

Prepared by:

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#### The Energy Council of Canada (E.C.C.)

The ECC is the national adhering body to the World Energy Council and was formerly designated as the Canadian National Committee of the World Energy Council, CANWEC. ECC is a non-profit organization funded by its membership who include industrial corporations, government departments and agencies. Its purpose is to promote discussion and exchange of information on all forms of energy, forging a better understanding between the public and private sectors and the public at large. This is achieved through annual energy for a attended by senior decision-makers from the public and private sectors, participation in the triennial congresses and study groups of the World Energy Council, and the dissemination of the results of these studies and meetings. The head office of ECC is located in Ottawa, Canada,

The World Energy Council brings together the heads of the energy industries from around the world. These include producers and consumers, energy practitioners in all fields, manufacturers of energy plants and equipment, politicians, economists, academics and scientists. The activities of the organization cover the technological aspects of all energy sources, both primary and secondary, from extraction to end use. In its committees and triennial congresses, it deals also with ecological, economic, social and political questions associated with the development and use of energy.

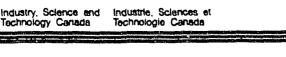
The ECC is a coalition of about 120 energy-related organizations and individuals. Membership is open to all Canadian organizations with a clear interest in energy and related fields. Listed in the following pages are the corporations, commissions and associations which are members of the ECC.

On the occasion of the 15th Congress of the World Energy Council in Madrid, ECC is pleased to join with Industry, Science and Technology Canada, in identifying Canadian players in the Equipment Manufacturing and Service sectors of the energy industry. These companies requires no introduction to the international energy community, and represent a powerful resource in providing Energy For Tomorrow's World.

Technology Canada

G.W. (Scotty) Cameron Chairman

Energy Council of Canada (ECC) 130 Albert Street, Suite 305 Ottawa, Ontario Canada K1P 5G4 Tel: (613) 993-4624 Fax: (613) 993-7679





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#### **ENERGY COUNCIL OF CANADA - MEMBERSHIP INPEX**

#### CORPORATE MEMBERS

Agra Industries Limited	2233 Argentia Road - Ste 400 Mississauga, Ontario L5N 2X7
Alberta Energy Company Limited	2400 - 639 - 5th Avenue S.W. Calgary, Alberta T2P 0M9
Alberta Natural Gas Company Ltd.	2900 - 240 - 4th Avenue S.W. Calgary, Alberta T2P 4L7
Alberta Power Limited	10035 - 105 Street Edmonton, Alberta T5J 2V6
Alcan Aluminum Limited	1188 Sherbrooke Street West Montreal, Quebec H3A 3G2
Asea Brown Boveri	1410 Blair Place, Ste. 600 Gloucester, Ontario K1J 9B9
Babcock & Wilcox Canada	581 Coronation Blvd. Cambridge, Ontario N1R 5V3
B.C. Hydro	970 Burrard Street Vancouver, British Columbia V6Z 1Y3
Bennett, Jones Verchere	4500 Bankers Hall East 855 - 2nd Street S.W. Calgary, Alberta T2P 4K7
Canadian Environmental Energy Corporation	10 Gateway Blvd, Ste 110 North York, Ontairo M3C 3A1
CAMECO	2121 - 11th Street West Saskatoon, Saskatchewan S7M 1J3

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Canatom Inc.

Consumers Gas Company Ltd.

Fording Coal Limited

General Electric Canada Inc.

**Home Oil Company Limited** 

Hydro-Quebec

**Imperial Oil Limited** 

Interprovincial Pipe Line Company

Manitoba Hydro

Maritime Electric Company, Limited

N.B. Power

Newfoundland and Labrador Hydro Corp.

Newfoundland Power

2020 University Avenue, 22nd Floor Montreal, Quebec H3A 2A5

100 Simcoe Street Toronto, Ontario M5H 3G2

1000 - 205 - 9th Avenue S.E. Calgary, Alberta T2G 0R4

107 Park Street North Peterborough, Ontario K9J 7B5

1600-324 Eight Avenue S.W. Calgary, Alberta T2P 2Z5

75 Rene-Levesque Blvd., West Montreal, Quebec H2Z 1A4

111 St. Clair Avenue West Toronto, Ontario M5W 1K3

10201 Jasper Avenue Edomonton, Alberta T5J 3N7

P.O. Box 815 Winnipeg, Manitoba R3C 2P4

P.O. Box 1328 Charlottetown, Prince Edward Island C1A 1Y1

515 King Street Fredericton, N.B. E3B 4X1

P.O. Box 12400 St. John's, Newfoundland A1B 4X7

P.O. Box 8910, Station "A" St. John's, Newfoundland A1B 3P6



Industry, Science and Technology Canada Canadä

Industrie, Sciences et Technologie Canada **NOVA Corporation of Alberta** 

Nova Scotia Power

Ontario Hydro

Pan-Alberta Gas Ltd.

**Power Corporation of Canada** 

Saskatchewan Power Corporation

Shell Canada

Stone & Webster Canada Limited

Suncor Inc.

Sulzer Canada Inc.

Syncrude Canada Ltd.

**TransAlta Utilities Corporation** 

801 - 7th Avenue S.W. P.O. Box 2535, Postal Station "M" Calgary, Alberta T2P 2N6

P.O. Box 910 Halifax, Nova Scotia B3J 2W5

700 University Avenue Toronto, Ontario M5G 1X6

500 - 707 - 8th Avenue S.W. Calgary, Alberta T2P 3V3 ·

751 Victoria Square Montreal, Quebec H2Y 2J3

2025 Victoria Avenue Regina, Saskatchewan S4P 0S1

400 - 4th Avenue S.W. P.O. Box 100, Station "M" Calgary, Alberta T2P 2H5

Yonge-Eglinton Centre 2300 Yonge Street Toronto, Ontario M4P 2W6

112 - 4th Avenue S.W. P.O. Box 38 Calgary, Alberta T2P 2V5

P.O. Box 210 Pointe Claire-Dorval, Quebec H9R 4N9

P.O. Bag 4023 9911 MacDonald Avenue Fort McMurray, Alberta **T9H 3H5** 

P.O. Box 1900 Calgary, Alberta T2P 2M1





TraasCanada PipeLines

Trans Mountain Pipe Line Company Limited

Trans Québec & Maritime PipeLine Inc.

#### **CROWN COMPANIES**

Atomic Energy of Canada Limited

Nova Scotia Resources Limited

Petro Canada

SOQUIP

**CONSULTING FIRMS** 

**Acres International Limited** 

Bantrel Group Engineers Ltd.

Bechtel Canada Engineers Limited

P.O. Box 1000, Station "M" Calgary, Alberta T2P 4K5

Suite 900 1333 West Broadway Vancouver, British Columbia V6H 4C2

Suite 2220 1 Place Ville Marie Montreal, Quebec H3B 3M4

344 Slater Street Ottawa, Ontario K1A 0S4

P.O. Box 2111, Station "M" Haiifax, Nova Scotia B3J 3B7

P.O. Box 2844 Calgary, Alberta T2P 3E3

1175 rue de Lavigerie P.O. Box 10650 Sainte-Foy, Quebec G1V 4P5

480 University Avenue Toronto, Ontario M5G 1V2

9th Floor 703 - 6th Avenue S.W. Box 1990, Station "M" Calgary, Alberta T2P 4C9

10 Gateway Boulevard Suite 200 Don Mills, Ontario M3C 3N8



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Monenco Consultants Limited

SNC Lavalin Inc.

400 - 801 - 6th Avenue Calgary, Alberta T2P 3W3

1100 Rene Levesque Blvd. W.-5th Floor Montreal, Quebec H3B 4P3

#### ASSOCIATIONS REPRESENTING THE VARIOUS SEGMENTS OF THE ENERGY AND FUEL INDUSTRY IN CANADA

Association of Consulting Engineers of Canada

**Biomass Energy Institute Inc.** 

**Canadian Electrical Association** 

**Canadian Gas Association** 

**Canadian Institute of Energy** 

Canadian Institute of Mining, Metallurgy and Petroleum

Canadlan Manufacturers' Association

Canadian Nuclear Association

**Canadian Petroleum Association** 

Suite 616 130 Albert Street Ottan, Ontario K1P 5G4

1329 Niakwa Road East Winnipeg, Manitoba R2J 3T4

Suite 1600 One Westmount Square Montreal, Quebec H3Z 2P9

55 Scarsdale Road Don Mills, Ontario M3B 2R3

1333 West Georgia Street Vancouver, B.C. V6E 3K9

3400 de Maisonneuve Blvd. West Suite 1210 Montreal, Quebec H3Z 3B8

913- 350 Sparks Street Ottawa, Ontatio K1R 7S8

725 - 144 Front Street West Toronto, Ontario M5J 2L7

Suite 3800 150 - 6th Avenue S.W. Calgary, Alberta T2P 3Y7



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**Canadian Pulp and Paper Association** 

Coal Association of Canada

Electrical & Electronic Manufacturing Association of Canada

Independent Petroleum Association of Canada

McMaster Institute for Energy Studies

**Municipal Electric Association** 

Solar Energy Society of Canada Inc.

19th Floor Sun Life Building 1155 Metcalfe Street Montreal, Quebec H3B 2X9

Suite 502 205 - 9th Avenue S.E. Calgary, Alberta T2G 0R3

10 Carlson Court, Suite 500 Rexdale, Ontario M9W 6L2

700 - 707 - 7th Avenue S.W. Calgary, Alberta T2P 0Z2

1280 Main Street West General Sciences Room 203 Hamilton, Ontario L8S 4M4

Box 2004 20 Eglinton Avenue West Toronto, Ontario M4R 1K8

Ballinafad Research P.O. Box 97 Ballinafad, Ontario NOB 1H0



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# ELECTRICAL EQUIPMENT MANUFACTURERS AND CONSULTANTS including Thermal, Hydro and Alternate Energies



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#### Introduction

The Canadian electrical power sector has developed a world class, world competitive technology. Vast quantities of falling water have made Canada the world's largest producer of hydroelectric power. The immense power requirements of our large resource industries, along with the challenge of equipping long-distance transmission systems in severe climatic conditions resulted in the development of a world-class Canadian industry. Because of Canada's unique requirements, important R&D has resulted in custom-engineered products in which Canadian firms are world leaders. These include hydroelectric turbines and generators, large electric motors, and extra-high voltage utility equipment such as transformers, air-blast breakers and line Canadian manufacturers, reactors. consulting engineers, constructors, and utility operators have helped build electric power projects in over 70 countries around the world. Equally important is Canada's experience in providing an ongoing, reliable source of electrical goods and services of every description.

Product quality is also a major strength and has been a key to success in the world's electrical markets. Products in the Canadian industry must meet the stringent requirements of the Canadian Stan - ids Association, whose norms are amor some world's most rigorous. Canadian electrical manufacturing must also meet the very stringent quality standards required to cope with Canada's severe climatic conditions, as well as the severe operating conditions in Canada's large resource industries.

This directory provides a brief summary of the capabilities of Canadian firms having proven abilities to respond and adapt to the world's electrical energy needs.





## Alphabetical Listing of Companies

A. Comeau & Associates Ltd. A.B. Chance Co. of Canada Ltd. ABB Combustion Systems Canada Acier Girole Inc. Acres International Limited Adecon Energy Systems Inc. Aerovox Canada Limited Agema Infrared Systems Ltd. Agro Wind Energy Systems Ltd. Alcan Wire and Cable Alcatel Canada Inc., SEL Division Alcatel Canada Wire Inc. Allanson Div. of Jannock Electrical Products Inc. Allen-Bradley Canada Limited Alles Corp. Alliance Ballasts Alpha Technologies Ltd. Alupower Canada Limited AME Microsystems Engineering Ltd. Amerace Ltd. AMP of Canada Anamet Canada Inc. Andrew Canada Inc. Appleton Electric Limited Argus Technologies Ltd. Argus Telecom International Armstrong Monitoring Corporation Artcraft Electric Limited Arva Crane Ascoletric Limited Asea Brown Boveri Inc. Astris Inc. AstroPower Canada Ltd. ASW Computer Systems Ltd. **ATC-Frost Magnetics** 

B.C. Hydro International Babco Electric & Engineering Ltd. Babcock & Wilcox Canada Bach-Simpson Limited Bailey Canada Inc. Ballard Power Systems Inc. Barber Waterpower Products Ltd. Battery Technologies Inc. Battronics Inc. Bauer Gearmotors Ltd. Beel Electronics Inc. BEL Products Inc. BEL Products Inc. Berocan Inc. Bestek Micro Devices & Systems Inc. BG Checo International Ltd. Bier Marketing Inc. Boundary Electric () Ltd. Brockton Electronics Ltd. Broman Engineering Ltd Burndy Inc.

C-Can Power Systems C&D Charter Power Systems Canada Inc. Cable Test International Ltd. CAE Electronics Limited Cam Tran Co. Canadian Process & Control Ltd. Canadian Contacts & Supply Inc. Canadian Shunt Industries Ltd. Canadian International Power Services Inc Canatom Inc. Canterra Electronics International Inc. Carbone of America (LCL) Ltd. Carte International Inc. **Clevemont Industries Ltd.** Columbia Electric Inc. Columbia/MBF Commander Electrical Materials Inc. Conex Power Products Inc. Contracteur Boulianne Ltee (CBL) Control Microsystems Inc. Cooper Lighting, Division of Cooper Industries Inc. Cooper Industries, Belden Wire & Cable Copal (Canada) Ltee Cormag Inc. Crippen Consultants, Division of H.A. Simons Criterion Instruments Ltd. Crosslink Technology Inc. Crouse-Hinds Canada Limited CTS of Canada Limited Cullen Canadian Inc. Cumming Cockburn CVDS Inc. Cyme International Inc.

Daly's Inc. Danfoss Manufacturing Company Limited Davis Controls Limited DBS Escher Wyss Inc. Deca Cables Inc. Delta Transformer of Canada Ltd. Dependable Turbines Ltd. Desigr. Electrical Manufacturing Dessau Inc. Dicon Systems Limited Dilor Architectural Dimming Systems Displayco Ltd. Domtar Inc. Wood Preserving Division DRB Engineering Consultants Ltd. Duracell Canada Inc. Durmitor Inc.

E.D. Products Limited Eastern Wire and Conduit Ltd. Econolite Canada Inc. Edwards International EHV Weidman: Industries Ltd. El-Met Parts Inc. Electric Power Accessories Co. Ltd. Electrical Contacts Limited Electrical Testing Instruments Ltd. Electro Porcelain Co. Ltd. Electro Canada Electro-Mécanik Inc. Electrofuel Manufacturing Co. Ltd. Electrolyser Corporation Ltd. Electronic Surveillance Corporation Electronik Micro Tech Inc. Electrotek Ltd. Elicon Industrial Controls Ltd. Elkon Inc. Elmec Engineering Ltd. Emerson Electric Canada Limited Erico Canada Inc Evans Consoles Inc. Evercady Canada Inc. Exide Electronics Canada Inc.

F-P Electronics Fasco Motors Ltd. Federal Pioneer Ltd. Ferguson Engineering Services Inc. Ferranti-Packard Transformers Ltd. FES International Ltd. Fleck Manufacturing Inc. Flexilume Canada Fortran Traffic Systems Limited Foster Wheeler Limited Franklin Playford Inc. Franklin Electric of Canada Limited FRE Composites Inc.

G&W Electric Ltd. GE Canada GE Canada (Hydroturbines and Generators) GEC Alsthom Electromecanique Inc. GEC Alsthom Energie Inc. Gentec Inc. Geotherm Inc. Global Thermoelectric Inc. Global Thermoelectric Inc. Globex Canada/Ber-Mac Electrical Ltd. GNB Batteries (Canada) Inc. Gould Shawmut Co. Grenmont Ltd. GTE Sylvania Canada Ltd. Guillevin International Inc.





Hamilton Porcelains Limited Hammond Manufacturing Company Limited Harbour Industries (Canada) Ltd. Harris Farinon Canada Inc. Heinemann Electric Canada Ltd. Herbrand Tools Corporation Heron Cable Industries Limited Hewitt Equipment Limited Hi-Test Detection Instruments Ltd. Hillmar Industries Ltd. Holophane Canada Inc. Howden Group Canada Hubbell Canada Inc. Hydro-Ouebec International Hydrolec Turbines Inc.

Iconopower Limited Indal Technologies Inc. Indepor Inc. Industrial Commutator Company Ltd. Industrial Equipment Co. Ltd. Instrumar Limited Intelcan Technosystems International Irrigation Systems Ltd. Interprovincial Corrosion Control Company Limited Inverpower Controls Ltd. IPC Resistors Inc. Iris Power Engineering ITT Cannon

J.A. Faguy & Fils Ltee J.R. Salmon Jack Otis Jannock Electrical Products Inc. Joslyn Canada Inc.

K-J.ine Insulators Ltd. Kaufel Group Ltd. Kearney National Canada Ltd. Keene-Widelite Klockner-Moeller Ltd. KWK Industries International

La Prairie Electrical Products Ltd. La Compagnie De Profiles Reynolds LabVolt (Quebec) Ltd. Leecraft Industries Ltd. Lenbrook Industries Limited Leroy-Somer Canada Ltee/Ltd Leviton Manufacturing of Canada Ltd. Lightolier Canada Inc. Lincoln Electric Co. Canada Ltd. Lisle-Metrix Ltd. Locweld Inc. London Mai Industries Ltd. Lunacell Incorporated Lumec Inc. Luminac Inc Lumitrol Ltd. Lyster Industries Inc.

Magnacharge Battery Corporation MagneTek Polygon Transformer Co. Manitoba HVDC Research Centre Manitoba Hydro Marcus Transformer Of Canada Ltd. Marine Safe Electronics Canada Ltd. Markham Electric Limited Marr Electric Limited Maxilite Mfg. Ltd. McPherson & Thom (Alberta) Ltd. Mechron Energy Ltd. Megatran Electric Ltee Mep Technologies Inc. Merlin Gerin Canada Ltee Metalumen Manufacturing Inc. Milltronics Miura Boiler Co., Ltd. MMC Canada Enterprises Inc., Moli Energy () Ltd. Moloney Electric Curp. Monenco Consultants Limited Morgan Schaffer Corp. Multi-AMP Canada Ltd. Multilin NCA/Acrow-Richmond, Div. of Premetalco Inc. NEI Mining Equipment Canada NEI Parsons Canada Limited NIFE Corporation Nocom Manufacturing Ltd. Norups Inc. NorWester Energy Systems Ltd. Nova Energy Ltd. Novatronics Inc.

Omega Controls () Ltd. Ontario Hydro - New Business Ventures Division Ottawa Precision Balance Engineering Ltd.

PAC Process Automation Controls Ltd. Pacific Rim Polytech Corp. Patton & Cooke Ltd. PCG Switchgear Ltd. Peerless Electric Co. Ltd. Philips Electronics Ltd. Philips Cables Limited Philtek Electronics Ltd. Pilgrim Technical Products Ltd. Pirelli Cables Inc. Pirelli Cables Inc. Pocatec Ltd. Pole-Lite Ltd. Polesystems () Inc. Poltec Industries Ltd. Polytech Electrical Products Positron Industries Inc. Power Measurement Ltd. Power Smart Inc. Power Battery (Iberville) Ltd. Powerplex Technologies Inc. Powertech Labs Inc. Prairie Ditching Ltd. Precision Paper Tube Ltd. Pressenk Instruments Inc. Pribusin Inc. Prism Systems Inc., Lentronics Division Progressive Lighting Systems Mfg. Ltd. Promac Inc. Protek Consultants Inc. Pyle-National of Canada Inc. Pylon Electronics Inc. Pyrotenax/A Division of Phillips Cables Ltd

Quali-Metal Inc.

R&S Enviro Products Limited Racal-Decca Canada Ltd., Insulators Division Raffin Electric Co. Ltd. Ram Air Manufacturing Ltd. Ranco Controls Canada Ltd. Relcon Inc. Reliance Electric Limited Renfrew Electric Co. Limited Resource Ventures Inc. Rex Manufacturing Reynolds Cable Company Ltd. Robroy Industries Limited Roger Girard Inc. Rousseau Sauvé Warren Inc.

S.D. Systems S&C Electric Canada Ltd. SACO Controls Inc. Saf Drive Systems Inc. Sales & Marketing Saskatchewan Power Corp. Scepter Mfg. Co. Ltd. Sci-Tec Instrument Inc. Securiplex Technologies, a Division of SNC Industrial SEW SEW-Eurodrive Company of Canada Ltd. Shawflex Inc. Shawinigan Lovalin Inc. Shawinigan Integ Inc. Sherman Lighting Ltd. Siemens Electric Ltd.

Siemens Automotive Limited - BCL Magnetics Plant Simpson Power Products Ltd. Simson-Maxwell Smith & Stone () Inc. SNC Lavalin Inc. Snemo Ltd. Snoc Inc. Softac Systems Ltd. Sola Canada, A Unit of General Signal Spectrodyne System International Ltd. Square D Canada Electrical Equip. Inc. SSF Industries Inc. Startco Engineering Ltd. Staticon Ltd. Stephens Equipment Inc. Stephens Analytical, Inc. Sunset Solar Systems Ltd. Surrette Battery Company Limited Syprotec Inc. T.D. Micronic Inc. Technologies Inc. Tecsult Inc. Tekmar Control System Ltd. Teledyne Still-Man Canada Telemecanique Canada Ltee Temco Electric Products Company Inc. Tenatronics Limited Teshmont Consultants Inc. **Teston Gauge Limited** Thermo Electric (Canada) Limited Thermon Canada Limited Thomas & Betts Thomas Lighting Ltd. Thomson Technology Inc. Thyristor Devices Ltd. Tideland Signal Canada Ltd. Timberland Equipment Limited TIR Systems Ltd. TME-Delta Inc. Topping Electronics Tracon Engineering Inc. Transelec Inc. Transformateurs P.M. Ltee

Trench Electric Tridem Manufactured Products Inc. TriVar Inc. Trylon Manufacturing Co. Ltd. Tycor International Inc. Unilight Limited United Electric Controls (Canada) Ltd.

Varta Industrial Batteries Ltd. Vibro-Meter Inc. Visioneering Corp. Volcano Energy Systems Inc. Vortek Industries Ltd.



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Westcan Electric Heating Inc. Westech Information Systems Inc. Western System Control Ltd. Western Integrated Technologies Inc. Western Industrial Programming Westinghouse Canada Inc. Power Generation Group Westinghouse Canada Inc. Industries Westinghouse Motor Company Canada Westinghouse Canada Inc. Westronic Inc. Willowglen Systems Ltd. Wodex Technology Inc. Xantrex Technology Inc. York-Lithonia Lighting Company

Vulcan Electric Co. Inc.

Weidmuller Ltd.

Group

Ltd

WECO Electrical Connectors Inc.

West Coast Engineering Ltd.



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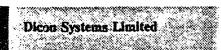
**Company Profiles** 

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#### ALARM SYSTEMS



719 Clayson Road TORONTO (WESTON), Ontario M9M 2H4 Tel: (416) 745-6044 Fax: (416) 745-0613 Export/Marketing Contact: Mr. Don Purk Product Manager-Smoke Alarms

Dicon Systems Limited designs and manufactures a complete line of ionization and photoelectric smoke alarms, gas alarms, the Dicon 9000 Security System, and Emergency Response Systems. As one of the world's largest manufacturer of residential smoke alarms, Dicon manufactures both photoelectric (no radioactive material) and ionization alarms in battery and hardwired, 120/220-240 VAC, models. Dicon's gas alarms detect both natural gas and propane gas. Dicon's patented Security System is wireless complete with built in telephone dialer and voice chip.

Industry Sector: Alarm Systems

Edwards International

6300 Northwest Drive MISSISSAUGA, Ontario L4V IV7 Tel: (416) 678-6767 Faz: (416) 678-2872 Export/Marketing Contact: Mr. Clive Milo Export Manager

Edwards is a major manufacturer and supplier of electrical signalling equipment, including fire detection systems standard and addressable, Nurses Call and Clock Systems. In addition, the company produce a broad range of electrical and electronic signals including bells, horns, buzzers, chimes, sirens and annunciators for commercial and heavy duty industrial applications.

Industry Sector: Alarm Systems



275A Steelcase Road East MARKHAM, Ontario L3R 1G3 Tel: (416) 475-0552 Fax: (416) 475-5623 Export/Marketing Contact: Mr. Jack Duggan President

Electronic Surveillance Corporation (ESC) is a provincially chartered manufacturing company which has been serving the needs of the fire and securities industries since 1978. From its headquarters in Markham. Ontario, ESC produces over 50 advanced security products of the highest quality, including control units, sensing and detection devices, zone annunciators, data communication modules, data acquisition and multiplex equipment, microprocessor and microcomputer hurdware and CAD/CAM Systems. Where applicable, the products are stringently tested and then approved and listed by ULC. Industry Sector: Alarm Systems

Securiple: Technologies, a Division of SNC Industrial Technologies Inc.

210 Brunswick Boulevard POINTE-CLAIRE, Quebec H9R 1A6 Tel: (514) 697-8002 Fax: (514) 697-9525 Export/Marketing Contact: Mr. V. Gameiro Director, Business Development

Established in 1979, Securiplex is a hightechnology company, providing design, engineering, manufacturing and interation of marine and industrial fire detection systems and services to industry and government clients around the world. From the simple fire protection system to complete building management and environmentally qualified naval damage control systems, Securiplex personnel have the proven capability of integrating individually engineered componenets into a shipboard or plant environment. Securiplex has introduced its new Series 1000, a family of microprocessor based fire detection control units. From the simple 8-zone fire alarm and control panel to a fully addressable system, the Series 1000 family of products has been created to provide the system designer unprecedented flexibility in the configuration of the fire detection and alarm systems. Industry Sector: Alarm Systems

#### ALTERNATE ENERGY

# Adecon Energy Systems Inc.

2910 Brighton Road, Unit 1 OAKVILLE, Ontario L6H SS3 Tel: (416) 829-3944 Fax: (416) 829-3946 Export/Marketing Contact: Mr. Alexander Printzios President

Adecon was incorporated in 1982 to develop, manufacture and market cost effective and commercially viable electricity generating wind energy conversion systems.

A fully integrated wind energy company, Adecon offers a complete line of windfuelled power plants utilizing vertical axis wind turbines with ratings from 75 kW to 1200 kW.

Adecon's organization has developed a balanced team in the areas of engineering, research and development, new product development, production, marketing-sales and finance.

Adecon is currently pursuing commitments to develop its present product lines to their full potential, and at the same time is seeking new avenues to broaden their scope.

Products include:

1) SL-38 150 kW Vertical Axis Wind Turbine (VAWT)

- 2) A19-21 75 150 kW VAWT
- 3) SL-55 350 kW VAWT
- 4) SL-554 600 kW VAWT
- 5) SL-558 1200 kW VAWT
- Industry Sector: Alternate Energy





### Agro Wind Energy Systems Ltd.

P.O. Box 563 MANOTICK, Ontario KUA 2N0 Tel: (613) 258-7282 Fax: (613) 292-0722 Expon/Marketing Contact: Mr. Michael Acton-Bond President

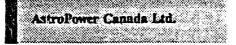
Agro Wind Energy Systems has been involved in the design and manufacture of wind powered water distribution systems for almost twenty years. The company is currently manufacturing and marketing a line of patented design wind pumps to a predominately developing country market, supplying not only irrigation water but community potable water supplies through the use of reverse osmosis water filters, providing clean water to areas with unacceptable water quality and availability. As well as these products, Agro Wind is currently developing an alternate, wind powered, electrical energy system with global applications

Industry Sector: Alternate Energy



809 Deslauriers ST-LAURENT, Quebec H4N 1X3 Tel: (514) 331-0840 Fax: (514) 331-0843 Export/Marketing Contact: Mr. John McCabe

Argus has lengthy experience in designing and installing photovoltaic systems in LDCs. The company is prir arily a telecommunications equipment supplier/installer. They manufacture module support structures. Components are assembled from imported parts. Industry Sector: Alternate Energy



6 Antares Drive, Unit 12 NEPEAN, Ontario K2E &A9 Tel: (613) 723-7232 Fax: (613) 723-7629 Export/Marketing Contact: Mr. J.L. McClung

AstroPower Canada Ltd. is Canada's only manufacturer of solar photovoltaic modules. These state-of-the-art products can be counted on to deliver years of trouble free electrical generation in all areas of the world. AstroPower offers complete power system design, installation and commissioning services. In addition, AstroPower specializes in providing the equipment materials & training necessary for companies to operate local photovoltaic module manufacturing plants, in both developed and developing countries.

The product line comprises photovoltaic power modules (including custom modules), complete solar and solar/úesel generating systems, solar water pumping equipment, and solar cell & module manufacturing equipment.

Industry Sector: Alternate Energy



21-2485 Lancaster Road OTTAWA, Oniario K1B 5L1 Tel: (613) 523-5211 Fax: (613) 521-6628 Export/Marketing Contact: Mr. Nae Ismail President

The company manfactures solar powered lighting systems for energy efficient indoor-outdoor residential and commercial applications. It also specializes in water pumping systems. Industry Sector: Alternate Energy

**DRB Engineering Consultants** Ltd. la in a chiairte a ch

101-3553 31st Street North West CALGARY, Alberta T2L 2K7 Tel: (403) 282-3115 Fax: (403) 282-1238 Export/Marketing Contact: Mr. David R. Baker, P.Eng President

Specializes in turnkey installations of data acquisition systems and data analysis software for performance testing/product evaluation of renewable energy systems. Engineering consulting, feasibility studies. Industry Sector: Alternate Energy

Indal Technologies Inc.

3570 Hawkestone Road MISSISSAUGA, Ontario LSC 2V8 Tel: (416) 275-3300 ext. 109 Fax: (416) 273-7004 Export/Marketing Contact: Mr. Vince Lacey Director of Sales

Manufactures 50 kW and 500 kW vertical exis wind turbine generators. Industry Sector: Alternate Energy

Industrial Equipment Co. Ltd.

**sen** manan kengagian perakan ker

7462 Progress Way Tibury Industrial Park DELTA, B.C. V6G 1E1 Tel: (604) 946-1675 Fax: (604) 946-1315 Export/Marketing Contact: Mr. Knut Gausvik V.P. Products & Technical Service

Manufactures bearing assemblies, couplings, brake systems and lubrication systems for large vertical axis wind generators. Provides associated engineering, design and assembly service. Industry Sector: Alternate Energy





## Intelcan Technosystems

69 Auriga Dr. NEPEAN, Ontario K2E 7Z2 Tel: (613) 228-1150 Faz: (613) 228-1149 Export/Marketing Contact: Mr. M.W.G. Whittall Manager, Business Development

Intelcan Technosystems is a major Canadian manufacturer and installer of photovoltaic systems internationally. Intelcan manufacturers photovoltaic chargers/regulators, designs and assembles complete photovoltaic power systems for telecommunications, water pumping and rural electrification. Intelcar is also a systems integrator for turnkey projects in civil aviation and telecommunications. Industry Sector: Alternate Energy

International Irrigation Systems Ltd.

P.O. Box 1133 STE-CATHERINES, Ontario L2R 7A3 Tel: (416) 688-4090 Fax: (416) 688-1780 Export/Marketing Contact: Mr. R.L. Neff President

The company manufacturers water distribution systems for agricultural drip irrigation using wind-powered water pumping system. System reduces water consumption by 75-90% compared to sprinkler irrigation. Provides consulting, installation, project management, design, feasibility assessments and turnkey services.

Industry Sector: Alternate Energy

## J.R. Salmon

1435 Colonsay Dr. BURLINGTON, Ontario LTP 2T8 Tel: (416) 335-6085 Fax: (416) 335-6065 Export/Marketing Contact: Mr. Jim Salmon

Design, installation, maintenance, data collection and processing for meteorological networks. Numerical modelling of wind flow in real terrain. Wind resource analysis and estimation. Industry Sector: Alternate Energy

# Jack Otle

P.O. Box. 1470 BLAIRMORE, Alberta TOK 0E0 Tel: (403) 564-4255 Fox: N/A Expc.t/Marketing Contact: Mr. Jack Otis President

Manufactures Enertech Wind Systems (60 kW), parts and repair, wind farm developer nerial services. Specialists in wind turbines for high wind regimes. Industry Sector: Alternate Energy

# Lenbrook Industries Limited

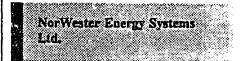
633 Granite Court PICKERING, Ontario L1W 3K1 Tel: (416) 831-6333 Fax: (416) 831-6936 Export/Marketing Contact: Mr. Graham Langford

Designs photovoltaic systems for all types of applications. Specializes in remote telecommunications systems. Industry Sector: Alternate Energy

### McPherson & Thom (Alberta) Ltd.

428 Moraine Road North East CALGARY, Alberta T2A 2P2 Tel: (403) 273-8676 Fax: (403) 273-7382 Export/Marketing Contact: Mr. Doug Howland Manager

Supplies and services windmills for water production. Industry Sector: Alternate Energy



Box 7, Site 32, R.R. #12 CALGARY, Alberta T3E 6W3 Tel: (403) 249-3337 Fax: (403) 249-7910 Expon/Marketing Contact: Mr. Jason Edworthy President

Manufactures wind turbine towers, designs and installs wind and solar powered water pumping systems. Distributes and retails electric generation equipment using wind, solar and hydro energy, as well as accessories and appliances. Provides services for consulting, feasibility studies, economic analyses, project management, project development, installation, servicing and operations.

Industry Sector: Alternate Energy





### Prairie Ditching Ltd.

418-26 Street S. LETHBRIDGE, Alberta TU 3R2 Tel: (403) 327-8280 Fax: Export/Marketing Contact: Mr. Jack Dick President

Manufacturers, assembles and services wind turbine powered compressors for operating compressed air water pumps and water aeration systems. Industry Sector: Alternate Energy

Resource Ventures Inc.

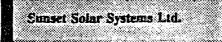
P.O. Box 414 CHARLOTTETOWN, Prince Edward Island CLA 7K7 Tel: (902) 892-0361 Fax: (902) 892-3420 Export/Marketing Contact: Mr. Malcom A. Lodge. P. Eng Consulting Engineer

Provides laboratory testing and evaluation of wind energy conversion systems, project management, turnkey and consulting services to wind energy projects. Industry Sector: Alternate Energy



R.R. #4 EGANVILLE, Ontario KOJ 1TO Tel: (613) 754-2721 Fax: (613) 754-2773 Expon/Marketing Contact: Mr. Robert J. Devlin Manager/Owner

Designs, assembles and installs wind, small hydro and photovoltaic units. Provides consulting services, weather systems and turnkey services. Industry Sector: Alternate Energy



501 Highway #2 North, P.O. Box 1327 ASSINIBOLA, Saskatchewan SOH 0B0 Tel: (306) 642-4240 Fax: (306) 642-4420 -Export/Marketing Contact: Mr. Doug Cameron President

The company manufactures wind powered pond mills for aeration by circulation of water supplies and sewage lagoons. It also manufactures windmills to be used for pumping water from wells or ponds and distributes pond mills and windmills to dealers and consumers. Sunset also provides maintenance and repair services at Assiniboia.

Industry Sector: Alternate Energy



105-3650 Bonneville Place BURNABY, B.C. V3N 4T7 Tel: (604) 421-0988 Fax: (604) 421-0987 Export/Marketing Contact: Mr. Allan Mitchener Vice President

Manufactures and sells its own photovoltaic panels along with complete solar generating systems (i.e. batteries, battery boxes, voltage regulators, etc.) Industry Sector: Alternate Energy

#### BALLASTS

Allanson Div. of Jannock Electrical Products Inc.

33 Cranfield Rd. TORONTO, Ontario M4B 3H2 Tel: (416) 755-1191 Fax: (416) 755-5896 Expon/Marketing Contact: Mr. Jon N. Baswick

Allanson manufactures ballasts and electrical transformers for the heating, lighting and electrical related industries in both Canada and the U.S.A. Industry Sector: Ballasts



33 Cranfield Rd. TORONTO, Ortario M4/3 3H2 Tel: (416) 755-5×52 Fax: (416) 755-6718 Export/Marketing Contact: Mr. Peter T. Hardy

Alliance (previously the Ballast Division of General Electric Canada) manufactures the complete line of Gold Label Ballasts for fluorescent lamps. Industry Sector: Ballasts



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#### Jannock Electrical Products Inc.

33 Cranfield Road TORONTO, Ontario M4B 3H2 Tel: (416) 755-1191 Fax: (416) 755-5896 Export/Marketing Contact: Mr. Rod Wilde Director of Sales

Jannock manufactures electrical transformers and ballasts for the lighting, sign, and oil heating industries, and power converters for the recreational vehicle industries.

Industry Sector: Ballasis

### Sola Canada, A Unit of General Signal

377 Evans Ave. TORONTO, Ontario M8Z 1K8 Tel: (416) 252-6465 Fax: (416) 231-8916 Export/Marketing Contact: Mr. Phil Verge

Sola Canada was established in Toronto, Ontario, in 1957 manufacturing fluorescent ballasts. Today, Sola Canada designs and manufactures, in Canada, a full range of Fluorescent and HID ballasts. This includes energy saving Fluorescent ballasts and Remote Encased Indoor and Outdoor HID ballasts. These products are sold direct to lighting fixture manufacturers and through electrical distributors across Canada and now into the U.S.A. for the replacement and retro fix markets. Products include:

#### Fluorescent Ballasts

-Standard mugnetic Fluorescent ballasts: Types offered are rapid start, slimline line, high output and very high output -Energy saving magnetic and electronic ballasts\*

#### HID Ballasts

-High Pressure Sodium, Metal Halide and Mercury Vapour types form 35 to 1500 watts; core & coil and encased types for indoor and outdoor applications. Industry Sector: Ballasts

#### BATTERIES



2480 Dunwin Drive MISSISSAUGA, Ontario LSL 139 Tel: (416) 820-1755 Fax (416) 820-8190 Expon/Marketing Contact: Mr. Stephen Meldrum Marketing Manager

Established in 1986, Battery Technologies Inc. (BTI) has developed the first high performance, low cost, environmentally safe Reusable Alkaline Manganese (RAM) battery technology. Initially RAM batteries\* (energy saving and environmentally safe) will be available in AAA, AA, C, and D sizes. The RAM system combines the performance characteristics of this single use alkaline battery, including a three year shelf life, long operating time (1.5 volts) and good performance at high temperatures, with the rechargeability of the Nickel Cadmium (NiCad) battery. However, unlike NiCads, RAM batteries are less expensive, they do not suffer the adverse effects of "memory" or quick self discharge, nor do they pose the environmental problem that Cadmium does. For the purpose of bringing RAM batteries to the commercial market place, the company is establishing an international network of strategic licensees who will pay royalty fee to BTI for manufacturing and marketing rights. Currently, licenses are held by companies in Canada, Australia, Hungary with two in the U.S.A. including Rayovac. Industry Sector: Batteries

Battronics Inc.

8301 Keele Street MAPLE, Ontario L6A 1T2 Tel: (416) 669-9326 Fax: (416) 669-6984 Export/Marketing Contact: Mr. Miro Lacka Export Manager

A leading Canadian manufacturer of automotive and industrial batteries, with manufacturing facilities located in Maple, Ontario, and Drummondville, Quebec. Battronics is dedicated to providing quality products and service with the most comprehensive line of Automotive and Industrial batteries in Canada. Battronics, with it brand names of Exide, Prestolite and Willard that is a recognized leader in Canadian battery manufacturing. Battronics is an all Canadian company with some 525 employees. Products include:

-Automotive Batteries -Batteries for Diesel Locomotive -Continuous Standby Power Supply -Railway Switching & Signalling Power Source -Telephone Standby Stationary Units

Industry Sector: Batteries

## Duracell Canada Inc.

2333 North Sheridan Way MISSISSAUGA, Ontario LSK 1A7 Tel: (416) 823-4410 Fax: (416) 823-4150 Export/Marketing Contact: Mr. Ian Milne-Smith Director of Industrial Division

Duracell Canada Inc., a subsidiary of Duracell Inc. in Bethel, Connecticut, manufactures and distributes a full line of batteries to meet the demands of both the consumer and industrial sectors-ranging from toys, audio equipment and lights to hearing aids, wheelchair and computers. Duracell is a worldwide company known for its top quality and high performing products, and in all possible products



significant steps to improve the products effects on the environment, have been taken. The head office and manufacturing facility for Duracel' Canada Inc. is located in Mississauga, Ontario, with sales and distribution centres in St. John's, Montreal and Calgary. Products include alkaline, rechargeable and general purpose batteries, flashlights, lanterns, rechargeable battery charges, battery rechargers, battery testers and photographic batteries. Industry Sector: Batteries

Electrofuel Manufacturing Co. Ltd.

9 Hanna Avenue TORONTO, Ontario M6K 1W8 Tel: (416) 535-1114 Fax: (416) 535-2361 Export/Marketing Contacx: Dr. S. Das Gupta President

The Electrofuel Company has developed a lithium aluminum/iron sulphide, high density battery prototype for use in electric vehicles, lood levelling, aerospace, and utilities.

Industry Sector: Batteries

Everendy Canada Ioe:

2500 Royal Windsor Drive MISSISSAUGA, Ontario LSJ 1K8 Tel: (416) 823-0266 Fax: 1-800-268-5876 Expon/Marketing Contact: Mr. Scott Ouellet

Eveready Canada Inc. manufactures zinc, carbon and manganese dioxide dry cell batteries of the key type (general usage). Eveready Canada Inc. manufactures a wide variety of dry cell batteries and flashlights of many different voltages for general and industrial applications. Compounds vary from carbon zinc, manganese dioxide, lithium, nickel cadmium, and mercuric oxide. Industry Sector: Batteries/Flashlights



9B-4500 Dixie Road MISSISSAUGA, Ontario LAW IV7 Tel: (416) 624-1107 Fax: (416) 602-4088/624-1801 Expon/Marketing Contact: Mr. Brian Winkless Export Manager

GNB has manufactured a complete line of lead acid batteries in Fort Erie, Ontario, since 1952. Today, GNB offers this, but also the new ABSOLYTE sealed range of batteries, together with related Battery Chargers, Installation supervision and Training Programmes. GNB's product lines and services include Lead Acid Batteries 10 ampere hour -8000, Battery Accessories, Battery Chargers, Installation supervision services, and Training Programmes. Industry Sector: Batteries



1279 Derwent Way NEW WESTMINSTER, B.C. V3M 5V9 Tel: (604) 525-0391 Fax (604) 525-0392 Export/Marketing Contact: Mr. Les Granholm Vice President

Established in 1963, Magnacharge Battery Corporation manufactures a complete line of storage batteries for automotive, marine, heavy commercial, diesel, recreational, standby and industrial motive power. Serving private industry and the public sector, Magnacharge focuses on manufacturing a high end product from raw materials that have been reclaimed in a recycling process. The ompany's highly trained staff are dedicated to providing the highest quality product and service available.

**Industry Sector:** Batteries

## Moli Energy (1990) Ltd.

20000 Stewart Crescent MAPLE RIDGE, B.C. V2X 9E7 Tel: (604) 465-7911 Fax: (604) 465-4398 Export/Marketing Contact: Mr. B. Sawicky President

The company manufactures rechargeable lithium batteries. Industry Sector: Batteries

Power Battery (Iberville) Ltd.

770 Thomas Ave IBERVILLE, Quebec J2X SE7 Tel: (514) 346-3273 Fax: (514) 346-8003 Export/Marketing Contact: Mr. Louis Hak National Sales Mgr.

The company manufactures wet lead and sealed lead acid batteries, specializing in sealed maintenance-free stationary batteries. Industry Sector: Batteries



257 Wildcat Road DOWNSVIEW, Ontario M3J 2S3 Tel: (416) 736-4994 Fax: (416) 736-0987 Expon/Marketing Contact: Mr. Dave Sedgewick General Manager

Powerplex Technologies is a leading company in the development and manufacture of sodium sulphur batteries. The batteries have applications in electric vehicles, airport support vehicles, and underground service vehicles. Industry Sector: Batteries

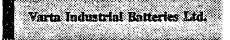




#### Surrette Battery Company Limited

Station Road SPRINGHILL, Nova Scotia BOM 1X0 Tel: (902) 597-3767 Faz: (902) 597-3767 Expon/Marketing Contact: Mr. David Surrette President

Surrette Battery Company Limited was established in 1959. The company has 20,000 square feet of manufacturing space and 15,000 square feet of warehouse space. The company manufacturers a high quality line of lead acid batteries for the following applications: Marine, Railroad, Deep cycle (Electric floor scrubbers-sweepers-electric vehicles), Electric fork truck and Automotive-commercial. The company markets under the trade name "Surrette" and "Rolls". The "Rolls" name is used in the United States. The Surrette marine line is marketed across Canada and in the Caribbean. The rolls line is marketed on the east and west coast of the United States. The product is well known in the industry and is considered to be the leader. Overseas as well as in Canada the company has been very successful in promoting it's railroad line. New and innovative products have been incroduced to the market place which eliminates breakage and reduces maintenance cost. Industry Sector: Batteries



72 Devon Road, Unit 22 BRAMPTON, Ontario L6T 5B4 Tel: (416) 790-0730 Fax: (416) 790-0744 Expon/Marketing Contect: Mr. Neil M. Hale General Manager

The business dates from the 1930's, beginning in Winnipeg. It was purchased by Varta in 1956. Varta is one of the major Industrial Battery Manufacturers in Canada. Varta's manufacturing operations are conducted in Lachine, Quebec, with sales/service operations in Brampton, Ontario. Varta manufactures and distributes Industrial Batteries for traction and starter application - also Stationary Batteries for stand-by, emergency lighting, UPS, communication and storage energy applications. All Varta products are energy saving, environmental recyclable products.

Industry Sector: Baneries

#### **BATTERY CHARGERS**



85, Road 132 West LA POCATIERE, Quebec GOR 1Z0 Tel: (418) 856-1454 Fax: (418) 856-5978 Exp.pn/Marketing Contact: Mr. Carl Cassista Chief Executive Officer

Established in 1974, Pocatec Ltd. is mainly involved in the design and manufacture of Battery Charge ¬, Communication System (P.A.) Large A1 LCD display for Mass-Transit Application. Know-how in these very harsh environments could be used very well for ordinary industrial systems. Production facilities include an SMT line. Products include battery chargers (fixed and mass transit), P.A. Systems, LCD variable message panels, and traffic light controllers and accessories. Industry Sector: Battery Chargers

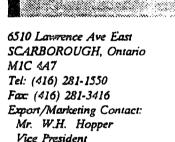
## Tenatronics Limited

776 Davis Dr. E. (P.O. Box 185) NEWMARKET, Ontario L3Y 4X1 Tel: (416) 895-4583 Fax (416) 898-7947 Export/Marketing Contact: Mr. L. Blanchard Plant Manager

Tenatronics Ltd. was established nearly forty years ago, to manufacture Automobile Antennas, which is still the core of its business. Since that time, Tenatronics has added a line of Battery Chargers, from 2 amp to 30 amp, as well as Custom coils and Transformers up to 1KVA. More recently the company has added Custom Co-Axial Cable Assemblies. for ...utomotive, CATV. Telecommunication, Computer, Home Entertainment and Security System

Entertainment and Security System applications. Industry Sector: Battery Chargers

Volcan Electric Co. Inc.



Or ginally established in 1898, the company manufactures electrical apparatus and battery chargers for a wide range of applications. The company has been lucated at its present site for more than 20 years. Facilities include sheet metal habrication and coil winding. The battery chargers are used in industrial and commercial applications such as electric fork ift trucks, pallet trucks, etc, stand-by diesel generator starting batteries, floor cleaning et uipment, automotive battery chargers, and chargers for batteries in other tandy and motive power applications.

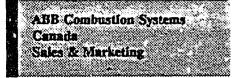
Industry Sector: Battery Chargers

Industry, Science and Technology Canada

and Industris, Sciences et la Technologie Canada



#### **BOILERS**

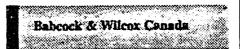


1410 Blair Place, Suite 600 GLOUCESTER, Ontario KU 9B9 Tel: (613) 747-5222 Fax: (613) 747-5880 Export/Marketing Contact: Mr. Per Koelbleitner Vice-President and General Manager

ABB Combustion Systems Canada is part of the ABB Canada family. The head office facilities are located in Ottawa and manufacturing is carried out in Sherbrooke, Quebec. Being a member of the world wide ABB organization, the company has access to a wide range of research and design data, as well as a varied background of experience to draw upon. ABB Combustion Systems-Ganada has been established for over sinty years and during this time has supplied to the public utility industry worldwide over 20,000 megawatts of steam generating capacity, ranging in size up to and including 660 MW per single unit, burning a wide range of fuels. Domestically the company has supplied well over half of the total megawatt capacity of thermal units purchased, many of which burn Canadian lignite or sub-bituminous coal, and range in size from 30 MW to 500 MW. Over one third of the company's utility sales is represented by the international market. ABB Combustion Systems Canada has commissioned units in many countries of the world, including Australia, New Zcaland, Thailand, Spain, Argentina and Mexico. In addition to being a major supplier to the utility industry, the company has also furnished a large number of chemical recovery units and industrial boilers to industries ranging from pulp and paper, petrochemical, sugar and steel to aluminum, in more than eighteen countries around the world.

These units burn a large variety of fuels and have been designed in accordance with individual requirements. In 1987, the company received the Canada Export Award.

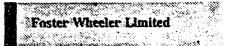
#### Industry Sector: Boilers



S81 Coronation Blvd. CAMBRIDGE, Ontario N1R 5V3 Tel: (519) 621-2130 Fax: (519) 622-2409 Export/Marketing Contact: Mr. M.R. Cox V.P. Marketing and Sales

B&W Canada's world-class capabilities have ensured substantial success overseas. Forty per cent of the company's annual sales have come from foreign markets over the past 30 years and that percentage will increase in coming years. This increased international marketing thrust is based on major projects completed in the fossil utility market in the Middle East, Venezuela, Thailand and Indonesia, and in Romania for the nuclear market. As part of an international consortium, B&W Canada signed a contract with the People's Republic of China to supply 4 350megawatt generating units. Babcock and Wilcox operates as the international division of the company, and offers complete fossil fuel steam generating systems and services to utility and industrial customer erection, boiler repair, alteration and maintenance services and general and heavy mechanical construction. Also included is the supply of nuclear steam generators, components and services.

Industry Sector: Boilers



Glendale Ave. NIAGARA-ON-THE-LAKE, Ontario LOS 110 Tel: (416) 688-4434 Fax: (416) 688-4588 Export/Marketing Contact: Mr. J.W. Orell V.P. Sales and Marketing

The company manufactures boilers and associated power plant equipment for utility and industrial applications. Industry Sector: Boilers



8 Copernicus boulevard BRANTFORD, Ontario N3P 1K5 Tel: (519) 758-8111 Fax: (519) 758-5294 Export/Marketing Contact: Mr. Stephen Foster

Miura Boiler Co., Ltd. manufactures a complete line of industrial and commercial boilers, thermal equipment, water treatment equipment and ancillaries in Brantford, Ontario. Miura Boiler Co., Ltd. is a subsidiary of Miura Co., Ltd. of Japan. Industry Sector: Boilers

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada Canadä

Volcano Energy Systems Inc.

4300 Beaudry Ave. ST-HYACINTHE, Quebec J2S 8A5 Tel: (514) 774-5326 Fax: (514) 774-3887 Export/Marketing Contact: Mr. Henri Reiher General Manager

Volcano Energy Systems Inc. is engaged in the design, manufacturer, installation and service of energy and recovery systems for the industrial, commercial and institutional markets around the globe. The company specializes mainly on tubes, plate and structural steel including boilers, pressure vessels, heat exchangers, tanks, etc, for the petrochemical, pulp and paper, mining and steel industries, environmental works, incineration and various other industrial and commercial clients. The boilers include firetube and electric boilers, dual energy and tri-energy (gas, oil and electric into one). Volcano's plant personnel have extensive work experience and take great pride in innovative design and technical excellence with high specialized requirements and demand tolerances. **Industry Sector: Boilers** 

#### CAPACITORS

Aerovox Canada Limited

P.O. Box 250 AMHERST, Nova Scotia B4H 3Z2 Tel: (902) 667-3886 Fax: (902) 667-3888 Export/Marketing Contact: Mr. P. Ben Griffin, President

Aerovox Canada began at Hamilton, Ontario, in 1938 as a subsidiary of the Aerovox Company. In 1972, the company moved into a new facility at Amherst, Nova Scotia. This 40,000 square foot facility is equipped with state-of-the-art mechanical, electrical and chemical systems for the efficient production of AC oil capacitors for the Canadian and export markets. Many phases of updating

mechanization have occurred over the years making this one of the most efficient facilities of its kind in the world. Products include low voltage power factor correction capacitors and automatic power factor correction systems. Acrovox has grown at its Amherst facility to where sales have reached U.S. \$10,000,000. There are now no other manufacturer of AC capacitors in Canada. Acrovox products are sold through manufacturers' representatives, managed by company officials. Acrovox's share of the Canadian market is in the order or 90%. The Company enjoys excellent personnel, commercial, and banking relationships. Expansion into diversified product lines is planned and the Company is actively pursuing new ventures in North America and aboard.

Industry Sector: Capacitors

#### **CATHODIC PROTECTION**

Interprovincial Corrosion Control Company Limited

930 Sheldon Court BURLINGTON, Ontario LTL SK6 Tel: (416) 634-7751 Far: (416) 333-4313 Export/Marketing Contact: Mr. William Russell, Marketing Manager

Federally incorporated in 1957. Interprovincial Corresion Control Company Limited (I.C.C.C.) has been providing professional engineering services and the supply and manufacture of corrosion protection materials to most major users throughout Canada. I.C.C.C. is recognized by "N.A.C.E.", with accredited Corrosion Engineers on staff; specializing in the protection of buried or immersed steel structures by the proven technique "Cathodic Protection." I.C.C.C. manufactures a variety of product lines, i.e. galvanic and impressed anodes, C.P. related equipment, including the patented Rustrol Polarization Cell systems and surge suppressors, which safely electrically isolate steel structures in order to apply corrosion-free cathodic protection to permanently preserve pipelines, tanks, refineries, et al. Export sales of over one

million (60% to the U.S.A.). The technological marketing is well developed, however overseas representation is not. Annual growth rate of over 30% and is forecast to continue over the next five years. Major clients have included Ontario Hydro, Consolidated Edison, and major electrical power utilities. Industry Sector: Cathodic Protection

#### CONNECTORS



20 Esna Park Drive MARKHAM, Ontario L3R 1E1 Tel: (416) 475-6222 Fax: (416) 474-5520 Export/Marketing Contact: Mr. Randy Cole Manager Utility Division

AMP of Canada manufactures connectors for the electric utility industry as well many other applications. AMP was awarded a "Qualitysupplier" status by Florida Power and Light and was the winner of the coveted deming award. Products include the "Ampact product line which is an energy saving connector system that can save electrical energy through low resistance losses between the conductors and the connectors. AMP also makes wedge type grounding connectors, and other electrical products. Industry Sector: Connectors

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1530 Birchmount Road SCARBOROUGH, Ontario M1P 2G9 Tel: (416) 757-8761 Fax: (416) 751-8509 Export/Marketing Contact: Mr. Bill Barnes

Established in Canada in 1949, Burndy is a major Canadian manufacturer of electrical and electronic connectors. Burndy has manufacturing plants in Markham and Scarborough, with sales offices throughout the country. Part of the FCI group of companies, a world leader in the connector industry, Burndy supplies connectors for Utility distribution and stations, construction and MRO markets. data systems, telecommunications, and military/acrospace. Utility products include: Overhead power distribution connectors, both mechanical and compression used for pale applications; Power distribution connectors for tube, cable and bus support applications; Underground power distribution, as well as, EHV station connectors; and The WEJTAP<sup>TM</sup> system for distribution and transmission connections round out our utility package. Construction and industrial products include mechanical and compression system grounding connectors, compression connectors for terminating and splicing power conductors; Small wire terminals, splices and nylon cable ties complete our wiring accessory products; Complete installation tooling - hand held; and Mechanical, hydraulic and pneumatic products are available. Burndy Electronics provides products to the Data systems, Business Equipment, Transportation, Industrial Controls, Consumer Electronics and Automotive sectors as well. Industry Sector: Connectors

# TIT Cannon

Four Cannon Court WHITBY, Ontario LIN 5V8 Tel: (416) 668-8881 Fax: (416) 668-4152 Expont/Marketing Contact: Mr. Don incCool

ITT Cannon, a division of ITT Industries of Canada Limited, is a leader in the design and manufacture of electrical and electronic multi-pin interconnect devices for hostile environments encountered in acrospace, shipboard, nuclear, military and oil exploration applications. Comprehensive customer support is provided through an Engineering Model Shop capability, backed by a modern machaine shop, moulding, and in-house plating operations. Major products include hermetically sealed connectors, high temperature firewall connectors, high density/high shock naval shipboard connectors, nuclear resistant connectors and high pressure/high temperature connectors.

Industry Sector: Connectors



215 Anderson Avenue MARKHAM, Ontario L3P 4C7 Tel: (416) 294-6068 Fax: (416) 294-2079 Export/Marketing Contact: Mr. D.L. Westbrook President

The company manufactures and distributes power connectors. Industry Sector: Connectors

# Marr Electric Limited

2555 Hensall Street MISSISSAUGA, Ontario LSA 2T1 Tel: (416) 277-9481 Fac: (416) 277-9795 Export/Marketing Contact: Mr. Wayne Molto General Manager

Founded in the 1920s by Scottish electrician William P. Marr. Marr Electric Limited has manufactured insulated wire connectors in Canada for over 70 years. The company's product line includes both twist-on and set-screw devices covering wire sizes for AWG 22 to 6. From its manufacturing facility in Mississauga, Ontario, Marr supplies the North American electrician via the wholesale distribution channel with Marr and Marrette brand wire connector of the highest quality and performance standards. Marr has recently expanded its product line - up to include electrician's fish tapes. Industry Sector: Connectors



8183 - 130th St. SURREY, B.C. V3W 7X4 Tel: (604) 591-5374 Fax: (604) 591-3505 Export/Marketing Contact: Mr. Greg Patton President & CEO

Patton and Cooke Ltd. has been designing and manufacturing high voltage electrical equipment for the past 30 years. Customers include most of the major Canadian mines and utilities. Patton and Cooke manufactures the only Canadian made line of high voltage mine cable couplers as well as related mine safety devices.

#### Products include:

-Power Connectors for substations -Utility transition splice modules and junction bars -Mine cable couplers and related power distribution devices





#### Industry Sector: Connectors

Pyle-National of Canada Inc.

2560 South Sheridan Way MISSISSAUGA, Ontario LSJ 2M9 Tel: (416) 822-3710 Fax: (416) 822-5447 Export/Marketing Contact: Mr. Stephen B. Riddell General Manager

Pyle-National monufactures electrical connectors. Products include Connectors, power and control, for industrial and Hazardous; Location applications; Connectors for rail and air transportation; Connectors for marine and hostile environments; Coupling and sealing grips; Industrial connector harness assemblies; industrial safety switches; and automotive connectors.

Industry Sector: Connectors



700 Thomas Ave. IBERVILLE, Quebec J2X 2M9 Tel: (514) 878-9601 Fax: (514) 347-1976 Export/Marketing Contact: Mr. Jim Taggart Dir. of Marketing

Thomas & Betts Ltd. is a manufacturer of electrical and electronic components and systems for connecting, fastening, protecting and identify wire, components and conduits. Thomas & Betts has been selling its products to the Canadian electrical industry for over 60 years. Head office and manufacturing facility are located in Iberville, Quebec. Products include: -Sta-Kon Terminals -Ty-Rap Cable Ties -Color-Keyed Connectors -Shrink-Kon Heat Shrink Insulators -Star-Teck Connectors -Bullet Connectors -Xtraflex Conduit and Tubing -E-Z-Code Wire Markers

#### **Industry Sector:** Connectors



16805 Hymus Blvd. KIRKLAND, Quebec H9H 3LA Tel: (514) 694-9136 Fax: (514) 694-0956 Export/Marketing Contact: Mr. John T. Meikle

WECO was founded in Hanau. West Germany in 1921. A patent for jacket clamps as a joining element for electrical installations was the beginning of WECO's success. With four plants located on three continents, WECO offers its customers world-wide over 10,000 products, all of which were developed in accordance to international approvals, i.e. UL, CSA, VDE. WECO Electrical Connectors Inc. (Canada) was established in Montreal in 1983. With a staff of 50 well-trained employees, WECO is able to provide products and services to North American customers through a network of representatives, distributors and factory support personnel.

Products include: Terminal blocks and electronic modules for the interconnection industry; terminal blocks for printed circuits for panel/chassis applications, both styles also available in depluggable format; also complete line of DIN Rail terminal blocks and electronic modules and custom designed interconnect solutions, ceramic terminal blocks; products meet UL, CSA, VDE as well as other international approvals.

Industry Sector: Connectors



10 Spy Court MARKHAM, Ontario L3R SH6 Tel: (416) 475-1507 Faz: (415) 475-2798 Export/Marketing Contact: Mr. Hans Kircher V.P. Sales & Marketing

Established in Canada in 1975. Weidmuller Ltd. is an industry leader in the manufacturing of terminal blocks. interface modules and cable preparation tools. The company has also expanded into the specialty markets of automatic marking and laser cutting systems. Products are sold nationally through wholesale distribution and service the electrical utility pulp & paper, petro chemical, mining and equipment OEM industries. The company has expanded to include sales offices in Quebec Cirv. Montreal, Calgary and Surrey, B.C. Other areas of the country are serviced by an outstanding network of agents. Weidmuller owns a building in Markham, Ontario which houses the head office and 35 of the company's 45 employees. Industry Sector: Connectors

#### CONSTRUCTION

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Arva Crane

120 Weston Street LONDON, Ontario N6C 1R4 Tel: (519) 661-0252 Fax: (519) 673-6329 Export/Marketing Contact: Mr. Fred Smith President

The company manufactures a full line of hydro tower lifters, mobile cranes, marines cranes, and man-basket attachments. Industry Sector: Construction

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## BG Checo International Ltd.

7151 Jean Talon St. East AUJOU, Quebec H1M 3R4 Tel: (514) 493-4343 Fax: (514) 493-4350 Export/Marketing Contact: Mr. Francis Mounie Export Manager

BG Checo was formed by a merger in 1974 that combined the resources of Bedard, Girard and Checo, founded in 1927 and 1920 respectively. BG Checo today offers a recognized experience and expertise in three main fields of activities: crection and installation of equipment in industry such as mining and metallurgy, petrochemical, pulp and paper, etc. and utilities, including mechanical and electrical crection in power generating plants and substations; construction of electrical power transmission systems: manufacture of electrical and electronic products and systems, particularly switchgear. With its experience in Canada over the years, BG Checo has made important breakthroughs in international markets, notably in Latin America, Africa and Asia. IPI, BG Checo's engineering and international projects division, executes turnkey projects in the fields of electric power generation, transmission and distribution. Its capabilities in construction and engineering allow IPI to take charge of all stages of a project, from feasibility studies, design, construction to start-up. Owing to its excellent reputation of competence and reliability. IPI attracts government and bank support and participation whenever project financing is called for. BG Checo is also the executive industrial partner of Hydro-Quebec for the distribution, engineering, manufacturing and installation of the CAPACITIVE COUPLING SYSTEM (SCC). The SCC is an innovative, reliable and economic solution to the electrification of rural communities located near high voltage lines

Industry Sector: Construction

### NCA/Acrow-Richmond, Div. of Premetalco Inc.

110 Belfield Rd. ETOBICOKE, Ontario M9W 1G1 Tel: (416) 245-4720 Fax: (416) 242-2727 Export/Marketing Contact: Mr. A. Belanger Products Manager

The Richmond Screw Anchor Company Inc. was formed in 1911 in Brooklyn, New York and invented, and patented many of today's well known forming devices. Acrow-Richmond Limited was incorporated in 1958. With Richmond's long experience in forming accessories, Acrow-Richmond Limited became the foremost manufacturer and supplier of concrete form hardware Canadian for the electrical utility and construction industries. Products include: -Conduit Box Insert -Grouts -Laminated Fibre Forms -Polyserts (Plastic Fixing Blocks) Industry Sector: Construction



459 Industrial Avenue WOODSTOCK, Ontario N4S 7Z2 Tel: (519) 537-6262 Fox: (519) 539-5853 Export/Marketing Contact: Mr. James R. Leslie V.P. Manufacturing & Marketing Manager

Since 1947, Timberland has earned an international reputation as a leading designer and manufacturer of Conductor Handling Equipment and Right of Way maintenance equipment for electric power transmission and distribution systems both overhead and underground. Timberland can supply a complete package of equipment and accessories required to install new, or reconductor electrical lines. Timberland's products have been shipped to many countries of the world, and operate under a wide variation of climate and terrain. Timberland backs its quality equipment with fully qualified service and training technicians plus parts availability. Products include:

Pullers, Tensioners, Puller/Tensioners, Reel Handling Equipment, Stringing Blocks, conductor Cars, Pulling Rope, Gripa, Underground Rollers, Blocks, Blowing Plugs and Pistons, Swivels, Stringing Accessories, Tree Trimmers and Bog.

Industry Sector: Construction (miscellaneous)



2500, Leon-Trépanier TROIS-RIVIERES, Quebec G9A SE1 Tel: (819) 372-0666 Fax: (819) 372-0077 Export/Marketing Contact: M. Claude Gauthier President

Transelec Inc. started its activities in 1978 and since then has executed in Canada and some Third world countries in particular, the construction of over 2,000 km of transmission lines ranging from 120 kV to 735 kV as well as numerous energy transforming substations and the maintenance of electrical distribution lines ranging up to 120 kV. Transelec Inc. acting as a general contractor offers a comprehensive range of services in the fields of generation, transmission and distribution of electricity for large projects. on its own or as a member of a consortium including other international companies with whom it maintains relations of common interest. **Industry Sector:** Construction



Industrie, Sciences et Technologie Canada

industry, Science and Technology Canada

#### CONSULTANCY

# Acres International Limited

480 University Avenue TORONTO, Ontarib MSG 1V2 Tel: (416) 595-2000 Fax: (416) 595-2004 Export/Marketing Contact: Mrs. I.W. Graham Marketing Specialist

For over 65 years, Acres has been engaged in the planning, engineering, construction supervision and project management of powerhouses, switchyards, transmission lines, substations and distribution systems. The Company undertakes load forecasts, long range planning and power system studies, generation investment planning, financial analysis, risk assessment and power system reliability studies, and also designs and supervises the construction of transmission lines, substations and related facilities.

Industry Sector: Consultancy



970 Burrard Street VANCOUVER, B.C. V6Z 1Y3 Tel: (604) 663-2360 Fax: (604) 663-3727 Expont/Marketing Contact: Mr. Jim Gemmill V.P. Consulting Services

B.C. Hydro International is a wholly owned subsidiary of British Columbia Hydro and Power Authority (B.C. Hydro), which operates Canada's third largest utility. The technical expertise of B.C. Hydro's environmental specialists, engineers, technicians and support staffs (total of 5,000) in all facets of electric system environmental and engineering consulting services, and operation is available to Canadian and international clients through B.C. Hydro International. Other B.C. Hydro wholly owned subsidiaries provide services to B.C. Hydro and Canadian and International clients: 1)

Powertech Labs. Inc. provides comprehensive research and development, and testing facilities and expertise related to electric utility systems. 2) Westech Information Systems Inc. provides electric utility and related computer software systems and expertise. 3) Western Integrated Technologies Inc. provides electric utility and related computer hardware system applications and expertise. B.C. Hydro International has been active for a number of years providing engineering and electric utility consulting services and sophisticated electronic and fibre optic monitoring equipment to clients in many countries including Brazil, Venezuela, Canada, USA, New Zealand, China, India, Pakistan, Thailand, Eggpt and Jordan. Industry Sector: Consultancy



6360, Jean Talon Est, Suite 202 MONTREAL, Quebec H1S 1M8 Tel: (514) 256-6622 Fax: (514) 256-8233 Export/Marketing Contact: M. François Tupula, Ing. Vice-President

Berocan is a consulting engineering firm specializing in the construction and management of projects in Canada and the export markets. Head office is at Montreal, with offices also in Brucelles, Kinshasa, and Kijiali. The company's main specialty is electric power transmission and distribution: low, medium or high voltage projects as well as substations. Berocan manages as well as designs full turnkey projects. Services include studies, planning, estimates, technology transfer, management consulting and construction management.

Industry Sector: Consultancy

Canadian International Power Services Inc.

2233 Argentia Road, Suite 400 MISSISSAUGA, Ontario LSN 2X7 Tel: (416) 858-8020 Fax: (416) 858-3332 Export/Marketing Contact: Mr. A.E. Houghton President

CI Power is an engineering company specializing in electrical production, transmission and distribution. A wholly owned subsidiary of ARGA Industries Ltd., CI Power provides the following services:

1) Engineering, Procurement, Construction Supervision and Commissioning for coal, oil and gas fired thermal plants, hydroelectric installations, combustion turbine-electric and cogeneration installations

Feasibility and Financial Studies,
 System Stability Studies and

 4) Operator Training for thermal power and hydroelectric installations world wide.
 Industry Sector: Consultancy



2020, rue University, 22e étage Montreal, Quebec H3A 2A5 Tel: (514) 288-1990 Fax: (514) 289-9300 Export/Marketing Contact: Mr. T. Gellatly Vice-President & Manager, Operations

Canatom Inc. works exclusively in the nuclear and related fields and serves clients in many parts of the world. It was formed in 1967 by three leading Canadian consulting companies whose individual nuclear experience extends back to the formative days of the industry. Like Canatom itself, these founding members are also internationally oriented, with working knowledge gained on large projects in some 40 countries. Canatom's own staff is backed by the diversified talents of its parent companies, also with

industry, Science and Technology Canada

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head offices located in Montreal, with a combined personnel exceeding 10,000 employees. Canatom specializes in the Balance of Nuclear Steam Plant (BNSP) and Balance of Plant (BOP) design, engineering, procurement, project management and construction management services, for nuclear power stations. Other services provided by Canatom include inspection, expediting, cost estimates, audits, feasibility studies, aite investigations and evaluations, commissioning, operational and training assistance.

Industry Sector: Consultancy (Nuclear)

Crippen Consultants, Division of H.A. Simons

Suite 900, 401 West Georgia St. VANCOUVER, B.C. V6B SE1 Tel: (604) 664-3000 Fax: (604) 664-4275 Export/Marketing Contact: Mr. Jim Lawler General Manager

Crippen Consultants specializes in small hydroelectric generation, water resource development, tunnels, terminal facilities, roads and bridges, and general industrial facilities.

Industry Sector: Consultancy

# Cumming Cockburn

145 Sparks Ave. WILLOWDALE, Ontario M2H 2S5 Tel: (416) 497-2929 Fax: (416) 497-0298 Expont/Marketing Contact: Mr. G. Steeves Vice President

Established in 1961 Cumming Cockburn currently has two hundred employees in seven Canadian offices. The firm specializes in small hydro engineering and has been responsible for the planning, design and construction management of plants varying in size from 50 kW off grid installations, to larger 20 mW grid connected plants. Principal line of business: Consulting engineering services for small hydro electric engineering plants. Industry Sector: Consultancy



1200 Boulevard St. Martin LAVAL, Quebec HTS 2E4 Tel: (514) 384-5660 Fax: (514) 967-0758 Export/Marketing Contact: Mr. Junaid Alam

Dessau, a prominent supplier of integrated engineering, procurement, and construction services throughout the world, is an entircly Canadian group, owned and managed by its employees. Founded in 1957 as Desjardins & Sauriel Consulting Engineers, the firm rapidly assumed a leading role in various fields of engineering. The firm has accumulated extensive experience in hydroelectric power generation and transmission by working on the huge hydropower projects of Quebec (Canada) as well as Africa and Asia. The real strength of Dessau is its more than 500 employees working together to provide multidisciplinary expertise in various parts of the world. Dessau is responsive to the quickening pace of social changes in the world and the rapid evolution of new technologies. Dessau's goal is to seek innovative solutions in partnership with their clients for a better world tomorrow. Dessau's multilingual and multicultural team of experts is ready to take on any challenging task in the engineering field, in any part of the world.

Industry Sector: Consultancy

Ferguson Engineering Services Inc.

50 Acadia Avenue MARKHAM, Ontario L3R 0B3 Tel: (416) 477-8791 Fax: (416) 477-6071 Export/Marketing Contact: Mr. Greg Ferguson President

The company provides consulting engineering services for high voltage electrical projects in Canada and around the world.

Industry Sector: Consultancy

Hydro-Quebec International

800, boul. de Maisonneuve est MONTREAL, Quebec H2L 4L8 Tel: (514) 289-6822 Fax: (514) 289-6118 Export/Marketing Consact: M. Michel. De Broux Vice-President Business Development

Hydro-Quebec International offers a comprehensive range of services in the fields of generation, transmission and distribution of electricity. Its expertise includes system planning, environmental impact and follow-up studies, construction, operations, marketing and administration. Hydro-Quebec International can provide its expertise in many ways: technical assistance and training, construction contracts, project management mandates, turnkey contracts with or without a franchise formula as well as franchise as such.

Industry Sector: Consultancy





KWK Industries International

855 Abbott Street MONTREAL, Quebec H4M 1X2 Tel: (514) 747-0661 Fax: (514) 747-8981 Export/Marketing Contact: Mr. Louis Katz

In existence for over 45 years and in the business of manufacturing non-toxic, biodegradable degreases for the electrical industry, the company now has a very large range of cleaners for all industrial and commercial applications. KWK is an experienced company in "cleaning" and now offer a consulting service on specialty applications or problems.

All products<sup>®</sup> are biodegradable, and nontoxic to the worker and are also water soluble.

Industry Sector: Consultancy (Cleaning)

Manitobe HVDC Research Centre

400-1619 Pembina Highway WINNIPEG, Manitoba R3T 2G5 Tel: (204) 284-8240 Fax: (204) 453-5074 Export/Marketing Contact: Mr. Dennis Woodford Executive Director

The Manitoba HVDC Research Centre is sponsored by Manitoba Hydro, the University of Manitoba, Teshmont Consultants and Federal Pioneer Ltd. The Centre offers specialist services to the electric power utility industry which include simulating, and studying complicated power systems with HVDC, SVC and their various protection and controls. Unique graphically driven software enables large complex models to be set up, tested and running within minutes or hours which would normally take days or weeks. Simulations can be undertaken in real time with both digital and analogue TNA's. A portable digital TNA capable of electromagnetic transient

modelling in real time can be taken to site for testing actual controls and protection. Industry Sector: Consultancy

## Manitoba Hydro

820 Taylor Avenue WINNIPEG, Manitoba R3C 2P4 Tel: (204) 474-3013 Fax: (204) 475-9044 Export/Marketing Contact: Mr. Bernie St. Amant Manager Export Services

Manitoba Hydro is the principal hydroelectric utility providing electrical energy to the province of Manitoba in Canada. Manitoba Hydro is also in the business providing power utility management consulting services to other utilities throughout the world. Using the expertise of its own employees, Manitoba Hydro offers to other utilities and organizations the benefits of its experience. In addition to wide hydro-electric and power system management expertise, Manitoba Hydro also offers the special experience and skills acquired from building, operating, and maintaining one of the largest high-voltage direct current transmission systems in the world.

Industry Sector: Consultancy



633 Weyburn Sqr. P/CKERING, Ontario LIV 3V3 Tel: (416) 605-1518 Faz: (416) 420-0767 Export/Marketing Contact: Mr. Madanmohan Chawla

MMC Canada provides export marketing services to small & medium size Canadian companies in the following sectors: a) electrical power generation- small, mini & micro hydro, solar, alternative nonconventional energy such as wind, biomass etc., and

b) electrical power transmission & distribution - switchgear, bus, duct, control, metering, relay panels, substations, switchyards, instrumentation, line monitoring, safety supplies. Marketing services include analysis. investigation, planning, strategies, catalyst for joint venture licensing, tech-transfer, training, product presentation to customers for promotion or approval and trade-show and sourcing of complimentary products for (a) adding to present Manufacturing. (b) distribution, (c) representation, (d) or for cost reduction. MMC also undertakes assignments to select, recommend, appoint & maintain a marketing network of subrepresentatives, agents, distributors, subsuppliers, sub-contract mfrg., joint-venture partner, after sales service,.. etc., tailored to suit clients. Product/packages/systems are offered, on behalf of principals or through associates, for projects/tenders/inquiries where financing is provided international financial institutions such as World Bank, ADB. AIDB, CrDB, USAID, EDC, CIDA...etc. Industry Sector: Consultancy



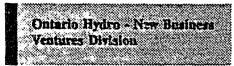


### Monenco Consultants Limited

180 Attwell Drive, Suite 400 REXDALE, Ontario M9W 6A9 Tel: (416) 798-0111 Fax: (416) 798-0130 Export/Marketing Contact: Mr. B. Ring Senior Vice-President, Power

In every aspect of the power industry, Monenco ranks as one of Canada's most authoritative engineering firms. Backed by a broad range of technology and management skills, it helps utilities, independent power producers, mining enterprises, and government institutions in Canada and around the world achieve their objectives. Monenco has been developing resources for electric power production, transmission and distribution since the beginning of the century. It engages in large and small developments in different climates and under varying physical conditions.

Industry Sector: Consultancy



700 University Ave., Suite A14 TORONTO, Ontario M5G LX6 Tel: (#16) 592-7072 Fax: (416) 592-8463 Export/Marketing Contact: Ms. Helen Fisch Manager - International Utility Consulting

Established in 1987, the New Business Ventures Division markets Ontario Hydro's technology and expertise to more than 50 countries around the world. Products and services comprise electric power system technology, international project consulting, isotope products, heat energy and training. **Industry Sector:** Consultancy

Ottawn Precision Balance Engineering Ltd.

Box 13202 KANATA Ontonio K2K 1X4 Tel: (613) 831-8419 Fax: (613) 836-1490 Export/Marketing Contact: Mr. David Desjardins P.Eng. President

Ottawa Precision Balance Engineering Ltd. has been in business since 1977. OPB has diversified into many fields generally related to dynamic balancing of rotating components and machinery noise analysis. The company has and excellent history of achievement in the aircraft defence and communication industries. The companies products are designed for dynamic balancing of rotating machines e.g. fans, pumps, motors, gears, etc.; dynamic balancing of aircraft rotating components, shafts, gears, propellors etc.; balancing of military repair and overhaul parts, engine components, antennae etc., and submarine drives: vibration analysis of all machinery. rotating components, building structures, and computer rooms; sound/noise analysis of all machines and buildings, and the manufacture of noise enclosures and other solutions to noise problems. Industry Sector: Consultancy



Suite 702, 1045 Howe Street VANCOUVER, B.C. V6C 2B1 Tel: (604) 663-1693 Fax: (604) 663-1697 Export/Marketing Contact: Mr. Art Geike President

Power Smart Inc. is an organization comprising 14 Canadian utilities. The company was established to assist utilities in the development of demand side management programs. Industry Sector: Consultancy

Powertech Labs Inc.

12388 - 88th Avenue SURREY. B.C. V3W 7R7 Tel: (604) 590-7500 Fax: (604) 590-5347 Expon/Marketing Contact: Ms. Blair Salter

Powertech Labs-is a subsidiary company of B.C. Hydro, Canada's 3rd largest utility. Powertech Labs specializes in technical problem solving for gas and electric utilities and their suppliers across North America. The company has over 20 years of industry experience and employs 140 engineering and scientific experts in a \$50 million modern test laboratory near Vancouver, B.C. Major services include: Power System Studies, Power Equipment Performance Evaluation, Rotating Machinery Diagnostics, Materials Performance Assessment, Maintenance Engineering Services and Environmental Sciences (Hazardous Waste Destruction)\*. Industry Sector: Consultancy



6400 av. Auteull, Bureau 106 BROSSARD, Quebec J4Z 3P5 Tel: (514) 443-6497 Fax: (514) 678-5398 Export/Marketing Contact: Mr. Rao V. Annamraju Ing. President

The company specializes in 1) Electrical design, construction management, and commissioning assistance, procurement of nuclear power stations, co-generation plants, 2) Engineering and site support Tokamak of Fusion program, 3) Specification, procurement, operation and maintenance of high current (up to 100 kA) power convertors, power electronics equipment. 4) Design of hydroelectric power stations, aluminium and magnesium smelters.

Industry Sector: Consultancy



industry, Science and Technology Canada



Industrie, Sciences et

Technologia Canada

### Rousseau Sauvé Warren Inc.

500, boul. Rent-Livesque Ouest Bureau 600 MONTREAL, Quebec H2Z 1W7 Tel: (514) 878-2621 Fax: (514) 397-0085 Export/Marketing Contact: M. F.G. Reid, Eng. Manager, Marketing

The staff of RSW numbers approximately 270 employees, composed of 110 engineers and other professionals, 125 technicians and draftspersons, and about 35 support staff. The principal fields of specialization include hydroelectric power generating facilities, powerhouses, turbines alternators and gates; electric power switching, transmission and distribution systems: electric power system analysis, planning and automation, industrial energy supply; dams: soil, rockfill, concrete; hydraulic engineering, hydrology, water control structures and spillways, flood control structures; industrial plants, effluent treatment.

Industry Sector: Consultancy

Saskatchewan Power Corp.

2025 Victoria Ave REGINA, Saskatchewan S4P 0S1 Tel: (306) 566-2102 Fax: (306) 566-3054 Export/Marketing Contact: Mr. Tony Harras Vice President, Planning

Saskatchewan Power Corporation is the principal electrical utility providing electrical energy to the province of Saskatchewan. It has expertise in a wide range of areas of utility design and operations, including rural electrification. **Industry Sector:** Consultancy

## Shawinigan Lavalin Inc.

1100 Rent-Lévesque West MONTREAL, Quebec H3B 4P3 Tel: (514) 871-1020 Fax: (514) 876-9273 Export/Marketing Contact: Mr. Peter Mayers Vice-President-Hydroelectricity

At its founding in 1919, Shawinigan Lavalin Inc. carried out engineering and construction work for its parent, the Showinigan Water and Power Company. Subsequently, its services were retained by other electric utility companies, both Canadian and international. As a result of a merge in 1982, it became a member of the Lavalin Group, an organization of consulting engineers of worldwide reputation with employees numbering 7,000. To date, 100,000 MW of hydraulic generation, 50,000 km of transmission lines and some 1000 transformer stations, in Canada and 60 other countries, attest to this remarkable achievement. Principle fields of specialization are hydroelectric power developments; energy and resources planning; hydroelectric plant inspection. rehabilitation and upgrading; power transmission and distribution systems (HV. RHV, UHV, HVDC); energy resource studies; industrial power systems; solar, wind and tidal power projects; water resources development; agricultural engineering; agronomy; soil science; rural development; agriculturei (conomics; sociology.

Industry Sector: Consultancy

### Shawinigan Integ Inc.

#1200 -1075 West Georgia Street VANCOUVER, B.C. V6E 3C9 Tel: (604) 669-2444 Fax: (604) 683-1672 Export/Marketing Contact: Mr. Ronald R. Thomas President

Shawinigan Integ Inc. is the thermal power engineering division of SNC Lavalin Inc., providing services for engineering, design and construction management to clients in Canada and other countries. These clients are mainly in the electrical utility sector. Many of the projects are large thermal and hydro electrical power plants with related transmission and distribution of electrical energy. Shawinigan Integ Inc. has engineered thermal energy plants including boiler systems, cogeneration power plants, district heating schemes and special combustion techniques. The company provides expertise and total capability for any scope of project from prefeasibility studies through to full engineering, design, procurement, construction, commissioning and management. Shawinigan Integ Inc. also has full access to the expertise of the SNC-Lavalin organization with more than 6,000 professionals, skilled technicians and support personnel in 60 specialized divisions.

Industry Sector: Consultancy



### SNC Lavalin Inc.

2 Place Felix-Martin, 39th Floor MONTREAL, Quebec H2Z 1Z3 Tel: (514) 866-1000 Fax: (514) 866-0795 Export/Marketing Contact: M. Guy Saint-Pierre President & C.E.O.

The company provides a full range of project management, engineering, procurement and construction services for hydroelectric, thermal and nuclear generating stations and for transmission and distribution networks. Industry Sector: Consultancy

## Tersult Inc.

85, Rue Ste-catherine Ouest MONTREAL, Quebec H2X 3P4 Tel: (514) 287-8500 Fax: (514) 287-8643 Export/Marketing Contact: M. Guy Fournier, P. Eng President

Tecsult has been active since 1961. Rapidly, it has grown to one of the leading consulting firms in the country. The many projects on which it has worked can be found not only in Canada but also internationally with Tecsult International Limited. With the help of its subsidiaries, the company offers a complete range of services in the various fields of engineering, including hydroelectric development, thermal energy, nuclear energy, and transmission and distribution.

Industry Sector: Consultancy

## Teshmont Consultants Inc.

7-1146 Waverley Street WINNIPEG, Manitoba R3T 0P4 Tel: (204) 284-8100 Fax: (204) 475-4601 Export/Marketing Contact: Mr. Jack Scriven President

Teshmont Consultants Inc. was established in 1966 by Canadian engineering consultants, who pooled their expertise to form a company specifically for the design and management of construction of large extra high voltage transmission system, with particular emphasis on HVDC power transmission. With its staff of experienced professional engineers, Tesinnont combines the engineering and technical disciplines necessary for the study, design and construction supervision of major EHV transmission systems anywhere in the world, and is supported by a highly capable project management group with comprehensive experience in scheduling. procurement, inspection and financial management of large utility projects. Services include feasibility studies, design procurement, commissioning and project management.

Industry Sector: Consultancy



9th Floor, 1045 Howe St. VANCOUVER, B.C. V6Z 2B1 Tel: (604) 663-3550 Fax: (604) 663-3554 Expon/Marketing Contact: Mr. Len Voth Marketing Mgr.

Westech Information Systems Inc. is a wholly owned subsidiary of B.C. Hydro, Canada's third largest utility. Westech Information Systems Inc. provides electric utility and related computer software systems and expertise. Industry Sector: Consultancy

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada

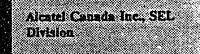
#### Western Integrated Technologies Inc.

Suite 704, 1045 Howe St. VANCOUVER, B.C. V6Z 2A9 Tel: (604) 663-2824 Fax: (604) 663-3652 Export/Marketing Contact: Mr. Jack Allison Marketing Manager

Western Integrated Technologies is a wholly owned subsidiary of B.C. Hydro, Canada's third largest utility. Western Integrated Technologies Inc. provides electric utility and related computer hardware system applications and expertise.

Industry Sector: Consultancy

#### CONTROL SYSTEMS



101 Valleybrook Drive DON MILLS, Ontario M3B 3M5 Tel: (416) 445-8600 Fax: (416) 441-3438 Export/Marketing Contact: Mr. John R. Brohm Manager, Sales

Alcatel Canada, SEL Division, is an international supplier of computerized signalling solutions for transit and mainline railways. Alcatel, SEL Division is a pioneer in creating driverless train control systems and has had major success in rapid transit systems such as Vancouver's SkyTrain, Detroit's People Mover, Scarborough's Rapid Transit and Disney World. Mainline railways such CN, CP and C&NW use SEL products to move freight and people economically. Alcatel Canada Inc., is part of Alcatel N.V., a world wide leading supplier of communication transmission systems with yearly revenue exceeding \$17 Billion U.S. Products include (1) a driverless automatic train control system for rail based transit properties; (2) a driverless automatic train



control system for monorail transit properties; (3) Remote control and solid state interlocking control unit, and (4) Advanced Train Control Systems (ATCS) Industry Sector: Control Systems

AME Microsystems Engineering Ltd.

71 Marycroft Ave. Unit 19 WOODBRIDGE, Ontario L4L 5Y6 Tel: (416) 851-9181 Fax: (416) 851-1665 Export/Marketing Contact: Mr. Ants Puust P.Eng.

AME Microsystems Engineering Ltd. is a partnership of professional engineers, providing design and manufacturing services to industrial clients requiring electronic subsystems and controls for inclusion in the machines or equipment they manufacture. The staff of AME consists of highly qualified senior engineers of diverse backgrounds, able to bring their extensive experience to bear on projects ranging from the design of freestanding products to the implementation of major systems. In addition to manufacturing the electronic subassemblies which are included in the equipment of its clients, AME has developed a number of products which it manufactures and sells under its own name. Of specific interest to the electrical industry is a line of microcontroller-based energy conservation timers/controllers\* which have been installed at locations across Canada.

Industry Sector: Control Systems

Balley Canada Inc.

860 Harrington Court BURLINGTON, Ontario L7N 3N4 Tel: (416) 639-8840 Fax: (416) 639-8639 Export/Marketing Contact: Mr. Richard West Utility Sales

Originally incorporated in 1921, Bailey Canada designs, manufactures, and implements distributed control systems to a wide variety of industry sectors including utilities (power generation and distribution), general industries, pulp and paper, chemical and petroleum, and mining and metals. Services offered include systems design, integration, and development; engineering; manufacturing and checkout; installation supervision; commissioning; operator training; and continuing field service. Products include: -INFI 90 and NETWORK 90 Distributed Control Systems\* -Analog and Digital Control Systems -Burner Management Systems -Turbine Control Systems -Combined Cycle Control -Cogeneration Control -Applications Software -Field Instruments and Sensors -Smart Instrumentation -Remote Communication Industry Sector: Control Systems

Control Microsystems Inc.

2049 Cohen ST. LAURENT, Quebec H4R 9Z7 Tel: (514) 745-1270 Fax: (514) ~15-1610 Export/Marketing Contact: Mr. Allan Erion

Control Microsystems designs and manufactures quality remote programmable units (RPU/RTU's) and industrial computers especially applicable to water control and environmental monitoring in electrical utilities. TeleSAFE RPU's integrate all the elements of a top of the line RPU. The TeleSAFE VS/x\* series provides cost effective solutions for small applications such as level monitoring and single/dual point pressure grids; whereas, TeleSAFE 6000° is perfect for larger water, oil & gas, environmental and industrial applications. All offer: full programmability in BASIC and C: industry standard protocols: telephone, radio, dedicated line and RS 232/485 communications; and -40 to +60\*c operating range.

Industry Sector: Control Systems

Elmee Engineering Ltd.

1410 Crown Street NORTH VANCOUVER, B.C. V7J 1G5 Tel: (604) 985-4721 Fax: (604) 985-3687 Export/Marketing Contact: Mr. David Wallace General Manager

Created in 1973, Elmec Engineering is a custom manufacturing company specializing in electrical, electronic and mechanical systems and controls, and provides research, design and consulting services industry-wide. The consummate "problem-solver" with a penchant for quality, flexibility and reliability, Elmec Engineering has earned a reputation for performance. Today, systems engineered and built by Elmec Engineering can be found all over the world. Whether it's



Industrie, Sciences et

Technologie Canada

Industry, Science and

Technology Canada

instrumentation packages for air conveyors, bulk material handling design for shiploading facilities, relay panels for pulpmills or fibre optic monitoring systems for hydro-electric generators - no challenge is too complex, no problem is too unique - Elmec Engineering delivers. Products include electrical relay panels, battery chargers, motor controls, and monitoring systems.

Industry Sector: Control Systems

### Lab-Volt (Quebec) Ltd.

2120 rue Lavoisier STE-FOY, Quebec GIN 4B1 Tel: (418) 681-6346 Fax: (418) 687-4014 Export/Marketing Contact: M. G. Goupil President

In its plants at Quebec City and Belleville, Ont., Lab-Volt manufactures educational electronic equipment and electric power and process control systems. Industry Sector: Control Systems

### Omega Controls (1990) Ltd.

6240 202 Street LANGLEY, B.C. V3A 4P7 Tel: (604) 534-7756 Fax: (604) 534-7763 Export/Marketing Contact: Mr. Werner Niemeyer President

Established in 1982, Omega Controls designs and manufactures electricelectronic control systems for the saw mill industry. Industry Sector: Control Systems PAC Process Automation Controls Ltd.

222B-4664 Lougheed Highway BURNABY, B.C. VSC STS Tel: (604) 261-6841 Fax: (604) 291-2269 Export/Marketing Co. tact: Mr. J. Cerny President

PAC - Process Automation Controls Ltd. was established in 1978. PAC offers engineering expertise, competence and system design and application experience in the following field: a) supervisory control and data acquisition systems for power utilities, oil and gas pipelines, water and sewer pipelines, security systems, and communication utilities such as microwave radio links, etc., b) process control systems for pump and compressor stations, c) control systems for large engines such as gas .urbines and piston engines as well as centrifugal and reciprocating compressors, and radio and fibre optics communication systems. PAC services consist of: a) standard consulting engineering services such as feasibility studies; engineering design; preparation of technical specifications; preparation of commercial documents; contract negotiation and administration: factor and field acceptance tests; construction supervision, etc. b) supply of complete, engineer/construct systems, and c) supply of equipment to specification. PAC also manufactures a PAC designed industrial control system, the "PACE" - a field proven, modular hardware solution to many date/process control applications. Currently, PAC delivers \$ 2,000,000 to \$ 3,000,000 of "PACE" based systems a year to customers in the utilities, oil and gas industry and government.

Industry Sector: Control Systems

## SACO Controls Inc.

9700 Trans Canada MONTREAL, Quebec H4S IV9 Tel: (514) 745-0310 Fax: (514) 745-0315 Export/Marketing Contact: Mr. Pat Argento Director of Sales & Marketing

SACO Controls Inc. specializes in the design and manufacture of mosaic mimic panels as well as related electronic and control equipment. The versatility of SACO's mosaic mimic system is quite evident in terms of global picture and display capabilities relating to automation and system control applications. Visual grouping of information and control data being symbolically represented on the mosaic surfaces makes the control room more efficient and easily manageable. Process indicators e.g. Digital readouts, meters and indicating lighting etc. are all strategically placed to display the functional and operational status of the various systems and processes while input devices e.g. pushbuttons, selector switches, control dials etc. enable expedient control and manoeuvre by the operator. SACO's unique concept of modular unit construction system makes the mapboards readily flexible as far as modifications and future emansions are concerned with least amount of effort and costs. SACO's strength in specialized electronic instrumentations complementing the mosaic system is based on a wide range of products and accessories which include: Computer Interface, Solid state Annunciators, LED Digital and/or Analog meters, 1", 2", 3" & 5" High Intensity LED Digital readouts (c/w BCD, Analog or Clock inputs), Status Indicators (Incandescent or LED). SACO's mosaic and control room product lines have applications in a wide range of control systems, including industrial process control, dispatching power networks, security control systems for nuclear power plants, and power system control centers for the electrical utilities.

Industry Sector: Control Systems

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# Snemo Ltd.

3605 Isabelle Street BROSSARD, Quebec J4Y 2R2 Tel: (514) 444-3001 Fax: (514) 571-5125 Expon/Marketing Contact: Mr. Daniel Carreau Director Marketing and Sales

Snemo Ltd. manufactures electronic protection relays, circuit breaker monitoring and control system and supervisor systems. Industry Sector: Control Systems

Western System Control Ltd.

1038 Venture Way, Box #829 GIBSONS, B.C. VON 1V0 Tel: (604) 886-3705 Fax: (604) 886-3561 Export/Marketing Contact: Mr. Denis G. Hostland

Incorporated in 1973, Western System Controls Ltd. provides industrial instrumentation contracting services to a wide variety of large corporate manufacturers. Its client-base includes pulp & paper mills, mines, breweries, water/sewer treatment plants & food processing plants, light fabrication & control panel manufacturing provide their 17,000 ft<sup>2</sup> facility. Winner of protit magazines 1991 "50 fastest growing companies in Canada", list at #36, W.S.C. is ready to service industrial Clients process control needs all across Canada. Industry Sector: Control Systems

### DRIVE SYSTEMS

# Reicon Inc.

80 Walker Drive BRAMPTON, Ontario L6T 4H6 Tel: (416) 458-1100 Fax: (416) 458-1200 Export/Marketing Contact: Mr. David Duff Director, Drives Marketing

Relcon Inc., is a leader in Canada in the custom engineering, manufacture and marketing motor control equipment include adjustable frequency drives, DC drives, slip energy recovery drive systems, and eddy current couplings. Industry Sector: Drive Systems

# Saf Drive Systems Inc.

859 Courtland Ave. East KITCHENER, Ontario N2G 4H5 Tel: (519) 743-5491 Fax: (519) 743-1628 Export/Marketing Contact: Mr. Juan Roman General Manager

The company manufactures AC an variable speed drives, solid state rec. and voltage starters for AC motors, crane/hoist controllers, arc furnace, heater, fan and pump controllers, mining vehicle motor controls, microprocess drive controllers, and variable frequency drives. Industry Sector: Drive Systems

# Softac Systems Ltd.

3046 Westwood St. PORT COQUITLAM, B.C. V3C 3L7 Tel: (604) 464-8505 Fax: (604) 464-2242 Export/Marketing Contact: Mr. Wayne Follett Manager-Drives

Established in 1971, Softac designs and manufactures variable speed drives, reduced voltage AC motor starters, rectifiers, for cranes, conveyors, ball mills for sawmills, mines, marine, and pulp mills. In addition, Softac designs and assembles PLC systems, controls & consoles. These systems may apply to the above noted industries and to automated computer optimizing systems for sawmills. Industry Sector: Drive Systems

### **ELECTRIC MOTORS**



9999 Markham Road, P.O. Box 150 MARKHAM, Ontario L3P 3J6 Tel: (416) 475-4647 Fax: (416) 475-4679 Export/Marketing Contact: Mr. Mike Snow Manager of Corporate Programs

Emerson Electric Canada is a diversified manufacturer of electrical and electronic products and systems through its 17 operating divisions and subsidiaries. Products are sold primarily through independent distributors and original equipment manufacturers in a variety of industries. Emerson in Canada employs over 2,000 people with 12 manufacturing locations. Emerson's extensive product line includes: electric heating elements, electrical products<sup>®</sup> for hazardous environments,

fractional/integral/industrial horsepower motors, air conditioning/refrigeration flow controls and compressors, solenoid valves, temperature/pressure/flow sensors, gas





valves, process flow control valves, appliance/furnace controls and thermostats, mechanical power transmission, hand held power tools, and garbage disposal appliances. Industry Sector: Electric Motors

Fasco Motors Ltd.

505 Conestoga Blvd. CAMBRIDGE, Ontario NIR 5X9 Tel: (519) 623-6130 Fax: (519) 623-6105 Export/Marketing Contact: Mr. Henry Mason Marketing Manager

Fasco Motors Ltd. manufactures subfractional AC electric motors (%HP and smaller). Motor lines include 2-pole and 4-pole shaded pole induction at 3.3" diameter, and skeleton (or c-frame) open type motors. Industry Sector: Electric Motors

Franklin Electric of Canada Limited

Highway 81 North STRATHROY, Ontario N7G 3J3 Tel: (519) 245-3220 Fax: (519) 245-3224 Export/Marketing Contact: Mr. G.D. Sharpe Sales Manager

The company manufactures fractional horsepower motors; subfractional horsepower motors; control boxes for submersible motors, submersible pump motors, sump pump motors, jet pump motors, permanent split capacitor motors and general purpose motors. Industry Sector: Electric Motors Leroy-Somer Canada Liev/Lid

1955 Cote de Liesse - suite 210 MONTREAL, Quebec H4N 3A8 Tel: (514) 332-1880 Fax: (514) 332-5912 Export/Marketing Contact: M. Lucien Nadeau V.P. Sales & Marketing

Established in Canada since 1964 and now part of the Emerson Group, Leroy-Somer is a world leader in the manufacturing of electrical and mechanical rotating machines. The company offers a complete range of drive systems for material handling, air handling, liquid handling, material processing or food processing. On request, the company will build to customer's specification and/or adapt gearmotors or motors to suit the customer's requirements. The company's products are designed for light and heavy duty industrial uses as well as marine duty. Products include:

-Premium Efficiency AC motors for 1 to 500 HP\*

-High efficiency AC motors from % to 5000 HP\*

-DC motors from 15 watts to 1000 KW -Alternators AC from 1 KW to 15 MW\* -Helical gearmotors\*

-Helical gear speed reducers°

-Variable speed control AC or DC or mechanical

Industry Sector: Electric Motors

179 Wicksteed Avenue TORONTO, Ontario M4G 2B9 Tel: (416) 421-2600 Fax: (416) 421-3065 Export/Marketing Contact: Mr. John Stopki National Sales Manager

The company manufactures welding equipment, consumables, and auxiliary power generators. Industry Sector: Electric Motors



677 Erie Street, P.O. Box 610 STRATFORD, Ontario NSA 6V6 Tel: (519) 271-3880 Fox: (519) 271-9781 Export/Markesing Contact: Ms. Laraine Murray Director of Sales

The company designs and manufactures precise electro-mechanical components for application requiring high reliability in the commercial and military aircraft industry. Products manufactured are DC subfractional motors (1 to 1/10 HP): servo motors, stepping motors, synchros, DC brushless motors. The company also manufactures digital indicators, mag wheels, and surface control position transmitters.

Industry Sector: Electric Motors





### Ram Air Manufacturing Ltd.

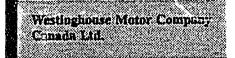
501 Newbold St. LONDON, Ontario N6E 1K4 Tel: (519) 681-1012 Fax: (519) 681-7341 Export/Marketing Contact: Mr. T.H. Dolumer General Manager

The company manufactures small DC electric motors (12 to 24 volts) for the automotive industry. Industry Sector: Electric Motors

## Rellance Electric Limited

678 Erie St. STRATFORD, Ontario NSA 6W1 Tel: (519) 271-3630 Fax: (519) 271-8213 Export/Marketing Contact: Mr. E.C. Dredge Sales Manager

The company manufactures large AC electric motors 200 to 4000 HP, and DC drive systems to 1000 HP. Industry Sector: Electric Motors



1632 Burlington Street (P.O. Box 2510) HAMILTON, Ontario L&N 3K2 Tel: (416) 528-8811 Fax: (416) 544-1781 Export/Marketing Contact: Mr. T.C. Johnson

Westinghouse Motor Company Canada is a fully integrated manufacturer of AC induction motors 1HP to 30,000HP as well as being able to provide large DC and Synchronous Motors for heavy industry. Sales offices are located across Canada with the engineering and Marketing sections located at the large factory in Hamilton.

Products include:

-AC motors, 1HP to 30,000HP to NEMA design standards with high efficiency designs as standard

-DC and synchronous motors for heavy industry

-TM brakes for use on overhead cranes Industry Sector: Electric Motors

#### ELECTRICAL POWER SUPPLY EQUIPMENT



5700 Sidley St. BURNABY, B.C. V5J 5E5 Tel: (604) 430-1476 Fac: (604) 430-8908 Export/Marketing Contact: Mr. David Graves Director of Marketing

Alpha Technologies Ltd. manufactures AC power products for the CATV, LAN, computer and telecommunications industries. DC products are supplied through its affiliate Argus Technologies Ltd. Manufacturing over 50 power conversion products in Burnaby, B.C., Alpha ships worldwide providing reliable power for a wide range of applications. CATV power supplies can be configured

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in either 50 or 60 Hz variations for many input and output voltages. Uninterruptible Power Supplies and Standby Power Supplies from 200 to 10,000 VA are available in many configurations. Alpha Technologies is a market and technology leader in the production of power conversion equipment. Products include: AC Uninterruptible Power Supplies (UPS), AC Standby Power, DC Uninterruptible Power Sources, Industrial and Commercial Battery Charger, 48 & 60V Transformer/Regulators, Line Conditioners, Surge Protection for Broadband Cable, Battery Eliminators, and Power Panels. Industry Sector: Electrical Power Supply Equipment

Argus Technologies Ltd.

7033 Antrim Ave BURNABY, B.C. VSJ 4M5 Tel: (604) 436-5900 Fax: (604) 436-1233 Export/Marketing Contact: Mr. Dennis Molnar Vice-President

Argus Technologies Ltd. manufactures DC Power System for telecommunications applications. Customers include major telephone companies in Canada and the U.S.A. as well as overseas. Argus's DC power systems convert the main AC electricity to DC which is used to power the telephone company's switching system and maintain the system's backup batteries. The company's product line includes rectifiers that convert AC power to DC power. These are supplied in 24 or 48 volts with current from 7.5 to 200 Amps. The rectifiers and other Argus power system components such as supervising panels, breaker panels, fuse panels, CEMF cells, termination panels, DC to DC converters and load disconnect panels are all integrated by Argus into a complete DC power system. The power system is custom designed and prewired to meet the users' requirements and can provide upto 1500 Amps of output current. Argus Technologies is dedicated to providing the most reliable power systems



possible to telecommunications spplications. This has enabled Argus to become one of the fastest growing DC power systems companies in North America.

Industry Sector: Electrical Power Supply Equipment

CiCan Power Systems

38 Commerce Crescent ACTON, Ontario L7J 2M3 Tel: (519) 853-4000 Faz: (519) 853-3166 Export/Marketing Contact: Mr. Dave Pitt

C-Can Power Systems designs and builds DC Power products for utilities, railroad, industrial and telecommunication applications. Products include rectifiers, batteries, DC/DC converters, distribution, and accessories. Primarily in the telecommunications industry, C-Can has recently introduced the world's smallest high power communications products with state of the art features. Custom products to client specification and to international standards are available. Located in Acton, Ontario, the 30,000 sq.ft. plant has full design and production facilities. Industry Sector: Electrical Power Supply Equipment

C&D Charter Power Systems Canada Inc.

9 Bradwick Drive CONCORD, Ontario L4K 2T4 Tel: (416) 669-4400 Fax: (416) 738-0564 Export/Marketing Contact: Mr. Norman N. Siomra V.P. & General Manager

C&D is a quality manufacturer of lift truck batteries and chargers for use in warehouse, manufacturing, airline ground support vehicles, pollution free & off-peak charging to more efficiently utilize electrical energy are standard features. Telecommunications, Uninterruptible Power Systems (UPS) & Switchgear & control applications demand reliability above all else. C&D Charter Power Systems Canada Inc. manufactures both standby batteries and power electronics equipment to provide integrated power systems for industrial use. Products include: -Motive Power Batteries -Motive Power Chargers\* -Standby Batteries -Standby Batteries -Standby Chargers -Valve Regulated (Scaled) Batteries Industry Sector: Electrical Power Supply Equipment

# CIN of Canada Limited.

80 Thomas Street STREETSVILLE, Ontario LSM 1Y9 Tel: (416) 826-1141 Fax: (416) 858-9058 Export/Marketing Contact: Mr. Bob Holmes

CTS manufactures standard or custom designed static power conversion equipment for a wide variety of demanding applications ranging from warships to cyclotrons and from nuclear generating stations to telecommunications systems. Products include uninterruptible power systems or DC - AC inverters, 50 VA to 50 KVA single phase; 3 KVA to 150 KVA three phase battery chargers; DC - DC converters; frequency converters; helicopter starters; and degausing rectifiers.

Industry Sector: Electrical Power Supply Equipment

# Electrotek Ltd.

1016- 34th Avenue S.E. CALGARY, Alberta T2G IV4 Tel: (403) 287-2200 Fax: (403) 287-3808 Export/Marketing Contact: Mrs. Barbara Franson Quality Assurance Manager

Founded in 1971, Electrotek Ltd. has flourished into a multi-faceted operation. In step with today's technology, the company designs, and manufactures "power factor correction equipment and performs power factor and harmonics studies for in depth evaluation. Electrotek also designs and manufactures process industrial controls. In addition to servicing industry with electrical contacting and maintenance, the company also provides data telecommunication networking, including design, integration and installations.

Industry Sector: Electrical Power Supply Equipment

Exide Electronics Canada Inc.

380 Carlingview Drive ETOBICOKE, Ontario M9W 5X9 Tel: (416) 798-0112 Fax: (416) 798-0062 Expont/Marketing Contact: Mr. John March Director Sales & Marketing

Exide Electronics designs, manufactures, markets and services a broad line of power performance and protection products which protect computer and other sensitive electronic systems against electrical power loss and distortions. The Company's products are used in diverse applications, including large computer facilities, mainframe and minicomputer systems, communications systems, medical applications and distributed computing environments.

Industry Sector: Electrical Power Supply Equipment





## Franklin Playford Inc.

620 McCaffrey ST. LAURENT, Quebec H4T 1N1 Tel: (514) 345-1950 Fax: (514) 341-1877 Export/Marketing Contact: Mr. Eddy J. Hannan Manager

Franklin Playford Inc. is a full line electrical distributor with manufacturing capabilities for custom electric heating units for heavy industry, and electrical panels, specializing in mining, steel, and pulp & paper industries. Principal products are uninterruptable power supplies, inverters and capacitors. Industry Sector: Electrical Power Supply Equipment

Iconopower Limited

5489 Canotek Road GLOUCESTER, Ontario K1J 9G7 Tel: (613) 744-3670 Fax: (613) 744-8452 Export/Marketing Contact: Mr. Peter Grace Export Manager

Established in 1975, Iconopower designs and manufactures electrical rectifier equipment, power semiconductor assemblies and regulated power supplies. lconopower specialises in heat-sink (cooling) techniques for power semiconductors. Customers include rapid transit authorities, railroads, electric utilities, telephone companies, the automobile industries, mines, the pulp and paper industry and power electronics industry which itself makes variable speed motor drives, induction heating equipment, electrolytic rectifiers, resistance heating equipment and electric welding equipment. Products include: -A.C. Electric Power Controllers\*

-Solid-state A.C. Switches<sup>•</sup> -Assemblies incorporating power semiconductors for variable speed motor drives and induction heating<sup>•</sup> -High power rectifiers for industrial applications for rapid transit. These may be controlled or unregulated. -Regulated power supplies, 50 watts to 2 kilowatts, employing switched-mode or series resonant technology -Firing circuits for thyristors and interface circuits for industrial electronics to facilitate operation of power equipment from logic level signals. Industry Sector: Electrical Power Supply Equipment



835 Harrington Court BURLINGTON, Ontario L7N 3P3 Tel: (416) 639-4692 Fax: (416) 639-0961 Export/Marketing Contact: Mr. A.S. Popp Marketing Manager

Inverpower's primary business is the design, development, consultation, servicing and manufacture of power electronic systems and solid-state power equipment. A major objective is the development of international leadership in the provision of power electronic systems for a variety of applications, such as special-purpose supplies, variable-speed AC drives, induction heating and military power supplies. In support of this goal, the company has continued to invest a large portion of its income to research and development. This R & D work extends to the use of microprocessors (for digital control system optimization, status indication, remote diagnostics, a d system mimic), programmable logic arrays and custom LSI for high-reliability logic and control and design capability to employ all power switches; i.e. SCRs, ASCRs, GTOs, IGBTs and power transistors. As a result of this research activity, Inverpower is able to select optimum systems for specified application requirements. Inverpower has supplied several hundred power electronic inverters in the range of 15 to 5000 kVA in more than 20 countries around the globe, in concert with the cultivation of exports representing approximately 70 percent of sales. Its clients are drawn from a wide range of firms in the industrial,

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada municipal, military, nuclear and national laboratory applications. Inverpower occupies 60,000 square feet and employs a staff of 100 highly trained personnel, including 15 engineers, 16 technologists, and senior executives with considerable experience and international reputation in the general area of solid-state power supplies and solid-state power control. Industry Sector: Electrical Power Supply Equipment



125 Nantucket Blvd. SCARBOROUGH, Ontario MIP 2N8 Tel: (416) 757-5151 Fax: (416) 752-4514 Export/Marketing Contact: Mr. Gary Pollock

Nife Corporation manufactures Uninterruptible Power Supplies, Battery Chargers, and Telecommunication Power Plants worldwide. NIFE specializes in Custom Design Equipment, and with Nickel Cadmium Batteries. NIFE recently merged with SAFT, and as a result, now holds a larger portion of the world market for Nickel Cadmium Batteries. SAFT-NIFE has provided the North American, and International markets with Quality, Workmanship, and prompt deliveries. They have been in the marketplace since 1944.

Industry Sector: Electrical Power Supply Equipment



## Norups Inc.

Box 13203 KANATA, Onsario K2K 1X4 Tel: (613) 831-8419 Fox: (613) 836-1490 Expon/Marketing Contact: Mr. David Desjardins, P.Eng. President

Norups Inc. (formeriy Atlas Energy Systems of Canada Ltd.) has been manufacturing motor-generator power systems in Canada since 1980. The company now has systems installed in all Canadian provinces. Norups provides solutions to all power quality problems. Product lines include motor-generator power conditioners, frequency changers, and rotary uninterruptible power supply (UPS) systems. System sizes are from 2KVA to 3000KVA. Typical users are airports, avionics, and computer mainframe applications. Industry Sector: Electrical Power Supply Equipment

Philtek Electronics Ltd.

2471 Vaxhall Place RICHMOND, B.C. V6V 1Z5 Tel: (604) 270-4642 Fac (604) 270-8343 Export/Marketing Contact: Mr. P. Pong Marketing Manager

The company manufactures electric power conversion equipment, uninterruptible power supplies, DC to AC inverters, AC to DC power supplies, and industrial battery chargers.

Industry Sector: Electrical Power Supply Equipment

## Pylon Electronics Inc.

147 Colonnade Road OTTAWA, Ontario K2E 7L9 Tel: (613) 226-7920 Fax: (613) 226-8195 Export/Marketing Contact: Mr. Brian C. Whaton

Pylon Electronics Inc., a Canadian company, was incorporated in 1955 and is a wholly owned subsidiary of Autrex Inc. of Weston, Ontario. The Pylon group comprises three operating divisions in Montreal, Toronto, and Ottawa, and a subsidiary in Dartmouth, Nova Scotia. The Montreal Division has been in operation for over 35 years and designs and manufactures products for the telecommunications power systems market. A vigorous research and development program ensures product-line continuity and state of the art solutions to customer problems. Primary product categories are DC/DC converters, inverters, ringing generators, battery chargers and uninterruptible power supplies (UPS). The Ottawa Division was established in 1977 and has developed unique products in various areas of electronic instrumentation including ordnance and buried hazards detection, radiation monitoring and measurement ( e.g. Radon gas), sutomated chemical analysis detectors, supervisory and control instruments for satellite ground stations and telecommunications maintenance and testing equipment. Pylon Electronics Inc. has shown consistent and financially stable growth for over three and a half decades. Its policy of significant investment in people and products ensures a distinguished

reputation for quality, service and innovation in products that are marketed worldwide.

Industry Sector: Electrical Power Supply Equipment

### Spectrodyne System ... International Ltd.

4000 Bois Franc ST. LAURENT, Quebec H4S LA7 Tel: (514) 331-9812 Fax: (514) 331-0379 Export/Marketing Contact: Mr. A. Zaki President

Established in 1975, Spectrodyne System International Ltd. has been dedicated to the design and manufacture of various "power" products and support items. Its customers include large and small telecommunication companies and utility (hydro) companies, both in Canada and abroad.

Products include:

-Battery chargers and switch gear. Complete DC power systems 12 v to 120 v (VPS)

-Rectifiers - switchmode and SCR -DC-to-DC converters

-Power supplies for base stations, repeaters and microwave stations -Static invertors

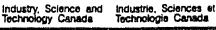
-Distribution, siam and monitoring panels -Customization to suit specific applications Industry Sector: Electrical Power Supply Equipment

Staticon Ltd.

390 Tapscont Road, Unit 5 SCARBOROUGH, Ontario M1B 2Y9 Tel: (416) 291-3723 Fax: (416) 291-3871 Export/Marketing Contact: Mr. Roland Hase Marketing Engineer/Mgr.

Incorporated since 1964, Staticon Ltd. is an established Canadian company specialized in the design manufacture and application of essential DC and AC power supply equipment. Over 40,000 Staticon power systems and modules are in service worldwide. Staticon products are chosen for harsh and/or remote environments and critical applications including computer

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installations, microwave and satellite earth stations, railways, nuclear power stations, pipelines and refineries, pulp and paper mills, mines, hospitals, airport landing systems, ship-board systems, and military installations. Staticon power systems solutions ensure the lowest power project life-cycle costs attainable. Products include rectifiers, inverters, DC to DC converters, and uninterruptible power supply (UPS) systems.

Industry Sector: Electrical Power Supply Equipment

# Thyristor Devices Ltd.

1893 Bonhill Rd., MISSISSAUGA, Ontario LST 1C1 Tel: (416) 564-2928 Fax: (416) 564-2945 Export/Marketing Contact: Mr. Syd Sinclair Vice President

Thyristor Devices Ltd.(TDL) designs and manufactures customised AC/DC power supplies. Established in 1968 to supply the electroplating industry, TDL has kept abreast with changing market needs and have recently gained approval from Ontario Hydro for its energy efficient rectifier design. The company's product line includes power supplies for technologies such as DC Arc furnaces, electro-painting motor-generator replacement, mine power centres, traction, refining, electrowinning, hard anodizing and Sandoz colour anodizing. The company is capable of competing in a global market with rectifiers currently operating on all five continents. TDL head office is located in Mississauga. Ontario and also maintains warehouse facilities in Port Huron, Michigan. Industry Sector: Electrical Power Supply Equipment



177 Samuel St., P.O. Box 2049 SARNIA, Ontario N7T 7L3 Tel: (519) 332-8800 Fax: (519) 337-5466 Export/Marketing Contact: Mr. Dave Watters Manufactural Supervisor

TME-Delta Inc. was founded in 1958 in Sarnia, Ontario as an electromechanical sales and service organization. Today it has four operating branches in southwestern Ontario (London, Wallaceburg, & Strathroy as well as Sarnia) carrying out electronic as well as electromechanical activities and employs upwards of 80 persons. The Company also manufactures both rotary and static phase converters which are devices that will convert single phase electrical power to the more commen industrial supply of three phase power for operating process or production equipment. These devises range ut/ to 60 HP units which will or-grate 180 HT of connected load. Design and build packages for industrial control applications, including PLC's, is also part of TME-DELTA's line. In 1989, the company received the Ontario Chamber of Commerce's Business Achievement Award for Business Excellence. Industry Sector: Electrical Power Supply

Tycor International Inc.

6107-6th Street S.E. CALGARY, Alberta T2H 1L9 Tel: (403) 259-3200 Fax: (403) 253-0663 Export/Marketing Contact: Mr. Will Frey C.E.O. & President

Tycor International Inc. combines ongoing research and development with field expertise in the manufacture of Power Conditioning Equipment used to protect the power supply of micro-processor based devices. Tycor Products incorporate finely-tuned circuitry which removes all normal and common mode noise, EMI and RFI, while protecting against massive surges as well as the conditions caused by brownouts and blackouts and the now very damaging HARMONICS. Tycor has export clients in Australia, Singapore, Hong Kong, Thailand, and the United States. Tycor's range of Power Conditioning Products includes AC Power Line Filters, Uninterruptible Power Filters, Regulating Line Filters, and Isolating Line Filters.

Industry Sector: Electrical Power Supply Equipment

Xantrex Technology Inc.

1584 Fell Avenue NORTH VANCOUVER, B.C. V7P 3E7 Tel: (604) 984-4268 Fax: (604) 984-9758 Export/Marketing Contact: Mr. N. Mulji Marketing Engineer

Xantrex is a power conversion specialist manufacturing a family of power supplies for a wide variety of applications in industrial educational and R&D environments. Xantrex designs and manufactures instrumentation quality laboratory and system supplies ranging from 50 watts to 12,000 watts. Industry Sector: Electrical Power Supply Equipment

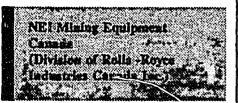
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Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada

Equipment



### FLAMEPROOF EQUIPMENT



55 Harbour Dr., Sydport Industrial Park, P.O. Box 967 SYDNEY, Nova Scotia B1P 614 Tel: (902) 564-5592 Fax: (902) 564-3964 Export/Marketing Contact: Ms. Marilyn Clements Operations Manager

Manufacturer and supplier of Underground I.S. ("intrinsically safe") & FLP ("flameproof") electrical equipment principally for the Canadian mining industry.

Products include: HV & LV distribution switchgear, motors, industrial controlgear, main ventilating fans, pumps, acomb switches, compressors, mine winders, haulage systems, fans, battery and trolley locomotives, transformers, gate end boxes, control gear, communication systems, radio & telephone as well as repair and refurbishing of Gate End Boxes (electrical switchgear for mines), and transformers. Industry Sector: Flameproof Electrical Equipment

### FUEL CELLS

## Alapower Canada Limited

Counter Court, Unit 20 407 Counter Street KINGSTON, Ontwio KTL 5N7 Tel: (613) 541-2287 Fas: (613) 541-2286 Export/Marketing Contact: Dr. John H. Stannard Senior Development Engineer

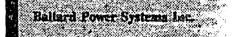
Alupower is a world leader in the development of aluminum-air fuel cells. The cells have a variety of applications; including reserve and stand-by power, and electric vehicles. Industry Sector: Fuel Cells



2480 Dumwin Drive MISSISSAUGA, Ontario LSL LI9 Tel: (416) 828-7700 Fax: (416) 828-7716 Export/Marketing Contact: Mr. Jiri K. Nor President

Astris Inc. manufactures electrochemical test cells, small fuel cells, and fuel cell generators up to 2 KW. The products are used in research and development for fuel cells, batteries and electrochemical processes.

Industry Sector: Fuel Cells



980 West 1st Street, Unit 107 NORTH VANCOUVER, B.C. V7P 3N4 Tel: (604) 986-9367 Fax: (604) 986-9367 Expont/Marketing Contact: Mr. David McLeod V.P. Marketing

Ballard Power Systems develops and manufactures Solid Polymer Fuel Cell Power Plants. These power plants can range in size from 5 Kilowatts to Megawatts. Designed as a modular system, these power plants can operate on pure hydrogen, methanol or natural gas. The natural gas product will be available by 1994 and will range from 40 kilowatts to 500 kilowatts. Ballard Power is also involved in developing Solid Polymer Fuel Cells for transportation applications and is currently developing a 100 kW power system for a transit bus. Products include:

PGS-103 - The device is a 3 kW net demonstrator power plant, capable of operating on hydrogen and air. PGS-105 - The device is a 5 kW net demonstrator power plant capable of operating on hydrogen and air. Industry Sector: Fuel Cells

#### FUSES



88 Horner Avenue TORONTO, Ontario M8Z SY3 Tel: (416) 252-9381 Fax: (416) 252-6572 Export/Marketing Contact: Mr. John Sencich Sales & Marketing Manager

Gould Shawmut Company is Canada's largest manufacturer of electrical fuses and the only Canadian manufacturer of HRCI and HRCII fuses. The company manufactures a wide range of fuse products which includes Fuse Blocks, Power Distribution Blocks and Wire Duct.



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Technology Canada

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The manufacturing and office facilities are located in Toronto where there are some of the most modern engineering and testing facilities available in the industry. Technical services are available through Technical Specialist located in Toronto and Montreal. Gould Shawmut has I een dedicated to providing value added products.

Industry Sector: Fuses

#### GEARMOTORS



#14-3105 Unity Dr. MISSISSAUGA, Ontario LSL 4L2 Tel: (416) 828-6996 Fax: (416) 828-6998 Export/Marketing Contact: Mr. Peter Giddings General Manager

Bauer Gearmotors Ltd. is a wholly owned subsidiary of Eberhard Bauer, W. Germany. Products include: -Geared Motors -Inline -Helical Worm -Shaft Mounted -Spiral Bevel -Gear boxes in the above styles Industry Sector: Gearmotors



210 Walker Drive BRAMELEA, Ontario L6T 3W1 Tel: (416) 791-1553 Fax: (416) 791-2999 Expont/Marketing Consact: Mr. G.R. Jockson Marketing Manager

SEW-Eurodrive Company of Canada Ltd., established in Canada in 1974, is the Canadian arm of SEW-Eurodrive G.m.b.H. The company has three plants in Canada, with locations in Vancouver and Montreal and including the headquarters in Bramalea, Ontario. SEW-Eurodrive is Canada's leading supplier of gearmotors, gear reducers, mechanical adjustable speed drives and related products. The products are backed by Eurodrive Canada's team of application engineers, and a world-wide network Eurodrive assembly plants providing local parts and service capabilities. Industry Sector: Gearmotors

GENERAL (MULTI-SECTORAL)

## Asea Brown Bovert Inc.

2 Complexe Desjardins East Tower, Room 3223 MONTREAL, Quebec HSB 1B9 Tel: (514) 987-1677 Fax: (514) 987-9845 Export/Marketing Contact: Mr. Wido Hoville Vice Pres., International Sales

With more than 5000 employees, ABB Canada is one of Canada's largest electrical equipment manufacturers, manufacturing for the most part power generation, transmission and distribution equipment. With its head office at St. Laurent, Quebec, ABB Canada has eleven manufacturing plants in Quebec and Ontario, and sales offices across Canada.

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada

The Canadian company's principal business areas consist of: 1) Transmission systems for electrical power generated in remote northern locations, 2) Transformers and electrical drives for domestic use and for export: and more recently, and 3) Engineering and supplying process control equipment for state-of-theart pulp and paper plants. Product lines include transformers (power, distribution, instrument, and dry), capacitors, switchgear accessories, medium voltage switchgear, high voltage switchgear. robotics, relays, transformer radiators, meters, shunt reactors, drives, exciters, relay systems, dry transformers, and boilers.

Industry Sector: General (Multisectoral)

**Babco** Electric & Engineering 8 A A

P.O. Box 3215, Station "D" EDMONTON, Alberta TSL 4J1 Tel: (403) 447-1386 Fox: (403) 447-1309 Export/Marketing Contact: Mr. George Babechuk President

Babco Electric & Engineering Ltd. was formed in 1971 primarily as a manufacturer of steel, aluminum and stainless steel enclosures for the electrical industry. In 1972, the company began manufacturing industrial instrumentation and control panels relative to electric electronic and pneumatic process control systems. This has now been expanded to include integrated variable speed drive systems, programmable controllers and robots. In 1973, Babco began manufacturing low and medium voltage motor control centers and low and high voltage switchgear. That same year the company added a service division to its operation, in order to give its customers the utmost in servic: satisfaction. Babco now operates under four divisions namely: a) Sheet Metai Division, b) Instrumentation and Control Division, c) Low and High Voltage Switchgear Division, and d) Field Service Division. Babco is a dynamic systems manufacturer



and does extensive work for oil & gas, pulp & paper, forestry, mining and utilities. Its growth is continuing to expand in North America and world market.

Industry Sector: General (Multi-Sectoral)

GE Canada

2300 Meadowvale Bivd. MISSISSAUGA, Ontario LSN 5P9 Tel: 1-800-668-4640 (416) 858-9009 Fax: (416) 858-5260 Export/Marketing Contact:

General Electric Canada is Canada's largest electrical manufacturer, with more than 10,000 employees in 16 manufacturing plants. Products include hydro turbines and generators, electric motors, time of day meters, load management equipment. and consumer, automotive, commercial and industrial lighting products including new technology halogen lamps. CAMCO, a GE subsidiary, is the largest manufacturer and distributor of major home appliances in Canada, with brand names GE, Horpoint, Moffat, McClary, as well as private brands; product lines include refrigerators ranges, dishwashers, washers and dryers. GE Canada is also a major Candu partner, providing fuel, fuel handling equipment and services to Ontario Hydro.

Industry Sector: General (Multisectoral)

## Guillerin International Inc.

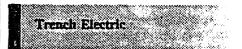
6099 Vipond Drive MISSISSAUGA, Ontario LST 2B3 Tel: (416) 670-8433 Fax (416) 674-0660 Export/Marketing Contact: Mr. Dushyant L. Shinde Manager Export Projects

Guillevin International Inc., established in 1906 is one of the largest Canadian electrical equipment and construction material supplier with 479 million dollars annual sales (1990). Guillevin exports totally coordinated electrical packages for power plants, transmission and distribution, steel plants, mining and several other industrial and construction projects. Guillevin represents most of the North American manufacturers; interfaces with architects and engineers, financial institutions and governments and provides complete procurement and technical services to customers worldwide. Products include: Electrical Construction Material and Accessories, Lamps, Lighting Fixtures and Lighting Systems\*, Wire, Cable, Conduit and Cable Trays, Heating, Ventilation and Accessories\*, Closed Circuit TV, Security Systems and Fire Alarms, Communication and Paging Systems, Programmable Logic Controllers & Factory Automation, U.P.S. Systems, Batteries, Rectifiers, Diesel Gen, Sets\*, Motor, Motor Control & Drive Systems\*, Metering and Instruments, Relay and Protection Equipment, Power Systems Apparatus, Bus Duct, Transformers, HV/LV Switchgear & Distribution equipment, Substations and Transmission/Distribution Systems, Power Plant Electrical Accessories, Connectors, Hardware and grounding equipment. Industry Sector: General (Multi-Sectoral)

### S. emens. Electric Ltd.

1180 Courtney Park Drive. MISSISSAUGA, Ontario LST 1P2 Tel: (416) 564-1995 Fas: (416) 564-5855 Export/Marketing Contact: Mr. Hans-Ulrich Schliefer Senior V.P., Standard Products

Siemens Electric Limited is one of Canada's largest electrical and electronic manufacturers, with more than 3000 employees. The Canadian Head Office is at Mississauga, Ontario, with manufacturing plants in Queuec, Ontario, and Alberta. Canadian manufacture comprises primarily electrical products and automotive electronics. Electrical products include motor control centres, starters, panelboards, switchboards, load centers, miniature circuit breakers, safety switches, panels, ducts, electrostrip, meters, switchgear, medium voltage control products, baseboard heaters, wall insert heaters, unit heaters, architectural heaters, and heater controls (thermostats). Industry Sector: General (Multisectoral)



71 Maybrook Drive SCARBOROUGH, Ontario MIV 4B6 Tel: (416) 298-8108 Fax: (416) 298-2209 Export/Marketing Contact: Mr. Allan Finn

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This 35 years old Canadian company employs approximately 750 people with more than 85 percent of its products exported around the world. With plants in Canada and Europe, Trench designs and manufactures heavy electrical equipment for utilities for use in transmission and distribution. A world market leader in both inductor technology (reactors & line traps) as well as high voltage (69 to 800kV) instrument transformers (capacitive voltage transformers and current transformers), Trench is

represented in more than 60 countries worldwide.

Products include:

-Air core and iron core reactors

-Line traps for power line carrier systems -Coupling capacitors (69kV & UP) for PLC

-Capacitive voltage transformers (69kV & UP) for metering & relaying

-Oil filled current transformers (69kV & UP)

-SF6 insulted current transformers (69 kV & UP)

Industry Sector: General (Multisectoral)

## Westingliouse Canada Inc.

Box 2510, Stn 'A' HAMILTON, Ontario L8N 3K2 Tel: (416) 528-8811 Fax: (416) 528-8734 Export/Marketing Contact: Mr. E.A. Robson

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Westinghouse Canada is a technologybased company competing globally with a diverse range of electrical, electronic and mechanical products and services. Established in 1903, Westinghouse Canada is one of Canada's largest electrical manufacturers, with over 5000 people in 15 manufacturing plants in Canada and abroad and has sales and service operations throughout Canada. Products manufactured in Canada include industrial motors<sup>\*</sup>, gas and steam turbines, sirline data communications systems, sonar, radar, surveillance systems and optical line tracer systems, "Linatrol" and electrical distribution and control products. Industry Sector: General (Multisectoral)

#### **GENERATOR SETS**

Cullen Canadian Inc.

9300-192nd Street SURREY, British Columbia V3T 4W2 Tel: (604) 888-2143 Fax: (604) 888-6583 Export/Marketing Contuct: Mr. K. Douglas Cullen President

Cullen Canadian Inc. manufactures diesel powered generator sets and contracts for the turnkey installation of diesel power plants and gas turbine power plants. Cullen Canadian Inc. designs and manufactures power management systems and power plant related switchgear. Cullen employs design engineers that work to international quality control standards. Product support is provided for all products sold by the company. Products include:

-High speed diesel generator sets 10kW to 2000 kW

-Fully enclosed diesel generator sets on a modular design for fast installation and operation

Medium speed diesel generator sets for power plants up to 20 megawatt unit sizes. -Gas turbine generator sets for emergency standby, prime power or utility use. Containerized from 200 kW to 3 megawatt for fast installation

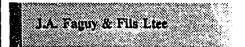
-Swithgear and motor control centres Industry Sector: Generator Sets



333 50th Avenue. S.E. CALGARY, Alberta 72G 2B3 Tel: (403) 253-3552 Fac: (403) 253-4607 Expon/Marketing Contact: Mt. Alan G. McNaughton Sales & Marketing Manager

Global Thermoelectric Inc. is a supplier of highly reliable, low maintenance power systems. Using thermoelectric generators Global provides power for applications requiring from 10 watts to 6000 watts. Global provides power supplies for numerous applications including cathodic protection, remote radio repeaters, data gathering, SCADA and navigational aids. Thermoelectric turn heat directly into electricity without any moving parts. Global manufactures portable and stationary thermoelectric generators. The generators require very little maintenance and have an extremely long operating life. The generators burn gaseous fuels such as propane, natural gas or liquid fuels such as diesel.

Industry Sector: Generator Sets



750 Montee de Liesse ST. LAURENT, Quebec H4T 1P3 Tel: (\$14) 341-3610 Fax: (\$14) 733-0196 Export/Marketing Contact: M. Raymond Flynn

Established in 1948, the company specializes in the assembly and sale of generator sets, mobile lighting towers, and the distribution of associated products. The company has had substantial export success in South America and Africa, and has 100 employees in 6 branches throughout Eastern Canada. Industry Sector: Generator Sets



#### Mechron Energy Ltd.

2437 Kaladar Avenue OTTAWA, Ontario KIV 8B9 Tel: (613) 733-3855 Fax: (613) 733-8197 Export/Marketing Contact: Mr. E.J. O'Brien Vice President, Sales

Mechton Energy Ltd. engineers, furnishes and installs electric power generating systems primarily for critical applications in hostile environments. It also maintains and services some of these systems for their customers. The company has engineered over 5000 custom engineered AC and DC power systems with a 99.999% field-proven reliability. Mechron's products carry CSA certification and are manufactured to NATO quality assurance certifiable to AQAP-4. Specialized power systems include their CYCLE CHARGE prime power system which reduces fuel consumption by over 70% and remote control and monitoring system (RMCS) for the management of remote diesel power generation systems. The company's sales activities are primarily concentrated in the Canadian market with some export marketing being done in tandem with other Canadian firms. The company is not presently represented outside Canada. Mechron would like to create more export opportunities and believes that this activity is best carried out in conjunction with representatives in specific countries who are knowledgeable and experienced with Mechron's product lines. The company would also entertain licensing and/or technology transfer of their technical know-how to appropriate parties. Industry Sector: Generator Sets

### Simpson Power Products Ltd.

110 Woolridge Street COQUITLAM, British Columbia V3K 5V4 Tel: (604) 520-3611 Fax: (604) 520-1974 Export/Marketing Contact: Mr. Derek L. Thomson Contracts & Quotes

Simpson Power Products Ltd., selling products under the trade name Simpower, has been designing and manufacturing generator systems since 1969. Simpower generator systems are manufactured in Vancouver and are marketed nationally and internationally. These systems serve as alternative power sources for airports computer centres, hospitals, schools, shopping centres, spartments, telephone exchanges, etc. Simpower also designs and builds engine drive / propulsion systems for tugboats, fishboats, pumps, cranes and sawmills.

Products include: -Generator Sets: -Diesel to 1600KW, Natural Gas/Propane to 2000KW -Marine Propulsion Systems -29BHP to 2159BHP Industry Sector: Generator Sets

# Simson-Manwell

1605 Kebet Way PORT COQUITLAM, B.C. V3C 5W9 Tel: (604) 944-7100 Fax (604) 944-7200 Export/Marketing Contact: Mrs. B. Marshall

Simson-Maxwell has been designing and manufacturing diesel generator sets, transfer switches, paralleling gear, and generator and engine controls since 1941. Power systems from 2 kilowatt to 7500 kilowatt are available using generating sets, batteries and solar power. Dependable prime and standby power systems used for remote, unattended operation have been designed and manufactured by Simson-Maxwell's power specialists and technicians. With 100 employees and branches in Vancouver, Prince George and Nanaimo, B.C. and Edmonton and Calgary, Alberta. Simson-Maxwell is well suited to meet all power requirements.

Industry Sector: Generator Sets

#### HEATING EQUIPMENT



80, rue Pépin ST-EUSTACHE, Quebec J7R SB7 Tel: (514) 473-2330 Fax: (514) 473-6441 Export/Marketing Contact: M. Pierre Côté

Copal (Canada) Ltee manufactures novel precast electric heating modules, patented in Canada and the United States in 1986. Copal's modules have resolved numerous installation problems where electric heating cables are used in floors, ceilings, and for melting snow. Copal's units are precision manufactured with fibreglass reinforced concrete. The heating cables are precisely installed in the molds prior to cooling. The units are then pretested and laminated in modules.

Industry Sector: Heating Equipment



1961 - 55th Avenue DORVAL, Quebec H9P 1G9 Tel: (514) 636-0510 1-800-363-8105 Fax: (514) 636-5647 Export/Marketing Contact: Mr. H.G. Clark

Established in 1962 Elkon Inc. manufactures a wide range of open coil electric heating products including electric pipe heaters, duct heaters, electric unit heaters and resistance load banks, at Dorval, Quebec. In addition Elkon builds SCR power controllers for resistive heating loads, up to 400 Amps at 600

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Volts. Elkon maintains a sales office in Toronto to serve the Ontario market. Industry Sector: Heating Equipment

## Teledyne Still-Man Canada

55 Underwriters Road SCARBOROUGH, Ontario M1R 3B4 Tel: (416) 751-5566 Fax: (416) 751-2215 Export/Marketing Contact: Mr. John Convey Executive Vice-President

Teledyne Still-Man Canada manufactures a wide variety of Canadian Standards Association (C.S.A.) and Underwriters Laboratory (U.L.) approved electrical heating devices for residential and industrial applications. The product list includes: residential products such as range/stove oven and surface units, small appliance tubular elements, residential electrical space heating elements for space and comfort heat, industrial process heaters and industrial immersion screwplug and flange heaters. The company has the design and manufacturing capabilities in Canada to make any type of electrical tubular element required up-to five (5) meters in length with voltages up-to 600 Volts with a maximum power rating limited by the safety of the application. Teledyne Still-Man Canada will assist each customer select the best and proper element for their application and manufacture it to the customer's specification, in quantities from a few to very large numbers required for mass production.

Industry Sector: Heating Equipment



150 Blue Heron Drive HYDE PARK (LONDON), Ontario NOM 120 Tel: (519) 657-3400 Fax: (519) 657-9030 Export/Marketing Contact: Mr. G.F. Heizer President

Thermon designs and manufactures a broad line of electric heating cables for industrial temperature maintenance applications and commercial snow/ice melting systems. A full complement of mechanical and electronic temperature controllers and monitor complete the fully engineered system. Thermon's Canadian made products include mineral insulated, constant power density and self-regulating cable and cable sets. Since incorporation in 1966, Thermon has directed their total resources to provide the highest quality products available to the Canadian and export marketplace.

Industry Sector: Heating Equipment



1820 Pandora Street VANCOUVER, B.C. V3L 1M5 Tel: (604) 251-2451 Fax: (604) 251-3356 Export/Marketing Contact: Mr. Gary Albach Executive Vice-President

Vortek is a private Canadian company that designs and manufactures the world's most power Arc Lamp Systems for scientific and industrial users. Listed in the Guinness Book of Records under the category 'Brightest Light', Vortek sells its lamp systems worldwide for industrial materials processing, high temperature testing, sunlight simulation and engineering studies. Through a joint venture with Eaton Corporation in the U.S., Vortek has supplied lamp systems worldwide for customers which include: Motorola, Siemens, IBM, Telefunken, Honeywell, Hyundai, Harris, Philips, NTT and

Tektronics. Vortek currently manufactures 4 models of lamp systems, ranging in power from 50 to 300 kW, together with standard optical reflectors. In addition, Vortek designs and manufactures custom optical reflectors as required for specific applications. Vortek supplies its customers with full service support including engineering design assistance, on-site turnkey installation, and both factory and on-site training in the operation and maintenance of Vortek facilities. Vortek is expanding its business to include design and manufacturing of equipment for industrial heat treating using its patented Whitelight<sup>TM</sup> technology. The company maintains a customer applications laboratory in Vancouver for advanced process development. Vortek is a private Canadian company founded in 1976 on research done at the University of British Columbia. International patents were granted on innovations for cooling arc lamps that allowed operation at high continuous powers. Vortek is the exclusive licensee of this technology and has continued the technical development and marketing of powerful arc lamps. Vortek maintains sales agents in Europe, Japan and North America for its arc lamp systems. These representatives are supported by joint ventures in all geographic markets for technical and market development of Whitelight<sup>TM</sup> products.

Industry Sector: Heating Equipment

Westcan Electric Heating Inc.

5895 Whittle Road MISSISSAUGA, Ontario L4Z 2H4 Tel: (416) 890-6006 Fax: (416) 890-6012 Export/Marketing Contact: Mr. Ron Ofield Vice President- Sales and Marketing

The company manufactures electrical comfort heating products, including baseboard heaters, and controls for the residential, commercial and industrial markets. The products are sold under the brand names 'Westcan' and 'Electromode'. They also supply controls and energy management systems.



#### Industry Sector: Heating Equipment

#### HYDROGEN PLANTS

### Electrolyser Corporation Ltd.

122 The West Mall ETOBICOKE, Toronto, Ontario M9C 1B9 Tel: (416) 621-9410 Fax: (416) 621-9830 Expon/Marketing Contact: Mr. Convers Baker Vice President-Marketing

The Electrolyser Corporation Ltd. is a Canadian manufacturer and supplier of electrolytic hydrogen plants for on-site production of hydrogen as a feedstock or atmosphere gas for a variety of chemical and industrial applications. Electrolyser has been in the hydrogen business for more than 40 years, and currently has 840 installations in 86 countries. Electrolyser is recognized as a world leader in the industry, having supplied more than half of the total number of electrolytic hydrogen plants currently installed wor! wide. In addition, through an extensive research and development program, Electrolyser hydrogen plants offer the highest level of efficiency and safety in the industry. Large scale electrolytic hydrogen plants have been developed for application in the energy sector and in the large scale production of such products as hydrogen peroxide and synthetic ammonia. Standard industrial size hydrogen feedstock or atmosphere gas in such areas as hydrogeneration of oils, fats, fatty acids, manufacture of float glass, high temperature metal process such as sintering, brazing, annealing, etc. Electrolyser also supplies a pre-assembled hydrogen generator for electrical generator cooling at thermal power stations. Industry Sector: Hydrogen Plants

### INDUSTRIAL CONTROLS

## A. Comeau & Associates Ltd.

4718 - 90 A Avenue EDMONTON, Alberta T6B 2P9 Tel: (403) 465-9961 Fax: (403) 465-4990 Export/Marketing Contact: Mr. Neil M. McNeil R.E.T.

Established in 1976, the company has become one of the world leaders in oilfield electrical control products & systems. The company manufactures the Keltronics line of submersible pump controllers along with a wide variety of control & protection equipment. Oilfield automation system design, integration, and installation services complement a comprehensive list of products & services available from the company. Specific products include the Keltronics K095 AMC Advanced Motor Controller. Kettronics K687 SPC Submersible Pump Controller, Keltronics K889 SMC Submersible Motor Controller, Keltronics K973 MPC Motor Protection Centre, Surge Shop Transient Suppressor, Optimizer Pump-off Control System, Scanwell Oilfield Automation System, and Keltronics Backspin Relay. Industry Sector: Industrial Controls

# Allen-Brudley Canada Limited

135 Dundas Street CAMBRIDGE, Ontario N1R 5X1 Tel: (519) 623-1810 Fax: (519) 623-8930 Export/Marketing Contact: Mr. W. C. Torrance V.P. Sales and Marketing

To meet the needs of customers worldwide, Allen-Bradley relies on uncompromising standards - and a "Zero defects" philosophy - to consistently produce high quality products. Allen-Bradley's products can classified into the following lines:

The Industrial Automation Control Products include a broad range of solidstate and electromechanical control devices. This line includes starters, sensors comprising of limit switches, proximity, speed, overload, undervoltage, barcode readers and vision inspection products. This also has products such as relays and operator interface devices. Drives and Motion Products include AC and DC drives. Motion Control drives, Computerized Numerical Controls and Intelligent Motion controls. Industrial Computers provide industry with a broad range of robotic control, process control systems as well as general automation applications.

Industry Sector: Industrial Controls

Industry, Science and Technology Canada Industrie, Sciences et Technologie Canada



### Ascoletric Limited

10 Airport Road BRANTFORD, Ontario N3T 5M8 Tel: (519) 758-2700-Fax: (519) 758-5540 Export/Marketing Contact: Mr. Dave H. Laackman Manager - Sales & Marketing

Ascoletric Limited was established in Brantford, Ontario in 1965. The Company serves its Canadian customers with Solenoid Operated Valves, Pressure and Temperature Switches, Rodless Pneumatic Cylinders and Electrical Control Products, such as Automatic Transfer Switches and Co-Generation controls which are also exported to the Asian countries and Europe. The Company has 225 employees in Canada and is well known by its customers for its high quality standards. Products include:

-Electrically operated valves 1/8" to 3" pipe size

-Automatic Transfer Switches to 600V, 4000 AMP

-Mulitpole Relays and Contactors -Synchronizing Controls

-Co-Generation Control Equipment Industry Sector: Industrial Controls



1230 Lakeshore Road East MISSISSAUGA, Ontario LSE 1E9 Tel: (416) 274-2311 Fax: (416) 274-4009 Export/Marketing Contact: Mr. A.C. Hogendoom President

Established in 1933, the Danfoss's head office is in Denmark, with about 14,000 employees world wide. Danfoss manufactures controls for Refrigeration, Heating Hydraulics, Industrial Instrumentation etc., motor starter special panels, and multi-speed starts for the electrical market up to 30 HP at 600V. Industry Sector: Industrial Controls

### Davis Controls Limited

2200 Bristol Circle OAKVILLE, Ont. L6H 5R3 Tel: (416) 829-2000 Fax: (416) 829-2630 Export/Marketing Contact: Mr. D.P. Grenfell President

The company manufactures capacitance probes, mercury contactor assemblies, high sensitivity contractor assemblies, high switches, vibration, process, fluid and industrial electrical controls. Industry Sector: Industrial Controls

## Delco Industries Ltd.

12202 Old Yale Road SURREY, B.C. V3V 3X5 Tel: (604) 580-2442 Fax: (604) 580-2278 Export/Marketing Contact: Mr. Helmut Ruff

Delco Industries Ltd. was established in 1973 in Vancouver, B.C. as a supplier of elevator replacement parts and components to customers worldwide. Modern manufacturing facilities combined with distributor rights of European, U.S.A. and Brazilian manufacturers for quality equipment have made Delco Industries Ltd. a reliable source in the industry in many countries. Delco manufactures complete microprocessor and relay logic based controllers for hydraulic and traction elevators offering many features for any type of installation and electronic safety devices and printed circuit boards for the elevator industry Industry Sector: Industrial Controls

### Displayco Ltd.

85 Dolomite Drive DOWNSVIEW, Ontario M3J 2N1 Tel: (416) 663-6405 Far: (416) 663-6492 Export/Marketing Contact: Mr. J.D. Rathgeber President

Displayco Ltd. is a family owned business incorporated in 1978 and specializes in mosaic graphic display systems and interface for the fire alarm industry. Displayco Ltd. manufactures mosaic graphic displays for traffic control systems, gas, water and electric utilities, and industrial control rooms. The display system interface includes lamp drives, digital displays and a "SmarkLink" intelligent serial interface to PCs. The interface system is used for lamps and numeric displays, and is also used in the fire alarm industry to operate remote annunciators. Specific products also include the "Numerix" numerical display system with  $1/2^{\circ}$  to 4° digits. **Industry Sector:** Industrial Controls

Durmitor Inc.

154 Caster Avenue, Unit 2 WOODBRIDGE, Ontario L4L 5Y7 Tel: (416) 856-4800 Fax: (416) 856-4802 Export/Marketing Contact: Mr. B. Veljkovic President & General Manager

Established in 1972, Durmitor has expertise in the fields of electronics, electro-mechanical assemblies and electrical controls. It specializes in custom controls which are not available off-theshelf. Durmitor designs and manufactures remote telemetry controls operating hearing and air-conditioning systems in multi-storey buildings, in addition to industrial control systems and has wide experience in custom start-up services. Industry Sector: Industrial Controls





Electro-Mécanik Inc.

445, Marconi STE-FOY, Quebec GIN 4A7 Tel: (418) 683-1724 Fax: (418) 683-6712 Export/Marketing Contact: M. Jean-N Bégin Vice President

Founded in 1962 as an electric motor repair and overhaul firm, Electro Mécanik now includes in its services the design and manufacture of automation control products. Electro Mécanik's engineers work closely with industry in the design and installation of sophisticated advanced technology automation control panels and system. The company also manufactures power factor controllers<sup>e</sup> employed to reduce energy costs.

**Industry Sector:** Industrial Controls

# Electronik Micro Tech Inc.

1390, De Coulomb, Suite C BOUCHERVILLE, Quebec J4B 7J4 Tel: (514) 641-4632 Faz: (514) 641-4756 Expon/Marketing Contact: M. Jean-Guy Bessette President

Established in 1979, EMT has 20 professionals which are specialized in the following fields: R&D in electronics controls and appropriate software, Manufacture of Traffic Directional Monitoring systems for bank applications, Battery charger controls for golf cart systems, Speed traction control for electrical vehicles, Natural gas/regular gas transfer control, and Safety road signalization systems. Clients include financial institutions, industrial sector, and government agencies. EMT's markets to the U.S. (East coast region) and Barbados (West Indies).

Industry Sector: Industrial Controls

### Elicon Industrial Controls Ltd.

#203 - 7080 River Road RICHMOND, B.C. V6X LC5 Tel: (604) 273-1654 Fax: (604) 273-0012 Export/Marketing Contact: Mr. R.A. Cax President

Elicon specializes in the automation of industrial plants. Elicon services include feasibility studies, power and control engineering, control system configuration, programming, documentation and start-up help, with emphasis on excellence in service at competitive rates. Soon after Elicon's inception in 1975, it pioneered the use of programmable logic controllers in board plants, sawmills, pulpmills, mining, material handling and water treatment facilities. While offering complete electrical engineering services with CAE/ CAD, including budgets, specs, power, grounding and lighting; Elicon still offers proven state-of-the-art technology for logic and provess controls, graphics, instrumentation for industry. \*A new department now specializes in energy efficiency and power quality, working closely with B.C. Hydro on their "Power Smart" program.

Industry Sector: Industrial Controls

Grenmont Ltd.

2200 Bristol Circle OAKVILLE, Ontario L6H 5R3 Tel: (416) 829-2628 Fax: (416) 829-2630 Export/Marketing Contact: Mr. D.P. Grenfell

Grenmont Ltd. is a wholly owned subsidiary of Davis Controls Ltd., a well established distributor of industrial controls and electronic equipment. Davis has been in business for 57 years and maintains sales offices and warehouses across the country. Grenmont Ltd. was established in 1986 to concentrate on energy conservation and environmental products and markets. Products include:

•CONSTAT Occupancy Sensor Based

HVAC Controllers. Used for energy conservation in hotel room applications (when the guest is not in the room the controller senses his absence and turns the heating/air-conditioning into the "setback" mode; this typically saves about 30 % of the annual energy bill.)

\*Grenmont Ltd. is also a supplier of other related equipment used in energy conservation and in-door air quality control. These include occupancy sensor based systems for the control of humidity, and the avoidance of mildew damage, also energy conservation load controllers time switches, etc.

Industry Sector: Industrial Controls



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S001 Trans-Canada Highway POINTE-CLAIRE, Quebec H9R 4R6 Tel: (514) 426-3000 Fax: (514) 426-5224 Export/Marketing Contact: Mr. Guy Sanscartier

Hewitt manufactures custom made electrical control panels for diesel generating sets, and switchgears for substation, and generating stations. Industry Sector: Industrial Controls

Klockner-Moeller Lat.

7275 Rapistan Court MISSISSAUGA, Ontario LSN 5Z4 Tel: (416) 542-2323 Fax: (416) 542-2321 Export/Marketing Contact: Mr. C. Chua

Klockner-Moeller Ltd. has served the Canadian industry for over 30 years and has built a strong market reputation for excellence in product quality and customer service. The company manufactures a comprehensive range of quality motor control and industrial electronic and automation products designed for industrial applications. Klockner-Moeller has its Head Office in Mississauga, Ontario, Factory in Granby, Quebec, and fully integrated facilities in major cities across Canada. Branches include extensive stock, a complete workshop for assembly, wiring and testing, and a design office to support the sales force. Distribution of Klockner-Moeller products is available through highly efficient authorized electrical distributors and the company's network of branches.

Industry Sector: Industrial Controls



130 Mclevin Ave. Unit 1 SCARBOROUGH, Ontario M1B 3R6 Tel: (416) 292-4463 Fax: (416) 292-4295 Export/Marketing Consact: Mr. W. Welk Marketing Manager

Leccraft was established in 1971 to manufacture and market pilot lights to the appliance industry. The Company has steadily expanded to typically 100 staff and manufactures 80% of items sold. Application engineering with fast custom building is a company philosophy. The product mix today includes pilot lights from 2 volts to 600 volts along with rocker, toggle and matrix switches. For the telecom industry the Company manufactures audio, coax or video jacks and jack panels, plus complete jackfield assemblies up to DSX-3. Recent product added is the DSX-3 or video restoration switch.

Industry Sector: Industrial Controls



635 Newbold Street LONDON, Ontario N6E 2T8 Tel: (519) 681-2980 Fax: (519) 685-9318 Export/Marketing Contact: Mr. Heine Holm President

London Mat Industries Ltd., is the world's largest manufacturer of treadle switches, trade name MATEX, used on transit vehicles for door safety, door opening and passenger counting. Most of the major manufacturers of passenger counting systems use the Matex treadle switches for counting sensors. They have proven to be the most accurate and indiscrete method of passenger monitoring found. Matex treadle switches are installed on vehicles at such transit properties as Amsterdam, Berlin, Brussels, Copenhagen, Geneva, Hull, Innsbruck, London, Leon, Melbourne, Mexico City, Milan, Montreal, Oslo, Ottawa, Paris, San Francisco, Seattle, Torino, Toronto, and Vancouver, to list just a few. The Matex treadle switches can also be found in such applications as traffic controls in the metro Subway in Paris, France, as well as being used on vehicle chairlifts and escalators. Products include:

1. Electric floor switches (mats) as used to activate automatic doors in supermarkets, hospitals, hotels etc.

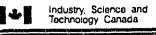
2. Same switches (mats) are now used to provide safety around machinery, robotic equipment etc.

3. Also used to control escalators and moving sidewalls to save energy 4. Treadle Switches used on Transit Vehicles for door opening, door safety and as sensors for passenger counting systems. Industry Sector: Industrial Controls



37 Staffern Drive CONCORD, Ontario LAK 2X2 Tel: (416) 738-3744 Fax: (416) 738-5732 Export/Marketing Contact: Mr. Arie Lapsker General Manager

Marine Safe Electronics was founded in 1981, and manufactures a patented product for early detection of insulation failure in electrical rotating equipment i.e. motors and generators. Marine Safe products have been installed worldwide. Products include insulation fault detectors. Industry Sector: Industrial Controls



and Industrie, Sciences et ada Technologie Canada



# Mep Technologies Inc.

3100 Peugeon CHOMEDEY LAVAL, Quebec H7L 9Z7 Tel: (514) 682-0804 Fax: (514) 682-3868 Export/Marketing Contoct: M. Armand Afilalo President

Mcp Technologies was founded in 1959 and is situated at Laval, Que. Mcp designs and manufactures industrial electrical products such as control cabinets, busbar, industrial switches, and steel and aluminum components. Industry Sector: Industrial Control

# Multilin

215 Anderson Ave. MARKHAM, Ontario L3P 4C7 Tel: (416) 294-6222 Fax: (416) 294-1815 Expon/Marketing Contact: Mr. John Ellison Expon Manager

Multilin established in 1978 is the premiere manufacturer of electronic relays. Electronic motor protection relays are specified with a motor control centre to prevent costly shutdowns. Multilin offers controls for a range of low and medium voltage motors. Accessories such as drawout case mounting, remote meters and communication software are available to meet specific system requirements. Relays are manufactured at the plant in Markham, Ont. calibrated and final tested. Service centres are located in Markham, Ont and Houston, TX, USA. Sales offices are located throughout North America and worldwide to provide customers with current product information. Winner of the "Certificate of Merit" award for industrial design.

Industry Sector: Industrial Controls



8433 Lougheed Highway BURNABY, B.C. VSA 1X4 Tel: (604) 421-7555 Fax: (604) 421-4101 Export/Marketing Contact: Mr. Sandy Michie President

Polytech manufactures underground electrical junction bores for in-ground electrical, communications, lighting and signalling connection applications - gas irrigation underground valves. These are now being produced and marketed in Western Canada and NorthWest U.S.A. The primary markets are governments, cities, highway maintenance, municipalities, districts, and electrical contractors. Industry Sector: Industrial Controls

# Pressenk Instruments Inc.

3870 Griffith ST.LAURENT, Quebec H4T LA7 Tel: (S14) 737-9562 Fax: (S14) 735-9744 Export/Marketing Contact: Dr. Miro Senk, Eng. President

Pressenk Instruments Inc. designs and manufactures electronic controls for OEM manufacturers of major appliances, i.e. electric/gas ranges, refrigerator/freezers, dishwashers, etc. The Company's product line includes electronic wiring devices such as GFI (Ground Fault Interrupters), wall and portable dimmers for regular and halogen lamps, electronic transformers for halogen lamps and electronic ballasts" for fluorescent lamps. Highly trained professionals will work with the customer to develop the proper electronic controller for the application. Pressenk's electronic controls are designed for both the American and European markets. Industry Sector: Industrial Controls



979 Alness Street DOWNSVIEW, Ontario M3J 2J1 Tel: (416) 665-1540 Fax: (416) 665-6249 Export/Marketing Contact: Mr. Viktor Buhr President

Pribusin Inc., designs and manufactures products for the process control industry. Products include isolated signal conditioners, alarm trips, power supplies RTD transmitters, multiplexer, and pH controllers to perform a wide variety of functions and applications. Pribusin's instruments have a reputation in the process control industry for low cost, dependability, and long life. Pribusin can, in many circumstances, custom engineer an instrument to it your individual specifications.

Industry Sector: Industrial Controls

Ranco Controls Canada Ltd Na 🗸 📈 1. W. M

221 Evans Avenue TORON<sup>7</sup>, Ontario M8Z, Tel: (4. 259-9254 Fax: (416) 231-3979 Export/Marketing Contact: Mr. Marvin R. McLean V.P. & G.M.

Ranco Controls Canada Ltd. is part of Ranco Incorporated which is a leading multinational manufacturer of electronic and electromechanical controls for regulating flov temperature, pressure, humidity, current, time, light, and speed. Ranco products are used every day worldwide - for controlling energy, physical comfort, safety and convenience. Products manufactured in Canada are liquid filled temperature, regulating thermostats, refrigeration controls and humidity controls.

Industry Sector: Industrial Controls





1210 Birchmount Road SCARBOROUGH, Ontario M1P 2C3 Tel: (416) 752-4611 Fax: (416) 752-4614 Export/Marketing Contact: Mr. Al Shelson President

Renfrew Electric Co. Limited, established in 1931, manufactures a wide range of wirewound resistors, electromechanical relays and terminal barrier strips. Resistors range in sizes from 3 watts to 225 watts including non inductive type windings. Renfrew electric has been manufacturing relays since 1950 and offers plug-in, panel mount, latching, sequence and time delay relays up to 10 Amp ratings. Power relays are available up to 30 Amp capability. Barrier Terminal blocks are available from 5 Amp to 90 Amp capacity. In addition, Renfrew Electric has the facility to supply various specialty coils.

**Industry Sector:** Industrial Controls



6675 Rexwood Road MISSISSAUGA, Ontario L4V 1V1 Tel: (416) 678-7000 Fax: (416) 678-9514 Export/Marketing Contact: Mr. Richard Copeland Manager of Marketing

Square D is one of Canada's largest electrical and electronic control manufacturers, with about 900 employees in four plants. Product lines include switchboards, panelboards, motor control centers, enclosed combination starters, circuit breaker enclosures, meter centers and units, frontline rack components, unit substations, enclosed HVL switches, load centers, safety switches, manual starters, and special control panels. Industry Sector: Industrial Controls



406 Jessop Ave. SASKATOON, SK S7N 2S5 Tel: (306) 373-S505 Fac: (306) 374-2245 Export/Marketing Contact: Mr. Ken Olan Sales & Marketing Manager

Startco Engineering Ltd. is a Canadian electrical manufacturing company. Startco expertise in digital electronics has taken it into the heavy industries of Canada, Australia and the U.S.A. These industries include mining, pulp & paper, oil & gas, petrochemical, forest, and utilities. Products include microprocessor based motor protection units, ground-fault ground-check monitors, high output ground-fault ground check monitors, bearing protection units, neutral-grounding - resistor monitors, 3-phase ammeters, ground-fault panels, solid-state starters and portable mine power centres. Industry Sector: Industrial Controls

Tekmar Control System Ltd.

4611 - 23rd St. VERNON, B.C. VIT 4K7 Tel: (604) 545-7749 Fax: (604) 545-0650 Export/Marketing Contact: Mr. Steffen Knuever President

Tekmar Control Systems Ltd. develops and manufactures precision electronic controls primarily for the hydronic heating industry. Its market is in North America with the majority of the product being exported to the United States. Tekmar uses the latest surface mount technology with robotic manufacturing to produce the excellent quality controls they are known for. All of their products are energy saving products and by definition, environmental products. These products include: Boiler temperature reset controls<sup>\*</sup>, Mixing valve reset controls<sup>\*</sup>, Boiler staging and reset controls<sup>\*</sup>, Hydronic heating zone controls, and set point controls<sup>®</sup>. Most of their products are researched and developed in Canada by Tekmar's in-house engineering staff. Industry Sector: Industrial Controls

Telemecanique Canada Liee 12 (A 1997) (A 1997)

580, avenue Lepine DORVAL, Quebec H9P 1G2 Tel: (514) 636-9560 Fax: (514) 636-1207 Export/Marketing Contact: M. B. Lafrance Sales Manager

Telecmecanique Canada Ltee has been established in Canada since 1970. The company manufactures industrial controls including relays, contactors, starters, motor control centers, and custom-built panels. Plants are located at Dorval, Quebec, and at Toronto, with distribution outlets across Canada

**Industry Sector:** Industrial Controls

Thomson Technology Inc. 

19214-94th Avenue SURREY, B.C. V3T 4W2 Tel: (604) 888-0110 Fac: (604) 888-3381 Export/Marketing Contact: Mr. Rick Martin Operations Manager

Thomson Technology Inc. is a manufacturer of electrical apparatus for use in the Power Generation industry. Most T.T.I. products are employed in conjunction with engine-driven generatorsets, in either prime power or standby applications. These products include switchboards for single or multiple generators, wall and unit-mounted generator set control panels, automatic transfer switches, bypass/isolation switches, etc., and are applied in industrial, commercial and marine installations. Products include:





Panels & Switchboards \*(Cogenerations & Parallel Generation-Uninterrupted Power Transfer)
Transfer Switches
Engine Controllers
Remote Annuncators
Sensing Devices
\* System Controllers - \*(ECS 500 System
Controller c/w data logging, remote
monitoring & control & SCADA)
Battery Chargers
Voltage Regulators
Load Banks
Meters & Accessories
Industry Sector: Industrial Controls

United Electric Controls (Canada) Ltd.

5320 Bradeo Blvd. MISSISSAUGA, Ontario L4W 1G7 Tel: (416) 625-5082 Fax: (416) 625-5709 Export/Marketing Contact: Mr. Malcolm Quinn

United Electric manufactures a complete line of pressure and vacuum controls, and differential pressure controls for industry. Temperature controls, indicating temperature controls, electronic controls thermocouples, RTD and thermistio probes are also manufactured at the Mississauga plant. United Electric have been manufacturing in Canada for over thirty years. Distribution is through distributors across Canada and U.E. sales offices.

Industry Sector: Industrial Controls

Western Industrial Programming

5840 Auto Road S.E. (P.O. Box 2044) SALMON ARM, B.C. VIE 4R1 Tel: (604) 832-9322 Fox: (604) 832-1885 Export/Marketing Contact: Mr. Guy Duke

PLC's continue to be the focal point of Western Industrial Programming's business, but the company believes in combining the best attributes of the wide variety of control equipment and concepts available to create systems that are fast, reliable, flexible and reasonably priced. The staff has experience in complete system design, programming, custom printed circuit board design, control console fabrication, machine vision, colour graphic operator interfaces, management reports, system commissioning and service - everything needed to bring a control project to a successful conclusion. Industry Sector: Industrial Controls

#### INSULATORS



173 Roger Street, P.O. Box 400 WATERLOO, Ontario N2J 4A9 Tel: (519) 576-2555 Fax: (519) 576-3780 Export/Marketing Contact: Mr. Tammi Ruutopold

Electro Porcelain Co. Ltd. has supplied electrical equipment manufacturers with insulators since 1946. The company is a custom manufacturer of low voltage porcelain insulators and refractory products for heater trades. All of the compositions, for different usage in electrical fields, are dry press compression mouldings ranging from commercial vitrified porcelain (glazed or unglazed) to refractory compositions for heater plates and coil carriers. The company also supplies normal steatite parts for heater trades, etc. Some technical compositions are also available for specific applications. Tooling for moulds is normally provided in house.

**Industry Sector: Insulators** 



25 Campbell Street, P.O. Box 594 BRANTFORD, Ontario N3T 5N9 Tel: (519) 753-8454 Fox: (519) 753-5014 Expont/Marketing Contact: Mr. Dave Stevenson Sales Manager

Hamilton Porcelains Ltd. has for many years manufactured insulators for numerous customers who apply hardware to these insulators for the pole line industry. Among its other products are numerous shaped insulators used in electric furnaces for supporting resistance wire coils & ribbon, numerous arc chute components for high voltage circuit breakers. Insulators for edge wound resistors, etc.

Hamilton Porcelains Ltd. was founded about 135 years ago and has evolved from producing pottery to the making of electrical porcelains. Products include:

-Pole Line Insulators - strains, spools, standoffs, bus. "U" bolt Ins. -Edge Wound Resistor Porcelains -Porcelains for Coil Elements -Arc Chute components - Arc Quenching Chutes, Constrictor Plates -Electric Furnace Spools, Hangers Industry Sector: Insulators



Tec



P.O. Box 1234 MEDICINE HAT, Alberta TLA 7M9 Tel: (403) 528-2445 Fox: (403) 527-0075 Export/Marketing Contact: Mr. Frank Weidel President & G.M.

Indepor Inc., and its predecessor Independent Porcelain Co. Ltd. since 1975, is a manufacturer of electrical porcelain insulators. The company specializes in distribution transformer bushings, fuse cutouts and specialty electrical porcelains; s, ool and guy wire strain insulators. It's customers include many of the North-American distribution transformer manufacturers. Products include: -Distribution transformer bushings -Porcelain bodies for fuse cut-outs and lightning arresters

-Distribution type guy strain and spool insulators

-A variety of custom specialty electrical porcelains

Industry Sector: Insulators

K-Line Insulators Ltd. 

50 Passmore Avenue SCARBOROUGH, Ontario MIV 2T1 Tel: (416) 292-2008 Fax: (416) 292-2094 Export/Marketing Contact: Mr. A.J. Carreira

K-Line Insulators manufactures polymer (silcone & EPDM) insulators for voltage systems up to 230kV. Products include: Polyer suspension, guy strain, post-type insulators, interphase spacers, insulated live-line tools and RTV dispersion coatings.

Industry Sector: Insulators



71 Selby Road BRAMPTON, Ontario L6W 1KS Tel: (416) 457-8720 Fax: (416) 457-2193 Export/Marketing Contact: Mr. Patrick HJ. Warr Manager-Marketing

Racal-Docca Canada Ltd. specializes in the design and manufacture of base and guy insulators for self supporting and guyline towers. Other insulator products manufactured in the Brampton, Ontario plant are air spaced and oil filled tower lighting transformers, static drain devices and feed thru bushings. Although these products are primarily aimed at the medium frequency radio antenna market, power utility companies also find the custom design and manufacturing capabilities useful for their special needs. The customer base is both national and international in nature with such prestigious customers, for example, as Transport Canada, Ontario Hydro, U.S. Navy and the British Broadcasting Company.

**Industry Sector:** Insulators

### LIGHTING PRODUCTS



77 West Beaver Cr. Rd. RICHMOND HILL, Ontario L4B 3A7 Tel: (416) 882-8008 Fax: (416) 882-8014 Export/Marketing Contact: Mr. W. Cook President

The company manufactures airfield lighting isolating transformers and connector kits, and waterproof connector kits for streetlighting and other applications. Industry Sector: Lighting Products (airport) Appleton Electric Limited

750 Lawrence Street CAMBRIDGE, Ontario N3H 2N1 Tel: (519) 653-2581 Far: (519) 653-5181 Export/Marketing Contact: Mr. Mike Carroll Sales manager

The company manufactures a broad range of lighting products including high intensity discharge and incandescent, for industrial use in both hazardous and nonhazardous locations. Electrical fittings, junction boxes, panel boards and industrial controls are also manufactured for hazardous locations. Also available are electrical fittings, lighting, controls and fixtures for marine applications. Industry Sector: Lighting Products

# Arteraft Electric Limited

#### 8050 Torbram Road BRAMALEA, Ontario L6T 3T2 Tel: (416) 791-1551 Fax: (416) 791-7381

Export/Marketing Contact: Mr. Howard S. Bernstein V.P. Marketing

Artcraft Electric Limited has manufactured and imported residential lighting focures for over thirty-seven years. The Company's product lines include both indoor and outdoor lighting fixtures using incandescent, halogen and compact fluorescent lighting. Artcraft has manufacturing facilities in both Montreal and Toronto and Showrooms in Montreal. Toronto and Dallas. Since its inception, Artcraft and its highly trained staff have been dedicated to providing the finest lighting and using the highest engineered standards for safety and quality. Artcraft offers a large range of compact fluorescent and halogen fixtures (low voltage and regular line voltage) all of which offer more efficient use of lighting and energy consumption. In addition, the Company





produces a large range of luminaries employing standard incandescent bulbs. Industry Sector: Lighting Products

Canterra Electronics International Inc.

16821-113 Avenue, 2nd Floor EDMONTON, Alberta TSM 2X2 Tel: (403) 486-3145 Fax: (403) 489-7670 Export/Marketing Contact: Mr. Bruno Dobler Chairman & C.E.O.

Founded in 1987 Canterra manufactures and distributes energy saving products for the lighting industry and control systems for industrial battery chargers. The "FRED" product<sup>\*</sup> is an add-on device to core-coil ballasts which reduce power consumption up to 35%. It also doubles ballast life, extends lamp life and reduces AC loads. The Canterra Sinusoidal Electronic Ballast<sup>\*</sup> is a high efficiency low harmonics product for the fluorescent focure market incorporating the latest technology in lamp control and is dimmable. The "Charge Guard"" is a microprocessor controlled retrofit system for industrial chargers which prolongs battery life and has diagnostic capabilities. Products are sold through agents and distributors to the entire spectrum of commercial and industrial users across Canada and the U.S.A. Industry Sector: Lighting Products

Clevemont Industries Ltd.

8155 Larrey St. ANJOU, Quebec H1J 2L5 Tel: (514) 353-8760 Fax: (514) 353-2660 Export/Marketing Contact: Mr. Edward Lenkov President

Clevemont Industries under its trade name L'Image is a leading North American manufacturer and innovator of lighting products for commercial and residential use. Amongst its diversified product lines are decorative, fluorescent, outdoor, track, low-voltage, energy efficient<sup>e</sup>, linear systems and a variety of other lighting products. The company maintains an R&D Department with the ability to do quotations, sophisticated lighting layouts and special lighting projects immediately upon request. The name L'Image has become synonymous with lighting innovation and the company numbers amongst its customer base the leading electrical distributors and wholesalers in North America.

Industry Sector: Lighting Products.

Columbia Electric Inc. 

148 Boyer Street ST. ISIDORE (CO. LAPRAIRIE), Quebec JOL 2A0 Tel: (514) 454-7561 Fax: (514) 454-4352 Export/Marketing Contact: Mr. J. Landgraf

Columbia Electric Inc. is a designer and manufacturer of lighting fixtures since 1945. The company's product line includes lighting of all types for home or semicommercial use, whether incandescent, fluorescent, halogen quartz, and energy anving lighting. Since it was founded, Columbia Electric has been dedicated to providing the finest lighting equipment possible.

Industry Sector: Lighting Products



5925 McLaughlin Road MISSISSAUGA,, Ontario LSR 1B8 Tel: (416) 507-4000 Fax: (416) 568-7052 Export/Marketing Contact: Mr. R. Lopes Marketing Manager

The company manufacturers recessed, surface, Power Trac, fluorescent, roadway, outdoor floodlighting, sportslighting, parking lot, large area, and security lighting products for the residential, commercial, institutional and industrial lighting markets in Canada. Industry Sector: Lighting Products



815 Gana Court MISSISSAUGA, Ontario LSS 1P2 Tel: (416) 670-8391 Fax: (416) 670-4616 1-800-668-5517 Expont/Marketing Contact: Mr. Peter Saccomanno National Sales & Marketing Manager

Design Electrical Mfg., a Noma Company. is located in a new and modern manufacturing facility in Mississauga, Ontario. Design manufactures a wide range of Industrial and Commercial lighting products and markets a complete line of energy saving compact fluorescent fixtures." The Rab product group sets th industry standard for the manufacture of cast aluminum boxes, garden lighting and explosion proof fixtures. Design products are represented by qualified lighting professionals coast to coast who are available to help design any lighting application. They are supported by dedicated factory, customer service, Engineering and Marketing teams who are always available for assistance. Industry Sector: Lighting Products





## Flexiloine Canada

165 Steelcase Rd. East MARKHAM, Ontario L3R 1G1 Tel: (416) 507-4000 Fax: (416) 568-7040 Expont/Marketing Contact: Mr. Richard Gloster

Flexilume has manufactured fluorescent lighting products for the Canadian and International markets since 1981. A complete range of fluorescent lighting products are manufactured in Markham, Ontario using Canadian components, and fixture design capabilities. The latest in computerized fabrication techniques maximize productivity and supports large custom fabrication projects. Flexilume stocks commercial, industrial and institutional lighting products and offers design and consulting services for projects worldwide.

**Industry Sector:** Lighting Products

GTE Sylvania Canada Ltd. 

2001 Drew Rd. MISSISSAUGA, Ontario LSS 1S4 Tel: (416) 673-6171 Fax: (416) 673-1413 Expont/Marketing Contact: Mr. P. Christie Dir. Marketing and Soles

The company manufactures a complete line of lighting products; 1) fluorescent, incandescent, high intensity discharge, photographic and tungsten halogen lamps, 2) fluorescent fixtures for indoor use 3) H.I.D. fixtures for outdoor and indoor application and street lighting. Industry Sector: Lighting Products



1620 Steeles Avenue East BRAMPTON, Ontario L6T 1A5 Tel: (416) 793-3111 Faz: (416) 793-9597 Expon/Marketing Contact: Mr. M. J. Barry

Holophane Canada was established in 1911, has plants in Brampton, Ontario and St-Hyscinthe, Quebec, and manufactures a range of outdoor, industrial and outdoor residential products<sup>\*</sup> for the project market and energy efficient retrofit sector. Holophane also supplies the O.E.M. market with glass refractor components for streetlighting, plastic fluorescent lenses (diffusers), the utility markets with highway high mast and interchange systems, and lighting analysis is provided to engineers, architects, users, contractors, and distributors to assess, calculate, compare and improve lighting systems. All products sold are energy saving products

Industry Sector: Lighting Products



1811 Boul. Hymus DORVAL, Quebec H9P LJ5 Tel: (514) 685-2271 Fac: (514) 685-2394 Export/Marketing Contact: Mr. Sam Rimoin National Sales

Kaufel Group Ltd., through its subsidiaries, Emergi-Lite, Landmark and Panek, is a Canadian manufacturer of emergency lighting and standby power equipment; street and highway lighting fixtures; residential and commercial lighting fixtures; custom- designed interior and exterior lighting systems for buses, subways, trains and trolley; custom metal products including cabinets, stampings and components; and injection-molded plastic components. It sells its products mainly in Canada and the United States. Industry Sector: Lighting



455 Dobbie Drive CAMBRIDGE, Ontario NIR 5X9 Tel: (519) 623-8820 Fax: (519) 623-4435 Export/Marketing Contact: Mr. Mickey Cooper V.P. Intul. Sales

Keene-Widelite, one of four operating divisions of Canivte Inc., manufactures efficient, energy saving high intensity discharge (H.I.D.) lighting products for industrial and commercial markets. Product lines such as Keene. Widelite & Widelite Controls, offer the customer a wide selection in H.I.D. Lighting. Products include floodlights, wallcubes and dimmer controls. Keene-Widelite manufactures in Cambridge, Ontario and has sales offices in every major Canadian city coast to coast. The people at Keene-Widelite are committed to provide the best in service & products to meet or exceed customer needs.

Industry Sector: Lighting Products



3015 Louis A. Amos ST.LACHINE, Quebec H8T IC4 Tel: (514) 636-0670 Fax: (514) 636-0460 Export/Marketing Contact: M. R.M. Arseneault V.P. Sales and Marketing

The company manufactures architectural indoor and outdoor lighting fixtures, consumer and commercial lighting, and incandescent, fluorescent and H.I.D. lighting fixtures. Industry Sector: Lighting Products

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### Lamacell Incorporated

120 Nashdene Road SCARBOROUGH, Ontario M1V 2W3 Tel: (416) 292-9782 Fax: (416) 292-6769 Export/Marketing Contact: Mr. David Rycroft President

Lumacell Inc. is a leading Canadian manufacturer of emergency lighting, emergency power and exit sign products. Innovative engineering and highest level of product quality characterize Lumacell's products. Production facilities include a modern 50,000 sq.ft. plant in Scarborough, Ontario and a plant in Lachine, Quebec. Lumacell products are used for evacuation lighting in commercial, institutional and industrial applications. All use state-ofthe-art charging technology and long life rechargeable batteries. Product lines include rechargeable emergency lighting battery units 6V, 12V, 24V output, inputs 120, 240, 277 or 347 V.A.C., and manufactured in a wide range of architectural models for finished commercial areas and heavy duty industrial styles; D.C. chargers and rectifiers with outputs of up to 100A; A.C. inverter systems consisting of charger, battery and inverters to provide up to 20 KVA of emergency A.C. power; \*Exit signs with legends available in a variety of languages; cut signs are available with PL, LED or electroluminescent panels for low energy drain; \*POWERFREE™ Self Luminous Exit Signs are available which require no power input or connection. Lumacell is extremely interested in developing international markets.

Industry Sector: Lighting Products

## Lume: Inc.

618 Curt-Boivin BOISBRIAND, Quebec JTG 2A7 Tel: (514) 430-7040 Fax: (514) 430-1453 Export/Marketing Contact: M. Alain Poudrette

Lumec specializes in the design and manufacture of high quality decorative and functional luminaries for the municipal and commercial sectors. The company has become a leader in Canada in the manufacture of deco-functional landscape and area lighting in both contemporary and traditional styles. The products include sodium vapour lamps to replace mercury lamps used by municipalities. With over 100 employees, Lumec is well positioned in the Canadian market, having established itself in very large projects throughout the country. Lumec now exports 25% of its production to its expanding United States market. Lumec's lighting products can also be found in Algeria, Singapore, and Hong Kong. Industry Sector: Lighting Products

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9125, 22E Aven. Industrial Park ST-GEORGES EAST, Quebec G5Y 6V8 Tel: (418) 228-2981 Fax: (418) 228-2981 Export/Marketing Contact: M. Denis Goulet Export Manager

Luminac has been manufacturing halogen lighting fixtures<sup>\*</sup> since 1986, with low voltage energy conservation features. Luminac also manufactures energy saving fluorescent and sodium fixtures, including sodium commercial lighting. Luminac is presently expanding into the U.S. export markets.

Industry Sector: Lighting Products (Lighting Fixtures)

### Muxilite Mfg. Ltd.

3008 Spring St. PORT MOODY, B.C. V3H 1Z8 Tel: (604) 461-4747 Fax: (604) 461-5747 Export/Marketing Contact: Mr. Max Cohen President

Maxilite specialises in the manufacture of quality residential lighting fixtures, using wood, glass and metal. In business for 14 years, Maxilite has concentrated on a small but unique line of products which are manufactured in-house. A recent expansion into "energy saving lighting fixtures offers a variety of styles to choose from.

Ind try Sector: Lighting Products



570 Southgate Drive, P.O. Box 1779 GUELPH, Ontario N1H 6Z9 Tel: (519) 822-4381 Fax: (519) 822-4589 Export/Marketing Contact: Ms. Casey Gaetz Manager - Sales & Eng.

Metalumen Manufacturing Inc. designs and manufactures quality architectural lighting systems and special application lighting fixtures. The company's lighting products can be found in hospitals, institutions, mines, churches, corporations, parks and along the roadside. Quality of workmanship is excellent. State-of-the-art manufacturing techniques, extensive product design and development are a way of life at Metalumen. All products CSA and UL approved. Customer service, superior design and quality workmanship - that's Metalumen Manufacturing Inc. Products include: Custom Lighting Fixtures, Exterior

Building Lighting, Interior Lighting, ambient and direct, Fluorescent Fixtures, Incandescent Fixtures, Mercury Fixtures,





Industry, Science and Indust Technology Canada Techn

d Industrie, Sciences et Technologie Canada High Intensity Fixtures, Metal Halide Fixtures, Sodium Fixtures, Recessed Lighting, Track Lighting Systems, Air Handling Track Lighting, Track Lighting Fixtures, relocatable, Tubular Lighting Systems, Lighting Bollards, Street Lighting Industry Sector: Lighting Products (Lighting Fixtures)

## Peerless Electric Co. Ltd.

9145, rue Boivin LASALLE, Quebec H8R 2E5 Tel: (514) 595-1671 Fax: (514) 595-4411 Export/Marketing Contact: Mr. Bert Chew Marketing Manager

Peerless, a leading Canadian manufacturer of flucrescent luminaries, is celebrating over fifty years of service to the lighting industry. Peerless specializes in computer design concepts and custom built luminaries in keeping pace with changing industry requirements and lighting trends. Peerless, with manufacturing facilities in both Montreal and Toronto, employs 260 people producing high quality products for the industry.

Industry Sector: Lighting Products (Lighting Fixtures)



601 Milner Avenue SCARBOROUGH, Ontario M1B 1M8 Tel: (416) 292-5161 Fax: (416) 297-1019 Export/Marketing Contact: Mr. Nick Wester Vice-President Corporate Affairs

Philips Electronics Ltd. is the Canadian arm of the worldwide Philips group of companies which have diversified operations in the electrical and electronics sector. In Canada, Philips has a PC manufacturing centre in Montreal and produces electronic displays in Scarborough, light bulbs in London and ballasts in St. Jerome, Quebec. Sales activities include audio and video products, lighting, household and personal care appliances, hearing instruments, information systems and office automation products, components for electronics manufacturers and scientific and industrial equipment, Polygram Inc. and Philips Medical Systems are associated companies. Electrical products include small kitchen appliances, shavers, personal care products, incandescent bulbs, fluorescent tubes, high intensity discharge lighting, specialty lighting\* and ballasts. Industry Sector: Lighting Products

### Progressive Lighting Systems Mig. Ltd.

100 Braid Street NEW WESTMINSTER, B.C. V3L 3P4 Tel: (604) 525-8484 Fax (604) 525-2020 Export/Marketing Contact: Mr. Gordon Bevington

Progressive Lighting Systems Mfg. Ltd. has been supplying lighting products since 1924. A full service facility complete with painting, metal, machine and woodworking shops. The company supplies the retail trade and also specializes in custom made fixtures to order. Product line includes chandeliers, wall, ceiling, track and bath units and compact fluorescent fixtures. Industry Sector: Lighting Products (Lighting Fixtures)



4490 Chesswood Drive, Unit 3 DOWNSVIEW, Ontario M3J 2B9 Tel: (416) 636-9881 Fax: (416) 636-8914 Export/Marketing Contact: Mr. David Sherman Export Manager

Sherman Lighting Ltd. is a manufacturer of decorative lighting fortures for use in residential and commercial applications. Energy saving lighting has been a recent addition to the line, and is growing

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada rapidly. The company also handles custom applications of all types. Industry Sector: Lighting Products (Lighting Fixtures)



17200 rue Centrale SAINT-HYACINTHE, Quebec J2T 4J7 Tel: (514) 774-5238 Fax: (514) 774-1954 Export/Marketing Contact: M. C. Cournoyer

Snoc Inc. is a manufacturer of cast aluminium residential lighting. Industry Sector: Lighting Products



Box 32 ABERNETHY, Sask. SOA 0A0 Tel: (306) 333-2288 Fax: (306) 333-2286 Export/Marketing Contact: Mr. Barry Englot President

SSF developed and now manufactures rechargeable vehicle lights under the brandname of "translight", which uses a 12 volt system to charge a high quality Lead-Acid cell. This unit has a continuous use of 3 hrs. SSF is a limited company established in 1987. Industry Sector: Lighting Products (Vehicle)



### Thomas Lighting Ltd.

189 Bullock Drive MARKHAM, Ontario L3P 1W4 Tel: (416) 294-9570 Fax: (416) 294-9811 Export/Marketing Contact: Mr. Will Pugh

Thomes Lighting Ltd. manufactures residential, commercial and industrial lighting fixtures. Industry Sector: Lighting Products

TIR Systems Ltd.

3935 East 2nd Ave. BURNABY, B.C. V5C 3W9 Tel: (604) 294-8477 Fax: (604) 294-3733 Export/Marketing Contact: Mr. John Eaves Vice President, Agent Operations

TIR Systems Ltd. has developed a unique linear lighting system\* called Light Pipe<sup>TM</sup>. which they manufacture in Canada and. market internationally. Unique design characteristics enable the linear light emitting light guide to separate from the light source, making it possible to distribute the light where it is required and locate the luminaries where they can be easily maintained. TIR's patented Light Pipe<sup>TM</sup> now accents the highest edges of Liberty I and II skyscrapers in Philadelphia, and sets off the distinctive pyramid atop Europe's tallest building, the 82 storey Messeturm in Frankfurt. Over 400 new MacDonald's restaurants across the U.S. use the Light Pipe<sup>TM</sup> technology in their illuminated roofbeams. 'TIR's Light Pipe<sup>TM</sup> offers up to 88' of unbroken linear light which is emitted uniformly over the entire length. The Light Pipe<sup>™</sup> eliminates the problems created by conventional lighting methods and offers many other advantages.

Industry Sector: Lighting Products



7625 Kimbel St. #22 MISSISSAUGA, Ontario LSS IA9 Tel: (416) 671-1744 Fax: (416) 671-8709 Export/Marketing Contact: Ms. Margaret Gibson

Established in 1980, TriVar Inc. develops and manufactures high-quality energyefficient solid state electronic power . controls and lighting devices. Its customers include major appliance manufacturers, lighting management companies, and retail stores in Canada. the United States and England. TriVar product lines include electronic fluorescent ballasts, motor speed control, lamp touch controls, fluorescent power reducers, and custom-designed and manufactured electric devices. TriVar products are manufactured at its automated facility in Mississauga, Ontario. TriVar is dedicated to the ongoing development of competitive, energy-saving products. Industry Sector: Lighting Products

# Unlight Limited

5530 St. Patrick Street MONTREAL, Quebec H4E LA8 Tel: (514) 769-1533 Fax: (514) 769-8858 Export/Marketing Contact: Mr. Jerry J. Hruby-Holy President

Unilight began in 1955 as designers and manufacturers of decorative, incandescent lighting fixtures and chandeliers - custom made and residential. Unilight is export oriented and more than 60 % of our products are sold outside Canada. With a staff highly skilled employees, Unilight has a reputation of capability to fill any lighting requirement imaginable - on time and/or budget. The Design department is equipped with CAD and the uniquelycrafted designs have become known throughout the industry. Unilight has produced many one-of-a-kind fixtures for special applications in hotels, embassy, palaces, cathedrals, synagogues and office buildings around the globe. In the year of 1990 the company was named by Arthur Andersen and Co. as one of the 50 medium sized with management excellence.

Products range from small one-light wall brackets to the 12-ton chandelier being 32 ft, in diameter, decorative lighting fixtures and chandeliers, as well as contemporary designs equipped with PL (fluorescent) light bulbs. The custom made fixtures are based on the customer's specifications regardless of whether the components are made of crystal, Murano glass, wrought iron or wood or others. Finishes and sizes vary according to the client's wishes. In the residential division Unilight offers a variety of designs from classical to contemporary - all consisting of guaranteed top quality material and craftsmanship.

Industry Sector: Lighting Products



24 Ward Street TORONTO, Ontario M6H 4A6 Tel: (416) 534-7991 Fax: (416) 531-4130 Export/Marketing Contact: Mr. Antony DiMatteo

Visioneering Corp. has been manufacturing in Toronto for over 29 years. A complete range of energy saving products are available which can be incorporated into existing or new fixtures including lamps<sup>®</sup>, ballasts<sup>®</sup> and high reflective aluminum reflectors<sup>®</sup>. Visioneering is a wholly Canadian company capable of supplying a complete line of fluorescent, H.I.D. and incandescent luminaries for the growing needs of todays lighting market. Industry Sector: Lighting Products



#### Yerk-Lithonia Lighting Company

1100 - Soth Avenue LACHINE, Quebec H8T 2V3 Tel: (514) 639-3571 Fax: (514) 639-3570 Export/Marketing Contact: Mr. William Astary

York-Lithonia offers an expanded product line covering most segments of the commercial and industrial lighting market. Being a subsidiary of the world's largest manufacturer of lighting equipment, Lithonia Lighting, York-Lithonia now offers on the Canadian market - in addition to its well known York commercial and industrial fluorescent luminaries - indoor and outdoor. HID and incandescent lighting fixtures, modular wiring systems, architectural lighting, emergency lighting equipment and lighting control systems. The company's goal is to provide the most extensive product offering available from a single manufacturer and to become the leading supplier of lighting equipment in Canada. Products include: -Commercial, industrial and decorative fluorescent lighting fixtures -Advantage Downlighting -Advantage Track

-Industrial/outdoor lighting

-Emergency lighting

-HID (High Intensity Discharge) lighting Industry Sector: Lighting Products

#### MEASURING AND TESTING DEVICES

Armstrong Monitoring Corporation

215 Colonnade Road South NEPEAN, Ontario K2E 7K3 Tel: (613) 225-9531 Fax: (613) 225-6955 Export/Marketing Contact: Mr. Yves Grandmaitre

Since its inception in 1981, The Armstrong Monitoring Corporation has experienced rapid growth and acceptance as a prime manufacturer of hazardous gas and vapour monitoring systems. A diverse product line allows Armstrong to meet gas monitoring requirements for a wide range of industries, from heavy industrial, to commercial, to institututional. Designed to provide choice and flexibility to the customer the AMC line offers portable and hand held units, fixed multipoint systems in rack or wallmount configurations, and 4-20 mA sensor/transmitter units which can be interfaced with building management systems or data acquisition equipment. A Technical Services Group comprised of highly skilled technical specialists whose only measure of success is customer satisfaction, is available for after sales service.

Products include:

- \*Fixed single point gas detectors
- •Fixed multi-point gas detectors
- \*Fixed hazardous gas monitoring systems \*Single or dual channel rack mount controllers
- \*Ten channel rack mount controllers \*Portable three function continuous gas
- detectors \*Portable hand held hazardous gas
- detectors
- °4-20 mA linearized output
- sensor/transmitter units
- \*Leak detection systems

Industry, Science and Technology Canada

Industry Sector: Measuring and Testing Devices

## Bach-Simpson Limited

1255 Brydges Street LONDON, Ontario N5W 2C2 Tel: (519) 452-3200 Fax: (519) 452-3165 Export/Marketing Contact: Mr. Victor Carriere

Bach-Simpson Ltd. was founded in 1946 with the objective of manufacturing electrical test equipment. Today it is one of Canada's largest manufacturers of fixed and portable test equipment. Bach-Simpson has subsidiary operations in the U.K. and in the U.S.A. The head office and main manufacturing plant are in London, Ontario. The product range includes wattmeters, voltmeters, ammeters and frequency meters. Accessories include current transformers and shunts. Also ... available is a wide range of portable test equipment including such items as 'clamp on' ammeters and chart recorders. Industry Sector: Measuring and Testing Devices

Broman Engineering Ltd.

1495 Frances Street VANCOUVER, B.C. V5L 1Z1 Tel: (604) 254-6311 Fax: (604) 254-6115 Export/Marketing Contact: Mr. Ralph Bristow

Broman Engineering is primarily a manufacturer of electrical test equipment for the heavy electrical industry. Typical products include contact resistance test sets, portable hipot sets, and digital milliohmmeters which are sold to electric utilities across Canada and the United States.

Industry Sector: Measuring and Testing Equipment

Canadä

Industrie, Sciences et Technologie Canada

### Cable Test International Ltd.

951 Denison St. East, Unit 21 MARKHAM, Ontario L3R 3W9 Tel: (416) 475-2607 Fax: (416) 475-2609 Export/Marketing Contact: Mr. Arthur Boas President

The company manufactures testing equipment for wire and cable. Industry Sector: Measuring and Testing Devices

Canadian Shunt Industries Ltd.

50 Bullock Drive, Unit 5 MARKHAM, Ontario L3P 3P2 Tel: (416) 294-5274 Fax: (416) 294-6096 Export/Marketing Contact: Mr. E. R. Milanczak President

CSI has been a manufacturer in Canada since 1970. The company manufactures knife switches ranging from 30 Amperes to 10,000 Amperes and DC Ammeter Shunts with ratings from 1 Ampere to 30,000 Amperes with various outputs. CSI currently exports to the U.S.A. Industry Sector: Measuring and Testing Devices

## Criterion Instruments Ltd.

30 Progress Ave. SCARBOROUGH, Ontario M1P 4W8 Tel: (416) 299-6666 Fax: (416) 299-8398 Export/Marketing Contact: Mr. Peter Soma General Manager

Criterion Instruments Limited, is an independent R & D organization devoted to measurement, control and testing in nearly all fields of electronics excepting high-frequency communications. Criterion is a manufacturer of high quality electronic equipment for public utilities and industrial applications and also has a special department for R & D in electronics and some related physical fields.

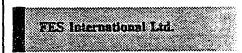
Industry Sector: Measuring and Testing Devices



3015 Kennedy Road, Unit 12 SCARBOROUGH, Ontario MIV 1E7 Tel: (416) 292-8181 Fax: (416) 292-8188 Export/Marketing Contact: Mr. Egon S. Manthey President

Power, Electricity, and High Voltage: A volatile combination - one that commands the highest respect from those who work with it everyday on the job. Electrical Testing Instruments Ltd. understands the inherent danger. For nearly two decades, ETT's goal has been to design and manufacture technologically advanced electrical testing equipment serving major electrical utilities, leading industries and government testing laboratories worldwide. ETI offers exceptional accuracy and precision in a complete line of standard and custom-built products which have proven rugged and dependable under strict laboratory testing and extreme conditions in the field. ETI's main objective is to

constantly improve their equipment, applying the latest innovations in technology to best serve their customers. Products include: -Contact resistance test sets -Transformer ratiometer -Capacitance-dissipation factor bridge -Relay test sets -High voltage AC/DC test sets -Insulation resistance testers -High current test sets -High current test sets -Jinc-oxide surge arrester test set Industry Sector: Measuring and Testing



60 Ironside Crescent, Unit # 9 SCARBOROUGH, Ontario M1X 1G4 Tel: (416) 321-1988 Fax: (416) 321-1991 Export/Marketing Contact: Mr. John Saunders President

Devices

FES International founded in 1986, offers the international power sector Partial Discharge Analyser (PDA) products and engineering services which are used for on-line monitoring of hydrogenerator, turbogenerator and motor high voltage stator insulation systems. Installed on more than 500 machines throughout the world, PDA monitoring has become an industry standard for on-line evaluation of stator insulation. PDA tests provide maintenance personnel with a reliable indication of the location, level and trend of insulation deterioration, as well as an early warning of slot discharge, internal voids, delamination, and loose windings. Industry Sector: Measuring and Testing Devices

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#### 272 Davis Dr., R.R. Ø1 UXBRIDGE, Ontario L9P IRI Tel: (416) 473-3306 Fast (416) 473-5334 Export/Marketing Contact: Mr. Deepak Parmar President

Gentherm Inc.

Manùfacturer of state-of-the-art instruments for measurement of thermal properties of soil, rock, insulation and other man-made and natural materials including oils, lubricants etc., and consultation and laboratory testing services for electric utilities in Canada, USA and overseas for the past fourteen years. Specialist services include formulation, testing and evaluation of corrective thermal backfills for underground and submarine power cables (high voltage transmission and distribution) Products include:

-Thermal Property Analyzer, custom-built thermal probes and accessories. -Custom-built temperature sensors to cover a wide range of application, temperature regime and resolution Industry Sector: Measuring and Testing Devices

Hi-Test Detection Instruments Ltd.

1099 Wolfe Avenue VANCOUVER, B.C. V6H 1V9 Tel: (604) 736-2848 Fax: (604) 736-2848 Expon/Marketing Contact: Mr. John A. Farijuhar President

Hi-Test Detection manufactures and sells the Hi-Test Insulator Tester and the Hi-Test Surge Arrester Tester. The former is used to test insulators for nonvisible defects and can be used with the line energized or de-energized. It can be used at any distribution or transmission voltage. The latter is used to test distribution and low level station class surge arresters for partial shorts. Hi-Test Detection also maintains an on-going R&D program examining new test products for the electrical utility industry. Hi-Test has particular expertise is in the design and development of portable high voltage test equipment. The products are used by electrical utilities of all sizes from the smallest municipal to the largest state owned utility around the world.

#### Products include:

Hi-Test Insulator Tester, Hi-Test Surge Arrester Tester. Those in development are: 30 KVAC Hi-Pot, 50 KVAC Hi-Pot, Surge Arrester Tester to test Substation class arresters and Insulator Contamination Monitor to provide information on when to wash insulators to avoid flashover.

Industry Sector: Measuring and Testing Devices

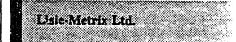
# iris Power Engineering

1550 Meyerside Drive, Unit 1 MISSISSAUGA, Ontario LST 1V4 Tel: (416) 564-4977 Fax: (416) 564-4979 Export/Marketing Contact: Mr. Greg C. Stone Director - Marketing

Iris Power Engineering was establish by four utility researchers to commercialize innovations developed under multi-million dollar research projects by Canadian power utilities and American Electric Power Research Institute. Iris manufactures and sells patented sensors. instruments and expert system software for monitoring the condition of the electrical windings in generators and large motors. These products permit power utilities and industries using large motors and generators to implement predictive maintenance programs. Products include: MICAA- The Machine Insulation

Condition Assessment Advisor is a sophisticated expert system which runs on a PC to help maintenance personnel determine if motors and generators are in good condition SSC- The Stator Slot Couplers are patented sensors which detect partial discharges in large turbine generators TGA- The Turbine Generator Analyzer is a sophisticated electronic instrument which works with the SSCs to determine the condition of a turbine generator's stator winding, without requiring a service interruption

Industry Sector: Measuring and Testing Devices



49 Sheffield SL TORONTO, Ontario M6M 3E5 Tel: (416) 249-9151 Fax: (416) 249-2952 Export/Marketing Contact: Mr. G.F. Crossman Vice President

Founded in 1958, Lisle-Metrix is a manufacturer and distributor of process equipment and controls for the industrial and municipal fields. The company specializes in fields of water quality analyzers, flow and level sensors and the following electrical products: Annunciators, Timers, Counters, Proximity Sensors, and Switching Amplifiers Industry Sector: Measuring and Testing Devices

Militronics

P.O. Box 4225, 730 The Kingsway PETERBOROUGH, Ontario K9J 7B1 Tel: (705) 745-2431 Fax: (705) 745-0414 Export/Marketing Contact: Mr. Glen W. Sluggett International Sales

Founded in 1954, Milltronics has developed a wide range of process measurement devices. These include noncontacting, ultrasonic systems; transducers; weighting and feeding equipment; and motion sensing devices. Milltronics has achieved an enviable reputation based upon the reliability of its equipment, which



Industry, Science and Industrie, Sciences et Technology Canada



is designed and manufactured in its Peterborough plant. A dedicated Research and Development programme has provided the foundation for company leadership in the development of ultrasonic technology. The mining. quarrying, chemical, cement, grain and petroleum industries provide markets for Milltronics highly successful line of monitoring, weighing and feeding equipment, which includes belt scales, solids flowmeter and weighfeeders. Milltronics' motion sensing devices are used extensively for protection of equipment in the mining, cement and grain industries, where the compar  $\gamma$ continues its long established presence. The organization has over three hundred employees and worldwide representation, with sales offices across Canada, a U.S. branch in Arlington, Texas'; a European headquarters in Bromsgrove, england; two offices in France.

Industry Sector: Measuring and Testing Devices

# Morgan Schaffer Corp.

5110 Courtrai Ave. MONTREAL, Quebec H3W 1A7 Tel: (514) 739-1967 Fax: (514) 739-0434 Export/Marketing Contact: Mr. Stuart Kishner

A commercial laboratory which offers a comprehensive transformer oil testing service. Testing services include: 1)Dissolved fault gas analysis (now a ASTM standard) 2)Transformer oil inhibitor analysis 3)PCB analysis of transformer oil and other wast is 4)Dissolved moisture in oil 5)Standard oil test ( dielectric, Acidity, IFT, etc...)

Morgan Schaffer Corp. recently introduced a new technology, (anti-oxidant analysis of transformer oils) which could extend useful life of transformer oils by triple that of normal used methods.

Industry Sector: Measuring and Testing Services



180 Middlefield Road. SCARBOROUGH, Ontario M1S 4M6 Tel: (416) 298-6770 Fax: (416) 298-7214 Export/Marketing Contact: Mr. Vince Oppedisaro Sales Manager

Established in 1951, Multi-AMP Corporation pioneered the electrical test industry with the manufacturing of a portable relay test set. To dute Multi-AMP offers over 120 different products widely used in the electrical industry, with manufacturing plants in Dallas & Toronto. Multi-AMP institute, the training division, has taught more than 50,000 technicians and engineers the proper methods of inspection & preventative maintenance through performance based courses. Products include:

ALFA-10.12kV Automatic insulation power factor test set MTB-Watt hour meter test board (10 station, automatic) SR-90-Universal Protective relay test set BGL-battery ground fault locator Training-customized on-site courses & open enrolment classes EPOCH-automated relay test equipment current breaker test sets Industry Sector: Measuring and Testing Devices



6703 Rajpur Place VICTORIA, British Columbia V8X 3X1 Tel: (604) 652-5118 Fax: (604) 652-0411 Export/Marketing Contact: Mr. William I. McMillan General Manager

Power Measurement Ltd. is a Canadian company which has been designing and manufacturing advanced power monitoring systems and components since 1969. PML introduced the first microprocessor based 3-phase power meter in 1984, and has since been involved in providing comprehensive, cost-effective Supervisory Control And Data Acquisition systems to the institutional, commercial, industrial, and small utility customer. PML products have found success around the globe in applications ranging from manufacturing plants, mills, and building complexes to power utilities and co-generation facilities. Products include:

<u>M-SCADA</u>: PC-based Supervisory Control And Data Acquisition system for industrial, commercial, and utility power substations and systems. Extensive data display, alarm detection, and event, historical and min/max data logging capabilities. Waveform capture and power quality analysis provides simultaneous multiple waveform display %THD indication, and histogram of harmonic content. Compatible with all PML 3000 series instrumentation.

3300 ACM Low Cost Digital Power Meter: Compact, economical meter can replace four or more analog meters and selector switch .s. Standard measurements: 3-phase Volts and Amps. KW. KWH. Many optional measurements, including: KVAR, KVARH, Freq., PF and min/max and demand on all values. Simple installation. Communications port. Available without display module for "power transducer" applications. 3710 ACM Full-Featured Dimital Power Meter: High accuracy, 3-phase Volts (1-i, I-n) Amps, KW, KWH, KVAR, KVARH, KVA, KW & Amps Demand, PF, Freq, and Neutral or Ground Current measurement. Waveform capture capabilities to 32nd harmonic on all voltage and current inputs. On-board data logging. Status inputs. On-board relays for set point control. Communications 3750 PDC Power Demand Controller: Reduces electrical costs through automated demand control. Monitors energy consumption, calculates load trends, predicts power used by end of demand period, alerts operators of pending peaks. On-board relays perform load shedding or backup generator control actions to prevent setting new peak demand levels. On-board data logging. Communications.\*

<u>3800 Mini RTU</u>: Interfaces directly to industry standard transducer/thermocouple devices. Display levels, pressures, temperatures etc. Four status/counter



Industry, Science and

Tochnology Canada

Industria, Sciances et Technologie Canada inputs to monitor positioning, flow rates, RPM etc. On-board relays for setpoint control. User-definable tabels and scaling. On-board data logging. Communications. Industry Sector: Measuring and Testing Devices

Promac:Inc.

1375 Morningside Avenue SCARBOROUGH, Ontario M1B 3C5 Tel: (416) 284-8440 Fax: (416) 284-8147 Export/Marketing Contact: Mr. P. Whiteside Export Sales Manager

Promac Inc. is a designer and manufacturer of high technology state-ofthe-art electrical/instrument type products for use in industrial applications. Products include:

: Series of highly accurate micro processor based Process Instrument Calibration and Test equipment, this includes a newly developed Computer Aided Calibrator Package called The "MasterCAL'. All calibrators are traceable to NIST (NBS) standards.

: Wide range of 2 and 4 wire Signal Transmitters, Converters and Alarm trips including a series of 'SMART' Universal Transmitters and Converters that can be user programmed.

: "MicroComet' series of Flow Computers including Energy Flow and

• "Global' and "Livewire' Telemetry equipment for Data Transmission and Acquisition.

Promac products are exported through a wide network of distributors to the USA, Europe and many countries in the Middle East and Pacific rim.

Product service centres have been established in North America, Europe and Australia.

Promac Inc. is a wholly owned subsidiary of Internatio-Muller by Rotterdam, Holland.

Promac Trademarks

Industry Sector: Measuring and Testing Devices



1526 Fletcher Road SASKATOON, Sask. S7M 5M1 Tel: (306) 934-0101 Fax: (306) 978-2339 Export/Marketing Contact: Mr. Dale Jantzen Director of Marketing

Sci-Tec Instruments Inc. manufactures the following products:

1) "Hilda" high voltage line data acquisition system, used by electrical utilities to measure vibration in power lines. 2) "Brewer Spectrophotometer" used by scientests to measure atmospheric ozone and UVB for environmental studies, and

3) "Petro TAG" automated tank gauging systems, used for inventory control in fuel storage tanks. Sci-Tec's products are exported for utility use around the world. Industry Sector: Measuring and Testing Devices



2750 Brabant Marineau MONTREAL, Quebec H4S IL1 Tel: (514) 332-1230 Fax: (514) 335-6566 Export/Marketing Contact: Mr. Alan Lee President

Stephens Analytical, Inc. manufactures hygrometers (dew point meters or moisture analyzers) incorporating a silicon chip as the sensing element. This new generation of moisture analyzers has eclipsed older technologies and revised the standards for rapid response. accuracy, freedom from drift and resistance to contamination. The hygrometers are sold to electrical utilities throughout North and South America. Stephens Analytical, Inc. also operates the only Laboratory accredited by the Standards Council of Canada specifically for moisture analyzer calibration. Industry Sector: Measuring and Testing Devices

# Syprotec Inc.

179 Brunswick Blvd. POINTE-CLAIRE, Quebec H9R 5N2 Tel: (514) 694-3637 Fax: (514) 694-9245 Export/Marketing Contact: M. Paul-Emile Labreche

Founded in 1975, Syprotec specializes in the development, manufacturing and worldwide marketing of analyzers and techniques dedicated to the detection, monitoring and control of failure conditions in oil-filled electrical equipment. The Syprotec products are essential elements in predictive maintenance programs and have prevented failures of critical power systems components. The HYDRAN 103B is a portable, fully automated and battery operated instrument dedicated to the detection and measurement of dissolved combustible gases in transformer oil. It is used in the field or laboratory for the early detection of a fault condition. It is also used to monitor new, recently serviced and chronically overloaded on filled electrical equipment. The HYDRAN 201R is an early warning device and to detect developing fault conditions that will potentially lead to equipment failure. The HYDRAN 201R is easily mounted on oilfilled electrical equipment for real-time continuous monitoring. AQUAOIL instruments and sensors monitor and detect the evolution of moisture in dielectric liquids. The portable AQUAOIL 100 is used in the field or the laboratory to measure the moisture content in a grab sample, and the AQUAOIL 200 is mounted on a transformer for the continuous monitoring of moisture in oil.

Industry Sector: Measuring and Testing Devices



ratne Sciences et gie Canada

Industry, Science and Technology Canada T.D. Micronic Inc.

#205 13395 76th Avenue SURREY, British Columbia V3W 2V8 Tel: (604) 596-1612 Fax: (604) 594-9193 Export/Marketing Contact: Mr. D. Sawrey, P.Eng.

T.D. Micronic has been manufacturing electronic components since 1979. T.D. Micronic's head office is in Surrey, B.C. with a sales office in Calgary. T.D. Micronic manufactures conveyor belt scales, crane overload systems and carbon monoxide monitors<sup>a</sup>. The carbon monoxide monitors<sup>a</sup>. The carbon monoxide monitors promotes energy savings by use in parking garages where the exhaust fans only operate when cars are running. Hydro rebates can be obtained using this item.

Industry Sector: Measuring and Testing Devices



3325 North Service Road BUFLINGTON, Ontario L7N 3G2 Tel: (416) 335-7198 Fax: (416) 335-3294 Export/Marketing Contact: Mr. E.M. Spencer Vice President

Teston Gauge Limited was established in 1962 to serve the needs of the power transformer manufacturing industry for transformer instrumentation. The company's product line includes discreet temperature indicators for both liquid and winding temperature indication and a winding control system, using winding temperature simulation techniques. The company also manufactures a line of liquid level gauges as well as special temperature indicators for large electrical motors, etc. Teston Gauge, since its inception, has been dedicated to providing superior products and service to its worldwide customer base.

Industry Sector: Measuring and Testing Devices

### Thermo Electric (Canada) Limited

12 Rutherford Road S. BRAMPTON, Ontario L6W 372 Tel: (416) 451-0813 Fax: (416) 451-4606 Expon/Marketing Contact: Mr. Eugene Dudar

Thermo Electric has been successfully meeting the temperature measurement and process control needs of the Canadian Industry for over 37 years. World wide the company employs more than 400 people with major manufacturing facilities in Ontario, Alberta, New Jersey and the Netherlands. Temperature sensors include industrial and miniature thermocouples and RTD's, thermowells and protection tubes, nuclear grade thermocouples and RTD's, multicouples and downhole thermocouples, and custom engineered temperature sensors. Wire and cable products include regular and special grade thermocouple wire and cable, extension thermocouple wire and cable, high temperature wire and cable, copper instrument wire and cable, and tray cable. Instrumentation includes digital/analog temperature and process indicators, portable digital temperature indicators, multifunction indicator/calibrators. programmable recorders, controllers, hand held data loggers, transmitters, and infra red sensors

Industry Sector: Measuring and Testing Devices



2115, boulevard Fernand-Lafontaine LONGUEUIL, Quebec J4G 927 Tel: (514) 646-2157 Fax: (514) 646-2164 Export/Marketing Contact: M. Marc R. Bissonnette Sales Representative

Vibro-Meter Inc. specializes in dynamic monitoring systems for large rotating machinery. At its plant in Longueuil, the company manufactures and develops the high technology electronics and software incorporated in every product sold. Vibro-Meter also offers service, technical support and installation. More than a hundred systems have been sold to prestigious companies such as Hydro-Quebec, Ontario Hydro (Canada), New York Power Authority (United States), Ansaldo (Italy), Toshiba (Japan), Comision Federal de Electricidad (Mexico), EDF (France) and Ministry of Water Resources (P.R. of China).

The product list consists of: The Air Gap Monitoring System (AGMS); its capacitive technology allows very accurate dynamic measurements of rotor-stator air gaps under any operating condition. The

'Lator Bar Vibration System, using the same capacitive technology, measures the vibration of the bar in the stator core causing wear of its insulation. The Zero Outage On-line Monitoring (ZOOM) system is a complete on-line monitoring tool for rotating machine performance analysis; its open architecture allows the user to configure the system with any combination of parameter measurements according to the machine. The HydroMax system is an efficiency management tool for hydroelectric generators. Industry Sector: Measuring and Testing Devices

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## Woder Technology Isc...

95 Glen Cameron Road Thornhill, Ontario L3T 1N8 Tel: (416) 889-4750 Fax: (416) 889-4399 Export/Marketing Contact: Mr. W.E. O'Neil President

The company manufactures electrical measurement systems; voltage, current, watt, var, Q, frequency, and power factor transducers; limit alarm modules, circuit breaker control modules, precision timers, UPS battery chargers, invertors, and ground fault detectors.

Industry Sector: Measuring and Testing Devices

#### PANELS

# BEL Products Inc.

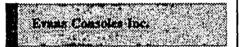
6868 Maurice-Duplessis Blvd. MONTREAL, Ontario H1G 126 Tel: (514) 327-2800 Fax: (514) 327-3250 Export/Marketing Contact: Mr. Norman Belenger Sales Director

Since its foundation in 1964, BEL Products has been dedicated to providing the finest electrical housing and distribution enclosures using the finest materials available. Its offices and manufacturing facilities in Montreal, Quebec and Mississauga, Ontario turn out a variety of multiple size enclosures that will suit any commercial or industrial application. BEL products is also highly renowned for its flexibility in making custom enclosures, built exactly to the customer's specifications and needs. Industry Sector: Panels



3020 Spring Street PORT MOODY, B.C. V3H 128 Tel: (604) 461-4547 Fax: (604) 461-2575 Export/Marketing Contact: Mr. Michael J. Hinman

Canadian Process & Control Ltd. has manufactured control panels and consoles for the industrial market for 25 years, specializing in PLC Cabinets (programmable logic controllers), Electrical Panels, Electronic Consoles and also Pneumatic & Hydraulic Controls. They also install instrument systems in plants ( Pulp & Paper Mills, Breweries, Mines and Petrochemical Refineries) through the U.S.A. and Canada. Industry Sector: Panels



2080 - 21 Street NE CALGARY, Alberta T2E 6S5 Tel: (403) 291-4444 Fax: (403) 250-6549 Export/Marketing Contact: Mr. Michael H. Crombie Marketing Manager

Evans Consoles Inc., founded in 1979, designs and manufactures a comprehensive line of modular electronic equipment console enclosures and workstations for electrical utilities' EMS, Transmission and Distribution and Telecommunications network control centers. Evans Consoles. with over 70 employees, operates from a modern 31,000 square foot office and manufacturing facility in Calgary, Alberta. Its highly qualified design group and continuing commitment to research and development assures the company's preeminence in a rapidly changing electronic and technical environment. The company's modular console enclosure system utilizes a patented steel and aluminum open loop "g" frame which permits the mounting of a wide range of

equipment including standard and PC driven CRT's, telecommunications equipment, printers, alarm and annunciator panels and paper management. Non-load bearing "clipon/off" exterior panels are offered in wood veneer, plastic laminate, fibreglass and 16 gauge steel and can be colour coordinated to provide a distinct custom look to each customer's control room. Industry Sector: Panels



#14, 6325 12 Street S.E. Calgary, Alberta T2H 2K1 Tel: (403) 259-4977 Fax: (403) 255-1842 Export/Marketing Contact: Mr. Shaun Going Vice-President

The company provides a complete range of electrical services to the oil fields, including engineering, drafting, electrical construction, and control panel manufacturing. The company provides onsite expertise, with particular capability in custom designed and installed control and distribution systems.

Industry Sector: Panels



5539- 1st Street CALGARY, Alberta T2H 1H9 Tel: (403) 252-7551 Face (403) 252-8436 Expont/Marketing Contact: Mr. P. Raffin President

Raffin Electric Co. Ltd. founded in 1956, is a leader in the design and manufacture of control panels and consoles. Raffin uses only components of high quality and reliability in its control panels. Standard features of Raffin control panels include fully welded or extruded cabinetry; precision computer controlled punching and forming; electrostatically applied,





baked finish; hot stamp wire marking; and 100 per cent testing and inspection Industry Sector: Panels

Roger Girard Inc.

10,123 Hotel De Ville MONTREAL-NORD, Quebec H1H 3V3 Tel: (514) 324-1520 Fax: (514) 324-8754 Export/Marketing Contact: M. Roger-Pierre Girard Office Manager

Established in 1953, Roger Girard Inc. manufactures aluminum, steel and stainless steel electrical panels. The panels are used by Hydro-Quebec for electrical controls in its distribution system, and in power stations.

**Industry Sector: Panels** 

#### PARTS AND COMPONENTS

ATC-Frost Magnetics

1130 Eighth Line OAKVILLE, Ontario L6H 2R4 Tel: (416) 844-6681 Fax: (416) 844-6895 Export/Marketing Contact: Mr. Efrair Ritter

ATC and Frost have independently supplied transformers, chokes and small ballasts for over 35 years. Combined, ATC-Frost can now supply complete magnetic needs from the smallest audio transformer and Ferrite component to large power and control transformers in the 3KVA range. ATC-Frost specializes in custom engineered magnetic solutions designed with optimized computer programs and built in two efficient operations in Oakville and Waterloo, Ontario.

Industry Sector: Parts and Components

### Canadian Contacts & Supply Inc.

335 Laird Rood, Unit #2 GUEL.PH, Ontario N1H 6J3 Tel: (519) 821-2336 Fax: (519) 821-5721 Export/Marketing Contact: Mr. Randolph Kervin President

Canadian Contacts & Supply Inc., since its beginning in 1982, has supplied electrical renewal/replacement parts to a variety of industries. Many of the parts such as contacts, shunts, carbon brushes, etc. manufactured by CCSI are parts that have been obsoleted by various original equipment manufacturers. CCSI utilizes AUTOCAD Release 11 in the reverse engineering and design drafting department and has the ability to manufacture a wide range of parts. CCSI is currently manufacturing and/or repairing parts and equipment for the utilities, mining, steel making, pulp and paper and railroad industries. Products include:

 Brónze, brass and copper trolley wheels
 Commutator treating supplies, commutator stones, brush seating stones, rubrite abrasives
 Complete range of braided shunts,

copper or tinned wire, insulated or uninsulated, ratings to 10,000 Amps 4. Complete line of insulators, nylon, acrylic, polyester fibreglass and lexan 5. Non-asbestos arc shutes and arc barriers

 Collector contact shoes, carbon, metal graphite, bronze, cast iron and nickel
 Pantographs

 Complete collector assemblies
 Replacement electrical parts, segments, contacts, dead plates, springs, fingers and fibre plates for the following: Clark, EC & M, Gen-ral Electric, Cutler Hammer, Jeff, Euclid, r & H, Westinghouse, Goodman Industry Sector: Parts and Components

### Carbone of America (LCL) --Ltd.

225 Harwood Blvd. DORION, Quebec J7V 1Y3 Tel: (514) 455-5728 Fax: (514) 457-7106 & (514) 455-5052 Export/Marketing Contact: Mr. J.A. King, P.Eng General Manager

Canadian Subsidiary of the Le Carbone Lorraine - Group, whose head office is in Paris, France, Carbone of America manufactures at plants in Dorion, Quebec & Toronto, Ontario employing approx. 150 people. Carbone is one of the major suppliers in North America of carbon brushes for electrical machines for industrial and traction applications. Products are carbon brush-holders, slip rings, power collector & grounding assemblies for electric traction system. They also supply/assemble DC switchgear up to 1500 volts, semi-conductor fuses, power resistors, speed sensors such as tachogenerators, shaft encoders, resolvers etc., HCL burners and impervious graphite chemical process equipment such as heat exchangers absorbers.

Industry Sector: Parts and Components



2050 Dechesnes, C.P. 1004 JONQUIERE, Quebec G7S 4K6 Tel: (418) 548-3134 Fax: (418) 548-5206 Export/Marketing Contact: M. Henri Boulianne President

In business since 1950, CBL rewinds and repairs electric motors and current transformer coils for its motor and transformer repair, and for other customers. Industry Sector: Parts and Components





## Cormag Inc.

3415 Landmark Rd. BURLINGTON, Ontario L7M 1T4 Tel: (416) 335-3490 Fax: (416) 336-3477 Export/Marketing Contact: Mr. Keith Brain Sales Manager

Cormag, established in 1972, was purchased in 1984 by Surahammers Bruks A.B., a Swedish steel mill totally dedicated to production of quality electrical steel. With annual sales of more than \$25 million, Cormag and its sister company Normag in Bridgeport, CT., U.S.A. are the largest independent manufacturers of electrical steel cores in North America. Cormag warehouses a full range of electrical steel, and manufactures a comprehensive list of electrical cores for the transformer industry.

The comprehensive electrical steel product line includes:

-Cold-rolled grained-oriented electrical steel for transformers.

-Cold-rolled fully processes non-oriented electrical steels for motors, generators, small transformers, and ballasts.

Both of these are cut to specific widths. -Distributed gap cores weighing well over a ton or small enough to fit into the paim of the hand, available in end gap, single sided gap and double sided gap. -Toroids-coated or uncoated, round or rectangular, Cormag provides cores in a wide variety of diameters and widths -Cut-to-length shunts-Cormag supplies square cut shunts and scrapless mitre cut shunts.

Industry Sector: Parts and Components

## Crosslink Technology Inc.

6680 Finch Ave. West, unit #1 ETOBICOKE, Ontario M9W 6C2 Tel: (416) 674-0510 U.S. 1-800-563-3769 Fax: (416) 674-7563 Export/Marketing Contact: Mr. Karl Egenberger Marketing Manager

Established in 1981, Crosslink Technology Inc. has two distinct divisions: 1) The Liquid Products Division is a leading manufacturer of epoxy and urethane insulating encasement compounds for the electrical and electronic industries. Formulations are developed and manufactured to suit specific customer requirements. 2) The Cast Parts Division is a recognized supplier of high quality transformer/switchgear components such as bushings, stand-off insulators and various custom cast parts. Both main product lines are supplied to original equipment manufacturers. Staying close to the customer, just-in-time supply and consistently high quality products puts the company among the best in its field of endeavour. "We place customer satisfaction above any other business consideration." Industry Sector: Parts and Components/ **Insulating Compounds** 

# Daly's Inc.

420 Millen Road STONEY CREEK, Ontario L&E 3N9 Tel: (416) 662-1652 Fax: (416) 662-3690 Export/Marketing Contact: Mr. Ed Daly President

Daly's Inc. manufactures wedges for water wheel generators, motors and turboalternators, and pressed board parts and presspan for transformers. The company also manufactures industrial insulation components, wet moulding, polyester sheets, angles and channels, and terminal boards.

Industry Sector: Parts and Components



930 Gartshore Street FERGUS, Ontario N1M 2W7 Tel: (519) 843-4660 Fax: (519) 843-4891 Export/Marketing Contact: Mr. Harry Gallant Vice-President, Marketing and Sales

EHV Weidmann specializes in the fabrication and distribution of non-metallic flexible and high pressure rigid laminates from its three locations in Fergus, Ontario, St. Jerome, Quebec and Edmonton, Alberta. These products have primarily electrical is sulating applications but also have several other applications in a variety of other industrial sectors. The company ships very little product to the U.S., but are currently searching for ways to successfully penetrate that market. Industry Sector: Parts and Components



47 Head Street DUNDAS, Ontario L9H 3H6 Tel: (416) 628-6366 Fax: (416) 628-4762 Export/Marketing Contact: Mr. John Payne sales Manager

The company manufactures steel laminations for electric motors, transformers and ballasts. The company also does steel slitting and warehousing services, magnetic core winding, and specialty annealing. Industry Sector: Parts and Components

Ind Toc



## Electrical Contacts Limited

519 22nd Ave. P.O. Box 160 HANOVER, Ontario N4N 3C4 Tel: (519) 364-1878 Fox: (519) 364-4626 Export/Marketing Coxtact: Mr. P. Allen Saler Manager

Electrical Contacts Limited is a manufacturer of precious metal contact materials that has served the electrical distribution & control industry, the automotive controls industry and the appliance controls industry for over twenty years. ECL's objective is to bring value to customers in the form of quality products and service. As a specialized manufacturer ECL maintains all of the necessary facilities and people to perform the work required in producing precious metal contacts to customers' exact specifications. Contacts produced using sintering techniques for high power interruption, and clad products and wire formed products, for low power interruption, are all part of the product. All are manufactured on a custom basis to specification.

**Product Profile:** 

ECL's product range includes discreet sintered contact materials for high power interruption. Sintered refractory materials such as tungsten, tungsten carbide and molvbdenum are combined with silver or copper in producing these very hard, very durable contacts. Applications for these products exist primarily in the switchgear and circuit breaker field. Discreet high silver content contact materials such as fine silver, silver cadmium oxide, silver tin oxide and silver graphite are also produced by ECL. The high conductivity property of these materials makes them attractive for applications such as thermostatic devices, relays, contactors, and motor controllers. Due to the tremendous hardness of the sintered refractory contact materials these products exist in pieces part form only. However, the high silver content materials exit in a number of forms. ECL uses these high silver content materials in the production of wire formed parts, whether they are bimetal or single

metal contacts; in clad products whether they are trimetal or bimetal products and in the assembly of discreet contacts to supports. All of these engineered products are available from ECL. Technical support for difficult applications or problems is available for the benefit of ECL's customers.

Industry Sector: Parts and Components



343 Deslauriers Street MONTREAL, Quebec H4N 1W2 Tel: (514) 332-1163 Fax: (514) 332-5751 Export/Marketing Contact: Mr. Graham Shaw

The company is a leading Canadian manufacturer of DC precision magnetic circuit breakers-0.01 to 100 amps, relays for the control of street lights, and special control panets.

Industry Sector: Parts and Components

Hillmar Industries Etd.

7168 Honeyman Street DELTA, B.C. V4G 1G1 Tel: (604) 946-7115 Fax: (604) 946-0329 Export/Marketing Contact: Mr. Ian Bourhill

Hillmar Industries Ltd. is a small, wholly owned Canadian manufacturing company based in B.C., Canada. All parts are manufactured, assembled and designed at Hillmar's modern 2,500 square metre manufacturing plant in Delta. Hillmar manufactures electrically driven and controlled Mono-Spiral cable reels. These reels are designed to allow large cranes to move laterally along dock and land facilities, reeling in and paying out the cable (depending on crane direction) which supplies the main power for the crane drives and controls. Industry Sector: Parts and Components



80 Morrow Road BARRIE, Ontario LAN 3V8 Tel: (705) 728-1469 Faz: (705) 728-1372 Expon/Marketing Contact: Mr. D.R. Simpson President

The company manufactures industrial commutators and slip rings for electric DC motors and generators. Industry Sector: Parts and Components



3280 Lenworth Drive MISSISSAUGA, Ontario LAX 2G2 Tel: (416) 625-1064 Fax: (416) 625-8735 Export/Marketing Contact: Mr. Bind Berardicurti President

Precision Paper Tube has manufactured paper tubes for the transformer industry for over 25 years. The company's product line includes round, rectangular, and square tubes, ranging from  $1/4^{\circ}$  to 4° in diameter for the round,  $1/4^{\circ} \times 1/4^{\circ}$  to 12°  $\times 12^{\circ}$  diameter for the rectangular and square tubes.

Industry Sector: Parts and Components





#### Siemens Automotive Limited -BCL Magnetics Plant

5045 North Service Road BURLINGTON, Ontario L7L 5H6 Tel: (416) 335-2530 Fax: (416) 335-8474 Export/Marketing Contact: Mr. Dave Dore US Sales Manager

Siemens BCL Magnetics manufactures high quality stamped components for the lighting and electrical industries, utilizing a complete range of grades and gauges of nickel alloy, silicon and cold-rolled steels. Products are magnetic laminations for electric motors, transformers; nickel alloy laminations and staked laminations; and toroidal transformer cores, the company also does cuesom slitting of light gauge steel coils, and custom annealing Industry Sector: Parts and Components

#### POLE LINE HARDWARL

A.B. Chance Co. of Canada Lid:

100 Howden Road SCARBOROUGH, Ontario MIR 3G1 Tel: (416) 288-9444 Fax: (416) 759-9053 Export/Marketing Contact: N.7. S. Thomas Marketing Administrator

Since 1907, A.B. Chance Co. has grown increasingly adapt in applying modern technology to solve the problems of planning, building, operating, maintaining and controlling electric power and telecommunications systems. Today, Chance is a world-class company whose products and special expertise serve the needs of dozens of industries at home and abroad. Product lines include earth anchors, hot line tools, switching and system protection, pole line hardware, epoxirod insulation, and grounding and jumpering.

Industry Sector: Pole Line Hardware





34 Sawley Dr. WILLOWDALE, Ontario M2K 2J1 Tel: (416) 222-6705 Fax: (416) 490-0387 Export/Marketing Contact: Mr. Carl X. Laprairie President

Conex Power Products Inc. is engaged in the design, development, manufacturing and supply of conductor hardware, pole line hardware and other products relating to the electrical power industries. Conex sub-contracts the various manufacturing operations to a number of qualified Canadian, ources with the objective of 100% Canadian content. The Company provides transmission line hardware and accessories such as insulator fittings, suspension clamps and conductor terminals for all voltages including EHV (Extra High Voltage) lines; pole line hardware and conductor accessories for sub transmission overhead distribution lines; a variety of connectors for the bus conductors for substations; and grounding clamps and connectors for counterpoise, station grounding of equipment, fence and structures. Connectors are supplied to electrical utilities and manufacturers for various electrical apparatus. The company devotes a major effort to export sales either directly or in conjunction with other companies. Besides offering it's own products the company will offer other products to complete packages of materials as requested by international buyers. Conex is interested in developing business worldwide and is open to consideration for joint venture and technology exchange.

Industry Sector: Pole Line Hardware



27 Selby Road BRAMPTON, Ontario L6W LKS Tel: (416) 475-8300 Fax: (416) 457-9696 Expon/Marketing Contact: Mr. J.A. Josephson Export Manager

The company is a manufacturer of transmission and distribution products for the electrical utility industry and have been exporting since 1977. They manufacture specialty pole line hardware: deadend/suspension insulators, line post insultors, and fibreglass guy strain insultors; insulator brackets, conductor clamps and connectors. They also manufacture street lighting, photo-electric controls, mercury vapour lamp, ballasts, and polymer insulators. Industry Sector: Pole Line Hardware

# Lyster Industries Inc.

2555 Bécancour - C.P. 250 LYSTER, Quebec SOS 1V0 Tel: (819) 389-5751 Fax: (819) 389-2193 Export/Marketing Contact: M. G. Dubé Sales Manager

Lyster Industries Inc. is a manufacturer of pole line hardware for electrical utilities. Industry Sector: Pole Line Hardware



### Poltec Industries Ltd.

10440 Henault MONTREAL-NORTH, Quebec HIG SR4 Tel: (514) 326-6030 Fax: (514) 326-9923 Export/Marketing Contact: Mr. Robert L. Grimaudo Sales & Plant Manager

Poltec Industries Ltd. is a Montreal based manufacture of pole line hardware and electrical entrance equipment. With warehousing in Montreal, Quebec and Vancouver, B.C., Poltec serves the electrical utilities and electrical distributors from coast to coast in Canada. Products are manufactured to C.S.A. specifications or can be custom made for special usage. Products include:

Pole Line Hardware includes:
Guying equipment (anchoring)
Grounding equipment
Bolts (all types)
Brackets
Porcelain Insulators
Pole braces & cross arms
Mast & Accessories:
Entrance Mast
Adapters and Reducers
Roof Flanges
Mast Racks
Entrance Caps
Industry Sector: Pole Line Hardware

Tridem Manufactured Products Inc.

359 Frankcom Street AIAX, Ontario L1S 1R4 Tel: (416) 686-0521 Fax: (416) 686-0521 Export/Marketing Contact: Mr. G.E. Hunt

A manufacturer of transmission and distribution hardware and connectors for the electrical utility sector, Tridem Manufactured Product Inc. has gained an excellent reputation for service and quality products since 1970. The management of the company is deep in industry experience and seeks out the specialized application needs of its customers. Its customer base includes all the major Canadian power companies and municipal utilities. The company exports and imports on a minor scale and holds patents issued in Canada, the United States and Australia. Specific product lines include 1) transmission hardware: suspension, dead end and corona; 2) distribution hardware: pole line and connectors; 3) fibreglass: standoff brackets and insulating strain rods; 4) others: tools and customer speciality products.

Industry Sector: Pole Line Hardware

#### POLES

Acter Girole inc.

3670 Jean Viel MONTREAL, Quebec H1B SN3 Tel: (S14) 645-7466 Fax: (S14) 645-0002 Export/Marketing Contact: M. Gilles A. Fontaine President

Acter Girole is a leading Canadian manufacturer of street lighting poles. The company has distinguished itself by the diversity of its products, conventional as well as decorative poles. Over the years, Acter Girole has developed revolutionary new products in this field. A large part of its market is the result of a reversible pole system which permits the pole to be easily lowered to the ground to facilitate installation or maintenance. This is done with a spring and hydraulically activated system.

Industry Sector: Poles

### Domtar Inc. - Wood Preserving Division

2021 Union Avenue, 12th Floor MONTREAL, Quebec H3A 2S9 Tel: (514) 848-5247 Fax: (514) 848-5661 Export/Marketing Contact: Mr. J. Kaddis Manager of Exports

Donitar manufactures wood utility poles, preserved by pressure-treating, for power transmission and power distribution as well as for the communication utilities. Domtar is the largest Canadian manufacturer of pressure-treated industrial wood products. Its six plants are strategically located across Canada. Raw material commodity quality standards are rigorously enforced, as are quality control of the treating processes, and final inspection. Preservatives available in Domtar treated products are: creosote, pentachlorophenol, CCA and ACA. Industry Sector: Poles



1 Edouard VII Blvd. ST. PHILIPPE, Quebec JOL 2K0 Tel: (514) 639-8951 Fax: (514) 444-3661 Export/Marketing Contact: M. Michel Pinsonneault

Pole-Lite has been active in the aluminum and steel lighting-pole manufacturing industry since 1958. In addition to its street poles and devices, Pole-Lite manufactures cellular monopoles and communication towers which are sold throughout Canada, the U.S., Puerto Rico and in other countries in the middle East and the Caribbean. With production and engineering facilities across North America that hone the cutting edge of technology, and sales representatives throughout the continent. Pole-Lite can meet customer needs for aluminum or steel lighting poles\*, Traffic light poles, Hi-Mast poles, Cellular Monopoles, and Communication

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towers, whatever the demands or specifications.

•believed to be environmentally superior to wood or concrete poles in terms of lifespan and ability to be recycled. Industry Sector: Poles

West Coast Engineering Ltd.

7984 River Road DELTA, B.C. V4G 1E3 Tel: (604) 946-1258 Fax: (604) 946-1203 Export/Marketing Contact: Mr. Dick Butler President

West Coast Engineering Ltd. was established in 1977 as a supplier of steel poles and street light brackets and other related products to Canadian utilities, government agencies and the private market through established wholesalers. Plant area comprises 24,000 sq. ft. of plant and 3,000 sq. ft. of office located on 2.78 acres of industrial land. All of the major production machinery was developed and assembled in-plant, after active research into various types of existing pole plant technology and equipment. The equipment available in the market place was found incompatible with the requirements for the wide variety of poles required to meet customer demands. With the expertise developed in the course of years of both equipment and pole manufacturing, a new international turnkey pole plant package was released into active marketing in 1983, and the Company has developed a highly efficient export package designed and tested to the particular needs of customer. West Coast Engineering has been involved in a wide variety of demanding and different projects ranging from transmission to street lighting. They have developed a system of manufacture including every piece of equipment specifically designed for met., pole manufacture. Industry Sector: Poles

#### **REPAIR AND OVERHAUL**

NEI Parsons Canada Limited

40 Neilson Avenue ST. CATHARINES, Ontorio L2M 7M9 Tel: (416) 687-1170 Fax: (416) 687-4998 Export/Marketing Contact: Mr. William J. Cumming Marketing Engineer

NEI Parsons Canada Limited ( A Rolls-Royce Company), with its new unique 49,750 sq.ft. facility, is equipped to service and refurbish turbine generators of unit sizes 1000 kW to 1,000,000 kW, reblading turbines, rewinding generator rotors, rebuilding stators as well as undertaking machining and fitting work on spare parts. The facility also undertakes general engineering machining and electrical/mechanical fitting work on a range of company and third party products. Planning to employ up to 100 specialized personnel, NEI parsons Canada Ltd. will provide excellence in quality and on-time service, and to support existing spare parts and on-site service teams.

Industry Sector: Repair and Overhaul

#### RESISTORS



7615 Kimbel St. Unit 2 MISSISSAUGA, Ontario LSS LA8 Tel: (416) 673-1553 Fax: (416) 673-8472 Export/Marketing Contact: Mr. Danny Dannawi President

IPC Resistors Inc. specializes in the design and manufacturing of Power Resistors. The company's product line includes Wirewound Resistors, Edgewound Resistors, Stamped Grid Resistors and Ribbon Resistor Components. As well as complete engineered resistor banks for Mine Hoist, Overhead Crants, Construction Tower Cranes and Neutral Grounding Resistors. Since it was established IPC has been committed to the production of the highest quality products. IPC has offices and manufacturing factory in Mississauga, Ontario and Marketing and Engineering Office in the Greater Cincinnati area in the U.S.A. Industry Sector: Resistors

#### **RTU'S**



4525 Manilla Road S.E. CALGARY, Albena T2G 4B6 Tel: (403) 243-3335 Fac: (403) 243-1815 Expon/Marketivg Contact: Mr. Roh Farguharson

Westronic designs, manufactures and supplies remote terminal units (RTUs) and station automation equipment for the power utility industry. The company develops real-time software for device to device communications and innovative microprocessor-based hardware using distributed processing. This means that the products have a long life cycle and are flexible to meet future needs. Westronic sells RTUs and station automation equipment directly and through OEMs, as well as the following products: power supplies (SwitchMode), metal and fibreglass cabinets, PC-based master station software, modems and 900 MHz radios. All products are designed and tested to meet and exceed major world standards (IEEE and IEC). There is a strong commitment to customer service and product performance which has made Westronic a respected and recognized leader in this industry. Industry Sector: RTU's





#### SCADA

## ASW Computer Systems Ltd.

75 Lakeshore Road East PORT CREDIT, Ontario LSG 1C9 Tel: (416) 274-7774 Faz: (416) 274-5194 Export/Marketing Contact: Mr. Kevin Oenon

ASW Computer Systems was established in 1979 with a mandate to provide industrial and governmental clients with engineering services, primarily in advanced electronics design and real-time software. Early in its history, the company entered the industrial monitoring and control marketplace, and has developed a number of products that provide standard building blocks with which to implement solutions tailored to clients' needs. The products are particularly applicable to electrical generation, transmission, and distribution systems. ASW Computer Systems offers a complete range of SCADA products, allowing them to sell and support complete turnkey SCADA systems. Master Stations run on 386 or 486-level computers, offering PC-bus products for low to medium scale applications, and Multibus technology for mid to high-range requirements. The family of RTU products provide a single-board transducer less RTU product for distribution automation applications, a mid-range product for substation automation, and a high-end modular RTU for large point counts or special applications such as multiple Master support, Sequence of **Events Recording or Automatic** Generation Control. Industry Sector: SCADA

## CAE Electronics Limited

8585 Cote de Liesse ST. LAURENT, Quebec H4T 1G6 Tel: (514) 341-6/80 Fax: (514) 341-7699 Export/Marketing Contact: Mr. John Charles

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CAE Electronics is one of the world's leading advanced technology companies and is a foremost Canadian scientific systems and software house. Based at St. Laurent, Quebec, and with a sister company in Strolberg, West Germany, CAE applies sophisticated real-time computer-based technology to 'arge, complex simulation and control tasks across a broad spectrum of applications. Electrical utility power system products comprise SCADA, utility energy inanagement systems and nuclear power plant training simulators. Industry Sactor: SCADA



Willowglen Business Park, #4 Manning Close N.E. CALGARY, Alberta T2E 7N5 Tel: (403) 272-1800 Fax: (403) 272-2114 Expont/Marketing Contact: Mr. J. Malcolm Milne Export Manager

Willowglen specializes in the Engineering, Design and Supply of Supervisory Control and Data Acquisition (SCADA) systems. Major applications of advanced technology SCADA systems are in the Oil & Gas, Electric Power, Water/Wastewater, Telecommunications and Transportation industries. Willowglen has been a major supplier of SCADA systems worldwide since 1974. Its large, modern facility, consisting of Head Office and Manufacturing Plant, is located in Calgary, Alberta, with branch offices strategically located internationally. Willowglen personnel have a proven ability to design and implement safe and secure systems

using state-of-the-art hardware and software. Thus, the Willowgien solution meets the stringent performance criteria essential to the SCADA environment. Willowglen's SCADACOM Master Station represents a new generation of SCADA systems. The SCADACOM Master Station is designed with real time performance and incremental expansion as basic features. Coupled with a sophisticated high resolution man-machine interface and fault tolerant operation, the SCADACOM Master Station brings new levels of reliability and flexibility to the SCADA marketplace. SCADACOM works on a hardware platform of SUN Microsystems RISC-Architecture Workstations on a high speed Local Area Network (LAN). Its implementation of a real-time Object Oriented Database multiplies performance factors by one to two orders of magnitude over conventional SCADA systems.

Industry Sector: SCADA

#### SUBSTATIONS

Markham Electric Limited

215 Anderson Avenue, P.O. Box 2700 MARKHAM, Ontario L3P 4C7 Tel: (416) 294-9405 Fax: (416) 294-9555 Export/Marketing Contact: Mr. Bryan Rees Export Manager

Markham Electric Limited are specialists in high voltage electrical equipment. The product range includes switchgear, transformers, cable bus duct, instrument transformers and complete substations. In addition to equipment supply, the company also offers engineering design, commissioning, installation and world-wide sourcing capability. The ability to either manufacture or source components from internationally recognized suppliers plus the ability to engineer and co-ordinate a complete package is the key to Markham's success in this highly specialized field. Industry Sector: Substations



#### SWITCHGEAR

## Boundary Electric (1985) Ltd.

7990 Columbia Ave. Box 758 GRAND FORKS, B.C. VOH 1H0 Tel: (604) 442-5561 Fax: (604) 442-8332 Export/Marketing Contact: Mr. Rob Docksteader

Boundary Electric designs and manufactures custom switchgear in both high & low voltage, and supplies new & remanufactured transformers up to 230 KV class, dry type including distribution. Boundary also manufactures portable & underground sub-stations for both development and permanent power supplies.

Industry Sector: Switchgear

### G&W Electric Ltd.

6581 Kitimat Rd. MISSISSAUGA, Ontario LSN 3T5 Tel: (416) 821-8892 Fax: (416) 821-7979 Expon/Marketing Contact: Mr. W.1. Tonge Vice President-Marketing

G&W Electric has been building cable accessaries for underground cable since 1905. The quality of the product, as it conforms to the requirements of G&W's customers, has the highest reputation. The Canadian plant, 23,000 square feet, and 25 employees manufactures porcelain terminations, 15-69 kV, oil and SF6 insulated load-break sectionalizing switches 15-38 kV, and various splicing materials and compounds. Products include: -Capnut potheads 5-46 kV up to 3000mcm conductor size -"Eliminator" and "PAT" slip-on terminators for solid-dielectric cable

-Oil insula in id-break switches, submersit indmounted. -SF6 insula. ad-break switches, vault and padmount in ie



-Current-limiting protectors\* Industry Sector: Switchgear

### GEC Alsthom Energie Inc.

1400, boulevard Industriel LAPRAIRIE, Quebec JSR 2E5 Tel: (514) 659-8921 Fax: (514) 659-3371 Export/Marketing Contact: Mr. Juan A. Morales Dir. - Intril. Dev.

Established in 1964, GEC Alsthom Energie formerly Cegelec Industries Inc., manufactures a complete range of 15 kV to 800 kV electrical equipment for transmission and distribution networks. The company's product line includes: Air blast, minimum oil and SF6 circuit breakers, different types of disconnect switches, solid and hollow type insulators, gas insulated switchgear, medium voltage switchgears and fused cutouts. Recent developments include the new all weather circuit breaker, capable of interruptions of 50 kA at -50°C or 63kA at -40°C, using pure SF6 as well as disconnect switches with breaking capacity for series compensation applications in high voltage transmission lines, and ground interrupter switches.

Industry Sector: Switchgear

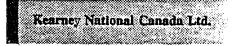


1560 - SSth Avenue LACHINE, Quebec H8T 3J5 Tel: (514) 631-6145 Fax: (514) 631-1215 Export/Marketing Contact: M. Michel Mondor

Joshyn Canada Inc. through the use of Joshyn Corp. technology manufactures and supplies products used for the protection, construction and maintenanc. of Electric Power Transmission and Distribution facilities. The main products are vacuum capacitor switches, overhead vacuum sectionalizers, vacuum switches for arc furnaces, underground and pole top SF6

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada switches, power and current, limiting SF6 fuses, secondary and distribution class surge arresters, station and intermediate class surge arresters, underground cable accessories and fused cutouts. Joshyn Canada Inc. is also actively involved in the research and development of custom-built products. It is located in Lachine, Quebec where over thirty-five (35) people are employed. Over the years, Joshyn has established itself as one of the leading manufacturers of Distribution equipment in Canada.

Industry Sector: Switchgear



9240 Langelier Blvd. ST-LEONARD, Quebec HIP 2E1 Tel: (514) 323-1274 Fax: (514) 323-8543 Export/Marketing Contact: M. Michel St. Onge Vice President Sales and Marketing

Kearney National (Canada) Ltd. designs manufactures products used by electrical utilities and industries in Canada and around the world. The company's product line includes distribution air-break disconnect switches, fuse cutouts and fuselinks, additional lines that are mcnufactured or distributed include products which are used to make all kinds of electrical connections and to assist in the maintenance and repair of distribution systems. The company's strength in the Canadian and export markets is due to its reputation for high quality, competitively priced products.

Industry Sector: Switchgear



### Merlin Gerin Canada Liter

1375 Graham Bell BOUCHERVILLE, Ouebec J4B 64: Tel: (514) 641-1340 Fac (514) 641-1472 Export/Marketing Contact: M. Jean Archambault Marketing Manager

Merlin Gerin Canada supplies electrical equipment to the leading electrical distribution markets in the country. Merlin Gerin Canada manufactures a complete range of exterior circuit breakers, medium voltage capacitors and equipment for the navy. Merlin Gerin Canada also supplies a complete range of low and medium voltage circuit breakers. Industry Sector: Switchgear

# PCG Switchgear Ltd.

4140 Finch Ave. East SCARBOROUGH, Ontario MIS 3T9 Tel: (416) 292-9801 Fax: (416) 292-5796 Export/Marketing Contact: Mr. A.B. Preston President

PCG Switchgear Ltd. is one of the leading manufacturers of custom designed products for electrical generation, transmission & distribution systems. Specialized products are switchgear, control, metering & relay panels, bus-duct, portable substation, unit substations. Customers are utilities, paper & steel mills, petrochemical plants, mining companies, environmental & waste management companies etc. PCG packages mini & micro hydro, solar panels and other growth oriented products/packages. Products include: - Outdoor metal enclosed switchgear<sup>o</sup>

- Metal-Clad switchgear°
- Control Panels<sup>°</sup>
- Metering & Relay Panels°
- Solar Panels<sup>o</sup>
- Mini Hydro\*

- Micro Hydro\*
- Bus Duct
- Brochure attached **Industry Sector:** Switchgear



90 Belfield Road TORONTO, Ontario M9W 1G4 Tel: (416) 249-9171 Fax: (416) 249-6051 Export/Marketing Contact: Mr. H.K. Sandios Director Int'l Sales

S&C Electric Company, serving the electric power industry since 1911. established its Canadian manufacturing facility in 1953. S&C specializes in the development and manufacture of switching and protective devices that play an integral part in delivering electric power in the most efficient and reliable manner. These devices minimize damage to circuits and equipment in the event of a short-circuit, make practical the extensive segmentation of circuits to minimize the number of power users affected by any cutage, and reroute power flow for fast restoration of service.

Medium and high-voltage products include power fuses, fuse cutouts, fuse links, padmounted and metal-enclosed switchgear. interrupter switches and circuit-switchers. Industry Sector: Switchgear



P.O. Box 5040, Stn "A", 3228 North Service Road BURLINGTON, Ontario L7R 3Y8 Tel: (416) 528-8811 Fax: (416) 634-2849 Export/Marketing Contact: Mr R.E. Buckley Manager, Export Sales

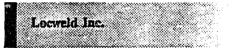
The Industries Group produces and markets electrical distribution and control products, including MV Metalclad Switchgear (to 34.5KV), MV Motor

Industrie, Sciences et Technologis Canada Industry, Science and Technology Canada

Control - "Ampgard", LV Motor Control Centres "5 Star", LV Metal Enclosed Switchgear, LV Bus Duct, LV Control Devices, Molded Case Circuit Breakers, Service Entrance Equipment, Automatic Transfer Switches/Systems, LV Distribution Switchboards, Grounding Resistors, Panelboards, Airfield Lighting Controls, Static Exciters, and Network Protectors. Also available are Automation Technologies, Instrumentation Services\*, Programmable Logic Controllers<sup>•</sup>, Replacement Coils<sup>°</sup>, Generation Services Upgrading/Overhauling, Field Services, Power System Studies, Wound Rotor and Squirrel-cage Induction Motors to 15,000 H.P.\*

Industry Sector: Switchgear

#### TOWERS



50 Iberville Avenue CANDIAC, Quebec JSR 115 Tel: (514) 659-9661 Fax: (514) 444-3111 Export/Marketing Contact: M. Maurice J. Cvr Vice President -Marketing

The company designs, manufactures, and galvanizes transmission line towers and substation structures. Locweld has a world class, world competitive manufacturing plant and has been particularly successful in export to Pakistan Industry Sector: Towers





800 Boulevard St. Joseph CHARLESBOURG OUEST, Quebec G2K 1W6 Tel: (418) 626-0007 Far: (418) 626-7933 Export/Marketing Contact: M. G. Poiulin Vice President

Quali-metal Inc. manufactures transmission towers, lighting towers, stations, substations, bridges and docks. Industry Sector: Towers

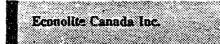
### Trylon Manufacturing Co. Ltd.

21 Howard Ave. ELMIRA, Ontario N3B 2C9 Tel: (519) 669-5421 Fax: (519) 669-8912 Export/Marketing Contact: Mr. Rod Fuller Vice President

Trylon manufactures and designs a full range of towers for telecommunication purposes. It has custom facilities for the engineering of support structures for navigational aids, radar, cellular, LPTV, microwave and radio. Trylon offers a full turnkey service for installation of towers and antennas both domestically and abroad.

Industry Sector: Towers

#### TRAFFIC CONTROLS



1650 Midland Avenue SCARBOROUGH, Ontario M1P 3C2 Tel: (416) 752-4252 Fax: (416) 752-6357 Export/Markesing Contact: Mr. Peter Keen, P.Eng. General Manager

Econolite Canada Inc. manufactures and distributes Traffic Control Products throughout Canada to Government Agencies and private contractors providing services to the Municipal and Provincial Governments. Econolite offers a wide variety of products for managing and controlling vehicular traffic, including Signal Displays, Traffic Controllers, and Cabinet Assemblies and related components, Traffic Management Software and Emergency Vehicle Preemption Systems. Econolite has manufacturing and sales offices in Richmond, B.C. and Scarborough, Ontario and is represented throughout Eastern Canada (Quebec and The Maritimes) by Electromega Limited, based in Candiac, Quebec. Together with Econolite Control Products Inc. of Anaheim, California, Econolite Canada is one of the leading suppliers of Traffic Control Technology in North America and is committed to providing solutions to "Tomorrow's Traffic Problems Today". Product lines include: Arterial Traffic Management Systems, Signals and Mounting Hardware, Controllers, Cabinet Assemblies, Traffic Data Collection System, Detectors, Loops & Sealants, Vehicle Identification System, Conflict Monitors, Emergency Vehicle Preemption Systems, Load Switches, Relays, Flashers, L.E.D. Signs and Signals, and Surge Arrestors and Filters. Industry Sector: Traffic Controls



470 Midwest Road SCARBOROUGH, Ontario M1P 4Y5 Tel: (416) 288-1320 Fac: (416) 288-9914 Export/Marketing Contact: Mr. Peter Lengyel General Manager

Fortran Traffic Systems Limited is Canada's largest manufacturer and distributor of vehicular traffic signal control equipment and systems. Fortran services all aspects of the industry from the supply of traffic signals and associated hardware, to sophisticated control equipment and coordination systems. Fortran manufactures signals, beacons, brackets and cabinets. Fortran also offers advanced computerized control systems plus a complete range of custom engineered and customer support services. Industry Sector: Traffic Controls

Polesystems (1990) Inc. 

4822 Centre Street S.W. CALGARY, Alberta T2G SA4 Tel: (403) 287-3610 Fax: (403) 243-8587 Export/Marketing Contact: Mr. Jim Parisien President

The company manufactures street light standards, traffic davits (poles), and traffic sign bridges. Industry Sector: Traffic Controls



# Topping Electronics

215 Nantucket Boulevard SCARBOROUGH, Ontario M1P 2P2 Tel: (416) 285-1272 Fax: (416) 757-8096 Export/Marketing Contact: Mr. John C. Illingworth General Manager

A Canadian systems electronics company incorporated in 1956, Topping Electronics has in-house capabilities ranging from micro-processor systems development and fabrication to electronic and communications equipment design. construction, assembly and test. In recent years, Topping Electronics has specialized in the design and manufacture of vehicular traffic control equipment and pipeline monitoring systems. Topping microcomputer traffic controllers are serving motorists in major cities across Canada and the United States as well as in state-of-the-art Freeway Traffic Management Systems, such as installed on Highway 401 in Toronto. Electronic pipeline ir pection equipment, which travels through oil and gas pipeline to determine the pipeline's reliability and safery, is in use around the world. Regular customers include natural resource companies, governments and telecommunications common carriers. Products include:

In-house CAD system, electronics development laboratory, electronics design and prototyping, electronics product manufacturing and testing, microprocessor development system, micro-memories programming, engineering microcontroller prototypes, production and test of microcontrollers, traffic signal control equipment, pipeline inspection equipment, frequency synthesizers, multi-channel tape recorders, telecommunications equipmert Services include:

Engineering design, Software design system and applications, Circuit board design, PCB assembly, Metal fabrication, Electrical testing services, and Documentation services Industry Sector: Traffic Con rols

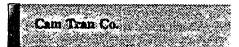
#### TRANSDUCERS



2625 Rue Dalton STE-FOY, Quebec G1P 3S9 Tel: (4!8) 651-8000 Fax: (418) 651-6695 Export/Marketing Contact: M. M. Laliberté V.P. Marketing

Gentec Inc. manufactures transducers for watts, vars, and current, power factor correction system, and low voltage and high voltage capacitors. Gentec also manufactures dual energy demand control and lighting control systems, and custom designed systems for utilities Industry Sector: Transducers

#### TRANSFORMERS



Bax 866, Purdy Road COLBORNE, Ontario KOK 1S0 Tel: (416) 355-3224 Fax: (416) 355-2273 Export/Marketing Contact: Mr. Bryn Campbell President

Cam Tran builds oil filled distribution transformers for the utility, contractor, and industrial markets. Cam Tran's manufacturing facility is in Colborne, Ontario, 80 miles east of Toronto. Products include: -Single phase pole mount transformers 5 KVA - 500 KVA° -Single phase pad mount transformers 25 KVA - 167 KVA° -Three phase pad or pole transformers 15 KVA - 1500 KV° -Cam Tran uses the newest technology available today to produce efficient transformers°

Industry Sector: Transformers

#### Carte International Inc.

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1999 Logan Ave. WINNIPEG, Manitoba R2R 0H8 Tel: (204) 633-7220 Fax: (204) 694-0614 Export/Marketing Contact: Mr. Douglas H. Ross V.P. Sales

Carte International is a privately owned company with 20 years experience supplying transformers in many world markets. Carte uses computers extensively in design and manufacturing and can respond to most specialized requirements. Carte manufactures distribution and small power transformers up to 7500 KVA and 46KV, oil or R-temp filled, 50 HZ or 60 HZ. Single or three phase.<sup>o</sup> Low loss, high efficiency designs are available, as well as stainless steel tanks for long life in highly contaminated areas. Industry Sector: Transformers

See a state of the second s Delta Transformer of Canada Ltd. and the state of the second second

795 Industrial Blvd. GRANBY, Quebec J2G 9A1 Tel: (514) 378-3417 Fax: (514) 378 Export/Marketu act: M. S. Roy Sales Manager

The company manufactures electrical transformers for control, distribution and power.

Industry Sector: Transformers



Industry, Science and Industrie, Sciences et Technologie Canada Technologie Canada Canadä

# Federal Ploneer Ltd:

19 Waterman Avenue TORONTO, Ontario M4B 1Y2 Tel: (416) 752-8020 Fax: (416) 752-8944 Export/Marketing Contact: Mr. B. Wisema-V.P.-International

The company manufactures products for the transmission, distribution and control of electricity, in 10 plants across Canada. The product scope covers a wide range of products for utility, industrial, commercial and residential applications, including electric transformers heaters, moulded case circuit breakers, panel boards, switchboards, safety switches, low voltage metal enclosed, switchgear, medium voltage metal enclosed and metal clad switchgear fuses, bus duct and ground fault detectors. The product lines include the full range of low and medium voltage distribution equipment, and the full range of sizes and types of transformers including power transformers to 500 mVA. The company also manufactures solid state electrical equipment: digital metering systems, ground fault relays, zero sequence current sensors, USD relays, and transformer protection relays. Industry Sector: Transformers

> Ferranti-Packard Transformers Ltd.

Dieppe Road, P.O. Box 548 ST. CATHARINES, Ontario L2R 6W9 Tet: (416) 685-6551 Fax: (416) 685-9783 Export/Marketing Contact: Mr. E.K. White Vice-President - Sales

Established in 1894, Ferranti-Packard Transformers Ltd. designs and manufactures a complete line of Cistribution and power transformers for electrical power utilities and industry. Ferranti-Packard Transformers Ltd. is a Rolls-Royce Company.

#### Industry Sector: Transformers

Hammond Manufacturing Company Limited

394 Edinburgh Road N. GUELPH, Ontario NIH IES Tel: (519) 822-2960 Far: (519) 822-0715 Expon/Marketing Contact: Mr. J.L. Husson Expont Manager

The company manufactures a wide range of transformers, magnetic components, metal and plastic cabinetry products to world markets. Four major lines of cabinetry products supply the international marketplace with enclosures ranging from miniature plastic and diecast metal cases to a full range of electrical enclosures, 19 inch rack mounting systems, desk-top cases, consoles and keyboards. Transformers from miniature P.C. mounting transformer and 5,000 KVA power transformers are available for export.

Indr ary Sector: Transformers



50 Northline Road TORONTO, Ontario M4B 3E2 Tel: (416) 755-3301 Fax: (416) 755-7364 Export/Marketing Contact: Mr. Dave Matthew

The company manufactures: -Dry type power transformers -up to 10,00 KVA 27,600 volts -open wound -epoxy impregnated -cast coil -dry type distribution transformers -single phase -three phase -three phase -special voltage transformers -expoxy potted transformers -up to 112.5 KVA 600 volts -drive isolation transformers -traction transformers -portable mine substations -mini substations -single phase -three phase Industry Sector: Transformers

Marcus Transformer Of Camida Ltil.

999 du College, Suite 26 MONTREAL, Quebec H4C 2S3 Tel: (514) 935-3543 Fax: (514) 935-6592 Expon/Marketing Contact: Mr. A. Marcus Pres. & Sales Mgr.

The company manufactures dry type transformers, single-phase 3 to 333 kVA and 5 kV, three phase 6 to 600 kVA and to 5 kV. Marcus also manufactures control and electronic transformers. Industry Sector: Transformers

Megatran Electric Ltee 

280, Rue Carreau ST. JEAN - SUR-RICHELIEU, Quebec J3B 2G4 Tel: (514) 346-6622 Fax: (514) 346-2078 Export/Marketing Contact: Mr. Narayan Shankar Vice President

Megatran Electric Ltee is a speciality transformer manufacturer who manufactures dry type and cast resin transformers up to 17 MVA 27.6KV 150KV BIL, and special oil filled units upto 2L MVA capacity, and rectifiers and traction transformers. Industry Sector: Transformers

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Moloney Electric Corp.

213 Sterling Road TORONTO, Ontario M6R 2B4 Tel: (416) 534-9226 Fax: (416) 535-13R4 Export/Markeur; Contact: Mr. Brian Sporting Marketing Manager

Moloney Electric is a Canadian owned manufacturer of transformers and mobile substations. Headquarters is at Toronto. with plants at Toronto, Spruce Grove, Alberta and Sackville, New Brunswick, Products include oil filled distribution transformers 10 to 500 KVA, up to 34.5 KV; speciality transformers for variable voltage drives (the only manufacturer in Canada), 480 to 4000 volts, 25 to 500 KVA; power transformers to 138 kV, 25 mvA; and mobile substations 138 kV. 50 mvA. Moloney's amorphous metal technology for distribution transformers is unique and a new technology for the transformer industry. In the export markets Moloney is especially competitive in the manufacture of it mobile substations and three phase oilfield distribution transformers. Moloney's mobile substation technology is world class and unique to the international market. Industry Sector: Transformers

Rex Manufacturing

25 Baywood Road REXDALE, Ontario M9V 3Y8 Tel: (416) 747-7818 Fax: (416) 747-1956 Export/Marketing Contact: Mr. Rory I. Thomson Marketing Manager

Rex Manufacturing has served the North American transformer industry since 1970. The company manufactures control transformers (25 VA - 5000 VA all voltages), power transformers (up to 5 MVA - 35,000 volts), auto transformers (all voltage), electrostatically shielded transformers, drive isolation and inverter transformers, epoxy encapsulated transformers, 80 C and 115 C temperature rise transformers, motor starting auto transformers, ultra isolating transformers, reactors, all specialty transformers, and unit substations.

**Industry Sector:** Transformers



520 Conestogo Road WATERLOO, Ontario N2L 4E2 Tel: (519) 884-2810 Fax: (519) 884-0062 Export/Marketing Contact: Mr. Harold Bast Transformer Division Manager

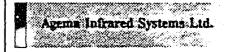
Tracon Engineering Inc. is a privately owned Canadian corporation in the business of designing and manufacturing of special and standard dry type transformers up to Smva and primary voltages of 27.6MVA. Tracon also assembles and wires custom control panels and consoles. Tracon has custom metal fabri-rating facilities and designs and manufactures custom consoles, desks, enclosures, racks, benchboards, operator cabins and C.R.T. systems in either mild steel or stainless steel. Produces include: -Distribution and Power Transformers up to 5MVA at 27.6KV Voltage Level -Single Phase and Three Phase Epory Potted Transformers -Motor-Starting, Rectifier, and Special **Drive Isolation Transformers** -Iron Core, Single and Three Phase Reactors and D.C. Chokes -Zig Zag Neutral Grounding Transformers, Special Design Computer Transformers -Custom Design Electrical and Pneumatic Control Systems -Custom Design Metal Cabinets and Consoles -Specialists in Custom Stainless Steel Fabricating Industry Sector: Transformers

Transformateurs P.M. Ltee.

164, rue Cowie GRANBY, Quebec 12G 3V3 Tel: (514) 372-3456 Fax: (514) 372-5890 Export/Marketing Contact: M. Daniel Meunier

Since 1960, Transformateurs P.M. Liee has been manufacturing current potential and metering transformers, insulation class 0.6KV to 27.6KV in epoxy. The company specializes in very high precision custom built transformers. Principal customers are the electrical utilities and the switchgear manufacturers. Industry Sector: Transformers

#### TRANSMISSION AND DISTRIBUTION (MISC.)



5230 South Service Road, Suite 125 BURLINGTON, Ontario LTL 5K2 Tel: (416) 637-5696 Fax: (416) 639-5488 Export/Marketing Contact: Mr. Edem Sosoo Controller

Agema Infrared Systems Ltd., designs, manufactures and markets equipment for non-contact temperature analysis. Infrared thermography has major applications in almost all industries. The market is divided into four main segments: Research and Development, Condition Monitoring, Process Control and Medicine.

Agema Infrared Systems Ltd. offers a variety of systems for applications in all four segments from "Simple to Sophisticated" imaging products. Agema Infrared Systems Ltd. offers total market commitment with Systems Design and Engineering Support, Operator Training and Complete Product Service. Products include:



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-Thermovision 800 and 900 Series & Accessories\* -Thermovision 400 Series & Accessories\* -Thermovision 200 Series & Accessories\* -Thermoprofile 6 & Accessories\* -TPT-800 & Accessories\* Industry Sector: Transmission and Distribution (Miscellaneous)

Alles Corp.

85 Dolomite Drive DOWNSVIEW, Ontario M3J 2N1 Tel: (416) 663-6405 Fax: (416) 663-6492 Export/Marketing Contact: Mr. Dave Rathgeber

Alles Corp. was founded in 1985 to manufacture custom computer products for industry. The company is located in a 4400 sq.ft. building in Toronto and facilities include electronic assembly, soldering and automated testing. The business is family owned and serves gas and electric utilities and municipalities as well as large and medium sized industries. Specific products include custom computers for DEM applications, the Fillminder natural gas filling computer and the Netminder telemetering system for use on VHF/ VHF radio.

Industry Sector: Transmission and Distribution (Miscellaneous)



606 Beech St. West WHITBY, Ontario L1N 5S2 Tel: (416) 668-3348 Fax: (416) 668-8590 Expont/Marketing Contact: Dr. George Tong

Andrew Canada Inc. is a subsidiary of Andrew Corporation, a worldwide supplier of electronics and communications products and systems. The Canadian facility was established in 1953 and supplies products designed and manufactured to meet specifications and standards of both commercial customers and Canadian and U.S. government agencies, including DOT and FAA. Andrew Canada Inc. designs and manufactures terrestrial microwave, satellite earth station, radar/navaid and high frequency antenna systems, and supplies coaxial cable, waveguide and related electronics. Other products include antennas for special applications such as reconnaissance and direction finding, and fabricated aluminum and steel structures.

Industry Sector: Transmission and Distribution (Miscellaneous)

# Bler Marketing Inc.

1250 Mississauga Valley Blvd. Unit #107 MISSISSAUGA, Ontario LSA 3R6 Tel: (416) 275-4187 Fax: (416) 275-6933 Export/Marketing Contact: Mr. Bruce W. Bier President

Bier Marketing was established in 1977, to supply the Canadian market with a complete range of hydraulic tools and accessories used in the construction and maintenance of overhead and underground transmission and distribution lines. Products include:

-Hydraulic compression tools and dies (4 ton to 200 ton)

-Hydraulic cutting tools ( up to 4" dia.) -Hydraulic punching tools ( up to 7/16" thickness)

-Electric/hydraulic and gasoline/hydraulic pumps and accessories

Industry Sector: Transmission and Distribution (Miscellaneous)



6900 Trans Canada HWY. PTE. CLAIRE, Quebec H9R 1C2 Tel: (514) 694-9320 Fax: (514) 694-0786 Export/Marketing Contact: Mr. Gerry Sullivan

Custom communications & control equipment and systems have been supplied to the power utility, telecommunications and transportation sectors by CVDS for the past 18 years. CVDS provides expertise in all-digital communications equipment based on advanced standards and technologies like ISDN, spread spectrum: radio, fiber optics and integrated voice & data LAN's. Industry Sector: Transmission and Distribution (Miscellaneous)



1486 Ruberval Street, Suite 204 ST. BRUNO, Quebec J3V 3P8 Tel: (514) 461-3655 Fax: (514) 461-0966 Export/Marketing Contact: M. Richard Dourian

Cyme International is a world leader in developing and marketing comprehensive Power Engineering System Analysis software. Cyme's programs are used by electric utilities, industrial organizations, consultants and research or teaching institutions in more than 50 countries around the world. Cyme is a licensee and a partner in development with many organizations including Hydro-Quebec, Canadian Electrical Association, Coordination Inc. and Milsoft Integrated Solutions.

Industry Sector: Transmission and Distribution (Miscellaneous)



Industry, Science and Industria, Sciences et Technology Canada Technologie Canada Canadä

6030 Ambler Drive MISSISSAUGA, Ontario LAW 2P1 Tel: (416) 624-3020 Fax: (416) 625-6197 Expon/Marketing Contact: Mr. Paul Manuel Sales Manager

F-P Electronics

F-P Electronics manufactures

electromagnetically controlled reflective disk display products for use in large information displays at electric power plants, airports, sports arenas, stock exchanges etc. F-P's datarama° system of status indicators is used for electrical utility control room applications. F-P Electronics also provides contact status multiplexer for data acquisition applications or alarm status monitoring. In addition to these manufacturing operations, F-P Electronics has a hard disk drive business with emphasis on refurbishment of seagate and miniscribe brand products.

All F-P Electronics reflective disk displays work on a method involving magnetic latching. Power is only required to change the information to be display - no power is required to maintain a message on a sign, resulting in very low energy consumption. In addition, F-P's displays have no consumable components and typically include disk mechanisms rated to over 100 million operations.

Industry Sector: Transmission and Distribution (Miscellaneous) Harris Farinon Canada Inc.

657 Orly Avenue DORVAL, Quebec H9P 1G1 Tel: (514) 636-0974 Faz: (514) 636-9377 Export/Marketing Contact: M. Lévis Malenfant Int'l Advance Marketing Manager

Harris Farinon Canada is a worldwide supplier of quality microwave products and systems for electrical utilities. Its capabilities range from system definition to complete turnkey installations. The company offers more than 50 analog and digital microwave products and systems for transmission of data, voice, and video, with more than 100,000 terminals in operation. Harris Farinon took a leading position in digital radio communication by developing efficient modulation techniques. It also developed FARSCAN<sup>TM</sup>, a proprietary microwave network supervision system. The company's commitment to customer service and support is evidenced by its experienced field installation team, comprehensive customer training, contract maintenance services, and two-year product warranty.

Industry Sector: Transmission and Distribution (Miscellaneous)



340 Dufferin Street TORONTO, Ontario M6K 1Z9 Tel: (416) 534-7943 Fax: (416) 537-1642 Expont/Marketing Contact: Mr. Eric D. Brooks Marketing Manager

Herbrand Tools Corporation has been manufacturing electrical hand tools in Canada for more than 60 years. The company's product line now includes over 4500 tools for the professional mechanic and electrician. Products include electricians' knives, punches, belts cutters, and tool sets.

Industry, Science and Industrie, Sciences et Technology Canada Technologia. Canada Industry Sector: Transmission and Distribution (Miscellaneous)

Instrumar Limited

P.O. Box 13246, Stn 'A', 25 Pippy Place ST. JOHN'S, Newfoundland A1B 4A5 Tel: (709) 726-8460 Fox: (709) 726-8613 Export/Marketing Contact: Mr. Robert Vivian V.P. Marketing

Instrumar Limited is a company dedicated to the development, manufacture and sales of "smart" sensors for the measurement of material properties. Special emphasis is placed on ice and materials related to the prevention, detection, and/or removal of ice build-up on structures. A path through more than a decade of Arctic ice instrumentation research provides the base capability for this focus. Capabilities in product development are evidenced through receipt of several awards for innovation and the Silver Award for Industrial Design in 1988 from the Canada Awards for Business Excellence. Instrumar Limited manufactures the IM101 Ice Monitor. The IM101 is designed to detect conditions of surface accumulation, including ice accretion on hydro electric towers and conductors. Ice accretion has always been a problem with millions of dollars of damage incurred annually by utilities. This does not have to be accepted as a fact of life. Having detailed information on the on-set. duration, and cessation of freezing precipitation allows for a proactive approach. Information on icing can be used in the design phase of hydro line construction. Routes can be selected to avoid areas of severe icing. Where route selection is limited, the line specifications can account for the expected level of icing. This helps avoid overdesign or underdesign. For existing lines, icing information can be used to provide early warning of potential problems. This would allow crews to be mobilized to remove ice in certain areas or extra loads to applied to low voltage lines to melt ice. If neither of these options is practical, it is still



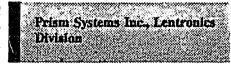
useful to put crews on standby or switch to alternate generating power to minimize the down time due to ice damage. The IM101 Ice Monitor solves these problems through measurement of the surface electrical impedance and temperature of a proprietary ceramic probe. This data is combined to sense the surface condition of the probe. A default icing window is programmed into each device and when the parameters fall within this window, an "icing" signal is triggered. The sensor then initiates an optional self do-icing cycle and/or control signal output. The IM101 has undergone two years of field and lab testing including the icing tunnels of the National Research Council of Canada and the Cold Regions Research Engineering Laboratory of the U.S. Army. Industry Sector: Transmission and Distribution (Miscellaneous)

# Positron Industries Inc.

5101 Buchan St. MONTREAL, Quebec H4P 2R9 Tel: (514) 345-2200 Fax: (514) 731-8662 Expon/Marketing Contact: Ms. Lily R. Gulrajani

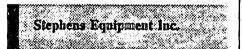
Established in 1970, Positron Industries Inc., designs and manufactures state-ofthe-art telecommunications systems and equipment. Over 15% of total sales revenue is devoted to research and development. Positron's high voltage protection and communication products are standard equipment in most of the larger utility and telephone companies in North America and are also exported worldwide. Positron is the winner of two IEEE "Bast Product" awards and the Canada Export Award of the Government of Canada. Its range of products include Telephone and Radio Communication Consoles with full patching capability for dispatch offices and communication centers; Teleline Isolators for high voltage "ground potaential rise" protection of wire line facilities entering power stations; defective power line isolator detector, audiotone protective relaving teleprotection products; portable Dosimeters that measure electromagnetic

field exposure and surveillance and remote alarm reporting SCADA systems. Industry Sector: Transmission and Distribution (Miscellaneous)



7025 Greenwood Street BURNABY, B.C. VSA 1X7 Tel: (604) 421-8700 Fax: (604) 421-8707 Export/Marketing Contact: Mr. Michael J. Broderick P.Eng Manager, General Sales

Prism Systems Inc. is a designer, manufacturer & supplier of products and associated EF&I services for telecommunications systems emphasizing application to the electrical utility industry. Products include microwave radio, multiplex, protective relaying, SCADA systems and associated products to provide turnkey integrated systems. Industry Sector: Transmission and Distribution (miscellaneous)



2750 Brabant Marineau MONTREAL, Quebec H4S 1L1 Tel: (514) 332-1230 Fax: (514) 331-2084 Export/Marketing Contact: Mr. S. Allan Stephens President

Stephens Equipment Inc. manufacturers dryers and complete systems for the compression, storage, and distribution of non-corrosive gases. The company is a major supplier of compressed air systems for air blast circuit breakers and other power house needs for electrical utilities. Industry Sector: Transmission and Distribution (miscellaneous)

#### TURBINES & TURBINE-GENERATORS

GE Canada (Hydroturbines and Generators) 

795 First Avenue LACHINE, Quebec H8S 2S8 Tel: (514) 485-4046 Far: (514) 485-4230/31 Expon/Marketing Contact: Mr. I.M. McKay Manager-Turbine Sales, International

GE Canada designs and manufactures state-of-the-art hydroelectric generating equipment. Through the design and manufacturing facilities located in the provinces of Ontario and Ouebec, GE Canada has supplied hydraulic turbines, hydrogenerators, transformers, exciters and bus ducts for major hydro projects throughout the world. The company's commitment to ongoing research and development programs has allowed for technological development that ensure the availability of state-of-the-art technology for these products. GE Canada's impressive list of installations include hydrogenerators totalling over 90,000 MVA and hydraulic turbines totalling almost 40,000 MW. Among the most notable installation on the list are the three - 826 MVA generators and the three - 612 MW Francis Hydraulic Turbines designed, manufactured and supplied by GE Canada for the Grand Coulee Project in the U.S.A. This is one of the largest hydraulic turbine and hydrogenerator installations in the world. GE Canada designed and manufactured hydro turbines and hydrogenerators are being installed in the world's major hydro projects including those in Argentine/Paraguay, China, India, Colombia, Venezuala, U.S.A. and Canada. GE Canada has supplied 3 Synchronous Generators totalling 675 MVA to the Chamera 1 project in India. GE Canada has earned a highly acclaimed reputation as a world class manufacturer of hydroelectric generating products. While recognized as a Canadian-based designer and manufacturer of hydroelectric generating equipment, GE Canada has





recently capitalized on its technology strengths through the development of technology transfer agreements within selected market areas. Industry Sector: Turbine-generators,

hydro

#### GEC Alsthom Electromecanique Inc

9 place Commerce, Suite S BROSSARD, Quebec G4W 2V6 Tel: (514) 465-9795 Fax: (514) 465-3736 Expon/Marketing Contact: M. Pierre Seguin Director of Marketing

GEC designs manufactures, and installs water wheel turbines, water wheel generators, synchronous condensers, erection and service facilities, and turbo alternators to 150 MW. Industry Sector: Turbine-generators, hydro

Hydrolec Turbines Inc.

990 Rue André Liné GRANBY, Quebec J2J 1E2 Tel: (S14) 378-0595 Fac: (S14) 375-6367 Export/Marketing Contact. M. Francois Berthiaume Sales Manager

Hydrolec Turbines Canada supplies complete electromechanical equipment for hydroelectric projects ranging in output from 50 kW to 15 MW per unit. Equipment supply includes any or all of turbines, generators, switchgear and electrical distribution, and control and SCADA equipment. Services include engineering, factory and field testing, installation, commissioning, and operator training. Hydrolec customers range from private developers and corporations to municipalities, utilities and national ministries, in North America and throughout the world. Hydrolec is a subsidiary of Neyrpic, world leader in

hydro turbines, and is a member of the GEC Alsthom worldwide group of companies.

Industry Sector: Turbine-generators, hydro



239 Barrick Road PORT COLBORNE, Ontario L3K 5Z5 Tel: (416) 835-5661 Fax: (416) 835-1733 Export/Marketing Contact: Mr. Herb Overberry Sales Manager

The company markets, designs and manufactures all types of turbines up to 25 MW for small and medium hydro applications. They frequently undertake "water-to-wire" projects where they assume responsibility for supply of all equipment related to a turbine-generation installation from intake to discharge on the water side and all electric associated with power generation, up to and including the connection to the grid. Industry Sector: Turbines, hydro

DRS Escher Wyss Inc.

555 Norre Dame Street LACHINE, Quebec H8S 2B1 Tel: (514) 485-2700 Fax: (514) 634-8644 Export/Marketing Contact: M. Réal Boulé Sales Manager

DBS Eacher Wyas Inc. offices and plant, near Montreal, were established in 1980. With a decade of solid achievement in both domestic and export markets. DBS Escher Wyas Inc. has established itself as an innovator offering the very latest technology and quality products for Hydro-electric Generating Units. Currently the company focuses on the packaging of medium and small size generating plants, and on high performance replacement runners and

rehabilitation of existing units. The Hydro Package Group is centred around the company's proven expertise and engineering skills in designing, supplying and installing medium and small hydro turbines and complete equipment packages on a "water to wire" basis, particularly for low head application. The Rehabilitation Group offers products and services to upgrade existing hydraulic turbines and related equipment of all makes; to improve their performance, reliability, availability and, or to increase their life span. The extensive experience of the parent company, Sulzer Escher Wyss, a world leader in design of hydraulic turbines for over 180 years, combined with DBS Escher Wyss design, manufacturing and field installation capabilities provides customer with the very latest technology combined with quality products and services for hydro-electric generating sterions.

Industry Sector: Turbines, hydro

# Dependable Turbines Ltd.

 47 3005 Murray St.
 PORT MOODY, B.C.
 V3H 1X3
 Tel: (604) 461-3121
 Fax: (604) 461-3086
 Expont/Marketing Contact: Mr. Robert Prior
 President

Established in 1978 Dependable Turbines designs and manufactures all types of hydro-electric turbines up to 5000 kW. The turbines are Pelton, Turgo, Francis and Propeller/Kaplan types. These are horizontal, vertical and incline units, ranging from standard designs with a wide variation of construction features for economical packages, to state-of-the-art packages. The company also provides complete water to wire packages from the turbine inlet value to the switch gear bus bar. With approximately 10 years of successful international projects, the company also provides complete installation supervision and commissioning. Industry Sector: Turbines, hydro





#### Howden Group Canada

1510 Birchmount Road SCARBOROUGH. Ontario M1P 2G6 Tel: (416) 752-7310 Fax: (416) 752-0147 Export/Marketing Contact: Mr. Bernard S. Chamberlain, P.Eng. Vice President, Turbine Division

The company designs and manufactures steam turbines, turbine components, ventilation systems, air handling systems, mining equipment. Industry Sector: Turbines, steam

Nova Energy Ltd. 

#420, 1333 Homby Str. VANCOUVER, B.C. V67. 2C1 Tel: (604) 682-3160 Fax: (604) 682-3160 Export/Marketing Contact: Mr. Martin J. Burger Managing Director

Nova Energy Ltd. manufactures custom made power generator units from 5 kW micro power units to large ocean current 10 MW generating units. Nova has made a significant breakthrough in achieving new efficiencies in hydro power extraction. The units extract electrical power from river current, tidal flows, or from the ocean's current. Four prototypes have been built and tested to date. Nova has successfully used aeronautical lift principles to design a new ultra efficient hydro turbine rotor, to generate renewable and cheap electrical power. Combined units form a simple enviro-benign mechanical system with outputs of 5 kw to 5000 megawatts. This use of aerospace technology is believed to be a sound solution to the problems of critical energy needs for many areas of the world. Industry Sector: Turbines, hydro



P.O. Box 2510, Stn "A"/ 120 King Street West HAMILTON. Ontario L8N 3K2/L8P 4V2 Tel: (416) 528-8811 Fax: (416) 528-5833 Export/Marketing Contact: Mr. L.W. Morgan Regional Director

Westinghouse manufactures gas and steam turbines (to 100 MW), and refurbishes turbines. Industry Sector: Turbines - gas and steam

#### WIRE AND CABLE



Box 269 Toronto Dominion Centre. 77 King Street West TORONTO, Ontario MSZ IKI Tel: (416) 860-4918 For: (416) 860-4807 Export/Marketing Contact: Mr. Andrew J. Olbrycht Export Manager

Alcan Wire and Cable is a division of Aluminum Company of Canada, Ltd. Montreal, Quebec. The company manufactures aluminum rod, electrical and mechanical, and bare aluminum conductor. The Wire and Cable Division's headquarter is located in Toronto and has seven plants across Canada equipped with the latest technology, manufacturing electrical grade rud as well as a full range of bare electrical conductors such as ASC, AASC, ACAB, COMPACT, ALPAC, and SDC for overhead transmission lines and insulated aluminum and copper cables overhead and underground, for utilities industrial, commercial and residential applications. The Wire and Cable Division also manufactures a variety of non-electrical aluminum wire, rod and bar products for deoxidizing, welding, Tig and

Mid. fencing, zippers, rivet stock, nails, etc.

Industry Sector: Wire and Cable



250 Ferrand Drive DON MILLS. Ontario M3C 3J4 Tel: (416) +24-5079 Fax: (416) 424-3329 Export/Marbeting Contact: Mr. Richard C. Gould V.P. Int'l Sales and Marketing

In operation since 1911, Canada Wire produces a complete range of electrical power cables up to 345 KV. In addition the company manufactures specialized cables for the construction industry, oil, gas and petrochemical sectors, airfield lighting, appliance and automotive applications and transportation. Manufacturing plants across Canada and joint ventures in South America and Europe ensure competitive and flexible service. The main powercable plant in Toronto has also recently been awarded the International Quality Assurance Accreditation ISO-9002 as well as CSA CAN 3 Z299.2

Industry Sector: Wire and Cable



130 Willmott Street COBOURG, Ontario K9A 4M3 Tel: (416) 372-8713 Fax: (416) 372-6291 Export/Marketing Contact: Mr. John Park Marketing Manager

Belden Wire & Cable has a 200,000 square foot world class manufacturing plant located near Toronia, Ontario This plant is only five years old & has the most up to date wire & cable manufacturing, computer supported machinery. Belden Wire & Cable manufactures a wide selection of electronic, electrical & industrial cables. This selection includes:



Technology Canada



Hook-up wire, Multi & paired cables, LAN, Fiber Optic, Coax, Flat Cable, Process Control, Cords, Building wire, TECK 90, Tray & Armoured instrumentation & control cables. Industry Sector: Wire and Cable

## Deca Cables Inc.

150 North Murray St. TRENTON, Ontario KBV 5W6 Tel: (613) 392-3585 Fac: (613) 392-7908 Export/Marketing Contact: Mr. Piero Di Pietrantonio Vice President

Deca Cables Inc designs and manufactures a wide variety of electronic and electrical wire and cable. The company's product line includes multi-conductors, multi-pairs, coaxials and specialty cables. Among its many operations include drawing and annealing of copper and tinned coated copper, one of the few cable manufacturers in Canada to do so. Deca's cables are available in a number of CSAapproved and UL-listed insulation compounds including polyvinyl chloride (PVC), polypropylene and polyethylene insulations. The company mainly utilizes flame retardant FT-4 compounds required in todays market place. To facilitate and articulate awareness of quality, Deca has established a long-term quality process that incorporates the ideas of several management experts. Products line include satellite cable, high speed data cable (level 4), coardal cables, instrumentation and computer cable, and fire-protective signal cable. Industry Sector: Wire and Cable

Harbour Industries (Canada) Ltd.

1365 Industriel Blvd. FARNHAM, Quebec J2N 2X3 Tel: (514) 293-5304 Fax: (514) 293-2421 Export/Marketing Contact: M. Marc Longpre

Harbour Industries (Canada) Ltd., which began operations in 1975, is a manufacturer of high temperature wires and cables. The products are high temperature wires and cables for commercial, industrial and military applications. These are insulated with Teflon (TFE & FEP), Tefzel, Halar, PFA, Kapton, PEEK, PES, Silicone rubber and 250°C, 1000°C high temperature specialty cables, sizes 32 AWG thru 4/0 AWG. Harbour holds many military specification approvals, including the following OPL approvals: MIL SPEC W-22759/1 thru /12. /16 thru /23. W-8777/, MS25471, W8777 /MS 27110 to 27500, C 27072 other MIL SPEC capabilities are W 81381, W 81822, MIL C 55021, W 16878, MIL-C17 as well as new shipboard cables application. Inspection facilities are to AQUAP4. The company has complete UL and CSA approvals on all popular Teflon, Silicone rubber, and high temperature glass braided constructions for appliances, focures, motor leads, equipment wire etc... Customs services include designing and construction of specialry cables, sodium etching, special bonding and custom marking and printing. Major markets include aircrafts, missile, communication appliances, medical, electronics, chemicals and petro-chemicals, utilities, paper, railroads, lighting electrical machinery, steel industries and nuclear plants. These are reached through direct OEM and distributor sales. Industry Sector: Wire and Cable

Heron Cable Industries Limited

440 Phillip Street WATERLOO, Ontario N2J 4C3 Tel: (519) 885-2850 Fost (519) 885-5460 Export/Marketing Contact: Mr. George Alexiou Sales and Marketing Manager

Heron Cable Industries is a North American leader in the custom manufacture and supply of resistance wire products. The product line includes: freeze protection products including electric pipe heating cables, roof de-icing cables and construction grade cable for snow and ice melting applications in asphalt and concrete, custom-designed resistance wire e.g. battery blankets, refrigerators block heater cords for the automotive industry, electric soil heating cables, and portable electric space heaters. Within Canada, Sentinel heat producing products for the consumer market are represented in all major hardware, lumber, plumbing and distributor outlets. In the United States, the company is represented by an affiliated company, Easy Heat Inc. ranking Heron among the top in its field there. Trade names in Canada are Sentinel for the consumer products line and Easy Heat for the industrial products. At Heron Cable the emphasis has always been on quality and customer service. Industry Sector: Wire and Cable

# Phillips Cables Limited

550 King Street BROCKVILLE, Ontario K6V 5W4 Tel: (613) 345-5666 Fax: (613) 345-7596 Export/Marketing Contact: Mr. T.P. Bohm V.P. Internal Sales

Phillips Cables manufactures all types of electrical wire and cable products complying to CSA and international standards. The company is part of the





BICC Group of companies, with many factories in Canada and the U.S.A. Its offices are in Brockville and Toronto. Its international sales personnel are versatile with many languages and familiar with exports throughout the world. Products include cables for the petrochemical and oil producing companies; special cables for mining (underground and open pit applications); all types of telephone cables and instrument cables, with or without armour and manufactured to specifications; Power cables up to 69kV to EPCEA or ICE Standards. Industry Sector: Wire and Cable

## Pirelli Cables Inc.

425 St. Louis ST-JEAN SUR RICHELIEN, Quebec J3B 1Y6 Tel: (514) 658-1731 Fax: (514) 349-6862 Export/Marketing Contact: M. Roch Goulet Export Manager

Pirelli Cable has been manufacturing electrical cables in Canada since 1953 and is a affiliated with the Pirelli Group involved world wide. Pirelli has supplied cables with voltages up to 138KV (solid dielectric insulation) and 345 KV (for paper insulated cables), serving the needs of the following markets: mines, pulp and paper, petrochemical, industrials utilities, and the mousing sector. Pirelli also manufactures telecommunication products. Industry Sector: Wire and Cable



13340 - 76th Avenue SURREY, B.C. V3W 2W1 Tel: (604) 591-3311 Fax: (604) 591-2292 Export/Marketing Contact: Mr. Shawn Davidson Marketing Manager

At its Surrey plant Pirelli manufactures copper telephone cable (outside plant and indoor PVC) and fibre optics (indoor and outdoor)

Industry Sector: Wire and Cable

Pyrotenax/A Division of Fullips Cables Ltd.

250 West St. TRENTON, Ontario KBV 552 Tel: (613) 392-6571 Far: (613) 394-3711 Export/Marketing Contact: Mr. J.C. Patton Export Manager

Pyrotenax is a company specializing in all types of Mineral Insulated electric cables. Over 30 years of experience has gone into these products which are in use in many countries. A highly qualified staff of engineers and technicians is ready to assist and advise the customer. Pyrotenax has sales offices in major cities across the U.S. and Canada and exports to more than 30 countries. The Mineral Insulated or M.I. cables, as they are called, include wiring, heating & thermocouple cables Through an ongoing research & development program Pyrotenax recently introduced an improved power for the insulant, a breakthrough for superior cable performance.

Industry Sector: Wire and Cable



500 Milloux Blvd MALBAIE (CHARLEVOIX), Quebee GSA 1N4 Tel: (418) 439-3916 Fax: (418) 439-4841 Export/Marketing Contact: M. George Voyer Vice-President Sales

The company manufactures aluminum conductors (bare ACSR, ASC, AASC, AAACSR, ACAR); aluminum flat wire; and aluminum re-draw rod. Industry Sector: Wire and Cable

#### WIRING DEVICES



P.O. Box 550, Lakeport Road COLBORNE, Ontario KOK 1S0 Tel: (416) 355-2122 Fox: (416) 355-3110 Export/Marketing Contact: Mr. Bev. R. Thew President

Anamet Canada Inc. manufactures flexible electrical conduit of all types and sizes. Included in the product range are conduit fittings, vibration eliminators, and plastic conduits.

Reg. trade names: Sealtite, Flexpipe, Anaconda, Conseal, Flexlube, & Shieldtite Industry Sector: Wiring Devices

Industry, Science and Technology Canada

d Industria, Sciences et Technologio Canada



### Brockton Electronics Ltd.

1330 Kootenay St. VANCOUVER, B.C. V5K 4R1 Tel: (604) 291-6665 Fax: (604) 291-6664 Expon/Marketing Contact: Mr. Keith Henderson

Brockton Electronics Ltd. was established in 1988, and manufactures a wide variety of custom cable assemblies (E.G. computer, control), wire harnesses and wiring assemblies. The company provides contract manufacturing services to manufacturers and end-users in the electronic, electrical, utility, computer and machinery industries. Brockton can provide design assistance including CAD, and complete turnkey service for any size job. These services include cut & strip service, faceplate & chassis wiring, and electromechanical sub-assemblies. Industry Sector: Wiring Devices

### Columbia/MBF

7555 Tranmere Drive MISSISSAUGA, Ontario LSS 1K4 Tel: (416) 678-9191 Fax: (416) 678-9323 Expon/Marketing Contact: Mr. Paul R. Goldup

Columbia/MBF is a leading Canadian manufacturer of steel conduits and accessories for the electrical market. These products are all CSA and UL approved. Columbia/MBF have two manufacturing plants in Canada, one in Quebec and the other at the above address.

Industry Sector: Wiring Devices

### Commander Electrical Materials Inc.

100 Longtin Street ST-JEAN-SUR-RICHELIEU, Quebec J3B 3G5 Tel: (514) 347-2304 (514) 861-5429 (Montreal) Fax: (514) 347-8076 Export/Marketing Contact: Mr. B.J. MacDonald Export Manager

Commander is a manufacturer of the Iberville line of electrical construction materials - a Canadian leader in the design and production of metallic outlet boxes, covers and accessories. Also manufacture a range of related connectors, bushings, cord grips, teck connectors, grounding bushings, locknuts, reducing bushings, set acrew connectors and couplings, etc. The company's roots go back to 1913. Industry Sector: Wiring Devices

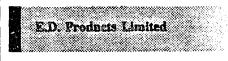
## Crouse-Hinds Canada Limited

1160 Birchmount Road SCARBOROUGH, Ontario M1P 2B9 Tel: (416) 757-8781 Fas: (416) 757-2330 Export/Marketing Contact: Mr. George Will

The company manufactures industrial wiring devices; industrial lighting; explosion proof plugs and receptacles; explosion proof motor control; customized bases; explosion proof fittings; explosion proof apparatus; molded products. Industry Sector: Wiring Devices Dilor Architectural Dimming Systems

P.O. Box 2169 - 37749 Second Ave. SQUAMISH, B.C. VON 3G0 Tel: (604) 892-9301 Fax: (604) 892-3052 Export/Marketing Contact: Mr. Philip Coe

Dilor was established in the mid 70's and manufactures electronic (SCR) dimmers, the related electrical distribution, and both digital and analogue controls for these dimmers. The equipment supplied is very high quality and very competitive. Dilor also does a significant amount of layout and design ensuring large projects are completed on time and on budget. Dilor's focus is on architectural dimming and the major market has been in supplying complete dimming and control systems to the resort/ convention hotel market. Controls for these facilities must be flexible, easy for the casual user to operate, and reliable. Dilor markets its systems through manufacturer's agents throughout North America. Industry Sector: Wiring Devices



380 Vansickle Road, Unit 530-540 ST. CATHARINES, Ontario L2R 6P7 Tel: (416) 682-9261 Fax: (416) 682-0131 Expon/Marketing Contact: Mr. Joe DeMan

E.D. Products was established in 1983 to make electrical wire harnesses and cable assemblies for the vending machine industry. EDP quickly expanded to provide a quality service to many other industries. Their assemblies go into switch controls, control panels, dishwashers, vacuum cleaners, and handling equipment. All products are CSA and UL approved. EDP also does electrical and mechanical assembly, drilling, tapping and precision soldering. The company has received awards for quality and service. EDP has

Indu Toch



automatic equipment for wire cutting, hotstamping and terminating. All assemblies are tested with computerized cable scanners.

Industry Sector: Wiring Devices

Eastern Wire and Conduit Ltd.

55 Valleywood Drive MARKHAM, Ontario L3R 5L9 Tel: (416) 474-1693 Fax: (416) 474-9221 Export/Marketing Contact: Mr. D. Mannarino V.P. Marketing

The company manufactures flexible liquid tight conduit type UL, EF, CSA, made from aluminum or galvanized steel. Industry Sector: Wiring Devices

Electro Canado

30 Tycos Drive TORONTO, Ontario M6B 1V9 Tel: (416) 785-6070 Fax: (416) 785-6078 Expon/Marketing Contact: Mr. Ron McNaily Sales Munager

Electro Canada manufactures CSA/UL approved moulded power cords, extension cords, wiring harmer & cable assemblies. The company has supplied products to the appliance, business machine, automotive, electrical & electronics markets for the past ars. Electro Canada is also the exc. arrunufacturer of the new "FLAT PLOG".

Industry Sector: Wiring Devices



46 Ingram Drive TORONTO, Ontario M6M 2L6 Tel: (416) 249-3363 Fax: (416) 249-5488 Export/Marketing Contact: Mr. L.S. Simon, P.Eng. General Manager

Erico Canada Inc. has been in business for forty years and over this period of time has developed a reputation as a reliable manufacturer and supplier of high quality products, covering a broad spectrum of electrical needs. Erico has developed a world wide reputation for electrical fasteners, connectors, grounding and bonding materials, power jumpers, cables and specialty flexible jumpers. Industry Sector: Wiring Devices

## Fleck Manufacturing Inc.

91 Lincoln Street TTLLSONBURG, Ontario N4G 2PQ Tel: (519) 842-9063 Fax: (519) 842-8335 Export/Marketing Contact: Mr. Harrison Hadwen Sales & Marketing Manager

For more than thirty years Fleck has served the wiring needs of original equipment manufacturers worldwide. With a large presence in the N.A. appliance, vehicle, and electronic wiring markets, Fleck has established a strong reputation for engineering, quality systems, and low cost manufacturing shipping from 5 key plant locations spread across Canada, the USA and Mexico. Fleck now exports to Europe, the Middle East and Australia. Products include wiring harnesses, power cords, fibre optic patch cords, resistance heaters, medical cords, data interface cords, computer interconnect cords, and a variety of value added assemblies using wiring subassemblies.

Industry Sector: Wiring Devices

### FRE Composites Inc.

350-1223 Michael St. N. GLOUCESTER, Ontario KU 71'1 Tel: (613) 745-4464 Fax: (613) 745-1598 Export/Marketing Contact: Mr. Richard Game

As a former division of G.E. Canada, FRE Composites is now a privately held, Canadian owned company specializing in the design and manufacture of advanced composite product: for the electrical, industrial & aerospace markets. FRE's electrical distribution network spans all continents in the world. Products include:

rtodu as include:

-FRE fibreglass conduit

-FRE phenolic fibreglass cable tray -Fibreglass DSM for fibre optic cables -Fibreglass/composite electrical/fusing components

Industry Sector: Wiring Devices



870 Brock Road South PICKERING, Ontario L1W 1Z8 Tel: (416) 839-1138 Fax: (416) 839-9108 Export/Marketing Contact: Mr. W.W. Burch V.P. and Manager Commercial & Industrial (C & I) Division

The company manufactures adaptors, arrestors, lighting transmission, ballasts, boxes, brackets, buttons, clamps, connectors, fibre optics, fittings, fixtures, hardware, post insulators, lighting fittings, lights, pedestals, plates, outlets, receptacles, supports, switches, taps, undercarpet wiring and wiring devices. Industry Sector: Wiring Devices



#### La Compagnie De Profiles Reynolds

305 Boul. Labelle/B.P. 150 STE-THERESE, Quebec J7E 4H7/J7E 2X8 Tel: (S14) 435-6551 Fax: (S14) 435-0679 Export/Marketing Contact: M. Michel Kicinski Sales Manager

Reynolds manufactures aluminium made electrical products, including aluminum extrusions, connectors, tubular bushings, bus bar, tubing, drawn tube, and aluminum conduit. Industry Sector: Wiring Devices

#### Leviton Manufacturing of Canada Ltd.

165 Hymus Blvd. POINTE-CLAIRE, Quebec H9R 1G2 Tel: (514) 954-1840 Fax: (514) 954-1853/4 Expon/Marketing Contact: Mr. Howard Pollock

Leviton Manufacturing Co. Ltd. came into existence in 1906 as a pioneer in the Electrical Wiring Devices industry. Today, Leviton is a leader and innovator in all Wiring Device areas including switches, receptacles, wallplates, lampholders, decorator styles devices, surge suppression devices, power-line carrier and telecommunication devices, passive infrared motion detector and lighting control (dimming) devices, etc. Industry Sector: Wiring Devices

## Lumitrol Ltd.

253 Merton St. TORONTO, Ontario M4S LA7 Tel: (416) 485-4817 Fax: (416) 485-4826 Export/Marketing Contact: Mr. Bruce Whitehead President

Lumitrol Ltd., established in 1974, designs and assembles complete stage lighting control and stage drape systems for school, university, theatre, AV and TV audio, church, and miscellaneous applications. The firm also designs and distributes an innovative architectural dimmer system, manufactured in Canada by a related company. Most projects undertaken are designed for architects or consulting engineers and relate to new construction, however, the firms's owner has recently established a separate engineering firm to undertake small renovation projects and safery inspections of theatrical stages. Products manufactured include large capacity incandescent light dimmers (1800 W and over), related preset or manual controls, custom control systems for lighting loads, and theatrical drapes and support systems.

Industry Sector: Wiring Devices



105 Willowlea Road CARP, Ontario KOA 1L0 Tel: (613) 831-8102 Fas: (613) 831-8103 Expon/Marketing Contact: Mr. Terry E. Dodds President and CEO

Nocom Manufactures modular wiring systems (MWS) for the commercial, industrial, institutional, and residential sectors. Noc .n's R&D center has developed advanced, patented MWS systems that are most flexible, versatile and economical. Product lines include fixture interceptors, starter cable sets, joiner cable sets, switching interceptors, switching cables, and fixture interceptor caps. The Nocom modular wiring system has been introduced in the United States and the United Kingdom. The company is presently finalizing its market stategy for these and other world markets. Industry Sector: Wiring Devices



6815 Columbus Road MISSISSAUGA, Ontario LST 2G9 Tel: (416) 564-3288 Fax: (416) 564-3306 Export/Marketing Contact: Mr. Alistair Gogan President

A 100% Canadian owned and operated company established 1969, and is currently operating out of a new 55,000 sq.ft manufacturing plant next to Toronto's International Airport. Pilgrim manufactures cable trays, cable support systems, strut, pipe, cable & conduit clamps, aluminum, stainless, non-metallic and hot dip galvanized steel cable trays are the most comprehensive range in North America. Pilgrim sells throughout Canada and has agents in the U.S., Turkey, Thailand, Singapore, and Hong Kong and exports to these countries as well as South America, Africa & India. Industry Sector: Wiring Devices



8433 Lougheed Highway BURNABY, B.C. VSA 1X4 Tel: (604) 421-7555 Fac: (604) 421-4101 Expon/Marketing Contact: Mr. Sandy Michie President

Polytech Electrical Products is a division of Pacific Rim Polytech Corp., a privately held company incorporated in British Columbia, Canada. The company has its headquarters and manufacturing operations in a 27,000 square foot facility

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located in Burnaby, B.C. Polytech's Electrical Division fabricates electrical cabletray, fittings and accessories from extruded aluminum and steel raw materials. In addition to cabletray, this division also fabricates aluminum highway traffic control arms - used at railway crossings and similar vehicular control locations. Standard products include aluminum, steel and stainless steel cable tray, and instrumentation channel. Custom products include cable bus, and maple cable blocks.

Industry Sector: Wiring Devices

## R&S Enviro Products Limited

Boyers Road KESWICK, Ontario L4P 3E9 Tel: (416) 476-5336 Fax: (416) 476-0475 Export/Marketing Contact: Mr. John Rye Vice President

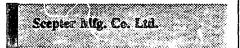
R&S Enviro Products Limited manufactures a line of Air Tight and Moisture Proof electrical boxes for new construction as well as Retrofit Liners for existing electrical boxes. These products are specifically designed to eliminate air flow and moisture problems in electrical boxes in new and existing housing. R&S Enviro Products Limited is dedicated to manufacturing energy efficient products for the construction industry. Products include Air Tight Switch Boxes<sup>o</sup>, Air Tight Ceiling Boxes<sup>o</sup>, Air Tight Double Gangs<sup>o</sup>, Retrofit Liner (single)<sup>o</sup>, and Retrofit Liner (double)<sup>o</sup>.

Industry Sector: Wiring Products



McLean Road RR#3 GUELPH, Ontario N1H 6H9 Tel: (519) 763-1432 Fax: (519) 763-1175 Export/Marketing Contact: Mr. George Vincent Pres. & G.M.

Robroy Industries has been a supplier to industry of quality corresion resistant electrical products since 1905. Products include "Plasti-Bond Red", PVC coated exterior and urethane interior coated c iduit and fittings, Stahlin Fiberglass Enclosures, Electromate Stainless Steel, Steel and Aluminum Enclosures, Rob-Glas Fibreglass cable tray with Fiberglass Strut Support Systems and CAB PVC Coated Hooks and Hangers for all industrial cable installations. Robroy Industries' products are UL/CSA approved, with high technology equipped engineering support available for all industrial applications. Industry Sector: Wiring Devices



11 Bermondsey Road TORONTO, Ontario M4B 1Z3 Tel: (416) 751-3820 Fax: (416) 751-7112 Export/Marketing Contact: Mr. Bob Dicker Electrical Marketing Manager

Scepter manufactures and markets nonmetallic electrical conduit, tubing, ducting, fittings, nonmetallic industrial light fixtures and custom nonmetallic enclosures. An industry leader in Canada of providing electrical raceways and components from engineered resins. This has established Scepter with 7 manufacturing locations, as one of the premier processors of plastic materials in North America. Products include: PVC Conduit, Tubing, Duct, Fittings, Weatherproof Boxes and Covers, Custom enclosures, Incandescent and °Fluorescent Light Fixtures. Industry Sector: Wiring Devices



25 Bethridge Road REXDALE, Ontario M9W 1M7 Tel: (416) 743-7111 Faz: (416) 743-7199 Export/Marketing Contact: Mr. Terry W. Sutton Manager - Marketing

Shawflex Inc., a Shaw Industries company, manufactures a broad range of instrumentation, control and small power cables for industrial and utility applications. Additionally, the product range includes thermocouple cable, tray cable and hazardous locations cables. Most constructions are CSA Certified and quality assurance is to CSA Z2993. Shawflex also produces instrumentation tubing bundles in both metal and plastic plus a line of hydraulic hoses, couplings and assemblies with ratings up to 10,000 psi.

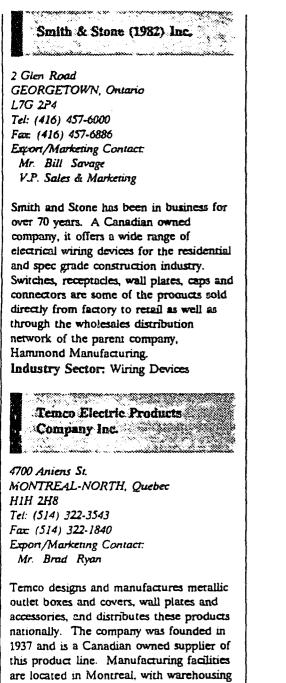
Products include:

-Instrumentation & Control cables

- -Thermocouple cable
- -TECK 90
- Tray Cable
- , lastic tubing & bundles
- -Pre-insulated tubing
- -Hydrauli nose & couplings
- -Hydraulic hose assemblies
- Industry Sector: Wiring Devices







nationally. The company was founded in 1937 and is a Canadian owned supplier of this product line. Manufacturing facilities are located in Montreal, with warehousing in Toronto and representation across Canada. Products include: switch boxes, outlet boxes, covers, masonry boxes, concrete rings, utility boxes, and custom wall plates.

Industry Sector: Wiring Devices





OIL AND GAS EQUIPMENT MANUFACTURERS AND SERVICES

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Industry, Science and Industrie, Sciences et Technology Canada 



#### Introduction

Canada is a country rich in energy resources. Abundant deposits of oil, natural gas, coal and uranium, plus many rivers and vast forests all contribute to making Canada a major producer of energy. Heavy oil and sour gas both make up a major part of Canada's larger hydrocarbon reserves. However, many of these deposits are found in formations and locations where production is difficult. Canada's harsh environment adds still another dimension to the requirement for the development of special advanced technology by the Canadian companies that manufacture equipment or provide services to the oil and gas industry. From a production and equipment design standpoint, the country's extreme climatic and physical conditions will not allow the industry to settle for anything less than the best.

The Canadian oil and gas equipment industry produces a wide range of machinery and equipment for oil and gas exploration and development and also performs related service activities such as geophysical evaluation, seismic studies and contract drilling. Specific areas where Canada is acknowledged as a strong equipment supplier include exploration, drilling, leasehold facilities, dehydration, secondary recovery, sour-gas gathering and treatment, heavy oil technology, and pipelines and related compression and pumping equipment. Noteworthy export strengths include exploratory and deep drilling rigs, workover rigs, thermadrive boilers, beneficiation equipment, gas turbines, compressors, heat exchangers, pump jacks, and steam generators.

Bordered by three oceans, Canada has methodically plotted a progressive, scientific exploration and development of its rich continental shelves to the point where Canadian industries can now successfully handle offshore projects from start to finish.

Canada has also taken precautions to protect the natural surroundings and preserve the land and has developed conservation guidelines, environmental protection technology and equipment that are among the most advanced in the world. Canada is ready to share this knowledge with other countries because conservation is a mutual concern.

Another area of Canadian competence is in the service field where there is expertise in a broad range of specialties such as leak detection, corrosion prevention, geodesic surveys, photogrammetric surveys, communications precise gravity surveys. mapping, seismic studies and marine research

Canadian manufacturers produce and export a broad range of machinery and equipment for the refining and petrochemical industries. Columns. fractionators and catalytic converters: pressure vessels and tanks; reactors; heat exchangers; distillation equipment; cryogenic vessels; compressors, pumps, valves and steam generating equipment are some examples of the types of equipment marketed internationally by Canada. In this field, Canada provides specialized services and equipment for the construction, testing and inspection of pipelines. In addition, Canadian consultants and construction companies have the capability to provide complete petroleum refineries, petrochemical and chemical projects, including feasibility studies, process equipment packaged systems, design, procurement, construction, commissioning and training.

With its practical experience in meeting the most challenging demands of the Canadian oil and gas production industry, Canada has the expertise to provide the wide range of equipment and services outlined in this directory.

Industry, Science and Technology Canada

Industrie, Sciences et Technologia Canada



## Alphabetical Listing of Companies

081639 Ontario Limited, Northway Industries Division 264333 Alberta Ltd., Wabash Oilfield Service Division 303007 Ontario Ltd., Forex Machine and Tool Co. Division 3-L Filters Limited

A. Comeau & Associates Ltd. A.R.D. Industries Ltd. Acier A/N Steel Inc. Acres International Limited Adlog Inc. AGAT Laboratories AIM Safety Company Inc. Alberta Compressor Valve Co. Ltd. Alco Gas & Oil Production Equipment Ltd. Allen-Bradley Canada Limited Almecon Industries Limited Alpine Subsurface Electronics Inc. AMS Industries Ltd. Aqua-Guard Technologies Inc. Argo Sales Ltd. Associated Corrosion Consulting Ltd. Atlantic Engine Rebuilders Ltd\_ MFM Industries Division Atlantic Towing Ltd.

B&W Technologies Ltd. Bailey Canada Inc. Baker Hughes Canada Inc., Milpark Drilling Fluids Division Banister Inc., Footage Tools Division Barber Industries Ltd. Baroid Corporation of Canada, Ltd. BeauDril (1987) Limited Bedarco McGruer Inc. Bennett Environmental Consultants Ltd. Bercha International Inc. Beta Monitors & Controls Ltd. BMP Energy Systems Ltd. Bombardier Inc. Bovar Inc., Mainland Manufacturing Division Bovar Inc., Western Research Division BPB Instruments (Canada) Ltd. Bristol Babcock Brittania Compression Industries Ltd. Brooke Ocean Technology Ltd. Bzh Petroleum Consultants Ltd.

C.M.E.L. Enterprises Ltd. CAE Machinery Ltd. CAEC Arctic Engineering Inc. Camrose Electric Controls Ltd. Canadian Blower/Canada Pumps Limited Canadian Foremost Ltd. Canadian Fracmaster Ltd. Canadian International Fluid Services Inc. Canadian Marine Drilling Ltd. Canadian Rig Ltd. Canadian Swabmaster Products Ltd. Canadian Tool & Die Ltd. Canadoil Forge Ltée CanOcean Engineering Limited Canpolar Inc. Canspec Group Inc. Cantech Environmental Systems Inc. Canterra Equipment Inc. Canuck GIE Engineering Ltd. Capilano Geophysical Ltd. Caproco (1987) Limited Cardium Tool Services Inc. Catalytic Maintenance Inc. Centre for Frontier Engineering Research Century Valve and Machine Co. Ltd. Cessco Fabrication and Engineering Ltd. CH2M Hill Engineering Ltd. Challenger International Services Ltd. Challenger Surveys & Services Ltd. Chambers Engineering Ltd. Chase Manufacturing Inc. Chimo Equipment Ltd. Chimo Polyurethanes Ltd. Chinook Industrial Supplies Ltd. Cis Can Sales (Western) Ltd. Computalog Ltd. Condor Machinery (1985) Ltd. Control Engineering Inc. Corrosion Service Co. Ltd. Cougar Tool Inc. CPW Valve & Instrument Ltd. Cryogas Engineering Ltd. Cullen Canadian Inc.

D&S Petroleum Consulting Group Ltd. D.B. Robinson Design & Manufacturing Ltd. Datro Industries Ltd. Datek Industries Limited Delta Projects Inc. Diamant Boart Stratabit Ltd. Digitech Information Services Ltd. Dilcon Constructors Ltd. DIPIX Technologies Inc. Double T Equipment Manufacturing Ltd. Dover Corporation (Canada) Ltd., Alberta Oil Tool Division Dreco Energy Services Ltd. Dresser Canada Inc., Dresser Fump Division Drill-Rite Industries (1985) Ltd. Drilltel Systems Limited

ECS-Power Systems Inc. El-Mac Pacific Distributors Ltd. Emery Apparal Canada Inc. Ener-Rig Electrical Supply Ltd. Environmental Technologies Inc. EnviroSeal Engineering Products Ltd. Epton Industries Inc.

F C Manufacturing Ltd. Farr Canada Ltd. Fintube Inc., Biraghi Canada Division Fleming Oilfield Services Ltd., Reef Mud Division Fluor Daniel Canada, Inc. Foothills Diamond Coring Ltd. Four M Oilfield Services Ltd. FRC Composites Limited FRE Pultrusions Inc. Frontier Engineering & Consulting Ltd.

Galaxy Oilfield Service Ltd. Gentronics Petroleum Services Limited Geonautics Limited Geopetrol Marketing & Distributing Ltd., North-Tech Environmental Division Geophysics GPR International Inc. George E. Failing Supply Company Geotechnical Resources Ltd. Global Thermoelectric Inc. GN Corporations Inc. Gris Gun Manufacturing Ltd.

Hall Compressors Canada Limited Hangwell Coil Tubing Services Ltd. Hardy BBT Limited Henderson, Barwick Inc. Hi-Point Industries Ltd. Hobic Oil Bit Industries Corp. Hooper Welding Enterprises Limited Hutchinson Body, Mudguard and Radiator Works Ltd. Hycal Energy Research Laboratories Ltd Hyprotech Ltd.

I.M.W. Industries Ltd. I.P. Constructors Ltd. ICI Construction Economists of America. Inc. Imperial Rubber Co. Ltd., Girard Polly-Pig Canada Division Import Tool Corporation, Ltd. Indutech Canada Limited Integra Castings Inc.

Indus Tech



**INTERA** Information Technologies Corporation Intercomp Resource Development & Engineering Ltd. International Cooling Tower Inc. International Hard Suits Inc. International Pipeline Engineering Limited International Radiography and Inspection Services (1976) Ltd. IPSCO Inc. Iron Horse Compression Ltd. Isko Heat Exchangers Ltd. Island Sandblasting (1987) Ltd. ITT Canon Canada Limited ITT Industries of Canada Ltd., ITT Barton Instruments

Jacques, Whitford Group Ltd. Jacques/McClelland Geosciences Inc. John T. Hepburn, Limited

Kilborn Inc. King Equipment Manufacturing Corp. Koch Engineering Company Limited Kubota Metal Corporation, Fahramet Division Kudu Industries Inc.

Labsoft Inc. Lambton College—Fire, Safety, and Environmental Division Lantec Industries Inc. Lift Systems International Ltd. Lister Industries Ltd. Luff Industries Ltd. Lynx Tool Company Ltd.

M & M Manufacturing Ltd. Partnership MacDonald Engineering Group Ltd. MacLaren Plansearch Limited Malonev Steel Ltd. Mandarin Oilfield Services Ltd. Marshall Macklin Monaghan Limited Marystown Shipyard Limited Master Flo Valve Inc. Matt's Manufacturing Ltd. McDaniel & Associates Consultants Ltd. McElhanney Geosurveys Ltd. Mega Engineering Ltd. Metro International Trading Company MIL Group Inc. Milton Roy Industries Ltd. Mitrade Export Inc. Monenco Limited Morris International Trading Ltd.

Nabors Drilling Limited Nardei Fabricators Ltd. National-Oilwell Canada Ltd. Newco Safety Tel Inc. Nortech Surveys (Canada) Inc. North Atlantic Machinery (Alta) Ltd. Norward Energy Services Ltd. Norwest Engineering Ltd. Novacorp International Consulting Inc. Nowsco Well Service Ltd. NRL Ltd. Nutron Manufacturing Ltd.

O'Connor Tanks Limited Opsco Industries Ltd.

Pacific Truck & Trailer Ltd. Pandit International Partec Lavalin Inc. Pason Well Services Ltd. Penetrators Canada Inc. Petrocraft Products Ltd. Phillips Cables Limited Pillar Oilfield Projects Ltd. Plains Perforating Ltd. Plainsman Manufacturing Ltd. Positive Action Tool Western Limited Predictive Maintenance Corporation Premetalco Inc., Exchanger Industries Division Proficient Oil Tools Ltd. Propak Systems Ltd. Prudential Steel Ltd. Pullmaster Winch Corporation Pulsearch Consolidated Technology Ltd. Pulsonic Geophysical Ltd.

Qualitas International Inc. Quality Fabricating & Supply Limited Quantel Engineering (1981) Ltd. Quebec Tools Corporation Quinn Testers Ltd.

Raffin Electric Co. Ltd. Ramsay Machine Works Ltd. Rayonics Scientific Inc. Rebrund Rig International Ltd. Reflange (Canada) Inc. Rice Engineering & Operating Ltd. Riley's Datashare International Ltd. RockBit Industries of Canada (1985) Ltd. RSI Research Ltd. Russell Technologies Inc.

S.I.R. Locator Service Sourcing & Purchasing Inc. S.N. Hanson Group Enterprises Ltd. Sander Geophysics Limited Sandwell Inc. Seatronics Technologies Ltd. SEI Industries Ltd. Select Energy Systems Inc. Servipetrol Ltd. Show Pipe Protection Ltd., CANUSA Division Sierra Drilling Ltd. Simmons Group Inc. SIMTECH Consulting Services Ltd. Smart Turner Limited Solid Resources Limited Spilsbury Communications Ltd. Sproule Associates Limited Sorung Instant Structures Ltd. Starozik Industries Ltd., Ruffneck Heaters Division Stelco Inc., Stelpipe Division Strata Drill Ltd. Stream-Flo Industries Ltd. Sunada Tech Inc. Sussex Manufacturing Ltd.

Taro Industries Ltd., Rostel Industries Division Tarton Engineering Corporation Ltd. Techno Scientific Inc. Telematic Controls Inc. Terra Linda Canada, Inc. Terra Surveys Limited The Armstrong Monitoring Corporation Thermo Design Engineering Ltd. Timbertand Equipment Limited Top-Co Industries Ltd. Topco Oilsite Sales Ltd. Travis Chemicals Inc. Trecan Combustion Limited Tri Ocean Engineering Ltd. Trimac Limited, Kenting Hi-Tower **Drilling** Division Tubetest Service & Supply Ltd. Tydac Technologies Inc.

United Corrosion Corporation United Resource Safety Limited Universal Industries Ltd. Universal Systems Ltd. Universe Machine Corporation

Valmet Automation (Canada) Ltd., Valmet-Sentrol Division Vancouver Shipyards Co. Ltd. Variperm (Canada) Limited Velan Inc. Veritas Seismic (1987) Ltd. Viking Pump Company of Canada Ltd. Volcano Energy Systems Inc.

Walker Steel Corporation Walters Oil Tool Machine Ltd.





Weatnerford Oil Tool Co. Ltd. Wega-D Geophysical Ltd. Weir-Jones Engineering Consultants Ltd. Weldco Limited, Weldco-Beales Division Wellmaster Pipe and Supply Inc. Wells-Hall Fabrication and Construction Ltd. Western Instruments, Inc. Westinghouse Canada Inc., Power Gei Division Wi. a Inada Ltd. Wire Rope Industries Ltd.

Zeton Inc. Zimmark Inc.



Industry, Science and Industrie, Technology Canada Technolog.

Industrie, Sciences et Technologie Canada



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**Company Profiles** 

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#### 264333 Alberta Ltd., Wabash Oillield Service Division

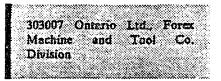
9312 - 110 A Street Westlock, Alberta Canada TOG 2L0 Telephone: (403) 349-4282 Facsimile: (403) 349-4716 Contact: Ron Riopel, President

Wabash Oilfield Services was established in 1981. The company currently manufactures a full line of steel truck tanks, tankers and pup trailers which feature a highly efficient baffling system. These products are used extensively in the Alberta oil fields and are available for sale or lease. Among its many products is a sophisticated gas boot for use on oil field production tanks.



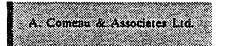
P.O. Box 371, 427 Elgin Street North Cambridge, Ontario Canada NIR 5V3 Telephone: (519) 621-9949 Facsimile: (519) 621-3371 Contact: Gabriella Magliocco, Inside Sales

3-L Filters Limited designs, engineers, manufactures and services filtration systems for refineries, pipelines and numerous industrial applications. From its original position as a petroleum industry supplier, the company has extended its expertise into filtration for coolants, solvents, lubricants, gases and water. Their engineers are also engaged in product development; prototypes are built and thoroughly tested in their laboratory prior to production and final design. The company exports to the U.S., Asia and Mexico.



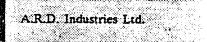
3267 Lenworth Drive Mississauga, Ontario Canada LAX 2G6 Telephone: (416) 625-6443 Facsimile: (416) 625-6443 Contact: Hugo Ven, President

Forex Machine and Tool Co. serves the Canadian, U.S. and Eastern European oil, gas and refining industries with precision machined, stainless steel products. The company specializes in standard and customized fittings and flanges. Its standard products are ANSI/ASTM/API low and high temperature, corrosion resistant, stainless and nickel alloy fittings and flanges. All products are NDE inspected and certified.



4718 - 90A Avenue Edmonton, Alberta Canada T6B 2P9 Telephone: (403) 465-9961 Facsimile: (403) 465-4990 Telez: 037-2966 Contact: Neil M. McNeil, Director of Marketing

A. Comeau & Associates Ltd. (ACA) was incorporated in 1976 to provide electrical engineering, consulting and design services to the oil and gas industry. In 1979, production began on a line of electronic control products. Engineering services range from the design of small compressor facilities to the design of large gas plants. A comprehensive range of consulting services is offered, including power system analysis, and research and development for electronic products and software. ACA's products include Keltronics submersible pump controllers, backspin relays, surge suppressors and SCADA software. The company is currently exporting to Asia, the U.S., Africa and the U.K.



180 Sheldon Drive Cambridge, Ontario Canada NIR 6V1 Telephone: (519) 622-1652 Facsimile: (519) 622-1358 Contact: Linda Marriott, Office Manager

A.R.D. Industries Ltd. is Canada's only friction Iding service supplier. It also supplies inction welded components. A.R.D. has 5 welders from 6 to 115 t, automatic cut-off saws and CNC turning equipment. The company is contracted to weld various types of equipment, tools and connectors for the oil and gas industry in Canada and the U.S.



9405 La Martinière Riviere Des Prairies, Quebec Canada H1E 3K8 Telephone: (514) 323-8796 Facsimile: (514) 494-2076 Contact: M. Luc Dubois, President

Acter A/N Steel Inc., established in 1979, manufactures a wide variety of storage tanks for the Canadian and U.S. markets. Their oil storage tanks are available for installation above and below ground. The underground tanks are manufactured complete with cathodic protectica, including anodes attached to the tank.





# Acres International Limited

480 University Avenue Toronto, Ontario Canada M4P 1N2 Telephone: (416) 595-2000 Facsimile: (403) 595-2004 Telex: 06-217815 AnswerBack: acres tor Contact: Jack Baker, Vice President, Corporate Marketing

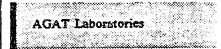
Acres International Limited is a consulting engineering firm with over 65 years of experience. The company offers planning, engineering and management services, including risk analysis, engineering, and economic and environmental studies for petroleum and gas industries, pipeline and pump stations, underground oil storage, and Arctic and offshore engineering. In-house facilities include a basin for testing the interaction of ships, structures and ice, using synthetic ice. Natural gas market and economic studies are conducted in Canada and in developing countries. Engineering for power and heavy civil projects is undertaken in Canada, the U.S. and overseas.

155 Queen Street, Suite 900 Ottawa, Ontario Canada K1P 6L1 Telephone: (613) 232-5676 Facsimile: (613) 563-9596

Adiog Inc.

Telex: 053-4741 AnswerBack: superior Contact: Karl McKinnon, President

Adlog Inc. specializes in ariministration and logistics pertinent to the oil and gas industry. It provides services in accounting, legal, human resources, management and production, project management, supply, training, transportation, and management information systems. It will conduct feasibility studies, operational auditing, managing and monitoring, recruiting and representation. Adlog's staff of 34 management specialists have experience in 65 countries.



3801 - 21st Street N.E. Calgary, Alberta Canada T2E 6T5 Telephone: (403) 299-2000 Facsimile: (403) 299-2022 Telex: 03827957 Contact: Terry Shawchuk, Senior Vice President

AGAT Laboratories was established in 1982 and has grown to become one of the largest and most diverse analytical laboratories in Canada. From its 3 500 m<sup>2</sup> facilities, AGAT offers analytical services in the environmental, engineering and geological sectors. Some of its major services include routine core analysis; oil, water and gas analysis; air monitoring, and soil analysis. Radiochemical services are also provided. Training and educational courses are offered through its Canadian Research Centre. AGAT provides a full spectrum of laboratory equipment which includes porosimeters, permeameters, gamma loggers and gas chromatography instrumentation. It has been directly involved in the assembly and maintenance of several field testing laboratories in Canada. AGAT has provided its analytical services to companies located in Europe, South America and the U.S.

AIM Safety Company Inc.

706 Derwent Way New Westminster, British Columbia Canada V3M 5P8 Telephone: (604) 524-6711 Facsimile: (604) 522-2855 Contact: Bill McDonald, Vice President

AIM Safety Company Inc. designs and builds intelligent, rugged, high performance gas and leak detection tools to the most demanding industrial and military standards. AIM Detectors are as easy to use as a pocket calculator. These detectors will: monitor a wide variety of gases; compensate for noise gas; capture, in on-board memory, the time, date and type of gas present for later recall and printing; continuously self-diagnose every key operating system and component; and provide ultra sensitive numerical readings of gas concentrations-for source location and arson investigation of unburned hydrocarbons.

Alberta Compressor Valve Co. Ltd 

4124 - 97th Street Edmonton, Alberta Canada T6E 5Y6 Telephone: (403) 461-7288 Facsimile: (403) 461-6049 Contact: Boyd T. Wark, President

Alberta Compressor Valve Co. Ltd. manufactures gas and air compressor valves. The *PYRAMID* gas compressor valve is widely used in the Canadian gas industry, the aerodynamic design of the valve rings offers higher efficiency at reduced costs. The introduction of thermoplastic valve rings reduces the likelihood of damage to the cylinders. Established in 1983, the company also custom designs and manufactures compressor valves for the U.S., U.S.S.R. and Asian markets.



#### Alco Gas & Oll Production Equipment Ltd.

310, 4014 MacLeod Trail S.E. Calgary, Alberta Canada T2G 2R7 Telephone: (403) 243-5055 Facsimile: (403) 287-1562 Teler:: 038-24779 Contact: Ken Pelletier, Vice President, Sales

Alco Gas & Oil Production Equipment Ltd. was incorporated in 1972 to provide production equipment to the Canadian and international oil and gas industries. The company's products include separation equipment, heaters, gas and oil dehydration units, glycol regeneration units, amine plants (to remove acid gas), and gas processing plants (to remove LPG). Alco has been successful worldwide in providing sophisticated equipment for the treatment of oil, water and natural gas.

Allen-Bradley Canada Limited

135 Dundas Street Cambridge, Ontario Canada N1R 5X1 Telephone: (519) 623-1810 Facsimile: (519) 623-8930 Telex: 069-59317 Contact: W.C. Torrance, Vice President, Sales and Marketing

Allen-Bradley Canada Limited manufactures a complete line of industrial control products, programmable controllers, industrial computers, communications, data acquisition, motor control centres, medium voltage starters, and AC and DC drives. The company has developed a worldwide reputation for the design, development and manufacture of medium voltage controllers. These controllers are across the line, multispeed, reversing, autotransforming start, reactor start, soft start, and AC variable speed drives, ranging to 7 200 volts. The company and its 950 employees export to numerous countries worldwide from its  $30\ 000\ m^2$  manufacturing facility.

Almar ludastries Ltd.

12235, rue April Montreal, Quebec Canada H1B 5L8 Telephone: (514) 645-2221 Facsimile: (514) 645-5613 Contact: Alec Rack, President

Almac Industries Ltd. is a manufacturer of trucks, tanks and trailer tankers for the transportation and distribution of petroleum products. All products are manufactured in Almac's new factory which is one of the most modern in the tank industry. It is equipped with modern metal working machinery and advanced welding technology. Almac markets its refueller truck tanks and its hydrant servicers worldwide to both commercial and military customers. Almac also produces truck tanks and trailer tanks for special applications, such as printing ink, crude oil, asphalt and bulk lubricants.

Almeron Industries Limited

3213 - 97th Street Edmonton, Alberta Canada T6N 1B7 Telephone: (403) 461-1647 Facsimile: (403) 463-3052 Contact: James E. Jackson, Marketing Director

Almecon Industries Limited (AIL) was founded in 1982 as a mechanical consulting firm, specializing in oil field products. In 1984, the company introduced its own line of seismic supplies. The company's products include a range of topping and tamping plugs for seismic auger bore holes; foam and air plugs which are tamping and/or flowing hole (artesian well) control plugs for auger bore and exploration holes/wells; and drive points. The company's products are exported to the U.S. and Asia. Alpine Subsurface Electronics Inc.

320, 645 - 7th Avenue S.W. Calgary, Alberta Canada T2P 4G8 Telephone: (403) 266-2010 Facsimile: (403) 264-7260 Telex: 03821089

Alpine Subsurface Electronics Inc. (ASE) was formed in 1987 to complement the services of Alpine Testers (1987) Ltd. To better serve the customer with reliable pressure and temperature Stained from drill stem and pt 3 (wireline), Alpine esta: , of specialists to develop a real affordable, pressure and temperature memory recorder. The ASE Recorder utilizes any IBM or compatible computer to completely download the memory. ASE's design allows for 32 levels of selectable floating intervals where 3 modes (delta time, delta pressure, timed interval delta pressure) can be implemented. The ease and simplistic nature of the recorder is evident through ASE's unique design-placing the interface within the actual recorder. No longer are large and cumbersome external interface boxes required; one cable is required to program, test battery voltage, download data and to check operational modes of the recorder.

AMS Industries Ltd.

1575 Franklin Street Vancouver, British Columbia Canade VSL 1P3 Telephone: (604) 251-3591 Facsimile: (604) 251-6422 Contact: George Fry, Sales Manager

AMS Industries Ltd. was incorporated in 1962 and specializes in metal spinning. It can form mild steel, stainless steel and titanium to a thickness of  $\frac{1}{2}$  in. and to 8 ft. in diameter. The company makes bubble cups and contactor trays in both mild steel and stainless steel, as well as flanged and





dished, semi-elliptical, and flanged and flued tank heads.

Aqua-Guard Technologies Inc.

200 - 1130 West Pender Street Vancouver, British Columbia Canada V6E 4A4 Telephone: (604) 681-3773 Facsimile: (604) 681-6825 Telex: 04-51586 AnswerBack: envirocntr vcr Contact: Nigel Bennett, Director, Sales and Marketing

Aqua-Guard Technologies Inc. was established in 1979 and now serves clients worldwide. The company manufactures a complete range of spill recovery equipment, including rotary kiln incinerators for the disposal of oily and hazardous wastes, oil skimmers, oil spill containment booms, oil sorbents, flexible storage tanks, and emergency response skimming of cargo vessels. It also provides services in hazardous material and oil spill contingency planning, environmental audits, impact assessments, sensitivity mapping, on-site supervision of spill clean-up, disposal of oily and hazardous wastes, and hazardous material computer systems for the work place.



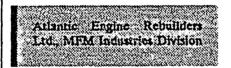
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580, 727 - 7th Avenue S.W. Calgary, Alberta Canada T2P 0Z5 Telephone: (403) 265-6633 Facsimile: (403) 265-2770 Contact: D.G. Robertson, Vice President

Argo Sales Ltd. is a manufacturer of oil field production equipment and a distributor of tubular goods and line pipe. Argo has two manufacturing and storage locations, and exports worldwide. Products manufactured include separators, treaters, line heaters, dehydrators, flare stacks, Texas Gates, headers and scrubbers. Associated Corrosion Consulting Ltd.

2220 - 39th Avenue N.E. Calgary, Alberta Canada T2E 6P7 Telephone: (403) 250-9041 Facsimile: (403) 291-5681 Contact: W.B. Holtsbaum, President

Associated Corrosion Consulting Ltd. was founded in 1963 to offer a completely independent consulting engineering, testing and monitoring service in the field of corrosion control and cathodic protection. Typical projects executed for the oil and gas industry include corrosion control of pipelines, plants and refineries. Services include investigation, design, inspection, specifications, reports, maintenance studies, monitoring and management services. The company's services are provided throughout Canada and to Asia.

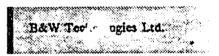


175 Beaverbrook Street Moncton, New Brunswick Canada E1C 8J2 Telephone: (506) 857-7700 Facsimile: (506) 859-7112 Telex: 014-2238 Contact: John K. Lockwood, Manager, Tank Department

MFM Industries is a carbon at d stainless steel fabricator—light structural and plate fabrication. The company and its 90 employees specialize in factory and field erected storage tanks, including pressure vessels. Atlantic Towing Ltd. ...

P.O. Box 5777, 300 Union Street Saint John, New Brunswick Canada E2L 4M3 Telephone: (506) 648-2750 Facssimile: (506) 648-2752 Telex: 014-47518 AnswerBack: atlantow Contact: Rio J. St. Armand, General Manager

Operating an extensive fleet of ocean, coastal and harbou: tugs, Atlantic Towing Ltd. has served the marine transportation needs of Eastern Canada and the U.S. for 30 years. Equipped with sophisticated marine communication and navigational aids, client monitoring of technically complex operations can be immediate, even when thousands of miles from location. With its fleet of harbour tugs ranging to 3 500 BHP and its berthing, barge bunkering, passenger services, fire protection and pollution control services, the company fulfils the demand for marine services created by offshore resource development.



242, 3030 - 3rd Avenue N.E.
Calgary, Alberta
Canada T2A 6T7
Telephone: (403) 248-9226
Facsimile: (403) 273-3708
Contact: Neil R. Campbell, Director, Operations

B&W Technologies Ltd. manufactures environmental monitoring equipment and provides gas detection services. Utilizing micro-electronics in its electrochemicalbased equipment, safety for personnel is improved and installation and operating costs are decreased. The equipment features a response time of less than eight seconds, safety and reliability, it is also unaffected by humidity. The solar powered, hand-held and hard-wired wireless monitoring equipment operates from  $-45^\circ$  to  $+60^\circ$  C. Eight toxic gases



can be monitored, including  $H_2S$ , Cl,  $SO_2$ , CO and combustible gases. This equipment is easily adaptable to various applications and can be customized to suit site conditions.

Builey Canudi Inc.

860 Harrington Court Burlington, Ontario Canada L7N 3N4 Telephone: (416) 639-8840 Facsimile: (416) 639-8639 Telex: 061-8506 Contact: A.S. Taylor, Industry Manager, Chemical and Petroleum

Bailey Canada Inc. is a world leader in the supply of instrumentation, controls, and distributed systems for the chemical and petroleum markets. The company provides a comprehensive service from the earliest engineering/design stages through to project management to final testing, training and commissioning. Nearly a decade ago, Bailey established an industry standard for distributed digital process control with the introduction of the Nerwork 90 system. More than 8 500 systems have been sold worldwide. Bailey's INF190 Strategic Process Management System extends Bailey's leadership in control systems.

Baker Hughes Canada Inc., Milpark Drilling Fluids Division

600, 736 - 8th Avenue S.W. Calgary, Alberta Canada T2P 1H4 Telephone: (403) 269-6971 Facsimile: (403) 262-3875 Contact: Jim A. McCracken, Area Manager

Milpark Drilling Fluids Division has supplied drilling fluid products and provided engineering expertise on over 12 000 wells since its establishment in 1958. The company has a complete range of drilling fluid additives for water-based and oil-based drilling fluids. A complete line of equipment, including bulk tanks and mixing facilities is also available. Milpark's engineers are equipped to handle drilling fluid situations worldwide—severe loss of circulation, sloughing shales, over pressures, sait,  $H_2S$ ,  $CO_2$ , water flows, anhydrite, and coal seams.

Banister Inc., Footage Tools Division

145 Fenmar Drive Weston, Ontario Canada M9L 1M7 Telephone: (416) 746-2911 Facsimile: (416) 746-8906 Contact: R.A. Hudson, Vice President

As a division of one of Ontario's largest underground utility contractors, Footage Tools manufactures customized field tools for the North American buried underground utility/resource industry. Their products include fusion tools for heat fusion of poly gas pipe, butt fusion equipment, squeeze-off tools, heating irons, heater faces, leak detectors; water tapping/drilling machines for direct tapping of water mains, flaring tools, underground piercing tools; and cable pullers and reel lifters.

Barber Industries. Ltd.

P.O. Box 5280, Station A Calgary, Alberta Canada T2H 2P3 Telephone: (403) 279-7511 Facsimile: (403) 279-4136 Telex: 038-25721 Contact: K. Poffenroth, Marketing Manager

Barber Industries Ltd. has served the energy industry since 1940 and has grown to 300 employees and three operating divisions. It holds 16 patents on its product line. The company's products include wellheads, emergency shut-down systems (actuators, rig savers) and process equipment. The company serves the oil

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and gas industry in most oil producing\_ countries.

Baroid Corporation of Canada, Lid. 1.00

2100, 840 - 7th Averue S.W. Calgary, Alberta Canada T2P 3G2 Telephone: (403) 263-8740 Facsimile: (403) 263-9355 Contact: M. Todd Achen, Financial Manager

Baroid Corporation of Canada, Ltd. has been providing products and services to the oil and gas industry for 30 years. Its Baroid Drilling Fluids Division provides drilling fluids to lubricate and cool the drill bit, remove cuttings and control downhole pressure. Its Sperry-Sun Drilling Services of Canada Division provides the equipment and personnel to drill directional wells with profiles from vertical through horizontal. Bits, motors, non-magnetic flex weight drill collars, drilling jars and MWD services (conventional directional tools, as well as full service logging and directional tools) are supplied. In 1987, the company supplied directional drilling services and equipment to over 625 wells for operators in Canada. It supplied directional drilling. supervision, equipment and personnel for projects in Japan, Kenya and Morocco. It also provided equipment and personnel for horizontal wells in the U.S., the Middle East and the North Sea.



# BesüDril (1987) Limiteit

P.O. Box 2574, Station M Calgary, Alberta Canada T2P 3S7 Telephone: (403) 233-4000 Facsimile: (403) 233-5501 Telex: 038-21335 AnswerBack: beaudril Contact: Tim Thomas, Coordinator, Marketing

BeauDril (1987) Limited leads the drilling industry in providing technologically advanced equipment and operating procedures for Arctic offshore drilling. Through the use of either a bottom founded or floating drilling rig (Molikpaq or Kullak), the harshest environments can be explored or delineated. In addition, four marine vessels, built to Canadian Ice Class IV standards, represent the most complete marine support system of its type. Two of these vessels rated at 23 000 HP represent the most powerful, privately owned icebreakers in the world. All or part of this system is available for charter, together with in-depth operational planning and support. Their markets include the North American offshore, as well as the U.S.S.R., China and Norway.

Bedarco McGruer Inc.

5745, place Turcot Montreal, Quebec Canada H4C 1W1 Telephone: (514) 933-7551 Facsimile: (514) 932-2942 Contact: Michael Notte, Vice President, Sales and Engineering

Bedarco McGruer Inc. offers & complete line of customized heavy metal and sheet metal products, including pressure vessels, towers, columns, evaporators, heat exchangers, storage tanks, and silos. Its markets include the chemical, petrochemical, petroleum, gas, pulp and paper, mining and pharmaceutical industries. The company and its 100

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employees operate from a 10 000 m<sup>4</sup> facility and export worldwide.

Bennett Environmental Consultants Ltd.

200 - 1130 West Pender Street Vancouver, British Columbia Canada V6E 444 Telephone: (604) 681-3773 Facsimile: (604) 681-6825 Telex: 04-51586 AnswerBack: environtre vcr Contact: Sue Kelsch, Marketing Assistant

Bennett Environmental Consultants Ltd. provides engineering and consulting services to the petroleum/chemical industry and governments worldwide. The company provides oil/chemical spill emergency response planning and evaluation, oil spill clean-up equipment design, supply evaluation, disposal of oily wastes, ecological surveys, and emergency response training. It also supplies emergency response software and Geographic Information Systems. The company has completed national emergency response plans for marine-based oil and chemical spills and has conducted training in emergency response on behalf of 14 countries in South America and Asia.

Bercha International Inc.

1220 Kensington Road N.W. Calgary, Alberta Canada T2N 3P5 Telephone: (403) 270-2221 Facsimile: (403) 270-2014 Telex: 03-827666 AnswerBack: bercha cgy Contact: B.J. Griffin, Vice President

Bercha International Inc. has offices throughout Canada and Asia. It provides complementary consulting services in project management, engineering, risk analysis, remote sensing data acquisition, and environmental analysis services for clients in the private and public sectors worldwide. Since 1975, the company has provided services in Arctic and Antarctic engineering; industrial risk analysis; environmental risk assessment; ice mechanics; remote sensing, including radar and laser data; and digital data processing. Hundreds of projects have been executed in the northern and equatorial regions of the world.



300, 1615 - 10th Avenue S.W. Calgary, Alberta Canada T3C 0J7 Telephone: (403) 245-5300 Focsimile: (403) 245-3257 Contact: John Kent, Sales Manager

Beta Monitors & Controls Ltd. was incorporated in 1979. The company produces a complete line of condition monitoring systems which are used throughout industry in predictive maintenance programs. The company's products include the *RECIP-TRAP*--used in condition monitoring of reciprocating engines and compressors; *DATA-TRAP*-used in condition monitoring of rotating equipment; *BETA-TRAP*--used to balance large industrial engines; and *MHEALTH*--machine health monitoring system.

a and the second se BMP Energy Systems Ltd. a a la caracteria de la c

1100, 777 - 8th Avenue S.W. Calgary, Alberta Canada T2P 3R5 Telephone: (403) 234-7979 Facsimile: (403) 262-9775 Contact: Gerald D. Feschuk, Vice President, Marketing

BMP Energy Systems Ltd. specializes in natural gas measurement processes, consulting and training for the domestic and international oil and gas industry. BMP is the only Canadian manufacturer of electronic integration equipment. This specialized measurement equipment utilizes NGAS (Natural Gas Accounting

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Software) developed by BMP. The company conducts training and consulting related to every aspect of measurement control, field inspection, surveillance, audit training, production accounting, loss prevention and security. The company also offers a production accounting system entitled *P.R.I.S.M.*, as well as modular field data capture system.



106, promenade Gun Point Claire, Quebec Canada H9R 3X3 Telephone: (S14) 694-4343 Facsimile: (S14) 695-9630

Bombardier Inc., established in 1942, offers all-terrain, soft track vehicles to the oil and gas industry. These vehicles feature capacities ranging from 2 000 to 40 000 lb. and are used for transporting equipment and personnel. The *Bombardier and Go-Tract* vehicles are used for diamon' drilling, and burden and soil sampling drilling. They are also used as carriers of mobile cranes, petroleum exploration units, fire fighting units, and seismic exploration units.

Bovar Inc., Mainland Manufacturing Division

15110 River Road Richmond, British Columbia Canada V6V 1L5 Telephone: (604) 273-1455 Facsimile: (604) 276-0051 Contact: Bruce M. Kitchener, Marketing Manager

The Mainland Manufacturing Division of Bovar Inc. offers integrated custom manufacturing services. Complete with foundry, machine/assembly shops, fabrication shops, belting shops, saw shops, distribution warchouses and engineering capabilities, Mainland also manufactures various models of service rigs. The company and its 186 employees export to the U.S., Mexico, Africa and South America.



1313 - 44th Avenue N.E. Calgary, Alberta Canada T2E 6LS Telephone: (403) 291-1313 Facsimile: (403) 291-1128 Telex: 03-827569 Contact: Aaron Dagan, Manager, International Marketing

Twenty-five years ago, when the sulphur recovery and gas processing industry in Canada was in critical need of environmental control technology and reliable pollution control in instrumentation, the Western Research Division of Bovar Inc. introduced the analytical tools, process analyzers and consulting services which enabled the industry to minimize polluting emissions. The current Western Research line of process instruments includes significantly advanced versions of the continuous stack emission monitor, air demand analyzer, sulphur dioxide monitor, hydrogen sulphide monitor, sales gas monitor, total reduced sulphur monitor and the hydrogen sulphide in amine monitor. Many of the company's products and services have become industry standards throughout North America and in many of the world's industrialized countries.



615, 500 - 4th Avenue S.W. Calgary, Alberta Canada T2P 2V6 Telephone: (403) 234-9144 Facsimile: (403) 237-5480 Contact: Mike Stadnyk, Sales Manager

BPB Instruments (Canada) Ltd. designs and manufactures wireline logging equipment and provides a comprehensive range of open hole, well logging services to the oil industry. The company's range of services includes open hole, cased hole, production logging, VECTAR enhanced high resolution logs, data transmission and computer interpretation. Both onshore truck mounted units and offshore skid units are available. In addition to conventional oil field services, a suite of slimline well logging services are offered for coal, tar sands, mineral and slimline oil and gas applications. The standard downhole oil field equipment is rated to 150° C and 15 000 psi; winch capacity is 6 000 m.

Bristol Babcock

234 Attwell Drive Rexdale, Ontario Canada M9W 5B3 Telephone: (416) 675-3820 Facsimile: (416) 674-5129

Established in 1933, Bristol Babcock is a manufacturing, sales and engineering company, specializing in networked distributed control systems and instrumentation—temperature, pressure and electrical recorders, transmitters and controllers. The company provides a number of services, including engineering design. It produces a number of different protocol drivers and offers a repair and maintenance service. Gas plants and gas transmission companies in Canada, the U.S. and Asia we among its clients.



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#### Bristania Compression Industries Ltd.

6, 3515 - 27th Street. N.E. Calgary, Alberta Canada T2E 5E4 Telephone: (403) 250-1844 Facsimile: (403) 291-2436 Contact: W. Sanderman, President and General Manager

Brittania Compression Industries Ltd. offers compressed air or gas equipment and a complete range of services, including standard equipment supply, design engineering, fabrication and modification. installation and start up, maintenance, service, parts and repair. Its equipment includes industrial air compressors, positive displacement blowers and vacuum pumps for 1/8 HP to 300 HP in reciprocating, rotary vane and rotary screw configurations. In addition, Brittania can supply and service oil-free and highpressure compressors with pressure ratings ranging to 10 000 psi. The company's ability to design and build specialized systems for compressed air or various other gases is in constant demand by numerous clients.

Brooke Ocean Technology Ltd.

P.O. Box 2220, DEPS Dartmouth, Nova Scotia Canada B3W 3Y3 Telephone: (902) 466-4075 Facsimile: (902) 466-4068 Contact: Arnold Furlong, Partner

Brooke Ocean Technology Ltd. was formed in 1983 to offer services in mechanical research and development with emphasis on the conceptual design and industrial reproduction of unique oceanographic and marine equipment and methods, particularly mechanisms suited to harsh environmental conditions. The company specializes in the design and development of shipboard handling/recovery systems, design and development of towed systems, development of sensors and instrumentation, at-sea testing of equipment and systems, and development of oceanographic and marine equipment.

Bzh Petroleum Consultants I.d.

131 Valhalla Crescent N.W. Calgary, Alberta Canada T3A 127 Telephone: (403) 263-5633 Facsimile: (403) 265-0571 Contact: Herve B. Collet, President

Established in 1976, Bzh Petroleum Consultants Ltd. has operated in Canada, the U.S., Europe, Africa and Central America. Its services range from wellsite supervision (geological, drilling, completions and production) to total project management and coordination (pre-project operation evaluations, supply, labour, logistics infrastructure, project administration, cost and materials control, and logistics backup). The company assists in the maximization of field efficiency and recovery of natural resources, better project administration, coordination and follow-up service.

C.M.E.L. Enterprises Ltd.

P.O. Box 220 Spencerville, Ontario Canada KOE 1X0 Telephone: (613) 658-3099 Facsimile: (613) 658-2897 Contact: Bob Marcellus, President

C.M.E.L. Enterprises Ltd. was established in 1979 to provide consulting, engin wing, and research and development services ... both industry and government. It is a leader in mechanics and ice-structure interaction modelling. Its services include ice engineering, continuum modelling, fracture mechanics modelling, offshore coastal and Arctic engineering services, and offshore pipeline design. CAE Machinery Ltd.

3550 Lougheed Highway Vancouver, Brirish Columbia Canada V3M 2A3 Telephone: (604) 299-3431 Facsimile: (604) 299-5935 Telex: 04-53498 Contact: L.M. LePage, Foundry Industrial Sales Manager

CAE Machinery Ltd., founded in 1913, is one of the CAE Industries group of companies. The Foundry Division meets its needs for large steel, stainless steel and ductile iron castings (to 5 500 kg), and also supplies numerous North American companies. Its produces components for heavy equipment, such as cast gear blanks; and pump and valve components for petrochemical, pipeline, and power generation (including nuclear). The Foundry Division meets the requirements of CSA Z299.3.

CAEC Arctic Engineering Inc. 

201 - 150 Isabella Street Ottawa, Ontario Canada KIS SA3 Telephone: (613) 236-3920 Facsimile: (613) 236-5614 Telex: 053-4499 AnswerBack: germil ott

CAEC Arctic Engineering Inc. is a Canadian joint venture company. It develops turnkey solutions to problems of hydrocarbon resource development in northern offshore areas. This approach brings together a wide range of complementary expertise and offers clients a cost effective alternative to similar services provided by the large multinational corporations. CAEC offers services in project management, ice model testing, geophysics, naval architecture, logistics support, structural engineering, instrumentation and controls. Its markets include countries with difficult offshore waters, such as the U.S.S.R., China, Norway and Denmark.





## Camrose Electric Controls Ltd.

9651 - 62nd Avenue Edmonton, Alberta Canada T6E 0E1 Telephone: (403) 435-5195 Facsimile: (403) 434-7887 Contact: Ken Hillman, President

Camrose Electric Controls Ltd. was founded in 1954 and, in cooperation with a major oil company, a wellhead pumping unit shutdown switch was developed for the oil industry. The company has expanded its line of controls to include stuffing box pollution controls, wellhead pumping unit controls, vibration controls, liquid levels controls, float controls and flow/no flow controls, as well as a range of pressure controls from 0.05 to 2 in. for use in pipeline, petrochemical and industrial plants. The RS73WPM is the most popular product because of its external reset, high temperature and highpressure capabilities. It is used extensively in steam flood applications.

Canadian Blower/Canada Pumps Limited

90 Woodside Avenue Kitchener, Ontario Canada N2G 4K1 Telephone: (\$19) 744-8111 Facsimile: (\$19) 744-4500 Contact: Robert E. Schock, Vice President, Sales

Canadian Blower/Canada Pumps Limited was founded in 1905 and has a 20 000 m<sup>3</sup> manufacturing facility, a staff of 400, and many numerically controlled work centres. The company produces customized heating, ventilating, air conditioning units; commercial and industrial pumps; and machine tools for markets worldwide.



1616 Meridian Road N.E. Calgary, Alberta Canada T2A 2P1 Telephone: (403) 272-3322 Facsimile: (403) 273-8084 Telex: 038-22772 AnswerBack: foremost cgy Contact: D.R. Stewart, Director of Sales, Vehicles Division

The Vehicles Division of Canadian Foremost Ltd. designs and manufactures a wide range of high-flotation, wheeled and flexible track, low ground pressure, all-terrain transporters to serve a wide variety of industry needs. The vehicles are designed for operation in mud, sand, swamp or snow where conventional equipment cannot operate. The combination of low ground bearing pressure and high tractive effort provide excellent mobility. Payload capacities range from 5 to 70 tons.

The Drill Systems Division designs and manufactures a series of drills and drill pipes. It pioneered the design of the reverse circulation drill and pipe system which provides uncontaminated solied samples from depths to 300 m. The system is capable of drilling through all formations regardless of density, and in cases where conventional core drilling is not practical.



1800, 505 - 5th Street S.W. Calgary, Alberta Canada T2P 3J2 Telephone: (403) 262-2222 Facsimile: (403) 265-4967 Telex: 03-827967 Contact: Bill Salahub, Manager, International Sales

Canadian Fracmaster Ltd., founded in 1976, serves the oil and gas industry throughout Western Canada and internationally. Fracmaster offers a broad

range of products and services, including its own line of oil field equipmentfracturing equipment, coiled tubing units, cementing equipment, nitrogen equipment and carbon dioxide equipment. Chemicals are developed in Fracmaster's laboratories for its acidizing, fracturing and cementing services. Chemicals can also be custom developed. Training in service and safety are provided in Canada and internationally. The ongoing development of new technologies is evidenced by its numerous patented products and services and other industry firsts. These technologies are offered internationally as part of Fracmaster's technology transfer commitments.

Canadian International Fluid Services Inc. 

403, 300 - 5th Avenue S.W. Calgary, Alberta Canada T2P 3C4 Telephone: (403) 269-2803 Facsimile: (403) 266-5708 Telex: 0636700614 Contact: Larry Pamplin, President

Canadian International Fluid Services Inc. provides technological advisory services to some of the world's largest oil and gas companies, and manufactures and supplies Brine-Add downhole fluids. The company's field representatives have developed an extensive working knowledge of fluid requirements and applications for nearly every oil field condition from shallow hole drilling projects to highpressure sour gas work over and horizontal drilling. The company is a leading authority in fluid compositions, programming, proposals and recommendations, and well site fluic. supervision.



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## Canadian Marine Drilling Ltd.

250 - 6th Avenue S.W. Calgary, Alberta Carada T2P 2H8 Telephone: (403) 298-3500 Facsimile: (403) 298-3533 Telex 03-822062 AnswerBack: domecanmar cgy Contact: L.G. Hammer, Manager, Contract Drilling

Canadian Marine Drilling Ltd. (Canmar) was formed in 1973 to perform the operational aspects of a major exploration program in the Canadian Beaufort Sea. Canmar performed the first deepwater drilling in the Beaufort Sea in 1976 and has drilling units supported by specialized marine equipment and technical personnel. Canmar is an Arctic offshore contractor and provides its clients with integrated drilling, marine, ice management and land-based logistical support. Providing these specialized services are 400 personnel; a fleet of four mobile offshore drilling units (three drill ships and one bottom-founded caisson); and a marine fleet, including six icebreakers.



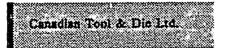
1165G - 44th Avenue S.E. Calgary, Alberta Canada T2G 4X4 Telephone: (403) 287-1910 Facsimile: (403) 287-2367 Contact: Allan Richardson, General Manager

Canadian Rig Ltd. was established in 1984 to design, build and operate advanced oil field rigs and associated equipment. The company has specialized in slant drilling, mechanization and automation of drilling rigs, slant work over rigs, and top drive drilling systems for conventional mobile, land-based drilling rigs.

### Canadian Swabmaster Products Ltd.

708 - 19th Avenue, P.O. Box 139 Nisku, Alberta Canada TOC 2G0 Telephone: (403) 955-7500 Facsimile: (403) 955-8921 Contact: Garry Farr, Sales Manager

Canadian Swabmaster Products Ltd. has been manufacturing and exporting a complete line of well servicing equipment for 10 years. Their equipment includes swab cup9--tubing and casing; swab mandrel9--tubing and casing sinker bars; tubular jars; hydraulic oil saver units; rod stripper rubbers; pipe wipers; rope sockets and swivels; oil saver rubbers; BOP ram rubbers; hydraulic pack-off head; and pack-off rubbers.



1331 Chevrier Boulevard Winnipeg, Manitoba Canada R3T 1Y4 Telephone: (204) 453-6833 Facsimile: (204) 453-3803 Contact: Hans Roeder, Manager, Specialty Engineering

Canadian Tool & Die Ltd., founded in 1947, is a custom manufacturer of heavy duty cylinders. The cylinders feature working pressures up to 34 478 kPa (5000 psi); precision ground, hard chrome plated piston rods; bore sizes from 25 to 200 mm (1 to 8 in.); and a choice of seals. All cylinders are quality controlled and individually tested before leaving the factory. The company exports to the U.S., Mexico and Central America. Canadoll Eorge Ltic

805, boulevard Alphonse Deshales Becancour, Quebec Canada GOX 1B0 Telephone: (819) 294-6683 Facsimile: (819) 294-6189 Contact: Brano Perelli, General Manager

Canadoil Forge Ltée, founded in 1983, specializes in the manufacture of customized valves and pipe fittings. The company exports to the U.S. and South America.

CanOcean Engineering Limited

1 Grosvenor Square New Westminster, British Columbia Canada V3M SS1 Telephone: (604) 524-4451 Facsimile: (604) 524-8943 Contact: Jean Lhopitallier, Chief Executive Officer

CanOcean Engineering Limited, formed in 1969, has pioneered many types of subsea systems and has become a world leader in the area of subsea oil production technology. It has completed projects throughout the world, including Brazil, China and India. CanOcean has been designing multiwell production systems since 1977. Template and manifolds have been designed for numerous major oil companies. These systems are for shallow water, diver-assisted applications, as well as operated equipment for installation, retrieval and maintenance of subsea equipment.





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# Canpolar Inc.

265 Rimrock Road, Unit 4 Toronto, Ontario Canada M3J 3C6 Telephone: (416) 635-5484 Facsimile: (416) 635-5353 Contact: James R. Rossiter, President

Canpolar Inc. was formed in 1983 to provide innovative scientific consulting to the offshore development sector, particularly for Canada's Arctic and East Coast regions. The company focusses on technologies for the detection and monitoring of pollution, environmental conditions and infrastructure decay. Its approach is to combine leading sensor technologies with the capabilities of modern portable computers. Canpolar has extensive experience and expertise in the development and use of Ground Penetrating Radar (GPR) for environmental and engineering applications, as well as in the research and development of sensing technologies for oil industry problems. The company has proprietary application and interpretation software for combining GPR results with those from other sensors, such as electromagnetic induction. The company also offers unique airborne ice thickness measurement capability.

Cansper Group Inc.

480C - 36th Avenue S.E. Calgary, Alberta Canada T2G 1W4 Telephone: (403) 287-2783 Facsimile: (403) 287-1559 Contact: John Collins, Marketing Manager

Canspec Group Inc., incorporated in 1985, is comprised of a number of companies and is one of the largest groups of engineers, technologists and inspectors engaged in quality assurance. Canspec is a recognized leader in the field of computerized non-destructive test systems. The company offers specialized engineering consulting services which include specification preparation, failure analysis, plant evaluation and audits, and material evaluations in the areas of metallurgy, welding, corrosion, polymers, and quality assurance. The non-destructive testing division uses technologically advanced equipment for radiography, ultrasonics, infrared thermography, vibration analysis, magnetic particle, leak testing, acoustic emission monitoring, alloy analysis and others. Canspec also provides technical assistance to thermal and nuclear power generator stations, the pipeline and offshore industry, acrospace and shipbuilding, major manufacturing industries, and structural steel fabrication.

### Centech Environmental Systems Inc.

2345 Stanfield Road Mississauga, Ontario Canada I.4Y 3Y3 Telephone: (416) 275-9800 Facsimile: (416) 275-0947 Telex: 06-961477 Contact: Ken Scott, Sales Manager

Cantech Environmental Systems Inc. offers complete engineering services and a broad range of gas and liquid filtration products to the oil and gas industry. The Canflo trademark offers a variety of liquid filtration products and systems for the filtration of drilling fluids, hydrocarbons and amine. Cantech exports to most world markets. Canterra Equipment Inc.

6700 - 9th Street N.E. Calgary, Alberta Canada T2E 8K6 Telephone: (403) 295-7676 Facsimile: (403) 295-7683 Telex: 03-821214 Contact: Howard Jackson, Vice President, Sales

Established in 1978, Canterra Equipment Inc. designs and manufactures heliportable seismic drill rigs. It has developed 'people' portable, buggy, trailer and other types of heliportable seismic drills. The company's hands-on approach and technical ability has made them an industry leader. The portable models include hand carried models for hole depths to 50 m in hard rock. The helicopter portable drills are available in models for hole depths to 100 m. The company's new products include auger drills for recovery wells. A soil investigation service is also offered. More than 500 Canterra drills have been sold in 26 countries.

Canuck JIE Engineering Ltd.

200, 708 - 11th Avenue S.W. Calgary, Alberta Canada T2R 0E4 Telephone: (403) 267-6000 Facsimile: (403) 267-6099 Telex: 03-826678 AnswerBack: canuck eng cgy Contact: William Bruce, President

Canuck GIE E gineering Ltd., consulting engineers to the pipeline and petroleum industries worldwide, provides a complete range of services from feasibility studies through to total project engineering, procurement and construction management. It is recognized in Canada as a leader in the provision of specialized services to the pipeline industry. The company has the technical capability, expenence and resources to provide general consulting services for the



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transportation of crude oil, gas, gas liquids, LNG, petroleum products, commercial liquids, gases and slurries. Its staff have had senior design responsibility for all phases of oil, gas and product pipeline projects in Canada and abroad, including evaluation and selection of new and unique equipment and materials for unusual pipeline service, tankage and storage, interface detection and metering for custody transfer of unusual and high vapour phase products.

## Capilano Geophysical Ltd.

2615 - 22nd Street N.E. Calgary, Alberta Canada T2E 7L9 Telephone: (403) 276-8022 Facsimile: (403) 291-2355 Contact: John A. Bull, International Operations Manager

Capilano Geophysical Ltd., one of Canada's largest geophysical data acquisition companies, was founded in 1980. The company employs more than 200 people in domestic and overseas operations. Capilano has a mix of four sophisticated vibroseis (controlled energy input) crews with one dynamite energy source crew. It is equipped to handle any terrain requirements. The company's capabilities extend to management and field personnel who are experienced in both domestic and international operations; dynamite or vibroseis recording; high channel capability with SERCEL 368, CFS 5, and MASTER/SLAVE recording systems; extensive field processing and parameter

extensive field processing and parameter testing; computerized quality control for vibrators and recording instrumentation; and all terrain capabilities with both track and buggy crews.

# Caproco (1987) Limited

8741 - 53rd Avenue Edmonton, Alberta Canada T6E 5E9 Telephone: (403) 468-1187 Facsimile: (403) 466-6432 Teles: 037-42787 AnswerBack: caproco edm Contact: Bob Conn, Vice President

Caproco (1987) Limited has offered a comprehensive corrosion prevention service since 1951. The company can provide a total involvement from initial site survey through manufacturing to commissioning, maintenance and training, and material procurement. Caproco has experts available for consultation in a wide variety of corrosion disciplines. Its equipment has been installed for various projects throughout the world, including the U.S.S.R., Middle East, North Sea and the U.S.

The range of internal corrosion monitoring equipment includes access fittings. retriever tools, service valves, weight loss coupons, and a full line of monitoring probes and metering devices. Products related to detection of biofilm related corrosion include bacteria probes, electrical resistance (ER) and linear polarization (LPR) probes for use in high or low pressure systems; a complete line of biofilm monitoring equipment, including biofilm studs, probes and spools; The Hydrogenase Test-a new test for microbially influenced corrosion which is fast (less than 4 hours) and will indicate the level of activity of corrosioninfluencing bacteria.

## Cardium Tool Services Inc.

P.O.Box 5620, Station L Edmonton, Alberta Canada T6C 4G1 Telephone: (403) 465-9311 Facsimile: (403) 469-0744 Telex: 037-41702 AnswerBack: cardium edm Contact: Christopher Stewart, International Director

Cardium Tool Services Inc., founded in 1954, is a leading designer and manufacturer of downhole tools and services for Canadian, U.S. and Asian clients. It has been involved in the development of every major oil and gas field in Canada. Its operations extend from the critical sour wells of the Alberta foothills to the massive Enhanced Oil Recovery Tar Sands of Northern Alberta. Cardium is also a major supplier to East Coast and Arctic frontier areas. From a simple tubing anchor catcher to a critical service tandem cone hydraulic liner hanger assembly, Cardium provides superior equipment designed to help produce oil and gas profitably, efficiently and safely.

Caralytic Maintenance Inc.

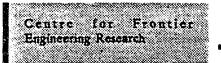
400, 8500 MacLeod Trail South Calgary, Alberta Canada T2H 2N2 Telephone: (403) 268-6899 Facsimile: (403) 255-1421 Telex: 038-22509 AnswerBack: del cat cgy Contact: Murray Propp, Vice President, Business Development

Catalytic Maintenance Inc. introduced the concept of contract maintenance for industrial plan sites to North America in 1952. At present, Catalytic averages approximately one million days annually in the development of international projects in Asia and South America. Four thousand highly trained supervisory staff and trades personnel for safety, labour relations, quality assurance/control and





tool services are supplied for maintenance, shutdown revamp and construction projects.



200 Karl Clark Road Edmonton, Alberta Canada T6N 1E2 Telephone: (403) 450-3300 Facsimile: (403) 450-3700 Contact: Elizabeth Clarke, Networking Officer

The Centre for Frontier Engineering Research (C-FER) was established in 1983 as a national centre of excellence. Its list of members has grown to 40 organizations, representing the leaders in Canada's resource and service industries, government agencies, laboratories and academic institutions. C-FER's move to its new \$18 million research centre in the Edmonton Research Park heralds a dramatic step forward in its research capabilities. The centre offers a broad range of reliable, quality services through the integration of expertise in the disciplines of structural analysis and engineering, cold regions and offshore engineering, mathematical modelling and numerical analysis, materials science and engineering, risk and reliability analysis, and synthesis and analysis of information. Research at C-FER focusses on both the improvement of existing technologies and the development of new technologies. Its achievements include a total technology for the design of ice-resisting composite walls, a new procedure for cold weather repair welds, a detailed understanding of the in-service performance of casing/connection systems for thermal recovery wells, and the innovative URAP tool for monitoring and for quality assurance in the make-up of premium connections.

# Century Valve and Machine Co. Ltd.

1915 - 30th Avenue N.E. Calgary, Alberta Canada T2E 6Z5 Telephone: (403) 250-9742 Facsimile: (403) 250-8624 Contact: Garth Hasselback, Marketing Manager

Century Valve and Machine Co. Ltd., founded in 1967, is a leader in the manufacture and supply of precision machined components for the process control industry in Canada. The company manufactures a complete line of instrumentation valves, ranging from small needle valves to gauge valves to multivalve instrumentation manifolds. Century is also Canada's largest producer of thermowells. The company also manufactures custom machined parts for a wide variety of companies in the processing and petrochemical sectors. Century utilizes advanced technology and manufacturing enhancements, such as CAD/CAM, CNC production equipment, robotics, and automatic bar-feed.

Cessco Fabrication and Engineering Ltd.

7310 - 99th Street Edmonton, Alberta Canada T6E 3R8 Telephone: (403) 433-9531 Facsimile: (403) 432-7899 Contact: David Howie, Vice President

Cessco Fabrication and Engineering Ltd. is a diversified worldwide supplier of major equipment to the oil and gas industry. It is a leading Canadian designer and fabricator of large ASME Code pressure vessels manufactured with steel, clad steels and other alloys; and skid mounted process modules, such as dehydrators, separators and line heaters. Cessco also builds large custom equipment and machinery for general industry. Skilled tradesmen for field construction and maintenance can be provided by the company's Field Services Division.

CH2M Hill Engineering Ltd. 

1100, 815 - 8th Avenue S.W. Calgary, Alberta Canada T2P 3P2 Telephone: (403) 237-9300 Facsimile: (403) 237-7715 Contact: Steven L. Lackey, President

CH2M Hill Engineering Ltd. is a consulting engineering company. Founded in 1978, the company has received numerous awards for innovative engineering. It provides conceptual design studies, detailed designs and construction management services related to heavy oil projects, oil production, produced water treatment and disposal, and natural gas productions. All facets of project design are provided in-house, including water sourcing, gathering systems and pipeline networks, gas sweetening and sulphur removal, and environmental assessment. The company is a recognized leader in the technology related to the treatment of produced water for reuse as steam generator feedwater in heavy oil projects.

Challenger Surveys & Services Ltd: 

200, 6011 - LA Street S.W. Calgary, Alberta Canada T2H 0G5 Telephone: (403) 253-8101 Facsimile: (403) 253-1985 Contact: J. Tom Lockhart, Manager, International Business

Challenger Surveys & Services Ltd. is a multidisciplinary survey firm, offering a diverse range of survey services, including offshore surveys. The company has operating experience more than 20 countries. The range of professional services offered includes legal and Cadastral surveys, control surveys, oil field surveys, construction surveys, seismic surveys, hydrographic surveys, offshore

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surface and subsurface positioning and navigation, geohazard surveys, engineering surveys, gravity and magnetic surveys, software and hardware system design, drafting services, satellite control surveys (Transit and GPS), and research and development.

Chambers Engineering Ltd.

17319 - 108th Avenue Edmonton, Alberta Canada T55 1G2 Telephone: (403) 484-4447 Facsimile: (403) 484-4581

Chambers Engineering Ltd. specializes in oil field and oil well production optimization, using the C.E. 1000 dynamometer and company developed software. The company also offers training courses and production engineering studies and is available for foreign and domestic operations. It provides full service and supplies for these instruments. The C.E. 1000 is a microcomputer-driven instrument: it is field rugged and can store data for 40 well surveys. The company has developed an advanced library of related software covering all phases of pumping oil well analysis. The company's dynamometer service evaluates all aspects of the pumping system from pump intake pressure through mechanical condition of the pump and tubing anchor, stresses in the sucker rod string, loading on the gear box, and beam and power requirement.

Chase Manufacturing Inc.

Rox 12, Site 5, RR 5 Calgary, Alberta Canada T2P 2G6 Telephone: (403) 279-2809 Facsimile: (403) 236-1328 Contact: Robert G. Herron, President

Chase Manufacturing Inc. produce and supply casing and tubing couplings to the worldwide oil industry. Advanced computer numeric controlled lathes are operated by skilled technicians, producing threads to exacting standards and close dimensional tolerances. Licensed by the American Petroleum Institute since 1985, the company has produced couplings in both round and buttress thread form and in diameters from 2 % to 13 % in.

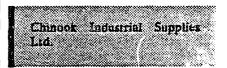


100, 909 - 7th Avenue S.W. Calgary, Alberta Canada T2P 1A6 Telephone: (403) 264-2245 Facsimile: (403) 264-8848 Contact: Robert W. Logan, President

Chimo Equipment Ltd., established in 1973, manufactures the WATCHDOG line of electronic drilling instrumentation. The WATCHDOG Model 303IS PVT Plus System is a microprocessor-based monitoring system which is designed to operate safely in all climatic conditions within a temperature range of -40° C to +70° C and to withstand the toughest oil field conditions. Chimo Polyurethanes Ltd. ....

100, 90? - 7th Avenue S.W. Calgary, Alberia Canada T2P LA6 Telephone: (403) 264-2245 Facsimile: (403) 264-8848 Contac:: Robert W. Logan, President

Chimo Polyurethanes Ltd. manufactures urethane elastomers for a variety of applications in the oil field markets. The manufacturing process requires the blending of high quality polyethers which are liquid cast to form the urethane products. Currently, it has the capability of processing medium-hard rubber to medium-hard plastics. The company exports to the U.S., Europe and Asia.



516 - 60th Avenue S.E. Calgary, Alberta Canada T2H 0P9 Telephone: (403) 253-8291 Facsimile: (403) 255-5565 Contact: Robert A. Bracko, Manager

Chinook Industrial Supplies Ltd., incorporated in 1965, manufactures component parts for all makes of natural gas compressors and air compressors. The company pioneered the use of high temperature thermoplastic compressor valve plates. These modern, efficient and environmentally compatible materials are incorporated into their Chinook compressor valves used in natural gas production facilities, gas processing plants, gas transmission station, refineries, and petrochemical plants. They are also used in air compressors. Chinook compressor valves are engineered and designed to improve compressor valve efficiency.

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### Cis Can Sales (Western) Ltd.

3880 - 74th Avenue Edmonton, Alberta Canada T6B 2P7 Telephone: (403) 466-3178 Facsimile: (403) 468-5904 Contact: David Gomez, Sales Manager

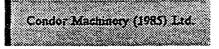
Cis Can Sales (Western) Ltd., incorporated in 1976, manufactures *Cata-Dyme* infra-red flameless gas heaters. These explosion-proof heaters are available in various sizes and configurations and feature single unit ratings from 3 000 to 45 000 BTU/hr. These heaters operate on natural gas or propane, and are certified by the Canadian Gas Association for use in class 1, divisions 1 and 2, group D hazardous locations. *Cata-Dyme* heaters are utilized for space and equipment heating of all types of oil and gas production buildings.

800, 600 - 6th Avenue S.W. Calgary, Alberta Canada T2P 0S5 Telephone: (403) 265-6060 Facsimile: (403) 298-5790 Telex: 03-826771 AnswerBack: computalog Cgy Contact: J.F. Perry, Manager, International Development

Computatog Ltd.

The principal business of Computalog Ltd. is to provide the oil and gas industry with wireline logging, perforating and production logging; directional drilling, measurement while drilling and mud motors; fishing tools and supervision; cement plug quality logging; and petrophysical analysis. Wireline service operations include open hole services, cased hole services and production logging. Their geotechnical services for the petroleum industry include basic reservoir core analysis, specialty tests and analysis, petrophysical studies, fluid analysis and research. Manufacturing involves the design and fabrication of

specialized truck or skid mounted wireline, MWD and seismic field units which are used in company operations and which are sold in export markets.



4771 Eleniak Road Edmonton, Alberta Canada T6B 2N1 Telephone: (403) 466-9799 Facsimile: (403) 469-2357 Contact: Inge Lohse, President

Condor Machinery (1985) Ltd. has been in the machining repair business since 1980 and offers specialized services to the oil and gas industry in Canada and the U.S. Complete with lathes, milling machines, drill presses, surface grinder, cylindrical grinder, numerical control machining, welders, and metco thermal coating, the company performs major and minor repairs to equipment employed in highpressure and low pressure services. The equipment includes engine components, gas compressor components, centrifugal pumps, reciprocating pumps, turbines, gear boxes, heavy equipment repairs, foundry equipment, downhole drilling equipment and pipeline equipment.

Control Engineering Inc.

Calgary, Alberta Canada T2E 7C8 Telephone: (403) 250-7915 Facsimile: (403) 250-1194 Contact: James Shedden, Vice President, Marketing

Control Engineering Inc., established in 1988, specializes in automation systems and electrical engineering. Its engineering expertise applies to the petroleum and petrochemical industries, manufacturing and production, gas, electrical and water utilities. The company will provide conceptual design and planning studies, including testing, commissioning and start up. It also offers a comprehensive

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knowledge of automation systems, such as flow measurement, programmable controller applications, distributed control systems (DCS), and Supervisor Control and Data Acquisition Systems (SCADA); and electrical engineering expertise in power system studies, motor control centres, variable speed drive systems, lightening and power distribution systems.

Corrosion Service Co. Ltd.

369 Rimrock Road Downsview, Ontario Canada M3J 3G2 Telephone: (416) 630-2600 Facsimile: (416) 630-2393 Telex: 06-218984 AnswerBack: corrosion tor Contact: R.A. Gummon, Vice President, Engineering

Corrosion Service Co. Ltd. is a full service corrosion engineering firm, specializing in the application of cathodic protection to oil and gas pipelines, storage facilities and production equipment. A staff of more than 120 includes NACE certified corrosion specialists, cathodic protection specialists, corrosion technologists and technicians. Its services include cathodic protection designs, stray current investigations, corrosivity determinations, cathodic protection system surveys, and supervision of cathodic protection installations.



#### Cougar Toul Inc.

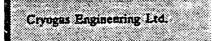
P.O. Box 5770, Station L Edmonton, Alberta Canada T6C 4G2 Telephone: (403) 437-5277 Facsimile: (403) 437-7666 Contact: Raymond Labonte, General Manager

Cougar Tool Inc., supported by its engineering and research and development personnel, has been manufacturing drilling jars and stabilizers for more than 30 years. The company has developed an exceptional support network to supply and service these products. Its equipment is exported to most oil producing regions.

CPW Valve & Instrument Ltd.

11620 - 170th Street Edmonton, Alberta Canada T5S LJ7 Telephone: (403) 451-6888 Facsimile: (403) 454-0331 Contact: Bill Hollands, Vice President

CPW Valve & Instrument Ltd. manufactures and markets the Hydro-Poise line of liquid-filled pressure gauges. The gauges are used in refineries, chemical plants, gas plants, on wellheads and drilling rigs and in all resource industries. The liquid-filled dry gauges protect the movement from rust, dust, vibration and severe pulsation. The firm also produces the Hydro-Pak line of gauges which are used in industrial applications, such as hydraulics, and on air or water lines. These products are exported to the U.S. and Asia.



1605, 700 West Pender Street Vancouver, British Columbia Canada V6C 1G8 Telephone: (604; 688-1773 Facsimile: (604) 688-4614 Contact: G.A. Constable, Vice President, Marketing and Finance

Cryogas Engineering Ltd. was formed in 1985 to manufacture and supply liquid natural gas (LNG) liquefiers and fuel systems for transport vehicle applications. Cryogas has the technology, engineering, designs and experience to supply complete LNG fuel systems, particularly systems of a scale to service individual truck and bus fleets. The company will also provide installation, start up, and training services. A complete system includes LNG liquefier, LNG storage tank. LNG fuelling station. on-board vehicle tanks, and vehicle conversion to natural gas operation. In addition to conversion of spark ignition engines to natural gas. Cryogas has a proprietary dual fuel (diesel/natural gas) conversion kit.

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9300 - 192nd Street Surrey, British Columbia Canada V3T 4W2 Telephone: (6:.1) 888-1211 Facsimile: (604) 888-6583 Telex: 04-365662 Contact: K. Douglas Cullen, President

Cullen Canadian Inc. manufactures diesel and gas turbine power plants and propulsion systems, using heavy duty prime movers-Wartsila Diesel, Detroit Diesel, Kawasaki Industrial Gas Turbines and others. Other products include modularized power systems, Cullen customized controls and switchgear, and power systems ranging from 100 to 20 000 Kw. The company's power systems have been successfully installed in oil and gas exploration sites in the Arctic Circle and in high ambient desert locations, as well as offshore drilling rigs, production platforms and support vessels.

D&S Petroleum Consulting Group Lid.

700, 125 - 9th Avenue S.E. Calgary, Alberta Canada T2G 0P6 Telephone: (403) 268-6500 Facsimile: (403) 269-7265 Telez: 03824649 AnswerBack: d+s des cgy Contact: T.P. Lederhouse, Vice President, Engineering and International Consulting

The D&S Petroleum Consulting Group Ltd. is one of the oldest integrated consulting firms in Canada. The company offers, on a worldwide basis, a wide range of professional consulting services, technical and commercial software products, and a computer time share service bureau. The consulting services include property and corporate evaluations, reservoir and mathematical simulation studies, heavy oil, geology, petrophysics, drilling and production operations, production and revenue accounting, as well as gas chart integration. Software products address the areas of corporate evaluations and economics, production history and forecasts, log analysis, reservoir analysis, numerical simulation and production and revenue accounting. These services and software products have been provided to the petroleum industry in Canada, the U.S. and Asia.



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#### D.B. Robinson Design & Manufacturing Ltd.

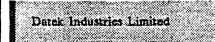
9419 - 20th Avenue Edmonton, Alberta Canada T6N 1E5 Telephone: (403) 463-8638 Facsimile: (403) 450-1668 Telex: 037-2966 AnswerBack: edm Contact: Raymond O. Lemieux, Group Manager, Marketing and Sales

D.B. Robinson Design & Manufacturing Ltd. designs and manufactures specialized high-pressure laboratory equipment for use in petroleum research and chemical process laboratories. Their equipment includes precision positive displacement pumps, visual and blind cells and associated complex systems used to evaluate hydrocarbon production techniques and the study of fluid phenomena experienced in the chemical process industry. The company's founder has been the recipient of numerous Canadian and improvementional awards in recognition of his achievements in the measurement and prediction of the properties and behaviour of hydrocarbons and related mixtures.

# Dacro Industries Ltd.

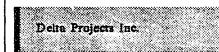
9325 - 51st Avenue Edmonton, Alberta Canada T6E 4W8 Telephone: (403) 434-8900 Facsimile: (403) 436-4203 Contact: Hugh Hunter, Business Development

Dacro Industries Ltd. has been serving domestic and foreign markets since 1974. It offers complete job management to clients, including design, drafting, procurement, expediting, fabrication and inspection. The company's products for the resource industry include process towers, stabilizers, de-ethanizers, regenerators and reactors; pressure vessels—such as air receivers, storage bullets, separators and filters; and flare stacks and related structural ladders, platforms and skids.



8522 Davies Road Edmonton, Alberta Canada T6E 4Y5 Telephone: (403) 465-1530 Facsimile: (403) 465-0130 Contact: Dallas Hauge, Director of Marketing

Datek Industries Limited is an electronic manufacturing company. Since 1971, the company has specialized in the solutions to complex electronic problems. Most of its major clients are in resource based industries. The company has developed a reputation for its capabilities in custody transfer and remote data acquisition. Large gas and oil pipelines depend on Datek to provide them with a sophisticated level of custody transfer units and control systems to manage their complex pipeline systems.



400, 8500 MacLeod Trail South Calgary, Alberta Canada T2H 2N7 Telephone: (403) 259-6411 Facsimile: (403) 255-1421 Telex: 038-22509 AnswerBack: del cat cgy Contact: Murray E. Propp, Vice President, Business Development

Delta Projects Inc. is a fully integrate engineering, procurement and construction company and provides project management, process design, detailed engineering, procurement and construction services to energy related projects within Canada and abroad. Since 1966, the company and its 350 employees have played a vital role in the development of Canada's energy sector.

## Diamant Boart Stratabit Ltd.

800, 407 - 2nd Street S.W. Calgary, Alberta Canada T2P 2Y3 Telephone: (403) 263-8025 Facsimile: (403) 262-4346 Telex: 03-821983 AnswerBack: 2500062 Contact: Cam Hamilton, General Manager

Diamant Boart Stratabit Ltd. is a world leader in the design, manufacture and implementation of diamond and P.D.C. drilling bits, as well as coring bits and core BBLS. The company has extensive experience in optimizing drilling performances in every major oil field. Their DBS Sponge Coring System squeezes rwice as much oil saturation data. Sponge cores data correlate better with electric log data. It can provide residual oil saturation after waterflood and identify depleted zones in a formation. Sponge core data can identify oil/water zones or transition zones. Their Canadian operation has participated in many international ventures.

Digitech Information Services Ltd.

700, 840 - 7th Avenue S.W. Calgary, Alberta Canada T2P 3G2 Telephone: (403) 266-8622 Facsimile: (403) 233-2917 Contact: Stephen Henry, General Manager

Digitech Information Services Ltd. provides information and system resources to the resource sector. The gathering, integration and distribution of large amounts of exploration and development information plays a key role in Digitech's business strategy. Coupled with this is the provision of system resources for the running of external applications. These system resources include CPU, tape, and printing and plotting facilities. Turnaround and system response are important factors to their clients.





# Dilcon Constructors Ltd.

20 Brooksbank Avenue North Vancouver, British Columbia Canada V7J 2B8 Telephone: (604) 985-5911 Facsimile: (604) 980-5875 7 Iex: 04-352848 Contact: J.B. Steward, Marketing Manager

Dilcon Constructors Ltd. performs construction work and provides project management and construction management services to projects within Canada and abroad. It is one of Canada's largest construction organizations. The company can undertake all aspects of large complex projects, electrical, instrumentation and insulation work. piping, and the installation of process equipment. Services include all activities from initial planning through physical construction and any necessary infrastructure, to commissioning of the completed facility. The company has participated in projects in Central America, the Caribbean and Asia.

DIFIX Technologies Inc.

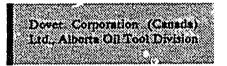
1050 Baxtor Road, Unit 7 Ottawa, Ontario Canada K2C 3P1 Telephone: (613) 596-4942 Facsimile: (613) 596-4914 Telex: 053-3651 AnswerBack: dipix ott Contact: Vijay Dube, Corporate Marketing Manager

DIPIX Technologies Inc. provides ARIES Image Processing Systems to various oil exploration companies, Government geological agencies and mapping companies worldwide. The ARIES system is used to extract pertinent information from satellites and aircraft remote sensing data for the selection of drilling and exploration sites and for locating mineral and petroleum resources. This data is used with Geographic Information System (GIS) information to provide a complete geologic analysis.

Double T Equipment Manufacturing Ltd.

2 East Lake Way Airdrie, Alberta Canada T4B 2B8 Telephone: (403) 948-5618 Facsimile: (403) 948-4780 Telex: 03825805 AnswerBack: double 1 air Contact: Thomas Thomas, President

Double T Equipment Manufacturing Ltd. was founded in 1976. It designs and builds rail/truck inload systems, rail/truck outload systems, bulk material handling, and blending and storage systems for use in Canada and the U.S.



9530 - 60th Avenue Edmonton, Alberta Canadà T&E 0C1 Telephone: (403) 434-8566 Facsimile: (403) 434-4267 Contact: J.R. Kosh, Vice President

Alberta Oil Tool, established in 1951 and a division of Dover Corporation (Canada) Ltd., has manufactured for the oil industry in Canada and the U.S. since 1963. The division manufactures the Norris brand of sucker rods and accessories, butterfly valves, tubular fittings, control valves and level controllers. Dreco Energy Services Ltd.

3716 - 93rd Street Edmonton, Alberta Canada T6E SN3 Telephone: (403) 463-2065 Facsimile: (403) 463-3276 Telex: 037-2243 Contact: Matt Sydor, Manager, International Sales

Dreco Energy Services Ltd. designs, manufactures, markets and leases drilling rigs, well servicing and work over rigs, drilling machinery and downhole drilling tools used in the drilling and servicing of oil and gas wells. The company conducts manufacturing operations in Canada and the U.S. The company is a leading exporter of drilling equipment.

Dresser Canada Inc., Dresser Pump Division 1. 1. 1. 1.

Worthington Drive Brantford, Ontario Canada N3T 5M5 Telephone: (519) 753-7381 Facsimile: (519) 753-0845 Telex 061-81165 Contact: J.P. Kenney, Director of Marketing

Since 1963, Dresser Pump has researched, designed and developed Worthington centrifugal and rotary screw and gear pumps for many services in the oil and gas industry, including production, drilling, enhancement, blending, storage, pipelining, refining, tar sands, heavy oil, offshore production platforms, and multiphase applications. The company's products are exported worldwide.





#### Crill-Rite Industries (1985) Ltd.

2435 - 22nd Street N.E. Calgary, Alberta Canada T2E 8K8 Telephone: (403) 250-1351 Facsimile: (403) 250-2534 Contact: Don A. Lackie, President

Drill-Rite Industries (1985) Ltd. supplies fishing tools, abandonment tools and cutting equipment, and supervision services to customers in Canada and throughout the world. The company manufactures its own line of milling equipment and wash over tools. Drill-Rite has substantial expertise in drilling, fishing and abandonment in all types of environments, on land and offshore.

Drilltel Systems Limited

3601A - 21st Street N.E. Calgary, Alberta Canada T2E 6T5 Telephone: (403) 250-5125 Facsimile: (403) 291-9556 Telex: 03-821172 Contact: Alex Finnie, Vice President

Drilltel Systems Limited manufactures a complete line of hydrocarbon detection equipment, including total gas detectors, hydrogen flame chromatographs,  $H_2S$  and cuttings gas detectors, as well as full computer-based rig monitoring systems. Drilltel can offer manned logging services in a variety of configurations or provide high level training and maintenance personnel. International needs for equipment were met in 1974 with the opening of manufacturing, and research and development facilities in Canada. The company exports to the U.S., Costa Rica, Africa, the U.K. and Australia.

# ECS-Power Systems Inc.

201 - 150 Isabella Street Ottawa, Ontario Canada KIS SA3 Telephone: (613) 236-3920 Facsimile: (613) 236-5614 Telex: 053-4499 AnswerBack: germil ott Contact: V. Rudy Sligl, Vice President, Corporate Relations

ECS-Power Systems Inc. is an engineering company and specializes in the development of advanced energy systems and associated product technologies for specialized applications. The company also provides professional engineering services to a variety of clients, including government, the power generation industry, oil and gas and marine industries. Its products include Ocean Shuttlecommercial nuclear-powered submarine concept for offshore underwater services, such as offshore uil and gas developments to depths greater than 50 m, exploration, construction and IMR services; CARMA-computer-assisted reciprocating machinery analysis used for compressor stations worldwide in onshore/offshore pipelines and diesel engine analysis. The company's services include project management, naval architecture and marine engineering, environmental engineering, as well as the design of icebreakers and ice capable ships and supply vessels.



P.O. Box 80232 Burnaby, British Columbia Canada VSH 3X5 Telephone: (604) 433-3292 Facsimile: (604) 433-6263 Contact: T. Alvin McMillan, President

El-Mac Pacific Distributors Ltd. manufactures tooling for situations where the lines at the flanges must be forced apart for service--replacing gaskets and changing blinds and installing valves in heavy duty pipelines and installations in refineries. Their *Big Mac* hydraulic flange spreaders are designed to completely overcome these problems. The flange spreaders can also be obtained with a manual adaptor. The company also manufactures a complete range of valve wheel wrenches in aluminum, bronze and steel.



13140 St. Albert Trail Edmonton, Alberta Canada TSL 4R8 Telephone: (403) 451-4444 Facsimile: (403) 452-5100

Emery Apparel Canada Inc. manufactures high quality protective workwear. Its product line includes coveralls, uniforms, pants, shirts, and jackets. The company manufactures cold weather, fire retardant, antistatic/ antidust and conventional apparel. Emery sells through offices in Canada, the U.S., the U.K., Norway and the Middle East.

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### Ener-Rig Electrical Supply Ltd.

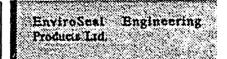
2104 - 7th Street Nisku, Alberta Canada TOC 2G0 Telephone: (403) 955-2067 Facsimile: (403) 955-2545 Telex: 037-2966 Contact: Grady Long, General Manager

Ener-Rig Electrical Supply Ltd. was formed in 1978 as an electrical wholesaler/supply house to meet the requirements for the specialized electrical products and services required by the oil and gas industry. The company can supply information on almost all electrical items, including AC and DC variable speed drives, ABB motor control and capacitors, cable, lighting futures, and all other related electrical equipment. The company supplies the U.S. and numerous countries throughout Asia.

**Bavironmental** Technologies Inc Sec. Start

12, 1235 - 64th Avenue S.E. Calgary, Alberta Canada T2H 2J7 Telephone: (403) 253-1616 Facsimile: (403) 252-1136 Contact: Richard Collens, President

Environmental Technologies Inc. is an environmental company which specializes in methane gas extraction from landfill sites and the utilization of gas as an alternate energy source (boiler fuel, electrical generation, pipeline quality gas for home heating, production of methanol and/or high quality clean burning diesel fuel). Its products and services include landfill gas recovery and utilization; landfill gas gathering system design; feasibility studies and site evaluation; project management; Entec process design and installation; and system operation, monitoring and maintenance.



1310 Rocky Lake Drive Waverley, Nova Scotia Canada BON 250 Telephone: (902) 861-3464 Facsimile: (902) 861-3522 Contact: Joe Dunford, President

EnviroSeal Engineering Products Ltd. has experience in dealing with the problems of fluid scaling. It has developed Sealsaver which greatly extends the operating life of mechanical scals and packing by as much as 15 times when installed in the scal cavity of industrial pumps. All grit is removed from the pumpage and expelled from the aree of the scal. Lontern Ring Coll consists of pure teflon lantern ring material in a coil form. All machining of lantern rings for pumps, agitators, etc. is eliminated. It is available in all common cross sections in 6 ft. and 12 ft. lengths.

1. 1. 1. 19.302 Epton Industries Inc. 1000 2558

521 King Street West Kitchener, Ontario Canada N2G 1C5 Telephone: (519) 744-6530 Facsimile: (519) 744-7566 Contact: Jim Aylward, Vice President

Epton Industries Inc. is an integrated manufacturer of engineered rubber and plastic products for the mining, petroleum and other primary industries. Its products for the oil and gas industry include rotary, vibrator, choke and kill hoses; blow-out preventer hoses; v-belts; steam hoses; and hydraulic hoses. The company's products are exported to the U.S. and Mexico.



P.O. Box 67 Nislaı, Alberta Canada TOC 2G0 Telephone: (403) 955-2693 Facsimile: (403) 955-3341 Contact: Bruce Bembridge, President

F C Manufecturing Ltd., through their Vac Inductor Products Division, designs and manufactures vacuum equipment. The company mounts tanks and various components on the clients' choice of chassis. Many of their various models are offered with complete vacuum/pressure systems. The company exports to the U.S. and U.S.S.R.



P.O. Bax 3962, Station D Edmonton, Alberta Canada TSM 2V2 Telephone: (403) 453-3271 Facsimile: (403) 455-2432 Telex: 037-3094 AnswerBack: farr can ltd. Contact: Karen Harrod, Administrative Manager

Farr Canada Ltd. employs more than 300 people and manufactures a large variety of products to service the oil, transportation and construction industries worldwide. It offers 14 mode sof hydraulic tubing and casing tongs that are utilized in work over and drilling applications on both land and offshore rigs. Farr has been involved with the casing and tubular section of the oil field industry for more than 25 years. It also custom designs drill pipe tongs and hydraulic power tongs for the slant drilling industry.





Finube Inc., Sireghi Canada Division

1175, boulevard Alphonse-Deshaies Becancour, Quebec Canada GOX 1B0 Telephone: (819) 294-2521 Facsimile: (819) 294-9505 Contact: Michel Labelle, General Manager

The Biraghi Canada Division of Fintube Inc. provides both a standard and customized line of high frequency finned tubes, studded tubes and economizers to refineries and the petrochemical industry, and for heavy oil recovery. The company provides a full range of extended surface tubes. The high frequency (HF) resistance welding process used by Biraghi to attach the fins to the exterior of the tube assures a high integrity metallurgical bond. This process is designed for high temperature, corrosive, erosive and other heavy duty applications.

Fleming Oilfield Services Ltd., Reef Mud Division

360, 800 - 6th Avenue S.W. Calgary, Alberta Canada T2P 3G3 Telephone: (403) 261-3925 Facsimile: (403) 261-8863 Contact: James K. Fleming, President

The Reef Mud Division of Fleming Oilfield Services Ltd. was established in 1975 and offers generic and proprietary chemicals, as well as engineering services to the resource exploration industry. It supplies all of the chemicals required to drill and complete oil and gas, mining, water and geothermal wells. Engineering services and supervision of critical fluid properties are also provided. Many products have been specifically designed to provide environmental protection while drilling or during clean-up operations. Reef Mud is very successful at programming and servicing the more difficult and technically demanding projects. The widely varied geology and

geography of the exploration industry in Canada has provided Reef Mud with the experience and technical ability to service any project worldwide.

Fluor Daniel Canada, Ins.

Bax 8799, Station F Calgary, Alberta Canada T2J 4B4 Telephone: (403) 259-1324 Facsimile: (403) 259-1224 Telex: 0636700853 Contact: Keith McCrae, Vice President, Marketing

Fluor Daniel Canada, Inc. was incorporated in 1949 to serve the needs of the Canadian oil and gas industry. The company offers a wide range of resources, capabilities and experience for the plenning, development, engineering, procurement, construction and maintenance of oil and gas facilities. It has the capability to execute projects which range from feasibility studies and conceptual designs through to major EPC projects. The company's services have been provided to clients in the U.S., Asia, Europe, Australia and Mexico.



904, 825 - 8th Avenue S.W. Calgary, Alberta Canada T2P 2T3 Telephone: (403) 266-5543 Facsimile: (403) 266-7401 Contact: Robert Zeer, President

For more than 25 years, Foothills Diamond Coring Ltd. has provided quality coring service to the oil business in Western Canada. The company's product line includes core bits, jars, core barrels and related parts in a variety of sizes. The style of its equipment conforms to international standards. Sideorak Coring, developed and patented by Foothills, is a process in which operators are able to cut 10 ft. of continuous 2% in. diameter core after their hole is drilled and logged. This is accomplished by deflecting the coring process at any interval and cutting core along side the existing bore hole.

Four M. Ollfield Services Ltd.

48 Avenue & 44 Street S.E. Redwater, Alberta Canada T0A 2W0 Telephone: (403) 942-3888 Contact: Brian J. MacKenzie, General Manager

Four M Oilfield Services Ltd. was formed in 1971 as a well service contractor. The company manufactures customized spooling equipment and has developed *Hydra Spooler*—a totally enclosed skid mounted submersible cable spooler which is capable of spooling and transporting a reel of cable. The company exports to Asia.



1993 Leslie Street Toronto, Ontario Canada M3B 2M3 Telephone: (416) 449-1405 Facsimile: (416) 449-0536 Telex: 069-66685 AnswerBack: frecomp tor Contact: Ergo Karuks, President

FRC Composites Limited researches and develops new products in the field of polymer modified and non-reinforced and fibre/fabric reinforced cementitious materials. Three of their principal products are Tapecrete. Marine Coating and FRC-80. These consist of a mixture of standard Portland cement, fly ash, water, inert filler materials, such as silica sand or other hard mineral aggregates, and acrylic polymer dispersion. In some applications, alkali resistant glass fibres or glass fabric or steel fibres are incorporated into the system. Their sealers are a complex mixture of an acrylic polymer dispersion and numerous chemicals normally available locally from the chemical industry. These products primarily protect



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structures against corrosion. FRC-80 is used extensively on oil and gas pipelines. Their products are used in most oil producing regions of the world.

FRE Pultrusions Inc.

4805 - 82nd Avenue Edmonton, Alberta Canada T6B 0E5 Telephone: (403) 466-3588 Facsimile: (403) 468-9504 Contact: Robert Santarossa, General Manager

FRE Pultrusions Inc. designs and manufactures advanced composite producta. Manufacturing processes include filament winding, pultrusions and hand lay-up. Products range from conduit to the Space Station Arm Boom. The company offers fibreglass sucker rod, pressure pipe, downhole tubing, cable tray and duct rodding. Specialized advanced composite products can be custom designed and manufactured. Full FEA, laminate analysis, laboratory testing and field inspection engineering services are also provided.

Frontier Engineering Consulting Ltd 

200, 816 - 7th Avenue S.W. Calgary, Alberta Canada T2P 1A1 Telephone: (403) 265-3900 Facsimile: (403) 266-1250 Contact: Philip J. Murray, President and General Manager

Frontier Engineering & Consulting Ltd. was formed in 1977 to provide engineering and consulting services. The company's operations encompass all aspects of exploration, development and production for both land and offshore oil and gas activities. Its range of services includes drilling project design, engineering, supervision, consultation and management; well completion design, engineering and supervision; reservoir engineering and evaluation; well work over program design, engineering and supervision; secondary recovery project; pipeline, oil treatment and gas processing facility design, specification, procurement, construction and inspection; equipment and service procurement; and oil field training programs.

Galaxy Oilfield Service Ltd.

5704 - 92nd Street Edmonton, Alberta Canada T&E 4Y& Telephone: (403) 437-3741 Facsimile: (403) 438-4481 Contoct: Patrick Zowtuck, President

Galaxy Oilfield Service Ltd. manufactures wellheads and oil field related products. It is licensed by the American Petroleum Institute to apply the official API monogram to its wellhead component product line. The company manufactures wellheads for conventional oil and gas applications, as well as high temperature heavy oil applications. Other products include polish rod stuffing boxes, one bolt couplings, four bolt clamps and swivels.

Gentronics, Petroleum Services Limited 363

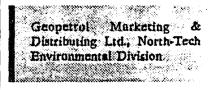
9, 2216 - 27th Avenue N.E. Calgary, Alberta Canada T2E 7A7 Telephone: (403) 250-3800 Facsimile: (403) 250-9635 Contact: Leo C. Perry, Vice President, Marketing

Gentronics Petroleum Services Limited provides engineering consulting and engineering design services to the oil and gas industry. With its experienced staff of petroleum engineers and its association with Genco Pressure Control Limited, the company provides complete reservoir modelling and well testing services. In conjunction with their engineering services, Gentronics offers a complete range of Quartz Crystal Electronic surface, subsurface pressure and temperature measurement instrumentation.

Geomatics Limited

P.O. Box 8143, 34 Glencoe Drive St. John's, Newfoundland Canada A1B 3M9 Telephone: (709) 364-6015 Facsimile: (709) 364-3550 Telex: 016-4596 AnswerBack: nordeo Contact: GJ. Hodgson, General Manager

Geonautics Limited provides a fully integrated offshore survey service and has many years of experience in marine logistics and high resolution geophysical services. Their capabilities are directed at the definition of seabed and shallow geologic conditions pertinent to engineering concerns. Surveys utilizing echo sounder, sidescan sonar, sub-bottom profiler and multichannel high resolution seismic are conducted for drill site geohazards, production site investigations. power cable and pipeline routing and regional geological studies. The company's expertise has been developed offshore of Eastern Canada where more than 60 drill sites, three production sites and four pipeline routes have been surveyed.

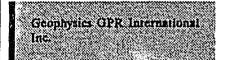


6029 - 103A Street Edmonton, Alberta Canada T6H 2J7 Telephone: (403) 434-9431 Facsimile: (403) 438-6984 Telex: 037-42552 Contact: Louis Galick, General Manager

North-Tech Environmental Division of Geopetrol Marketing and Distributing Ltd. provides environmental products and services. Their spill recovery products include oil sorbents—polypropylene, biosorb biodegradable oil sorbent; storage



units, containment booms, skimmer, portable tanks, pumps, hoses and fittings. The company also provides spill clean-up and recovery services, and training services.



2545, rue Delorimier Longueuil, Quebec Canada J4K 3P7 Telephone: (514) 679-2400 Facsimile: (514) 521-4128 Telex: 055-60495 Contact: Michel Gariépy, Vice President, Research and Development

Geophysics GPR International Inc. is a consulting engineering firm, specializing in geophysics, geology, data interpretation and specialized training. The company concentrates on mineral and oil exploration, drilling programs, site evaluation, large civil engineering works, underwater reconnaissance, hydrogeology, vibration and blasting control, environmental protection, technology transfer, and staff training. GPR's instruments are technologically advanced, precise, lightweight and adaptable, and allow their staff to perform the work required in remote sites.

Geotechnical Resources Ltd.

4500 - Sth Street N.E. Calgary, Alberta Canada T2E 7C3 Telephone: (403) 230-4000 Facsimile: (403) 230-4370 Telex: 03-821172 AnswerBack: cgy Contact: Arne Matiisen, Chairman

Geotechnical Resources Ltd. offers the complete range of services required to efficiently explore, develop and produce petroleum resources. The company has provided laboratory services, laboratory equipment and consulting services for clients worldwide. Geotechnical offers its

clients an integrated source for complete formation and reservoir evaluation for computer modelling of any reservoir for producing condition or EOR methodology. All aspects of Geotechnical's operations and business are supported by a services group. Standard services for core, petrology, fluids and gases are complemented by a full range of PVT. special core analysis, core displacement and reservoir simulation services. In providing these services, the company can integrate the analysis results to provide cost effective, continuous control of sophisticated, multiphase laboratory programs.

# Global Thermoelectric Inc.

333 - 50th Avenue S.E. Calgary, Alberta Canada T2G 2B3 Telephone: (403) 253-3552 Facsimile: (403) 253-4607 Telex: 038-24680 AnswerBack: global teg cgy Contact: William Lancaster, President

Global Thermoelectric Inc. manufactures remote power and stationary and portable thermoelectric DC generating systems (20 - 5 000 W). It also provides engineering and complete mechanical services, specializing in stainless steel, anconal, aluminum and hastelloy, sheet metal working and light alloy welding. Their generators are used in 47 countries.



6, 4312 Ogden Road S.E. Calgary, Alberta Canada T2G 4V3 Telephone: (403) 290-1720 Facsimile: (403) 265-2851 Contact: Ambrose Chun, Vice President, Marketing and Sales

GN Corporations Inc. has served the international oil and gas industry for 25 years as a precision manufacturer of highpressure oil field equipment, wireling equipment and trucks, and downhole tools. GN's general line of oil field equipment includes low and high-presente unions. connections, flanges, treating irons/flowlines, check valves, ball injectors/ball guns, tree savers designed to protect the wellhead from high-pressure and corrosive or abrasive fluids, a complete line of manual and hydraulic wireline BOPs, stuffing boxes, lubricator risers, wireline tools and completion equipment.

Gris Gun Manufacturing Ltd 

R.R.1

Red Deer, Alberta Canada T4N SE1 Telephone: (403) 340-1017 Facsimile: (403) 340-1018 Contact: Delton Campbell, President

Gris Gun Manufacturing Ltd. was founded in 1979 to serve the completions and work over sector of the oil and gas industry. Gris Gun pioneered the development of the expendable perforating gun and introduced the first large expendable gun to the oil industry. Since then, large expendable guns have steadily grown in popularity as an efficient completions tool. The tubular charge loading strip was another invention of Gris Gun. These products are known for their performance successes in some of the world's toughest downhole conditions.



#### Hall Compressors Canada Limited

4604 Manitoba Rozzi S.E. Calgary, Alterta Careada T2G 4B8 Telephone: (403) 287-0526 Facsimile: (403) 243-3155 Contex: A.F. Moon, President and General Manager

Hall Compressors Canada Limited offers a line of balanced-opposed, reciprocating, 2 throw, 75 to 1 200 HP, 600 to 1 800 rpm compressors for gas applications. The unique drive-through crankshaft provides the customer with the ability to add or delete throws with a minimum amount of cost and time. Factory parts are available from a very substantial inventory, and service is available through factory authorized personnel. The Hall compressor is curre win use throughout the U.S. and Canada. Its applications include vapour recovery, pipeline boosters, gas injection and landfill gas for cogeneration. These units may be engine or electric motor driven.

# Hangwell Coll Tubing Services

104, 3750 - 19th Street N.E. Calgary, Alberta Canada T2E 6V2 Telephone: (403) 250-8004 Facsimile: (403) 291-5408 Contact: Fred Jagert, President

Hangwell Coil Tubing Services Ltd. was founded in 1988 to meet a growing demand for coil tubing wellhead hangers, accessories and parts. This system was designed specifically as a safe and economical way to perform tasks never before challenged—landing and retrieving  $\sim$  tinuous tubing in a well under pressure. Hangwell is an engineering, manufacturing and service company for all types of coil tubing wellheads and accessories.

# Hardy BBT Limited

219 - 18th Street S.E. Calgary, Alberta Canada T2E 615 Telephone: (403) 248-4331 Facsimile: (403) 248-2188 Contaci: Brian E.W. Dowse, Senior Vice President

Hardy BBT Limited provides specialized engineering and environmental services to the eil and gas industry. With more than 450 staff and 20 office locations, the company has completed more than 10 000 assignments in its 40 years of service. The company provides professional testing services at every stage of an oil and gas project. Its specialties include pipeline corridor location studies and feasibility studies. The company is normally involved in a project from the site selection stage through to the quality assurance stage. Clean-up of past oil and gas aites is an area of expanding expertise.



176, rue Peel Montreal, Quebec Canada H3C 2G7 Telephone: (514) 935-4623 Facsimile: (514) 935-2553 Contact: Robert A. Monet, Senior Vice President

Henderson, Barwick Inc. operates two fully equipped production facilities. Its machine shop performs the precision machine operations required in the manufacture of heat exchangers, pressure vessel and valve components, including lathes, boring mills, milling machines and radial arm drills. It also manufactures a complete range of light wall, stainless steel pipe and fittings, including smooth flow elbows, tees, reducers, Vanstone Rings and backup flanges.

# Hi-Point Industries Ltd.

P.O. Box 2535, Station M Calgary, Alberta Canada T2P 2N6 Telephone: (403) 290-6650 Facsimile: (403) 290-7751 Telex: 038-21503 AnswerBack: nova cgy Contact: S. Ho Lem, President and Secretary

Hi-Point Industries Ltd. was incorporated in 1983 and manufactures peat-based oil absorbent products in particulate form (OCLANSORB) and tubular sock form (SORB-SOX). OCLANSORB is non-toxic, offers instant absorption, containment and retention; absorbs oil (not water); meets Canadian and U.S. leachate standards and is 15 times more effective than day. SORB-SOX are ideal for industrial and in-plant use and are ten times more effective than the leading corn husk absorbent socks. Their products are being used by fire departments, airlines, emergency response teams, transportation companies, armed forces, hazardous materials management consultants, oil refineries, and many industrial companies. These products are exported to the U.S., U.K., Western Europe and Australia. Agents represent the products in all major European countries and the Middle East.



260, 11791 Hammersmith Way Richmond, British Columbia Canada V7A 5C6 Telephone: (604) 241-0086 Facsimile: (604) 241-0087 Contact: John Panusa, General Manager

Hobic Oil Bit Industries Corp., established in 1986, manufactures diamond core and drill bits in diameters to 12.25 inches. Hobic bits have been sold throughout Canada, the U.S. and Australia.





#### Hooper Welding Enterprises Limited

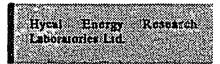
1390 Advance: Ross Oakville, Ontario Canada L&L &L& Telephone: (416) 827-2600 Facsimile: (416) 827-1600 Contact: Jim Wright, Sales Manager

Hooper Welding Enterprises Limited specialize in pressure vessels, storage tanks, and structural fabrication. Hooper has the technology to provide quality welding using a variety of carbon steels, stainless steels and many exotic materials. They offer over 25 welding procedures and puarantee the appropriate process for the j:.b. The company has a staff of 40 professionals and employs in-house design and engineering espabilities. Hooper serves clients in the U.S., South America and Asia.

Hutchinson Body, Mudguard and Padiator Works Ltd.

20 Alness Street North York, Ontario Canada M3J 3H4 Telephone: (416) 661-9330 Facsimile: (415) 661-9165 Contact: Norman F. Hutchinson, President

Hutchinson Body, Mudguard and Radiator Works Ltd., established in 1918, is a major Canadian manufacturer of custom built tankers for the Canadian and U.S. markets. Available in lengths to 48 ft. and with up to five adles, these tankers can be built in steel, stainless steel or aluminum.



1338A - 36th Avenue N.E. Calgary, Alberta Canada T2E 6T6 Telephane: (403) 250-5800 Facsimile: (403) 291-0481 Telex: 03-821172 Contact: Douglas W. Bennion, President

Hural Energy Research Laboratorics Ltd. performs applied research and provides consulting services to the petroleum industry in the area of reservoir engineering, production engineering, and enhanced recovery. The company's engineers have substantial experience in miscible flooding, heavy oil recovery, simulation and all other areas of reservoir and production engineering. It has research facilities, engineering consulting specialists, and a complete set of mathematical simulators. Hycal has performed work for over 70 companies in Canada, the U.S., Europe, Asia, Africa and South America. It has provided design data and developed processes for a number of pilots and reservoirs in Canada, the U.S., China, Madagascar, Turkey and Peru.

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400, 119 - 14th Street N.W. Calgary, Alberta Canada T2N 1Z6 Telephone: (403) 283-7710 Facsimile: (403) 283-4764 Telex: 03-821172 Contact: Tony Vysniauskas, Principal and Director

Incorporated in 1976, Hyprotech Ltd. has grown to become an internationally recognized company, specializing in consulting, engineering, and computer software services to all sectors of the energy industry. Hyprotech is the author of the *HYSIM* flowsheet simulation program. It was designed for the gas processing, oil refining, petrochemicals,

Industry. Science and Technology Canada

and Industrie, Sciences et 3a Technologie Canada chemicals, and synthetic fuel industries. HYSIM is a complete and comprehensive flowsheet simulator, designed for. steady-state simulation of gas processing, oil refining, petrochemical, chemical and synthetic fuels facilities. This proven mainframe simulation package has been converted to microcomputer technology. The microcomputer version is identical to the mainframe version, but has the advantages of a user-dedicated environment and extensive graphics.



45831 Hocking Avenue Chilliwack, British Columbia Canada V2P 1B5 Telephone: (604) 795-9491 Facsimile: (604) 792-3806 Contact: Fred J. Feistmann, Vice President

LM.W. Industries Ltd., established in 1958, is a world leader in the manufacture of cold roll forming equipment and related machinery. In 1985, a subsidiary company was formed to manufacture dedicated natural gas compressor and dispensing equipment for vehicular applications. The robust radial throw compressors feature capacities to 400 scfm and discharge pressures to 4 000 psig. The equipment is very versatile-can be adapted easily to different well or line conditions, is water-cooled, has a low rpm and non-lubricated cylinders. The company has supplied compression equipment for urban transit bus fleet fuelling facilities in The Netherlands and Colombia, and is currently designing the equipment for the B.C. Transit bus project in Vancouver, Canada.



### I.P. Constructors Ltd.

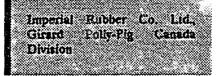
5430 - 30th Street S.E. Calgary, Alberta Canada T2C 1G2 Telephone: (403) 279-7553 Facsimile: (403) 279-3635 Telex: 03-821154 AnswerBack: ip constrs cgy Contact: Clint Elgar, Export Director

I.P. Constructors Ltd., incorporated in 1976, is an engineering company and serves a broad range of clients throughout the world in the oil and gas, industrial process and resource industries. The company's services include engineering and detailed design; equipment manufacturing and assembly of piping; and structural, electrical and instrumentation materials and equipment for modular process equipment packages and facilities. It also custom manufactures pressure vessels, pipeline pigging equipment, process vessels, water treatment and injection equipment.

ICI Construction Economises of America, Inc.

64 Guided Court Rexdale, Ontario Canada M9V 4K6 Telephone: (416) 743-4854 Facsimile: (416) 743-5936 Contact: Norman H. Matthews, President

ICI Construction Economists of America, Inc. is a Canadian company that provides construction cost consulting and quantity surveying throughout North America. The firm's services include construction cost consulting and analysis, quantity surveying, construction litigation support services, mortgage monitoring/payment certification services for lending institutions, scrutiny of change orders on large projects, tender support services, 'expert witness' in construction litigation, and project management.



P.O. Bax 139 Nisku, Alberta Canada TVC 2G0 Telephone: (403) 955-8780 Facsimile: (403) 955-8921 Contact: Garry Farr, Sakes Manager

Imperial Rubber Co. Ltd. has been manufacturing and marketing rubber and urethane products for the well servicing and pipeline industries for 10 years. These products include rubber and urethane cement plugs, wooden cement plugs, conveyor idler discs, bridge pads, inflatable packers, packer elements, seals, Maxi-Cup pigs, Masi-Discs pipeline pigs, and custom moulded polyurethane and rubber products. The company's Girard Polly Pig Canada Division manufactures Polly Pigs in sizes ranging from 2 to 56 inches. Their internal pipeline cleaners are made of the highest quality polyurethane flexible foam and with a variety of polyurethane rubber coating and abrasives for dryers, wipers and scrapers; these can negotiate 90 degree elbows.

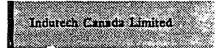
Import Tool Corporation, Ltd.

440, 910 - 7th Avenue S.W. Calgary, Alberta Canada T2P 3N8 Telephone: (403) 261-3032 Facsimile: (403) 263-4955 Contact: Robert K. MacLeod, President

As a service supply and manufacturing company, Import Tool Corporation, Ltd. (ITC) has been servicing industry since 1952. It has developed cementing tools, including the *ITC Casing Swivel* (to allow for rotation of casing in the tension above a stage cementing collar). This product is available for world markets and is manufactured in 4.5, 5.5, 7 and 9 % in. sizes. It is used by many operators, including Esso, Mobil and Shell. Integra Casting Inc.

1333 Chevrier Boulevard Winnipeg, Manitoba Canada R3T 1Y4 Telephone: (204) 453-6833 Facsimile: (204) 453-3803 Contact: H.H. Roeder, Manager, Specialty Engineering

Integra Castings Inc. is a major producer of oil pumping unit castings. The castings weigh from ounces to 5 000 lb. in various grades of ductile and grey iron, using green sand and no-bake molding processes. The company's markets include Canada and the U.S.



5210 - S4th Avenue S.E. Calgary, Alberta Canada T2C 2V8 Telephone: (403) 279-2222 Facsimile: (403) 236-1522 Contact: Derek J. Wolstenholme, President

Indutech Canada Limited exports to three continents and offers extensive expertise in the field of induction heating and the quenching of steel. The company has developed and applied this technology to pipe bending procedures and the production of an abrasion resistant steel pipe-offers all of the advantages of normal carbon steel plus excellent resistance to abrasion. Indutech also manufactures NASPipe-abrasion resistant steel pipe that is produced by induction heating and controlled quenching. A complete piping system, including bends and fittings, is available. NASPipe has proven to be an economic investment in applications where piping systems have required frequent rotation and replacement. The ability to ultrasonically monitor wear enables the operator to schedule maintenance and avoid potential environmental damage.



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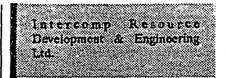
Industrie. Sciences et Technologie Canada



#### INTERA Information Technologies Corporation

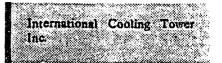
2500, 101 - 6th Avenue S.W. Calgary, Alberta Canada T2P 3P4 Telephone: (403) 265-0900 Facsimile: (403) 265-0499 Telex: 03-824537 Contact: Marc C. Wride, Vice President, Marketing

**INTERA Information Technologies** Corporation provides data collection, data processing and data interpretation products and services to petroleum and resource companies and governments worldwide. Through the efforts of 500 people in three business units, the company is a leading provider of these technologies in two principal business segments-petroleum and resource management and mapping reconnaissance-to a broad base of customers in approximately 85 countries. The company's U.K. business unit supplies engineering software, exploration data products, and consultancy services to the petroleum industry. The Canadian-based business units specialize in providing remote sensing data products, such as radar image maps from proprietary STAR systems, magnetic maps from airborne geophysical equipment and the reproduction of infra-red and photographic products from aerial survey systems. STAR-MAP, a new process which is close to developmental completion, produces topographic radar images at scales of 1:50 000 and 1:10 000, with contour overlays and associated digital elevation models (DEMs).



1000, 840 - 7th Avenue S.W. Calgary, Alberta Canada T2P 3G2 Telephone: (403) 265-6550 Facsimile: (403) 266-5202 Telex: 03-824857 AnswerBack: sti cgy Contact: Peter Stanton, President

Intercomp Resource Development & Engineering Ltd. offers fully integrated consulting services to the upstream petroleum industry. Its services cover the disciplines of geology/petrophysics, reservoir engineering, production/facilities engineering and pipeline engineering. Engineering studies have been conducted worldwide and cover the complete range of services from relatively routine pool reserves evaluations to complex studies involving full field development plans for implementation of enhanced oil recovery schemes, such as hydrocarbon solvent floods or in situ compustion projects. The engineering consulting services are supplemented by formal training programs in reservoir computer simulation, as well as application training for our clients. A full spectrum of petroleum engineering software products are also available which complement the various consulting disciplines.



3310 - 93nl Street Edmonton, Alberta Canada TöN 1C7 Telephone: (403) 469-4900 Facsimile: (403) 469-5858 Contact: Larry Johnston, General Manager

International Cooling Tower Inc. has provided design, site and application engineering, equipment supply, maintenance, inspection, repair and upgrade on industrial cooling towers for more than 30 years. The company employs 75 people and owns a modern engineering and parts supply facility. The company sells and erects new cooling towers in Western Canada, ranging in size from 500 to 28 000 gal./min. per cell capacity. The company has gained invaluable experience in cold weather application and operation of cooling towers. In addition, the company repairs, services, tests and upgrades all makes of cooling towers, and maintains the largest stock of cooling tower components in Canada. The company serves the Western Canadian and U.S. markets. Its services are available on a worldwide basis.



1174 Welch Street North Vancouver, British Columbia Canada V7P 1B2 Telephone: (604) 986-5600 Facsimile: (604) 986-7125 Contact: J. Scott Morrison, Sales Manager

International Hard Suits Inc. was formed in 1986 to produce the NEWTSUIT—an atmospheric diving suit. Beginning with the development of a pressure balanced rotary joint, a deep sea diving suit was designed around the joint. The NEWTSUIT allows for deep diving capabilities to 1 000 ft. at a fraction of the cost of alternative methods; eliminates all of the problems of decompression while allowing excellent mobility on the sea

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floor; can be operated with a crew of four; is easily aircraft transportable and requires very little deck space. A thruster pack for mid-water work has been developed which allows the *NEWTSUIT* to be used for surveys, inspections and production platform maintenance.

International Pipeline Engineering Limited

450 Midwrst Road Scarborowyth, Ontario Canada. MIP 3A9 Telephone: (416) 288-0896 Facsimile: (416) 288-1416 Contact: Fraser Farmer, Manager, Marketing

International Pipeline Engineering Limited (Pipetronix) is a subsidiary of TransCanada Pipelines Limited. TransCanada has owned and operated one of the world's largest natural gas transmission systems for more than 25 years. Pipetronix makes TransCanada's expertise in the natural gas industry available to pipeline owners and operators, as well as to governments involved in the natural gas industry. One of the major services offered is the inspection of oil and gas pipeline products to detect metal loss. dents and other pipeline defects. This service, using magnetic flux inspection tools, is provided worldwide.

International Radiography and Inspection Services (1976) Ltd.

5908 - 96th Street Edmonton, Alberta Canada T6E 3G3 Telephone: (403) 437-2022 Facsimile: (403) 436-4873 Contact: Bob Taylor, Manager, Marketing and Sales

International Radiography and Inspection Services (1976) Ltd. is a non-destructive and visual inspection service company. Established in 1953, the company conducts training courses and seminars for its staff and clients. The Non-destructive Testing Division's services include radiographic inspection, ultrasonic inspection, magnetic particle inspection, liquid penetrant inspection, eddy current inspection, positive material identification, infra-red heat survey, hardness testing, and videoprobe inspection.

The Quality Control/Quality Assurance Division offers testing and checking materials, welding inspection, dimensional checking, shop inspection, witnessing of performance tests, packing and marking inspection, progress reporting, expediting, quality assurance, pipe inspection, and welder and operator performance tests (A.B.B. approved).



P.O. Bax 1670 Regina, Saskatchewan Canada S4P 3C7 Telephone: (306) 949-3530 Facsimile: (306) 949-3500

IPSCO Inc. is a major Canadian steelmaker with plants throughout Western Canada and the U.S. IPSCO manufactures a diverse range of steel and steel products, including structural sections and pipe. The company's markets are primarily in North America and Asia. Iron Horse Compression Ltd. •

9852 - 33rd Avenue Edmonton, Alberta Canada T6N 1C6 Telephone: (403) 462-6847 Facsimile: (403) 450-0124 Contact: Gordon J. Sheward, Director

Iron Horse Compression Ltd. manufactures a low-maintenance, very efficient beam mounted gas compressor which is operated by the walking beam of a pump jack. The compressor is used to enhance oil recovery from older wells with lower bottom hole pressure and high casing pressure. It is non-lubricated, manufactured in accordance with API 618 and ASME VIII, and operates efficiently in temperatures ranging from -40° C to + 50° C. Return on investment is often achieved in less than two months. The units can enable existing pump jacks, powered by LPG to be converted to solution gas as a fuel. It also manufactures a natural gas desiccant dehydrator. With no moving parts, this single tower unit produces maximum dew point depression and operates well with natural gas inlet temperatures of 20° C and lower.

Isko Heat Exchangers Ltd.

2700, rue De Miniac, St-Laurent, Quebec Canada H4S 1K9 Telephone: (514) 337-5192 Facsimile: (514) 337-5482 Contact: Ishy Khan, President

Isko Heat Exchangers Ltd. designs and manufactures customized shell and tube heat exchangers for the petrochemical, gas and other industries. The exchangers are designed to meet ASME, TEMA, CSA and other international codes.



### Island Sandblasting (1987) Ltd.

P.O. Bax 2561 Charlottetown, Prince Edward Island Canada C1A 8C2 Telephone: (902) 569-4400 Facsimile: (902) 569-4400 Contact: Neil A. Shaw, President

Island Sandblasting (1987) Ltd. performs sandblasting, waterblasting, coating applications, structural painting, glass beading, and storage tank lining. It has worked in plant shutdown conditions, oil refineries, and on marine vessels and pipeline docks.

ITT Caron Canada Limited

Four Cannon Court Whitby, Ontario Canada L1N 5V8 Telephone: (416) 668-8881 Facsimile: (416) 668-4152 Telex: 06-981357 Contact: Donald McCool, Product Manager

ITT Cannon Canada Limited is a major supplier of specialized electrical and fibre optic interconnect devices to the oil and gas industry. The company continues to refine and improve hostile environment interconnect devices for exploration. offshore and drilling applications. A leader in geophysical exploration, the company developed metallized ceramic technology for use in single pin feed-thrust and high temperature/high-pressure, hermetically sealed, multipin connector, this increased reliability and performance to unprecedented levels. Towed array couplers were developed for use in offshore applications; these couplers reduced weight and overall size and allowed for increased quantities of information to be processed.

#### ITT Industries of Canada Ltd., ITT Barton Instruments

3840 - 11A Street N.E. Calgary, Alberta Canada T2E 6M6 Telephone: (403) 291-4814 Facsimile: (403) 291-0060 Telex: 038-21536 Contact: Joseph Incontri, General Sales Manager

ITT Barton Instruments, a division of ITT Industries of Canada Ltd., is engaged in the design, manufacture, sale and service of process instruments for worldwide markets. The company provides mechanical, electromechanical, and electronic instrumentation that sense, monitor, compute, record and control various conditions of liquids and gases. This instrumentation is used 20 measure variables such as flow, level, differential pressure, density, corrosion and other physical and chemical properties of fluids.

# Jacques, Whitford Group Ltd.

3 Spectacle Lake Drive Dartmouth, Nova Scotia Canada B3B 1W8 Telephone: (902) 468-7777 Facsimile: (902) 468-9009 Contact: David V. Fanning, Director, Marketing

Jacques, Whitford Group Ltd. is an Eastern Canada-based engineering group, established in 1972, and offering a comprehensive range of geotechnical, hydrogeological, environmental, materials and mining engineering, petroleum services, and other related consulting services to clients in industry and government. The company's 250 professional staff provide geotechnical investigations, foundation and earthwork design, offshore geotechnical investigations, materials testing/inspection-CSA, ASTM, materials research, geomechanics, rock mechanics, subsidence evaluations, ice/Arctic

engineering, environmental impact studies, environmental audits, contaminant investigation and remediation, waste management, hydrogeology, water resource assessment, underground storage tank assessment, general site assessments, archaeological assessments, and agricultural engineering.

Jacques/McClolland Geostiences Inc.

3 -pectacle Lake Drive Dartmouth, Nova Scotia Canada B3B 1W8 Telephone: (902) 468-7777 Facsimile: (902) 468-9009 Contact: David V. Fanning, Director, Marketing

Jacques/McClelland Geosciences Inc. was founded in 1980 to provide offshore geotechnical and geophysical services for hydrocarbon exploration on Canada's East Coast. The firm is backed nationally by the complete engineering and environmental services of the Jacques, Whitford Group and internationally by their affiliation with Fugro-McClelland BV. The company provides mobilization of specialized drill ships with geotechnical sampling and in situ testing capability, onboard geotechnical laboratory testing, onshore advanced laboratory testing. detailed characterization of sub-seabed geotechnical conditions, analysis of bearing capacity and deformations of gravity-based structures, piles and other structures founded on or below the seafloor, and geophysical and geotechnical services related to marine pipelines and cables. Their clients include national and international companies involved in offshore hydrocarbon exploration and production of marine cables and pipelines.



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#### John T. Hepburn, Limited

7450 Torbram Road Mississauga, Ontario Canada L4T 1G9 Telephone: (416) 671-2200 Facsimile: (416) 671-0499 Telex: 06-968793 AnswerBack: jthepburn msga Contact: Ray Pillon, Vice President, Sales and Marketing

John T. Hepburn, Limited designs and manufactures machinery and equipment for the offshore oil industry (semi-submersible oil rigs and drill ships). Its products include mooring winches, windlesses and fairleaders which are capable of handling any size of wire rope and chain. With its combination traction winch/windlass for efficient handling of combination wire rope and chain mooring lines, Hepburn is a world leader in deep water mooring technology. The company also manufactures special cranes, including hydraulic BOP cranes for the positioning and servicing of blow-out preventer stacks and pipe handling cranes. Hepburn's Underway Replenishment Systems are available for vessels to offshore oil rig transfer.

2200 Lake Shore Bouleverd West Toronto, Ontario Canada M8V 1A4 Telephone: (416) 252-5311 Facsimile: (416) 231-5356 Contact: L. Blake, Manager, Business Development

Kilborn Inc.

Kilborn Inc. serves the oil refining, gas, chemicals, petrochemicals, manufacturing and minerals industries in Canada and abroad. Its services include process design, feasibility studies, cost estimates, detailed design, procurement and construction management. Recent projects and studies have been conducted in the areas of oil refinery process units, utilities and revamps; oil refinery waste management; environmental studies and installation of facilities; plastics compounding and extrusion; polymer chemicals; oil sands and heavy oil upgrading; and plant instrumentation upgrades and replacement. Established in 1947, Kilborn has provided services for more than 1 000 projects worldwide.

King Equipment Manufacturing Corp.

i401 Dundas Street Woodstock, Ontario Canada N4S 7Z3 Telephone: (519) 539-6111 Facsimile: (519) 539-3860 Contact: Ron Ferrell, International Sales Manager

King Equipment Manufacturing Corp. is a manufacturer and distributor of dependable utility and transportation equipment and is dedicated to an immediate response service. The company will analyze customer requirements and engineer a solution which will provide a cost-effective answer to customers' specific problems. Its broad trailer equipment is used for the transportation of a wide variety of payload. The company's trailer equipment includes pneumatic and liquid tanker trailers and low-bed trailers. ranging from 35 to 100 t. Its utility equipment includes digger derricks to 48 000 lb. capacity, stiff boom cranes to 44 000 lb. capacity, material handling aerial devices to 85 ft., truck mounted winches, and hydraulic tools.

Koch Engineering Company Limited

4750 Sheppard Avenue East Agincourt, Ontario Canada M1S 3V7 Telephone: (416) 293-3666 Facsimile: (416) 293-6409 Contact: W. Peter Barker, Executive Vice President

Koch Engineering Company Limited is engaged in the design and manufacture of heat exchangers, including shell and tube type, plate and frame type, and hairpin double pipe/multitube type. Its principal markets are in the oil, chemical, natural gas, petrochemical and electrical power generation markets. The company has exported more than 1 000 exchangers to numerous countries worldwide.

Kubota Metal Corporation, Fahramet Division

25 Commerce Road Orillia, Ontario Canada L3V 6L6 Telephone: (705) 325-2781 Facsimile: (705) 325-5887 Telex: 06-875587 AnswerBack: FAHRAMET ORIL Contact: Allan Gillespie, Vice President, Marketing and Sales

Kubota Metal Corporation is a custom steel foundry with centrifugal and static casting capabilities. Its facilities include complete non-destructive testing, machine shop and fabrication capabilities. Castings are produced in heat resistant, corrosion resistant alloys, as well as carbon and low alloy steels. For the oil and gas industry, Kubota produces bi-metallic tubing and manifolds, reformer tubes, pyrchysis coils, tube sheets and tube supports, and valve and pump bodies. The company serves most world markets.





5915 - 36th Street S.E. Calgary, Alberta Canada T2C 211 Telephone: (403) 279-5838 Facsimile: (403) 279-2192 Contact: Robert A.R. Mills, President

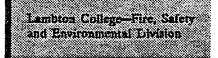
Kudu Industries Inc.

Kudu Industries Inc. supplies a wide range of progressing cavity oil well pumps. It also manufactures the drive systems which may be powered electrically, hydraulically, or with internal combustion engines. Kudu is a leading manufacturer and supplier in Canada. The senior principal of Kudu Industries has worked in the development of the progressing cavity (Moineau) pumps technology since 1978. Progressing cavity pumps feature the lowest capital cost and lowest operating expense for pump volumes to 2 500 bbls/day (400 m<sup>3</sup>/day) with pumping fluid ievels down to 6 600 ft. (2 000 m). These pumps will also pump heavy crude with high sand content which cannot be pumped by any other means.

Labsoft Inc.

803 Maiıland Street London, Ontario Canada N5Y 2W6 Telephone: (519) 667-2041 Facsimile: (519) 667-2042 Contact: Stuart Bevan, President

Labsoft Inc. produces sophisticated control devices for the oil industry. Based on many years of industrial control experience, the devices employ the latest computer technology to enhance oil well productivity. Utilizing the most advanced microchip technology, the company's range of intelligent controllers meet the most exacting production demands. Their *Optimizer* series of products include an advanced sensing device with no moving parts, control software with adaptive capabilities, and all necessary components for easy installation and maintenance. The products are rugged and can be easily installed by field personnel. The devices are user friendly, easy to maintain, withstand environmental extremes, increase production, enhance efficiency, and decrease maintenance costs.



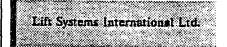
P.O. Box 969, 1457 London Road Samia, Ontario Canada: N7T 7K4 Telephone: (\$19) \$42-7751 Facsimile: (\$19) 332-6583 Contact: L. Sandra Carlton, Industrial Training Consultant

Lambton College provides training to commercial, industrial, marine and defence clients worldwide. Training is available in industrial fire fighting, spill response and control, marine safety, management of emergencies, fire ground commander, transportation of dangerous goods (TDG), emergency response (basic and advanced), TDG regulations, gas testing and confined space entry/rescue, and automotive and general industry fire fighting. In addition to the scheduled training, the college will conduct training at clients' locations.

Lance Industries Inc.

5827 Production Way Langley, British Columbia Canada V3A 4N5 Telephone: (604) 530-0737 Facsimile: (604) 530-0737 Contact: K.A. McIntyre, Vice President, Marketing

Lantec Industries Inc., founded in 1969, serves numerous industries, including oil and gas (exploration, production, servicing and pipe laying). The company's primary products are hydraulically-driven winches, hoists and drives. With 19 years' experience in this field, Lantec will custom build a product to meet exact performance requirements. Manufacturing consists of a full range of production machinery, including turning, boring, milling, drilling and gear cutting. Other manufacturing operations include fabricating, assembly, testing and painting. Lantec utilizes basic proven components and the latest in manufacturing techniques.



P.O. Bax 1089 Battleford, Saskatchewan Canada SOM 0E0 Telephone: (306) 937-7766 Facsimile: (306) 937-2257 Contact: Larry Gabruch, Vice President and General Manager

Lift Systems International Ltd. (LSI) has established itself as one of Canada's major producers of oil field pumping units and has more than 2 000 units currently operating in North America. Its pumping units are based on a proven design technology and have a history of success in demanding heavy oil applications and severe North American climates.

Lister Industries Ltd.

7410 - 68th ue Edmonton, ria Canada Tód 0A1 Telephone: (403) 468-2040 Facsimile: (403) 469-0383 Contact: Don Rowland, President

Lister Industries Ltd., established in 1988, manufactures auxiliary oil field equipment. The company's snow melters feature a 1 500 barrels/day capacity and can also be used for oil spill clean-up. The Lister Rig Mats are support pads for rigs and were originally designed for the Tundra. Lister also manufactures air heaters which are designed to augment the steam heat of the boilers. The company's equipment is used in most oil producing regions of the world, including Canada, the U.S., the U.S.S.R., and the Middle East.





### Luff Industries Ltd.

3528 - 80th Avenue S.E. Calgary, Alberta Canada T2C LJ3 Telephone: (403) 279-3555 Facsimile: (403) 279-5709 Contact: Philip Arnold, Sales Representative

Established in 1979, Luff Industries Ltd. has 35 employees and serves the metal fabrication sector. Its Pressure Products Division designs and builds vessels, piping and SKID packages for the Canadian and U.S. markets.

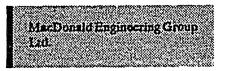


406 - 22nd Avenue Nisku, Alberta Canad.: TOC 2G0 Telephone: (403) 955-8971 Facsimile: (403) 955-2373 Telex: 037-41484 Contact: Lance Grant, Sales Manager

Lynx Tool Company Ltd., originally established in 1977, manufactures downhole drilling tools for the Canadian and U.S. oil industry. These tools include drill collars, heavy-wall drill pipe, reamers, stabilizers, combo tools, subs, and low valves. Lynx' products are available for worldwide markets. M & M Manufacturing Ltd. Partnership

61 Estates Road Darmouth, Nova Scotia Canada B2Y 4K3 Telephone: (902) 465-7675 Facsimile: (902) 465-4102 Contact: Besim Halefoglu, Vice President, Commercial and Design

M & M Manufacturing Ltd. Partnership, founded in 1980, provides manufacturing services to the offshore sector of every continent. It provides customized high quality steel and alloy products to the industrial, offshore and defence sectors. The company also provides refit, upgrade and maintenance services. Its products include offshore structures, decks, modules and pallets, pressure vessels, high-pressure piping and furnaces.



600, 1177 - 11th Awrue S.W. Calgary, Alberta Canada T2R 1K9 Telephone: (403) 228-3366 Facsimile: (403) 245-0219 Telex: 03-827769 AnswerBack: macdeng Contact: Michael A.P. Diening, Vice President, Business Development

MacDonald Engineering Group Ltd., established in 1965, originally specialized in reservoir engineering. Today, the company provides detailed engineering design services for all of the many disciplines in the oil and gas industry. It also operates a construction company in order to provide a complete turnkey package for clients. A full computer hardware and software design and implementation service, utilizing advanced CAD systems, is also provided. The company's services are available worldwide. MacLaren Plansearch Limited

200, 5657 Spring Garden Road Halifax, Nova Scotia Canada B3J 3R4 Telephone: (902) 421-3200 Facstimile: (902) 425-4464 Telex: 019-22718 AnswerBack: lavalinhfx Contact: S.G.P. Skey, General Manager

MacLaren Plansearch Limited provides oceanographic, meteorological, environmental studies, as well as operational and consulting services to industry and government. The combined skills of oceanographers, engineers, scientists, meteorologists, programmers and field technicians provide a range of services from basic research through field studies, data processing, numerical modelling and hindcasting studies, and offshore and coastal environmental support. Some of the numerous projects conducted by the company are oceanographic and meteorological data acquisitions, processing and analysis for several offshore operators on the East Coast, West Coast and Beaufort Sea; investigation of ice motion and wave generated ice conditions; development of wind and wave climatology and design criteria; wind/wave hindcast studies and site-specific forecasting; offshore software development and implementation; and environmental impact studies.

Maloney Steel Ltd. Second Second

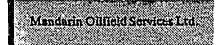
8825 Shepard Road S.E. Calgary, Alberta Canada T2H LX1 Telephone: (403) 279-5000 Facsimile: (403) 279-2068 Telex: 03-821153 AnswerBack: maloney cgy Contact: Don Krusky, Vice President, Business Development

Maloney Steel Ltd. offers a complete range of design and fabrication services for oil and gas production equipment for





worldwide markets. The company specializes in heaters, glycol dehydration units, separators, oil emulsion treaters, gas sweetening units, hydrocarbon recovery units, free water knockouts, coalescers, precipitators and production systems. The company has designed and manufactured some of the largest and most sophisticated oil and gas production and process equipment in the world, operating both onshore and offshore in every oil producing nation.



326, 510 - Sth Street S.W. Calgary, Alberta Canada T2P 3S2 Telephone: (403) 265-8987 Facsimile: (403) 265-6776 Telex: 063670059 Contact: Neil Marshall, Chairman of the Board

Mandarin Oilfield Services Ltd. has designed and developed its own Inflate Drillstem testing tools. The company can supply both conventional and Inflate Drillstem equipment, as well as drillstem testing services. Their Inflate System utilizes unique pump and release technology. The pump features radial piston action which is simple in design and very reliable. The release system operates on hydraulic action instead of mechanical, and has no moving parts that can fail-malfunction is virtually impossible. The system is being used in Canada and Asia.

### Marshall Macklin Monaghan Limited

80 Commerce Valley Drive East Thornhill, Ontario Canada L3T 7N4 Telephone: (416) 882-1100 Facsimile: (416) 882-0055 Contact: C.W. Longden, Vice President, Corporate Development

The Surveying and Mapping Division of Marshall Macklin Monaghan Limited, in operation since 1952, provides the firm's full range of professional surveying and mapping services, including digital mapping and Geographic Information Systems. Its professional and technical staff of 150 includes registered land surveyors, professional engineers, survey technologists and technicians. The company's principal fields of activity are cadastral surveying, geodetic surveying, applied surveying, hydrographic surveying, computations and plotting services, digital mapping and photogrammetric services, geographic information systems, digital terrain modelling, and remote sensing applications.



100 New Gower Street, Suite 200 St. John's, Newfoundland Canada AIC SJ9 Telephone: (709) 726-1323 Facsimile: (709) 279-1408 Telex: 016-3140 AnswerBack: msl mary Contact: Eric Patey, President

Marystown Shipyard Limited is located on the south coast of Newfoundland. The yard is situated at Marystown in Mortier Bay on Newfoundland's Burin Peninsula. The location is strategically close to Atlantic shipping lanes and Canada's east coast oil and gas fields. The deepwater port, one of the world's greatest natural harbours, is ice-free all year. The shipyard is considered to be one of the most experienced shipyards in Canada. The yard has built numerous trawiers, anchor-handling supply vessels/tugs and diving support/supply vessels for Canadian and European customers.

The company operates an oil rig servicing base for the repair and service of semi-submersible rigs at dockside--equipped for the efficient fabrication, outfitting and crection of the sub-assemblies and assemblies for oil related offshore exploration and production systems. The facility is to be optimized around the requirements of mechanical outfitting of gravity based structures with secondary capability in module construction and sub-sea manifold and template construction. The peak employment level has been 700, supported by approximately 120 supervisory, technical and management staff. There are 1 100 tradesmen within the region and available to the company.



4910 - 74th Avenue Edmonton, Alberta Canada T6B 2H6 Telephone: (403) 468-4433 Facsimile: (403) 469-9853 Telez: 037-41648 Contact: Richard Cove, Vice President, General Manager

Master Flo Valve Inc. is a manufacturer of chokes and valves. In-house engineering staff maintain a high level of quality control and new product development and design. It has a manufacturing facility in Scotland and representation in every continent. The company specializes in flow control and plgging operations. Its worldwide patented production choke is available in a 0.5 to 6 in. body and working pressures ranging to 10 000 psl. The control valve may be obtained in sizes ranging from 0.5 to 4 in. and working pressures ranging to 5 000 psi. Its Pig Ball Valve is available in by-pass and shut-off styles, and working pressures ranging to 1 500 psi.

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## Matt's Manufactuting Ltd.

P.O. Box 18, Site 4, R.R 5 Calgary, Alberta Canada T2P 2G6 Telephone: (403) 279-9353 Facsimile: (403) 236-1535 Telex: 03-821795 AnswerBack: mattr mfg cgy Contact: Matt Plesa, President

Established in 1974, Matt's Manufacturing Ltd. is a custom design and manufacturing company which serves the domestic and international community. The company is a major manufacturer of oil field equipment and specializes in wireline logging perforation units. Its products include wireline skid units, vans, hydraulic draw works, self-contained lube vans, hydraulic presses, as well as the company's exclusive custom-designed machinery and equipment. The company also repairs surface and downhole equipment.

McDaniel & Associates: Consultants Ltd. Sec.1

1200, 800 - 6th Avenue S.W. Calgary, Alberta Canada T2P 3G3 Telephone: (403) 262-5506 Facsimile: (403) 233-2744 Contact: W.C. Seth, Senior Vice President

McDaniel & Associates Consultants Ltd., founder, in 1955, provides a wide range of services to the oil and gas industry and, in particular, those aspects relating to reservoir engineering and economic evaluations of petroleum properties. The firm has consulted in all phases of oil and gas reservoir engineering and related economic evaluations and has been retained by both private and public companies, financial institutions and government organizations.

Representatives of the firm provide 'expert witness' services in matters related to the oil and gas industry in Canada and the U.S.

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# McElhanney Geosurveys Ltd.

100 - 780 Beatty Street Vancouver, British Columbia Cerrada V6B 2M1 Telephone: (604) 683-8521 Facsimile: (604) 683-4350 Telex: 04-51474 Contact: Donald B. Thomson, Vice President

McElhamtey Geosurveya Ltd. provides, on a worldwice basis, marine and geodetic surveys, mapping, and geographic information services. The company operates from six offices across Canada and from permanent facilities in Singapore and Malayzia. Employing more than 125 skilled specialists in the fields of surveying, engineering, photogrammetry, computer information and earth sciences, the company has successfully completed projects in more than 65 countries.



625 - 4th Avenue S.W. Calgary, Alberta Canada T2P 0K2 Telephone: (403) 263-0894 Contact: Ralph J. Russell, President

Mega Engineering Ltd. offers expertise in the area of planning, designing, and on-site engineering and geological supervision of oil and gas well drilling and completion operations. It has been actively involved in many Canadian projects, as well as several international petroleum developments. The company has provided on-site construction, drilling, completion and geological supervision for most of the major operators and for many of the medium-sized and junior companies. It has also supplied in-house consulting engineering and geological services for several companies. Internationally, the company has been active in engineering and geological supervision and on-site management for drilling operations in Europe, South America, Asia, the Middle East and Northern Africa.

Metro International Trading Company

Box 526, Station W Toronto, Ontario Conada M6M 5C2 Telephone: (416) 652-1117 Facsimile: (416) 656-4910 Contact: Moe Irshad, Director, International Operations

Metro International Trading Company is an international trading house, importer, exporter, buyer and seller of a wide range of goods and services in Canada and worldwide. In business for more than ten years, the company is well known to its worldwide customers for supplying top quality, Canadian gas and oil field equipment and services.

MIL Group Inc. 1993 - 1994 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 -1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 - 1996 -

1010, rue Sherbrooke West Montreal, Quebec Canada H3A 2R7 Telephone: (514) 842-7911 Facsimile: (514) 842-9183 Contact: John McStay, Manager

The MIL Group Inc. is comprised of a group of companies and major operating divisions. The group's activities now include the design and manufacture of a wide range of complex, high quality equipment, including offshore structures. ships, hydro-electric turbines and generators, nuclear reactor calandrias, mechanical handling systems and specialist fabrications for the energy, petrochemical. shipbuilding and defence industries. MIL can fabricate a wide variety of structures, including jackets, module support frames, floating production systems, shuttle tankers, jack-up and semi-sub mobile drilling platforms, and accommodation units. Thirtcen offshore drilling platforms have been completed for various parts of the world. The company is now ready to manufacture the new generation of drilling and production platforms suitable for operation in any hostile environmental



Industrie, Sciences et Technologia Canada waters. MIL also offers a wide range of services to the offshore industry, including hookup and commissioning, in situ repair and maintenance of platforms, engineering services, and inspection and testing.



300 Milroy Drive Peterborough, Ontario Canada K9J 7Y8 Telephone: (705) 743-6550 Facsimile: (705) 743-5831 Contact: William Killoch, Vice President, Sales and Marketing

Milton Roy Industries Ltd.'s modern 2 000 m<sup>3</sup> facility manufactures chemical metering pumps to customers' specifications. The company's products include a complete line of mechanically driven and solenoid operated chemical metering pumps, electronic actuators for control valves and regulation of chemical injection systems. Established in 1966, the company serves the resource industries in the U.S., Asia and South America.

Mitrade Export Inc.

I, Place Ville-Marie, bureau 1933 Montmal, Quebec Canada H3B 2C3 Telephone: (514) 393-9596 Facsimile: (514) 393-9809 Telex: 055-61926 Contact: Norman Brunelle, Export Sales Manager

Mitrade Export Inc. facilitates the international procurement process. The company offers a source for most products in the oil and gas industry—delivery, scheduling, technical support and shipping details. Mitrade has worldwide experience; projects have included the supply of equipment for new factories and petrochemical plants.



400, 801 - 6th Avenue S.W. Calgary, Alberta Canada TWP 3W3 Telephone: (403) 298-4170 Facsimile: (403) 298-4125 Telex: 038-22636 AnswerBack: mon cgy Contact: Robert J. Clark, Vice President, Oil and Gas Division

Serving private and public companies, governments and international lending agencies in more than 70 countries, Monenco Limited is comprised of 27 subsidiaries and associated companies in Canada, the U.S. and abroad. Monenco is engaged in the power, oil and gas, mining, industrial and environmental fields. It has specific expertise in the provision of engineering, procurement and construction management (EPCM) services to the oil, gas, petrochemical and process industries. Its computer-assisted project management system, coupled with its quality management program, has contributed significantly to Monenco's international reputation.

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1520 Columbia Street North Vancouver, British Columbia Canada V7J 1A4 Telephone: (604) 986-2189 Facsimile: (604) 986-6978 Contact: David E. Morris, President

Morris International Trading Ltd., in business for 13 years, markets the oil pollution control equipment which is manufactured by Morris Industries Ltd. The product line includes a range of oil skimmers and an inshore containment boom. Currently being developed is a work boat which can serve as a skimmer and/or boom deployment vessel, as well as a fixed installation oil recovery unit. Morris equipment is in use in Canada, Europe, South America and the U.S.



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## Nabors Drilling Limited

1100, 505 - 3rd Street S.W. Calgary, Alberta Canada T2P 3E6 Telephone: (403) 263-6610 Facsimile: (403) 264-7390 Telex: 038-25629 AnswerBack: naborsintl cgy Contact: T.L. Doyle, President

Nabors Drilling Limited was formed in 1952 and currently owns and operates 23 land drilling rigs in Western Canada-depth capacities ranging from 1 500 to 6 000 m. Nabors has developed an industry reputation for the construction and operation of safe and efficient deep hole drilling rigs. Its primary areas of expertise are design and construction of custom drilling rigs which feature mobility. cold weather technology, efficiency and safety; contract drilling services, specializing in deep, sour gas technology; training services for drilling operations, including rig crews, safety, well control. preventative maintenance; and research and development in the areas of rig automation, top drives and slant drilling. Nabors has exported several highly mobile deep drilling and service rigs to Alaska's North Slope. Its subsidiary company currently operates drilling rigs and offshore platforms in Yemen, Syria, Japan and the U.S.



#### Nardei Fabricators Ltd.

P.O. Box 14, Site 1, R.R.5 Calgary, Alberta Canada T2P 2G6 Telephone: (403) 279-3301 Fazsimile: (403) 279-5871 Contact: B.K. Kaushik, Sales Manager

Nardei Fabricators Ltd. is a contracting organization, specializing in the supply (engineering, design and fabrication) of pressure vessels, boiler external piping, process piping systems, skids, packaged units and auxiliary services for the natural gas processing, oil refining and petrochemical industries.

## National-Oliwell Canada Ltd.

1010, 800 - 6th Avenue S.W. Calgary, Alberta Canada T2P 3G3 Telephone: (403) 262-9501 Facsimile: (403) 262-9166 Telex: 038-22693 Contact: K.A. Neveu, Manager, Manufactured Products

National-Oilwell Canada Ltd. is a reliable source for innovative oil field equipment and services. It manufactures and distributes a broad range of drilling and production machinery, repair parts and operating supplies. The company and its staff of 320 direct their capabilities to the petroleum industry and export to most world markets.

## Newco Safety Tel Inc.

1921 - 10th Avenue S.W. Calgary, Alberta Canada T3C 0K3 Telephone: (403) 228-3605 Facsimile: (403) 229-9321 Contact: Dean Bochulak, Marketing Engineer

Newco Safety Tel Inc. was established in 1986 to design and manufacture specialty communications equipment for use in harsh environments and special applications-coplosive atmospheres, exposure to weather, high humidity an chemical vapours. The company's primary product is an industrial, touch-tone, explosion proof telephone. It has been approved by the Canadian Standards Association and is listed by Underwriter's Laboratories (U.S.A.). It is the only telephone unit (currently available with these attributes) that can be connected directly into the public telephone network. This is complemented by Newco's Rig Intercom system which is used on landbased/offshore oil drilling rigs.

# Nortsch Surveys (Canada) Inc.

319 - 2nd Avenue S.W. Calgary, Alberta Canada T2P 0C5 Telephone: (403) 262-0800 Facsimile: (403) 262-0810 Contact: Brian Cutting, Senior Manager, Calgary Division

Nortech Surveys (Canada) Inc. is a surveying and positioning company, formed in 1983. It operates worldwide with offices in Canada, the U.S., and the Sultanate of Oman. The company offers a complete range of services, including offshore surveys, GPS static and dynamic positioning, inertial surveys, and specialized integrated systems—the Airborne Laser Terrain Profiling System (ALTPS) and Digital Video Geographic System. Its personnel are among the most qualified in the world for land, sea and airborne positioning services. Nortech's strength lies in software and hardware development related to navigation and position determinations on the earth's surface. Nortech is a pioneer in the area of inertial guidance systems, satellite doppler navigation techniques, and GPS positioning techniques.

North Atlantic Machinery (Alta) Ltd.

3820 - 93rd Street Edmonton, Alberta Canada T6E 5K6 Telephone: (403) 450-4961 Facsimile: (403) 450-4709 Contact: Don Ruckman, President

North Atlantic Machinery (Alta) Ltd. is an international leader in the design, engineering, manufacture and supply of downhole drilling equipment. The company has established service facilities for a full line of bit drive directional tools. iars, shock tools, roller reamers and stabilizers, as well as other specialized tools. The company's machinery plants in North America currently occupy in excess of 3 000 m<sup>1</sup> and are equipped with modern equipment to ensure quality product. In addition to CNC lathes, mills, hollow spindle lathes, drills, shapers, slotters, etc. the company is able to provide a line of heavy duty grinding and honing equipment.

Norward Energy Services Ltd. 

703, 1015 - 4th Street S.W. Calgary, Alberta Canada T2R 1J4 Telephone: (403) 290-0264 Facsimile: (403) 265-6142 Telex: 03-821172 Contact: Terry Brown, Manager, Technical Services

Norward Energy Services Ltd. provides rroduction testing services for onshore and offshore oil and gas wells. Norward is a total service company and has branches in



the U.S. It specializes in testing wells that contain  $H_2S$  gas. The company's surface equipment is engineered and built in-house to meet the rigid specifications of the major oil companies. Don Buck Fabrication Ltd. is a subsidiary company engaged in pressure piping, pressure vessel manufacture and well testing unit manufacture. The two companies design and build production testing equipment for export. This equipment is currently used in China, Pakistan, Australia, New Zealand and the state of Alaska in the U.S.

Norwest Engineering Ltd.

902, 1015 - 4th Street S.W. Calgary, Alberta Canada T2R 1J4 Telephone: (403) 290-1648 Facsimile: (403) 261-5048 Telex: 03821-820 AnswerBack: execucares cgy Contact; J. David Smith, President

Norwest Engineering Ltd. is a professional engineering firm that specializes in petroleum consulting services. The company maintains a staff of experienced professional engineers and field supervisors to assist the industry in activities ranging from multiwell development projects to single well exploration programs.

Novacorp International Consulting Inc.

P.O. Box 2535, Station M Calgary, Alberta Canada T2P 2N6 Telephone: (403) 261-5200 Facsimile: (403) 290-6090 Telex: 038-21503 AnswerBack: nova cgy Contact: C. Dale Richards, Senior Vice President

Novacorp International Consulting Inc. provides engineering and operating expertise in pipeline transmission systems

and petrochemicals to clients worldwide. It is a subsidiary of NOVA Corporation which builds its businesses principally on pipelining and the manufacture of materials processed from hydrocarbons. The company has successfully participated in the development and implementation of numerous pipeline projects worldwide. Project services typically involve feasibility studies, design engineering, project and construction management, operation and maintenance assistance, staff training programs and technology transfer. Novacorp's Pipeline Software Group provides software products for the safe and efficient operation of pipelines. This includes software for leak detection. pipeline modelling and pipeline operations training. Novacorp also offers the knowledge and capabilities of a team of specialists who deal with the design, application and trouble-free operation of specialized products, such as mechanical dry scals.



1300, 801 - 6th Avenue S.W. Calgary, Alberta Canada T2P 4E1 Telephone: (403) 261-2990 Facsimile: (403) 264-7489 Telex: 03-825617 Contact: Stan Baldwin, Manager, International Sales

Nowsco Well Service Ltd. provides, on an international basis, specialized equipment and technology to owners and operators of oil and gas wells for the cementing and stimulation (including acidizing and fracturing) of wells and in related applications involving nitrogen, carbon dioxide, endless tubing and leak detection. The company also designs and fabricates specialized equipment for its own use worldwide and for sale to third parties. The company provides training to a variety of customers, and conducts research and development activities.



P.O. Box 307, 2104 - 7th Street Niska, Alberta Canada TOC 2G0 Telephone: (403) 955-3317 Facsimile: (403) 955-2545 Telex: 037-2966 Contact: Grady Long, General Manager

Formerly known as Northern Rig Lites Ltd., NRL Ltd. was formed in 1985 through a purchase of the original company. Previous designs and manufacturing methods which have enhanced marketing of the products worldwide for the past 25 years, continue to be used today. Reliability under the most severe of conditions have proven the products' ability to be used in all drilling environments. The company manufactures hazardous and non-hazardous area fluorescent and H.I.D. lighting focures; marine and shipboard fluorescent and incandescent light fixtures; quartz halogen, H.I.D., and fluorescent light fixtures; portable lighting for hazardous and nonhazardous areas; and emergency lighting for hazardous and non-hazardous areas. These are exported worldwide.

Nutron Manufacturing Ltd.

4318 - 76th Avenue Edmonton, Alberta Canada T6B 2H8 Telephone: (403) 468-2732 Facsimile: (403) 466-7741 Contact: Denis Gaulin, Marketing Manager

Nutron Manufacturing Ltd. is an integrated design, engineering and manufacturing company. It manufactures the Nutron ball valves and chokes. Ball valves range in size from 0.25 to 4 in. and up to 6 000 psi; chokes from 1 to 3 in. and up to 6 000 psi. These products are designed and manufactured for sweet, sour and low temperature service. 316-stainless is also used for other critical services. Their primary market is the upstream petroleum industry in Canada and the U.S.





## O'Connor Tanks Limited

15 Bermondsey Road Toronto, Ontario Canada M4B 1Z4 Telephone: (416) 751-1140 Facsimile: (416) 751-7431 Contact: D.R. Malcolm, Sales Manager

O'Connor Tanks Limited has a staff of 100 and is a custom steel fabricator. The company offers a full range of support services—design, painting, internal lining, insulation, piping, transportation and installation. Some major products routinely fabricated include tanks, pressure vessels, hoppers and bins. The company serves numerous world markets.

Opsee Industries Ltd.

2601 Centre Avenue East Calgary, Alberta Canada T2A 2L1 Telephone: (403) 272-2206 Facsimile: (403) 273-0377 Contact: Brian S. Langton, Marketing and Sales Manager

Established in 1965, Opsco Industries Ltd. and its 120 employees provide wireline (pressure surveys), well testing and evaluation services, as well as instrumentation systems and services. It also manufactures oil field production equipment, including gas/liquid separators, line heaters, dehydrators (glycol) and packaged process equipment-meter stations, production satellites, water treatment and injection packages.

## Pacific Truck & Trailer Ltd.

935 West 3rd Street North Vancouver, British Columbia Canada VTP 1ES Telephone: (604) 985-7121 Facsimile: (604) 985-5893 Telex: 04352529 AnswerBack: pactruck ver Contact: George Boulet, Manager, Sales Engineering/Product Development

Pacific Truck and Trailer Ltd. is a custom builder of specialized on/off highway trucks and tractors. In 1988, the company won the British Columbia Export Award for achievement in international marketing and outstanding export performance. The company was founded in 1947 and manufactures heavy duty trucks to 80 000 kg GVW, and 270 000 kg GCW for use in the oil field, as well as other industries. The company manufactures four basic models; two of these are readily adapted to meet the vocational requirements of the oil field. They can be set up as a flatbed with a disappearing fifth wheel in order to haul a wide variety of heavy oil field equipment.

# Pandit International

263 MacLaren Street, Suite 1208 Ottawa, Ontario Canada K2P 0M1 Telephone: (613) 232-8497 Facsimile: (613) 232-8497 Telex: 053-4741 AnswerBack: superior orl Contact: Raj Kumar, Vice President, International Marketing

Pandit International was founded to design and market products for the oil and gas industry and to make investments in the form of joint ventures in oil and gas exploration and project development. It is capable of handling project development implementation, financing and marketing. Its services include the provision of seismic and gravity surveys; geomagnetic surveys for oil and gas exploration; seismic, gravity and geomagnetic data processing and 3D seismic data processing. It provides well logging systems, and inflatable packers and testing tools.

Partec Lavalin Inc.

909 - Sth Avenue S.W. Calgary, Alberta Canada T2P 3G5 Telephone: (403) 294-2100 Facsimile: (403) 237-8365 Telex: 03-827910 AnswerBack: lavalin cgy Contact: John R. Wood, Manager, Sales and Marketing

Partec Levalin Inc. has more than 340 engineers, technicians, designers, draftspersons, and support personnel. The company's expertise encompasses all areas relating to the production, transportation, processing, upgrading and delivery of conventional energy resources, chemicals, petrochemicals and synthetic fuels. The technology base covers all aspects of project management, engineering, procurement and construction from wellhead to end user. Its professionals have completed major domestic and international projects, including processing plants, sulphur forming plants, gathering systems, pipelines and tank forms in Canada, the U.S.S.R., Africa, Asia and the Middle East.

Pason Well Services Ltd: 

5, 6120 - 11th Street S.E. Calgary, Alberta Canada T2H 2L7 Telephone: (403) 255-3158 Facsimile: (403) 253-9681 Contact: Jim Hill, President

Pason Well Services Ltd. has been a custom manufacturer of control and monitoring systems for drilling rigs since 1978. The company's *Pit Volume Totalizer* system is used to detect the beginning of a gas kick while drilling. This detection is achieved by monitoring the mud levels in



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the mud tanks and the return flow rate from the wellbore. Pason also builds a remote drilling choke system which is used to release gas from the wellbore under controlled conditions. These products are ideal for deep land-based rigs in areas where gas zones are expected, as well as for harsh, isolated locations.

Penetrators Canada Inc.

200, 6712 Fisher Street S.E. Calgary, Alberta Canada T2H 2A7 Telephone: (403) 253-3233 Facsimile: (403) 252-6700 Contact: Derek C. Martin, Executive Vice President

Penetrators Canada Inc. was established in 1990 to market services and equipment which utilize the Lance System Penetrator Tool. The Lance System Penetrator technology is new and unique and has applications in all oil and gas producing regions of the world. The tool is a hydraulically actuated, high-pressure jet drill that consists primarily of a cutting nozzle and flexible lance. It is capable of extending three metres outward from the wellbore into formation rock-substantially exceeding the average penetration currently achieved by other penetrating devices. The tool is non-damaging, non-explosive, and uses clean, compatible, non-contaminating fluids as the cutting agent for deep formation penetration. The company supplies the downhole tools, high-pressure surface pumping equipment and high-pressure tubing, as well as the advanced technology and expertise required to put the penetrator system to work for customers.

Petrocraft Products Lid.

2410A - 2nd Avenue S.E. Calgary, Alberta Canada T2E 6J9 Telephone: (403) 272-9590 Facsimile: (403) 248-7999 Telex: 03 821172 Context: H.R. Morris, President

Formed in 1963, Petrocraft Products Ltd. is one of the largest suppliers of geological equipment and services in Canada and holds over 10 patents. One of the company's products is the Sample Boy Continuous Cuttings Sampler. This unique semi-automatic device is designed to sieve. wash and collect representative well cuttings in predetermined quantities; provide a gentle, thorough washing action; retain fines, even when drilling carbonates or sandstones; exclude most cavings; and resist corrosion-stainless steel construction. The wellsite geologist and/or mud-logger is the company's primary client. The company exports to the U.S., Mexico and Europe.

Phillips Cables Lim/ted

550 King Street West Brockville, Ontario Canada K6V 5W4 Telephone: (613) 345-5666 Facsimile: (613) 345-1365 Telex: 066-36512 AnswerBack: philelec Contact: T.P. Bohm, Vice President, International Sales

Phillips Cables Limited has supplied pump cable for ESP systems for more than 20 years. Its laboratory conducts research and development for submersible cables and its Pyrotemax Division produce mineral insulated, high temperature, heat tracing cables and systems. Different types of ESP Cables are produced for various temperatures and feature round and flat designs. Heat tracing systems, controls, and engineering services are also available. The company's clients include

Industry, Science and Industrie, Sciences el Technology Canada Technologie Canada petrochemical and oil producers worldwide.



502, 550 - 11th Avenue S.W. Calgary, Alberta Canada T2R 1M7 Telephone: (403) 266-7070 Facsimile: (403) 233-7802 Contact: Robert J. Unreu, General Manager

Incorporated in 1983, Pillar Oilfield Projects Ltd. provides construction and fabrication services to the oil industry, including field installation of gas compressors, gas plants, oil batteries, water disposal plants and heavy oil facilities; shop fabrication of production skids, satellite and header facilities.



860, 400 - Sth Avenue S.W. Calgary, Alberta Canada T2P 0L6 Telephone: (403) 262-6306 Facsimile: (403) 266-3960 Contact: Tom Kusumoto, President

Plains Perforating Ltd., established in 1972, is a perforating and logging company. The company provides services to more than 100 oil and gas clients. All of its logging equipment is fully computerized and can service from shallow gas wells to deep wells.



## Plainsman Manufacturing Ltd.

5928 - 99th Street Edmonton, Alberta Canada T6E 3N9 Telephone: (403) 435-4807 Facsimile: (403) 435-4546 Telex: 037-2966 Contact: Lee Makelki, Secretary Treasurer

Plainsman Manufacturing Ltd. manufactures a complete line of chemical pumps, check valves, orifice plates, insulators, and plastic and steel pumps and foam pigs for the Canadian and U.S. markets. The company's engineers also custom build to clients' requirements.

1401, 510 - 5th Street S.W. Calgary, Alberta Canada T2P 3S2 Telephone: (403) 237-6441 Facsimile: (403) 237-6445 Contact: Hugh M. King, International Sales Manager

Positive Action Tool Western

Limited

Positive Action Tool Western Limited. established in 1976, is a manufacturer and distributor of specialized equipment designed to help solve problems which often occur in artificial lift (pumping) oil wells. The company manufactures and installs Sucker Rod Scraper-Guides for paraffin control and rod centralization: one model is designed to reduce or eliminate the necessity of hot oiling or chemical injection as it prevents paraffin build-up on rods and tubing simultaneously. Other products include the AGM two-position, wellhead steam control device (blowout preventer); the HTD high temperature, dual packed stuffing box for heavy oil production; Rod Rotators-installed on plunger ends of bottom hole pump to reduce plunger seizing; field installable Lotus Rod Guides-to centralize sucker rod strings in moderately crooked wells; Posi-Align stuffing boxes-for wellhead polished rod

mis-alignments; and oil field improvement Wheeled Rod Guide Couplings---to centralize sucker rod strings in severely deviated oil wells.

Predictive Maintenance Corporation

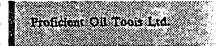
400, sauve West, bureau 101 Montreal, Quebec Canada H3L 128 Telephone: (514) 383-6330 Facsimile: (514) 383-5631 Contact: Marvin Ostin, President

Predictive Maintenance Corporation is an oil analysis laboratory and research facility. Its mission is to provide accurate and reliable machine and lubricant diagnostics to industry in order to predict and prevent costly repairs and production losses. The company employs artificial intelligence to produce consistent, in-depth reporting on the health of machinery and quality of lubricants. It also uses laboratory methods, such as total metals spectroscopy (TMS) to accurately measure both large (15 to 75 microns) and small particle wear (less than 15 microns). (Conventional emission spectroscopy is limited to the detection of small particles.) An accurate and fast method of detecting and measuring large particles is important in the monitoring of machines that contain gears and rolling element bearings (90 percent of all machines). The company also markets its Artificially Intelligent Laboratory Information Management System (AI/LIMS).

Premeralco - Inc., Exchanger" Industries Division

5505 - 52nd Street S.E. Calgary, Alberta Canada T2C 2W8 Telephone: (403) 236-0166 Facsimile: (403) 279-8242 Contact: Ian Wright, Sales Manager

Exchanger Industries, a division of Premetalco Inc., was founded in 1961 to design and manufacture heat transfer equipment in support of the oil and gas and petrochemical industries. It is now one of the leading heat exchanger manufacturing companies in Canada. The products engineered and manufactured by the company include shell and tube heat exchangers, air-cooled hr: exchangers, waste heat boilers, and oil well pumping units.



7131C - 6th Street S.E. Calgary, Alberta Canada T2H 2M8 Telephone: (403) 255-5544 Facsimile: (403) 255-4105 Telex: 03821671 AnswerBack: proficient cgy Contact: Les Szadovszki, President

Proficient Oil Tools Ltd. was established in 1986 to specialize in downhole completion equipment for oil and gas completions in Canada and international markets. The company offers advanced, proven product lines and high standards of quality control measures. Its equipment meets the needs of varied well conditions, including  $H_1S/CO_1$  service and extremely corrosive service. Its product line includes tubing mounted completion equipment-nipples, sliding sleeves, blast joints, shut-off valves; flow control accessories-plugs, chokes separation sleeves, check valves, instrument hangers, collar stops; shifting, running, equalizing and pulling accessories-shifting tools, running tools, shanks, guides, prongs and



probes; wireline tools-rope sockets, stems, hydraulic jars, blind boxes, gauge rings; and wireline equipment packages and production testing equipment packages.

# Propale Systems Ltd.

505 East Lake Boulevard Airdrie, Alberta Canada T4B 2C3 Telephone: (403) 948-2001 Facsimile: (403) 943-5024 Telex: 03-827716 AnswerBack: propaksyst air Contact: P.J. Dewey, Vice President, Technical Sales

Propak Systems Ltd. has, since 1976, provided in-house services to the energy processing industry in engineering/process technology development, shop fabrication/modularization, and field construction, commissioning and start up. The company provides a total turnkey approach on projects valued to \$10 million. It has constructed more than 500 processing facilities ranging from 0.2 MMSCFD to 90 MMSCFD of natural gas. Propak's engineering services include civil, mechanical, electrical and process engineering on an individual basis or in combination. Propak has demonstrated superior capability in areas of mixed refrigeration to cryogenic temperatures, selective absorption amine systems, as well as other areas of general gas processing. Propak's capabilities also include plan process simulation, productivity enhancement studies and performance tests.

# Prudential Steel Ltd.

P.O. Box 1510 Calgary, Alberta Canada T2P 2L6 Telephone: (403) 263-7820 Facsimile: (403) 261-0936 Contact: Byron Hussey, Manager, International Sales

Prodential Steel Ltd. is the largest pipe manufacturer in Canada. Its products for the oil and gas industry include E.R.W. and seamless oil tubular goods, line pipes, hollow structural sections, and mechanical tube. Its seamless tubulars exceed expectations for concentricity, wall integrity, metallurgy, dimensional accuracy and surface quality.

# Pulimaster Winch Corporation

8247 - 130th Street Surrey, British Columbia Canada V3W 7X4 Telephone: (604) 594-4444 Facsimile: (604) 591-7332 Contact: Heinz K. Schroer, Director of Marketing

The Pullmaster Winch Corporation is a worldwide supplier of precision gears and machine components. After the introduction of the first *Pullmaster Winch*, the company became a leader in the development of planetary hydraulic winches and drives; these feature automatic disc brakes with static and dynamic brake function. Its equipment includes planetary hydraulic winches in a range of capacities from 2 000 to 5 000 lb. line pull, and planetary hydraulic drives with output torques of 5 000 lbs./in. and 135 925 lbs./in.

#### Philsearch Consolidated Technology Ltd.

700, 10201 Southport Road S.W. Calgary, Alberta Canada T2W 4X9 Telephone: (403) 259-8560 Facsimile: (403) 255-6637 Contact: John R. Adams, President

Pulsearch Consolidated Technology Ltd. was founded in 1987 as an advanced technology engineering, survey, software and systems design enterprise. The experience of the principals includes structural engineering, system development and integration and geodetic technologies. The in-house technical expertise and operational experience allow the company to respond to numerous demanding and technically challenging tasks. The company provides services in systems development and integration-engineering systems design, navigation system integration, software and hardware design; geodetic surveys-precise engineering surveys, land/marine survey data acquisition; management consulting-contract management consulting; monitoring-pipeline geometry pigging, civil engineering structures, mines. dams; and structural analysis-engineering system analysis, pipeline stress analysis, civil structures structural analysis, limit state analysis, reliability analysis, predictive and corrective maintenance planning analysis.

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#### Pulsonic Geophysical Ltd.

700, 10201 Southport Road S.W.
Calgary, Alberta
Canada T2W 4X9
Telephone: (403) 255-2820
Facsimile: (403) 255-6637
Contact: Doug Bogstie, Vice President, Marketing

Pulsonic Geophysical Ltd. is one of the largest seismic data processing contractors in Canada. Established in 1981, it has become an industry leader in geophysical research and the introduction of new technology. It has provided its services to clients worldwide. Proprietary software developed by the affiliate company, Pulsonic Technology Corp. (PTC) runs on a large networked computing facility which includes supercomputing hardware. PGL is capable of processing any type of seismic data, including land, marine, 2D and 3D. The company specializes in producing very high quality results by utilizing its vast array of advanced programs. Superior 3D products have made Pulsonic one of the foremost 3D processors in North America. Advanced techniques developed for AVO processing have yielded significant exploration success for numerous clients.

Qualitas International Inc.

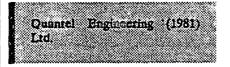
2828 Signal Hill Heights S.W. Calgary, Alberta Canada T3H 2B5 Telephone: (403) 242-8630 Facsimile: (403) 240-3945 Contact: Ameet Rao, President

Qualitas International Inc. is an international trading and procurement service company. Its personnel have a unique combination of technical and commercial experience in the execution of large international projects. The company's areas of specialization include oil and gas production and drilling equipment, solar and geothermal energy utilization, and welding and materials testing equipment. All commercial transactions are supported by technical professionals to guarantee the highest levels of quality and reliability to its customers. Qualitas can handle all aspects of an international export contract.



3751 • 76th Avenue Edmonson, Alberta Canada T6B 258 Telephone: (403) 468-6762 Facsimile: (403) 468-0995 Contact: Gino Alessandrini, President

Quality Fabricating & Supply Limited is a manufacturer of a variety of structural steel products, fabricated to customer specifications. For the oil and gas industry, the company manufactures drilling rigs, including support modules-generator assemblies and buildings, dog houses, catwalk ramp assemblies, complete mud assemblies, utility buildings, and miscellaneous rig components. For the petroleum production and processing industry, the company manufactures modular pipe bridge sections, complete with pipe transmission towers and hardware, steel buildings, equipment supports and skids, pump jack structures, heat exchangers, and miscellaneous structural steel.



700, 777 - 8th Avenue S.W. Calgary, Alberta Canada T2P 3R5 Telephone: (403) 269-9833 Facsimile: (403) 269-9845 Telez: 038-27954 AnswerBack: quantel cgy Contact: Said Arrata, President

Quantel Engineering (1981) Ltd., established in 1975, offers a comprehensive range of services—from concept development through to plant

start up. It provides feasibility and economic studies; process configuration studies/development; process/mechanical designs; detailed engineering and design drafting; procurement; project management; construction management and construction: and commissioning and plant start up. In 1989, the company was responsible for the execution of \$110 million in capital projects. Its capabilities encompass heavy and conventional oil technology, gas sweetening processes, pipelines, gathering systems, compressor stations, pumping stations, enhanced oil recovery systems, offshore topside facilities, control systems, supervisory control and data acquisition systems, and refinery modifications.



55, Benjamin-Hudon Si-Laurent, Quebec Canada H4N 1H7 Telephone: (514) 331-7720 Facsimile: (514) 331-0388 Contact: Donald Chartrand, Procurement Manager

Quebec Tools Corporation manufactures custom built machinery for the chemical and petroleum industry. Its 8 100 m<sup>4</sup> modern plant is equipped with the necessary muchine tools to permit complete fabrication, machining and assembly of components. Equipment manufactured by the company includes pressure vessels, drilling rig components, platforms, pump base frames, conveyors, rolls, and hydraulic turbine parts.





### Quim Testers Ltd.

405, 1040 - 7th Avenue S.W. Calgary, Alberta Canada T2P 3G9 Telephone: (403) 290-1704 Facsimile: (403) 266-1962 Contact: Pat J. Quinn, President

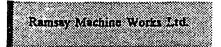
Quinn Testers Ltd. is a major supplier of drill stem testing services. It also designs and manufactures testing tools. The company conducts education courses in expert drill stem analysis and drill stem testing.

Raffin Electric Co. Ltd.

5539 - 1st Street S.E. Calgary, Alberta Canada T2H 1H9 Telephone: (403) 252-7551 Contact: James Duffy, Controller

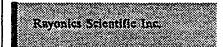
For more than 30 years, Raffin Electric Co. Ltd. has been designing and building solutions for the special electrical requirements of numerous industries, including petrochemical. The company's controls, switchgear and retrofits have consistently provided high quality service and flexibility. Raffin's equipment has been exported to the U.S. and Asia.

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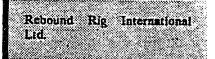
1430 Store Street Victoria, British Columbia Canada V8W 1V3 Televhone: (604) 384-5314 Facsimile: (604) 389-0504 Contact: Gregory H.P. Ramsay, President

Ramsay Machine Works Ltd., established in 1903, has serviced and produced manufactured items for the oil and gas industry for more than three decades. The company produces custom steel and stainless steel fabrications, and machined components for clients in Canada, the U.S. and Western Europe.



473A Windmill Road Dartmouth, Nova Scotia Canada B3B 1B2 Telephone: (902) 468-3344 Facsimile: (902) 468-1203 Contact: Kerry Weaver

Rayonics Scientific Inc. sells and services a wide range of laboratory and analytical equipment and a complete line of test and measurement instrumentation to clients worldwide. Services are provided in overhaul, repair and contration of electrical, electronic, nechanical, physical properties, nuclear medical, optical, and quality control test and measuring instrumentation. Its products include pressure gauges, compressor filters and dryers, laboratory analytical equipment (oil analysis, etc.), test and measuring instrumentation, communication test equipment, spectroflourometers and gas chromotographs.



1165A - 44th Avenue S.E. Calgary, Alberta Canada T2G 4X4 Telephone: (403) 287-0176 Facsimile: (403) 243-2061 Telex: 03-825512 AnswerBack: rebound cgy Contact: L.E. Tomlin, Vice President, Marketing

Since 1973, Rebound Rig International Ltd. has been a leader in the manufacture and supply of coiled tubing units with large compressors for shallow hole clean outs. Each of the eight different coiled tubing models, which range from shallow to intermediate to deep wall applications. can be custom designed and manufactured to meet customers' needs. Ongoing research and development has produced the new RT-SERIES injector heads which lead the industry in pulling strength. With almost 100 Rebound coiled tubing units sold throughout the world, Rebound offers a complete spare parts back-up and infrastructure support. A complete line of accessories and service equipment is also available.

Reflange (Canada) Inc.

Old Onondaga Road, R.R.1 Brantford, Ontario Canada B3T 5L4 Telephone: (519) 759-5672 Facsimile: (519) 759-4495 Contact: David M. Dewan, President

Reflange (Canada) Inc. manufactures a line of severe service, pipe connectors. The line of connectors consists of R-Con, G-Con and E-Con models. The R-Con and G-Con are hub-type connectors and are fully interchangeable with Grayloc connectors. The E-Con connector is a modified flange fitting which may be retrofitted to existing field connections or used for original design. These flanges reduce the cost of massive flange forgings,



bolts and commonly used gaskets through the use of a metal-to-metal, pressure energized seal. The *Reflange connection* is commonly used, both nationally and internationally for high-pressure and temperature applications for petrochemical production, power plants, and in petroleum production and refining, offshore oil and gas platforms and extremely critical extraction projects.

Rice Engineering & Operating Ltd.

8505 Argyll Road Edmonton, Alberta Canada T6C 4B2 Telephone: (403) 469-1356 Facsimile: (403) 469-2587 Contact: E. Dorman, Sales Manager

Rice Engineering & Operating Ltd., established in 1956, manufactures the Rice Long Path Insulating Nipple. The patented device interrupts the flow of stray electrical currents along steel pipelines. It requires no field assembly and its sturdy construction allows for permanent installation in the piping system.

Riley's Datashare International Ltd.

1223 - 31st Avenue N.E. Calgary, Alberta Canada T2E TW1 Telephone: (403) 291-3370 Facsimile: (403) 291-3894 Contact: D.E. Plewes, President and Chief Executive Officer

Riley's Datashare International Ltd. is a petroleum industry service company involved primarily in providing well log data and seismic processing services. Riley's was founded in 1950 as a reproduction and supply company and worked closely in its early years with the petroleum industry in developing a well log library for Canada. The Log Division operates a library of Canadian well logs. It provides this distribution from a comprehensive library of over 540 000 logs in both hardcopy and microfiche formats. The Digital Division is primarily engaged in building a database of well logs in digital format, and supplying data and related analytical services to the Canadian and international markets. It also markets microcomputer-based applications software which uses digital log data. The Seismic Processing Division operates a processing centre for the Canadian market.

RockBit Industries of Canada (1985) Ltd.

5677 Burleigh Crescent S.E. Calgary, Alberta Canada T2H 127 Telephone: (403) 255-3730 Facsimile: (403) 255-3721 Contact: Lawrence M. Pedersen, President

RockBit Industries of Canada (1985) Ltd. is primarily a research and development facility with a reputation for innovative technology and customer service. The company has made numerous technological advancements—a high speed dual bearing system, a mechanical lock-up feature, indication systems for bearing or gage failures, and two-cone deviation control bits. RockBit has worked with several major companies as a custom bit manufacturer. Projects have ranged from prototype bits and special application bits to improved cutting structure designs. RSI Research Ltd.

10, 10114 MacDonald Park Road Sidney, British Columbia Canada V8L 3X9 Telephone: (604) 656-0101 Facsimile: (604) 656-1161 Contact: Chris Roper, Marine Robotics Manager

RSI Research Ltd. conducts research and development and also designs and manufactures subsea equipment. Its products include subsea advanced master/slave remote manipulator systems; undersea custom tools; advanced control systems for large hydraulic equipment; grapple yarders and front-end loaders, diggers and excavators; and internal pipe crawlers for pipeline inspection. The company's products have been exported to the U.S., Asia, Australia and Europe.

Russell Technologies Inc.

4909 - 75th Avenue Edmonton, Alberta Canada T6B 2S3 Telephone: (403) 469-4461 Facsimile: (403) 468-2076 Telex: 037-2966 Contact: Jim Yukes, Sales Representative

Russell Technologies Inc. was formed in 1973 to meet the increasing demand for non-destructive examination services. The company's expertise ranges from the correct procedure for the tightening of an individual bolt to the coordination of complete plant shut-downs. The company's products include Radalarm II radiation monitor and the Radalarm II field meter. These meters and monitors combine audible and visual alarms; the field meter includes a survey meter. Settings are adjustable and they are worn on the belt to free hands and ensure safety. The products' leather cases have pockets for dosimeter and film badge.

The company's Ferroscope System is the only practical method for examining



ferro-magnetic tubes in boilers, feedwater heaters and heat exchangers. The system provides significant savings in equipment life-extension and preventative maintenance. Defects which the system detects include general wall loss, fretting, corrosion, erosion and pitting. A pipeline 'pig' for 4 in. flow lines is being developed.

SLR. Locator Service Sourcing & Purchasing Inc.

105, 3016 - Sth Avenue N.E. Calgary, Alberta Canada T2A 6K4 Telephone: (403) 235-1058 Facsimile: (403) 248-2899 Contact: Pieter Gijsenbergh, Managing Director

S.I.R. Locator Service Sourcing & Purchasing Inc. is an international equipment brokerage firm that was established in Canada in 1988 for the purposes of marketing, consulting, representing and assisting multinational organizations and large industries in the marketing and seiling of high capital value, new and used, surplus equipment or machinery. The company arranges and supervises the dismantling and loading procedures, financial arrangements, export licences, transport, shipping arrangements, insurance, and other details. Other services include quote purchasing-project planning, quote assembly, tenders and organizational services; and a locator service for foreign buyers to quickly, efficiently and anonymously locate potential suppliers.

### S.N. Hanson Group Enterprises Lid.

7450 - 18th Street Edmonton, Alberta Canada T6P 1N8 Telephone: (403) 440-2916 Facsimile: (403) 440-4175 Contact: Gary D. Stuart, General Manager

Hanson Materials Engineering, a distant of S.N. Hanson Group Enterprises Lod, is comprised of consulting engineers, technologists and inspectors with expertise in power generation, the offshore petroleum sector and other sectors. Hanson offers a specialized engineering consulting service which includes preparation of specifications, failure analysis, plant evaluations and audits, and materials evaluations in the areas of metallurgy, welding, corrosion, polymers, and quality assurance. The Non-Destructive Testing Division employs technologically advanced equipment. With the largest group of technicians in Canada, the company has successfully completed many of the most prominent construction projects awarded since 1970.

Sander Geophysics Limited

303 Legget Drive Kanata, Ontario Canada K2K 2B1 Telephone: (613) 592-1301 Facsimile: (613) 592-1302 Telex: 053-4755 AnswerBack: geosand Contact: George W. Sander, President

Sander Geophysics Limited was established in 1956 and has grown to be a major organization in the field of airborne geophysical surveying. The company provides a variety of airborne surveys to the oil and gas industry. These surveys assist in the initial evaluation of new exploration areas and aid considerably in the exploration of developed areas. The company operates three fixed-wing aircraft and one helicopter equipped with GPS

(Global Positioning System) satellite instrumentation and Inertial Navigation System. Sander Geophysics has developed systems to fly airborne geophysical aircraft in areas which are either not well mapped or provide poor reference on the ground, particularly offshore areas. It has experience in depth calculation and other mathematical evaluation of data, and geological interpretations. The company operates a large data processing centre which provides services for its own surveys. as well as for other companies. The company also develops methods and programs for the evaluation of airborne geophysical survey data.

# Sändwell inc.

666 Burrard Street Vancouver, British Columbia Canada V6C 2X8 Telephone: (604) 684-0055 Facsimile: (604) 684-7533 Telex: 04-51275 AnswerBack: swanco vcr Contact: R.E. Anderson, Director, Business Development

Sandwell Inc., a group of consulting companies, has been planning and engineering projects in Canada, the U.S. and worldwide since 1949. Sandwell has emerged to international prominence in the planning and engineering of ports, harbour installations, offshore structures, bulk terminals, materials handling, transportation systems and specialized Arctic facilities.

Their DATAP Systems Division supplies real-time automation and information management systems. The company's software products, developed through extensive research and development programs, provide comprehensive capabilities in remote control, monitoring and facility management. DATAP's installed products for the oil and gas industry include multiprocessor minicomputer supervisory control and data acquisition networks for petroleum production and pipelines. The projects completed for the industry include engineering, software, turnkey system

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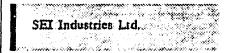


services and installation management related to distributed multiprocessor networks; batch tracking and leak detection packages; extremely fast response, highly flexible man/machine interface; and production automation systems, using both mini and microcomputer-based master and field production metering.



304 - 3700 Gilmore Way Burnaby, British Columbia Canada VSG 4M1 Telephone: (604) 437–4781 Facsimile: (604) 430-3035 Contact: Jacques Heyrman, President

Seatronics Technologies Ltd. was founded in 1983 to undertake research and development in the field of hydrodynamics. At the B.C. Research Ocean Engineering Centre in Vancouver, Hydralift Skegs and energy efficient tug/barge designs were developed. At present, 15 vessels fitted with Hydralift Skegs are operating worldwide, mostly in support of the offshore gas and oil industry in areas where marine transportation services to oil and gas exploration and production is required (the U.S. Gulf and West Coast, the North Sea and the Middle East).



7400 Wilson Avenue Delta, British Columbia Canada V4G 1E5 Telephone: (604) 946-3131 Facsimile: (604) 940-9566 Telex: 04-355779 AnswerBack: sei ind vcr Contact: Peter Van Bodegom, Sales Manager

SEI Industries Ltd. is known internationally for its expertise in aerial fire-fighting equipment. The company manufactures the *Bambi Bucket* which is recognized as the most advanced bucket available for aerial attack by helicopters. It is used for fire-fighting in more than 40 countries by commercial helicopter operators, government agencies and military forces. It recently won the prestigious Ernest C. Manning award for outstanding design innovation in Canada. The company also manufactures a complete line of lightweight, air transportable storage tanks. The Fuel Easy is a collapsible fuel container used to transport fuel by helicopter. Terra tanks are air transportable tanks used for fuel, chemical or water storage, and are available in sizes ranging to 200 000 litres.



1165J - 44th Avenue S.E. Calgary, Alberta Canada T2G 4X4 Telephone: (403) 243-7542 Facsimile: (403) 243-7977 Telex: 03-825512 Contact: Les Tomlin, Vice Pre ident, Marketing

Select Energy Systems Inc., established in 1988, is a specialty manufacturer and supplier of parts and accessories to the colled tubing industry. These include single and double coiled tubing hangers, BOPs, annular BOPs, stripper BOPs, production packers, setting tools, drilling (mud) motors, and other specialty tools for international markets.

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P.O. Box 7010, Station E Calgary, Alberta Canada T3C 3L8 Telephone: (403) 266-2535 Facsimile: (403) 264-8297 Telex: 03-821172 AnswerBack: cgy Contact: Roberto Aguilera, President

Servipetrol Ltd. was established in 1981 to provide petroleum consulting services, software and training to companies worldwide. The company has unique expertise in the evaluation of naturally fractured reservoirs. This has led to their services being provided in more than 25 countries. The company offers services ranging from geological evaluation to reservoir engineering studies, including prospect evaluation, well log interpretation, reserves evaluation, reservoir performance analysis, numerical simulation, well test analysis and economic evaluation.

Shaw Pipe Protection Ltd., CANUSA Division

25 Bethridge Road Rexdale, Ontario Canada M9W 1M7 Telephone: (416) 743-7111 Facsimile: (416) 743-7199 Telex: 06-989435 Contact: Fred Wutschert, Marketing Manager

The CANUSA Division of Shaw Pipe Protection Ltd. began operations in 1966 and provides field joint protection products. With a strong base in plastics engineering, as well as sealants and coatings technology, CANUSA engineers have developed a wide variety of heat shrinkable pipelire products. The CANUSA Wrapid Sleeve system is a unique one-piece heat shrinkable wraparound sleeve. The patented design incorporates a welded closure strip that fuses the overlap to the underlap during shrinking. This premium product and their regular wraparound sleeves and heat shrinkable tube sleeves are available in a wide range of backings and scalants to suit specific operating temperatures and environmental conditions. The CANUSA Wrapid Tape™ is a primerless heat shrinkable tape which is used on fittings, risers, elbows and irregular configurations to prevent corrosion. Other products include the CANUSA Repair Patch for the repair of damaged pipe coatings, the CANUSA Protection Kit to provide a complete seal of thermite brazed, cathodic protection wire connections and the CANUSA Casing Seal Kit that provides a permanent seal on pipeline casings to electrically isolate pipelines from metallic casings.





# Sierra Drilling Ltd.

1070,7001 - 4th Avenue S.W. Calgary, Alberta Canada T2P 3J4 Telephone: (403) 266-1900 Facsimile: (403) 266-1926 Contact: R.D. Edwards, Vice President

Sierra Drilling Ltd. is recognized as a world leader in slant hole or angle drilling. Sierra has drilled more than 800 s'ant wells and many thousands of com/entional wells. The company provides slant hole drilling rigs and technology, ie. equipment that drills at angles up to 45° from surface. This is accomplished by changing the angle of the derrick and permits straight line drilling to achieve horizontal displacements. Its markets are primarily in pad or multiwell applications, such as heavy oil. Sierra has provided it services in South America and Asia.

Simmons Group Inc.

700, 1207 - 11th Avenue S.W. Calgary, Alberta Canada T2C 0MS Telephone: (403) 245-5156 Facsimile: (403) 245-5156 Telex: 03-827662 AnswerBack: sg canada sg Contact: Dale M. Simmons, Chairman

The Simmons group of companies originated in 1962 with the formation of Simmons Drilling Ltd. To satisfy a growing oil well drilling market, Simmons became involved in the design and fabrication of efficient and innovative drilling rigs. Diversification in the early 1970s led to the creation of Western Underground Contractors, a company that develops underground salt caverns for the storage of petroleum and natural gas. This was followed by the acquisition of a natural gas transmission system by which Simmons Pipelines Ltd. transports a total of more than 225 MMCFD of gas to Sync ude and to the NOVA System in Alberta. Responding to the world's

growing concern for the environment, Simmons entered the 1990s with the formation of Noram Environmental Solutions Inc. Through its two subsidiaries, Alternative Fuel Systems Inc. and Deep Shaft Technology Inc., Noram markets an electronic, computer-driven, dual fuel kit for diesel engines and an innovative wastewater treatment process. The kit converts engines to run on economic natural gas; the Deep Shaft process efficiently treats biodegradable waste with a fraction of the land or energy required of conventional methods.

# SIMTECH Consulting Services

2005, 205 - 5th Avenue S.W. Calgary, Alberta Canada T2P 2V7 Telephone: (403) 262-4885 Facsimile: (403) 263-8556 Telex: 038-22763 Contact: Geoffrey M. Warren, Marketing Representative

SIMTECH Consulting Services Ltd. is an advanced technology consulting and software research and development firm, specializing in numerical simulation programs for the petroleum industry. Applications include hydraulic fracturing, reservoir modelling, tar sands/ geomechanical modelling and well test analysis. The company's markets include all oil and gas operating and service companies worldwide.



191 Barton Street East Hamilton, Ontario Canada L&L 2W7 Telephone: (416) 527-4567 Facsimile: (416) 527-7173 Contact: T.D. Lindermere, General Manager

Smart Turner Limited has more than 100 years of experience in the design and manufacture of heavy duty industrial and municipal pumps. Their products include ANSI-B73.1 and standard end suction, double suction, multistage, vertical sump, non-clog, refuse, and vertical cantilever centrifugals. Also available are reciprocating steam and power pumps; sizes range from 1 to 12 in. discharge while materials vary from cast irons and steels to a full selection of corrosion resistant alloys, including bronzes, stainless steels, hastelloys, and titaniums. The quality and performance of the company's products are ensured by manufacturing quality assurance programs to CSA Z299.3 and Z299.4, and pump testing to the standards of the Hydraulic Institute.

Solid Resources Limited

304, 513 - 8th Avenue S.W. Calgary, Alberta Canada T2P 1G3 Telephone: (403) 237-8050 Facsimile: (403) 266-1464 Contact: Jim Lake, Sales Manager

Solid Resources Limited specializes in wireline and well testing. Its Solid Well Testing Division provides operating crews and equipment for sweet and sour gas well testing, rental of oil field production and testing equipment, absolute open-flow potential determination, reservoir evaluations and limit tests, repair and maintenance of production equipment, and the provision of crews for gas plant operations. Its Solid Wireline Services Division supplies wireline equipment for sweet and sour gas well testing, mechanical

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equipment of sweet and sour service, B.H.P. and temperature equipment for low or high pressure wells, and electronic equipment for downhole or surface printouts; design and manufacture of special tools and a complete pressure control service.

Spilabury Communications Ltd.

1495 Franklin Street Vancouver, British Columbia Canada VSL 5B6 Telephone: (604) 254-6411 Facsimile: (604) 254-2080 Telex: 04-55482 AnswerBack: spiltin vcr Contact: Berge Tuyssuzian, Manager, International Marketing

Spilsbury Communications Ltd., incorporated in 1941, has developed commercial, medium and long range, high frequency, single side band (HF SSB) communications. In recent years, the company has diversified its activities and developed a range of digital voice products; it has also become a major supplier of VHF car radio telephones. Today, Spilsbury's marketing and service network extends into more than 50 countries. Exports account for half of the company's annual sales.

In 1986, Spilsbury incorporated R.A.C.E. Technologies Inc., purchasing the right to further develop, manufacture and market *RACE*—automated HF radio and telephone system for voice data communications networks. R.A.C.E has also developed a range of modems for error free transmission of facsimile and data over HF networks. Racal Communications of the U.K. markets R.A.C.E products on a worldwide basis. Sproule Associates Limited

900, 140 - 4th Avenue S.W. Calgary, Alberta Canada T2P 3N3 Telephone: (403) 269-7951 Facsimile: (403) 237-0201 Telex: 03-821172 Contact: Rudolf Cech, Director

Sproule Associates Limited provides worldwide geological and engineering. services to the petroleum and mineral industries and to governments and international agencies concerned with resource development. It now employs about 75 persons, including professional geologists and engineers in many parts of the world. The company's services include oil and gas reserve determinations, property and company evaluations, subsurface geological analyses, petroleum engineering services, feasibility studies, field surveys, photogeological interpretations, consultation, exploration and development, management of oil and gas companies and properties, and advice on petroleum investments.



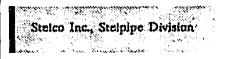
1001 - 10th Avenue S.W. Calgary, Alberta Canada T2P 0B7 Telephone: (403) 245-3371 Facsimile: (403) 229-1980 Contact: F.B. Irvine, Vice President

Sprung Instant Structures Ltd. was incorporated in 1971 and evolved from a research and development program which was initiated in 1969 in cooperation with the Canadian Government. Over the succeeding four years, the Membrane Stress Theory evolved and was refined and put into practical application in the form of the present Sprung Instant Structure. This application or technique is patented in every industrialized nation in the western world. The structures have been sold in more than 50 countries, including the Arctic regions. Sprung Instant Structures are portable and modular and can be quickly erected and dismantled. They are the answer to the need for economical enclosed space and are suitable as warehouses, maintenance depots, workshops, pipe assembly plants, construction covers, equipment and vehicle storage depots, and emergency shelters.

Starozik Industries Ltd., Ruffneck Heaters Division

2827 - 18th Street S.E. Calgary, Alberta Canada T2E 7K3 Telephone: (403) 291-5488 Focsimile: (403) 291-7042 Contact: Ian McDonald, Marketing Manager

Ruffneck Heaters Division is a manufacturer of specialty heating equipment which is used primarily in hazardous locations where explosion-proof units are required. Ruffneck has been manufacturing and marketing its high quality, rugged, industrial heating equipment for 15 years. These heaters are sold extensively throughout North America, Europe, China an U.S.S.R.



P.O. Box 1010 Welland, Ontario Canada L3B 5Y6 Facsimile: (416) 735-2055 Contact: D.W. Johnstone, Sales Manager, Oil and Gas Eastern

The Stelpipe Division of Stelco Inc. was originally established in 1900. The division manufactures a large variety of line pipe for the oil and gas industry at its two manufacturing locations in Canada—Camrose, Alberta and Welland, Ontario.





# Strata Drill Ltd.

P.O. Box 494 Okotoks, Alberta Canada TOL 1TO Telephone: (403) 236-1600 Facsimile: (403) 279-1868 Contact: Roger Hoffort, President

Strata Drill Ltd. has been in business for 22 years and manufactures polycrystalline diamond bits, including core bits.

Stream-Flo Industries Ltd.

4505 - 74th Avenue Edmonton, Alberta Canada T6B 2H5 Telephone: (403) 468-6789 Facsimile: (403) 469-7724 Telex: 037-2869 Contact: J.D. McNeill, President

Stream-Flo Industries Ltd. was established in 1962 to design and manufacture wellhead equipment. The company markets its products under the brand name of CROWN. These wellhead products include adaptor flanges, bowi protectors, back pressure valves and plugs, casing hangers, head and spools, combination test plugs and retrieving tools, crosses, tees adaptors, drilling flanges, gate valves, secondary pack-offs, subsurface safety control valves, tubing hangers, tubing head adaptors and tubing hends. CROWN Swing Check Valves are available in 0.5 to 56 in., 275 to 6 000 psi working pressure. All Stream-Flo products are licensed with the American Petroleum Institute. Today, Stream-Flo sells its products in Canada, Asia and Northern Africa.



3, 415 Monument Place S.E. Calgary, Alberta Canada T2A 1X4 Telephone: (403) 235-6684 Facsimile: (403) 269-2419 Contact: Norm Roscovich, Sales Manager

Sunada Tech Inc. was established in 1985 for the manufacture, sales and service of electronic geophysical equipment to the oil and gas industry. Sunada provides turnkey electronic surface and subsurface data collection systems. Its product line consists of three main systems-electronic, battery powered, memory pressure/temperature probe (MODEL ST18000); real-time, conductor line pressure/temperature surface and subsurface probes (MODEL STIRTP); and radio telemetry systems for remote data transmission. These products have applications in the production and service sectors. Field results show that users enjoy a reliability/success rate of more than 98 percent.



P.O. Box 692, Industrial Park Sussex, New Brunswick Canada EOE IPO Telephone: (506) 432-1130 Facsimile: (506) 432-1135 Contact: Marc Blanchard, Vice President

Sussex Manufacturing Ltd. is a manufacturer of waste oil refiners. The Shurtleff SX 302 Waste Oil Refiner was designed for ease of operation and servicing. Encased in detachable metal panels, the mechanism is assembled to facilitate the service or replacement of any part. Parts, piping and switches are readily available at any hardware dealer virtually anywhere in the world. The main components are a waste oil storage tank, cracking chamber, combustion chamber, heat exchangers, refined end-product storage tank, bleed-off line, and piping. The SX 302 Refiner was designed to operate 24 hours/day, with approximately 5 percent downtime for cleaning. All plumbing parts are of the highest quality durable metals and routine operation can be mastered in a short period of time.

Taro Industries Ltd. Rostel Industries Division 

4535 - &A Street N.E. Calgary, Alberta Canada T2E 416 Telephone: (403) 276-9785 Facsimile: (403) 230-0877 Contact: Lloyd Bridge, Sales Representative

Rostel Industries was founded as a private company in 1976 before becoming a division of Taro Industries Ltd. in 1985. It designs, manufactures and repairs oil and gas drilling rig equipment to meet or exceed API specifications. Rostel has complete machining, fabrication, mechanical and inspection facilities. The company has successfully served the drilling industry in Western Canada and the U.S. and many countries in Europe and Asia.

Tarion Engincoring Corporation Ltd.

11, 1915 - 32nd Avenue N.E.
Calgary, Alberta
Canada T2E 7C8
Telephone: (403) 250-7915
Facsimile: (403) 250-1194
Contact: James Shedden, Vice President, Marketing

Tartan Engineering Corporation Ltd., established in 1977, serves the energy processing industry by providing complete turnkey engineering and management services in the area of oil and gas surface facilities and pipelines. The company offers a proven track record of engineering and management expertise which includes process, civil, mechanical and electrical engineering disciplines. Management functions include conceptual/feastbility studies, economic evaluations, budgeting,

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cost control, procurement, and expediting and inspection.



60 Caster Avenue Woodbridge, Ontario Canada LAL 5Y9 Telephane: (416) 851-9958 Facsimile: (416) 851-6314 Contact: David Johnston, Marketing Manager

Founded in 1980, Techno Scientific Inc. (TSI) is an advanced technology firm that specializes in non-destructive testing systems, robotic systems and sensors. TSI's non-destructive testing system design, development and service capabilities include ultrasonics and eddy current.

Telemetic Controls Inc.

2, 9804 - 47th Avenue Edmonton, Alberta Canada T6E 5P3 Telephone: (403) 436-0511 Facsimile: (403) 436-9039 Contact: Brian L. McClelland, General Manager

Telematic Controls Inc. has been manufacturing a standard line of thermal dispersion flow and level switches and mass flowmeters for more than 20 years. The company exports to the U.S., U.S.S.R., and China. Terra Lindu Canada, Inc.

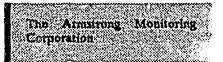
600, 510 - Sth Street S.W. Calgary, Alberta Canada T2P 3S2 Telephone: (403) 262-2170 Facsimile: (403) 262-3549 Contact: Deborah Miles, President

Terra Linda Canada, Inc. is a geophysical company formed in 1988 and is a leader in AVO seismic technology. It holds the exclusive licence to the newly developed and patented scismic geophone. The OMNIPHONE is a three-component geophone with a polarization filter that sends the three data components down a single line or channel. It is the first and only seismic geophone to have a computer and signal processor as part of the device. This product eliminates the need for two-thirds of the costly field equipment in three-component seismic recording and improves the quality of recorded seismic data. Used in the oil industry, the **OMNIPHONE** is available for distribution worldwide.



2060 Walkley Road Ottawa, Ontario Canada KIG 3P5 Telephone: (613) 731-9571 Facsimile: (613) 731-0453 Telex: 053-3502 AnswerBack: geoterra Contact: J.R. Depper, President

Established in 1966, Terra Surveys Limited provides consulting, engineering and technical services in the photogrammetric, hydrographic and geophysical fields. As one of Canada's largest resource mapping and development organizations, the firm is particularly oriented to the provision of surveying, mapping and engineering services for G.LS. projects. It is equipped with modern air survey cameras, ground and airborne geodetic survey units, precise photogrammetric instrumentation, a complete photographic laboratory and a data processing facility. Their Hydrographic Division provides a complete surveying service in all waters--offshore, coastal, inland and Arctic. Its capabilities in collecting and compiling hydrographic data have been proven in numerous projects, such as charting, drill site investigations, pipe and transmission line crossings and environmental assessments.



215 Colonnade Road South Nepean, Ontario Canada K2E 7K3 Telephone: (613) 225-9531 Facsimile: (613) 225-6965 Contact: William L. Armstrong, Vice President and General Manager

Established in 1981, The Armstrong Monitoring Corporation has become an industry leader in the development and manufacture of hazardous gas and vapour monitoring systems. Armstrong's diverse product line allows it to meet gas and monitoring requirements for a wide range of industries, including petrochemical. Designed to provide choice and flexibility to the customer, the product line includes portable and hand-held units, fixed multipoint systems in rack or wallmount configurations, and sensor/transmitter units that can be interfaced with building management systems or data acquisitions equipment.



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#### Thermo Design Engineering Ltd.

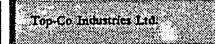
P.O. Box 5557, Station L Edmonson, Alberta Canada T6C 4E9 Telephone: (403) 440-6064 Facsimile: (403) 440-1657 Telex: 037-2966 Contact: Brent Gibson, Sales Manager

Thermo Design Engineering Ltd. and its 90 employees provide detailed engineering, design and fabrication services to the petroleum and petrochemical industries worldwide. The company specializes in natural gas processing facilities and equipment for LPG recovery, acid gas sweetening, sulphur recovery, dehydration and separation.

Timberland Equipment Limited

459 Industrial Avenue Woodstock, Ontario Canada N4S 7Z2 Telephone: (519) 537-6262 Facsimile: (519) 539-5853 Telex: 064-74133 AnswerBack: telcot wdsk Contact: James R. Leslie, Vice President and Marketing Manager

Since 1947, Timberland Equipment Limited has earned an international reputation for the design and development of heavy equipment for various applications. The company's cranes, winches and custom built blocks have assisted in the construction of numerous offshore oil drilling platforms.



7720 - 17th Street Edmonton, Alberta Canada T6P 1S7 Telephone: (403) 440–4440 Facsimile: (403) 440–4443 Telex: 037-3842 AnswerBack: topco edm Contact: Bob Ryll, Export Sales Manager

Top-Co Industries Ltd., a manufacturer of primary cementing equipment, was established in 1963 and exports its equipment worldwide. The company manufactures a complete line of primary cementing equipment, float shoes and collars, guide shoes, stage collars, plug dropping heads, welded and non-weld centralizers, and a complete line of casing scratchers, stop collars and cement baskets.



3603 - 2nd Street N.E. Calgary, Alberta Canada T2E 3H6 Telephone: (403) 230-1558 Facsimile: (403) 230-4591 Contact: Rick Kane, General Manager

Topco Oilsite Sales Ltd. is dedicated to manufacturing high quality products, as well as formulating new compounds and scalants to meet the changing requirements of the oil and gas industry. It has successfully developed a line of high temperature products for heavy oil projects, a 'dry' lubricant used in transportation, and a non-lead tubing and casing compound. The company assists in any technical matters related to thread compounding and specialty lubricants. Technical seminars are conducted for drilling and servicing contractors, supply stores and oil companies. Its products and services have been provided to clients in the U.S., U.S.S.R. and India.

# Travis Chemicals Inc.

1900, 777 - 8th Avenue S.W. Calgary, Alberta Canada T2P 3R5 Telephone: (403) 263-8660 Facsimile: (403) 233-7011 Telex: 038-25587 Contact: Jack Curr, International Division Manager

Travis Chemicals Inc. owns and operates two chemical manufacturing facilities and is a diversified supplier and manufacturer of specialty chemicals. Travis also supplies technical services internationally and has developed a network of field blending facilities and distribution centres. The company operates a research and development laboratory for field services, and manufactures and supplies oil and gas production specialty chemicals, gas and oil process chemicals, additives for drilling fluids/acidizing products, and products for heavy industry water treatment. The company provides its products and services to Canada, China, the U.S.S.R., Cuba, the Middle East, Indonesia, India and Pakistan.



6685 Millcreek Drive, Unit 6 Mississauga, Ontario Canada L3N 5M5 Telephone: (416) 826-8631 Facsimile: (416) 826-8631 Contact: P.B. Miller, General Manager

Trecan Combustion Limited offers extensive experience in the design, manufacture, installation and commissioning of industrial combustion equipment and services to clients in Canada, the U.S. and Asia. It specializes in providing engineered solutions to complex combustion problems, often on a turnkey basis. The equipment is used extensively in refineries and the petrochemical industry and includes incinerators for liquid, gaseous and solid wastes; and burners (oil, gas, dual fuel) for





fired heaters, reformers and steam generators.

# Tri Ocean Engineering Ltd.

600, 926 - Sth Avenue S.W. Calgary, Alberta Canada T2P 0N7 Telephone: (403) 266-4400 Facsimile: (403) 266-5525 Telex: 03-822798 AnswerBack: tri ocean Contact: R.A. McBeth, Principal

Tri Ocean Engineering Ltd. is comprised of a highly skilled group of professionals who provide comprehensive engineering and project management services to the petroleum industry on a worldwide basis. Their experience and expertise is primarily related to evaluation, detailed design and management services for offshore production and drilling systems; Arctic production and drilling systems; conventional oil and gas gathering, treating and secondary recovery facilities; offshore and onshore exploratory drilling and field development; and feasibility studies, development plans and emergency response planning. The company offers complete project support through all stages of a project from preliminary engineering and economics evaluation through detail design, installation and start up. The full scope of services can be made available under a project management arrangement-expert supervision and direction of a project while the client retains full control of major decisions.

### Trimsc Limited, Kenting Hi-Tower Drilling Division

1610, 300 - 5th Avenue S.W. Calgary, Alberta Canada T2P 2V8 Telephone: (403) 298-5266 Facsimile: (403) 298-5258 Telex: 03-825633 AnswerBack: trimac ho cgy Contact: A.D. Tyson, Vice President

Kenning Hi-Tower Drilling is a major Canadian drilling organization. Kenting and its affiliates own 85 land drilling rigs and currently are operating 57 rigs in Canada, 20 in the U.S. and eight in the U.K., Europe and the Middle East. Kenting has drilled more than 4 000 wells in Canada and more than 350 in the U.S. Its international operations commenced in 1972 and it has drilled over 650 wells in Europe and Africa. Since 1983, the company has provided 130 personnel to operate and maintain the semi-submersible Kulluk and the mobile Arctic Caisson Molikpag offshore rigs which are operating in the Beaufort Sea. Kenning has been contracted by more than 300 oil, gas and geothermal energy producing companies.

# Tubetest Service & Supply Ltd.

6774 - 52nd Avenuse Red Deer, Alberta Canada T4N 4K9 Telephone: (403) 346-6161 Facsimile: (403) 347-3740 Contact: Mitch Sullivan, President

Tubetest Service & Supply Ltd. was incorporated in 1961 as a service and supply company to the oil and gas industry. In 1965, they expanded their services to the Canadian East Coast and offshore Beaufort Sea, and now serve clients worldwide. Their Tubetest (P.T.C.) Power Thread Cleaner is a convenient, ruggedly designed, light weight and performance proven system for cleaning all types and sizes of threaded connections in preparation for inspection and make-up. P.T.C.'s special brush and solvent system thoroughly cleans in 5 to 15 seconds per thread. All dirty solvent is collected, Tiltered and recycled, resulting in no spillage on the rig floor or in the ocean.



1600 Carling Avenue, Suite 310 Ottawa, Ontario Canada K1Z 8R7 Telephone: (613) 722-7472 Facsimile: (613) 722-8682 Contact: Giulio Maffini, President

Established in 1982, Tydac Technologies Inc. specializes in the development of Geographic Information System (GIS) software and related applications. Tydac's main product is SPANSTM (SPatial ANalysis System). SPANS and its related software packages are designed for GIS professionals who want a stand-alone desktop workstation with strong data integration, analysis and modelling capabilities. SPANS can rapidly process complex geographically referenced databases in all three key data structures (vector, raster and quadtree), along with images of varying resolution. More than 800 SPANS systems have been installed in more than 37 countries. Tydac provides a full range of GIS support services with SPANS, including training, hot lines, applications consulting, database development and customized software.

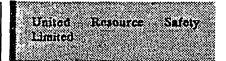


## United Corresion Corporation

P.O. Box 5560, Station L Edmonton, Alberta Canada T6C 4E9 Telephone: (403) 440-1356 Facsimile: (403) 440-4413 Contact: Tom Burke, Manager, Finance and Administration

United Corrosion Corporation specializes in products and services related to corrosion and serves Canada, the U.S. and Asia. Its subsidiary company, United Corrosion Consultants Ltd. concentrates on cathodic protection and internal corrosion monitoring. Utilizing specialized products and procedures, internal and external corrosion control measures can be implemented. Its approach is to undertake and evaluate corrosion problems; then it engineers, designs and installs a cathodic protection system. It also supplies rectifiers, anodes, coke breeze and all other materials used in the cathodic protection industry.

Another subsidiary company, United Pipeline Systems Inc., installs high density polyethylene liners into pipelines to prevent internal corrosion of the pipeline. It concentrates on oil field water injection and water disposal systems. The advantages to its liner system include relatively few joints; the integrity of the liner can be monitored with the venting system.



340, 525 - 28th Street S.E. Calgary, Alberta Canada T2A 6W9 Telephone: (403) 273-7774 Facsimile: (403) 273-0963 Telex: 038-21501 Contact: Fred S. Farmer, Marketing Manager

United Resource Safety Limited, established in 1987, provides safety inspections, emergency response plans, on-site inspections, gas plant services (H<sub>2</sub>S drilling, drill stem testing, etc.), loss control management and safety training. These services are provided in Canada, the U.S., Asia, South America and Africa.

# Universal Industries Ltd.

P.O. Bax 1590 Lloydminster, Saskatchewan Canada S9V 1K5 Telephone: (306) 875-6161 Facsimile: (306) 875-6169 Contact: Rod Steward, Manager, Sales and Marketing

Universal Industries Ltd. are leaders in the manufacture, supply and service of procest, equipment for heavy oil projects. Their equipment includes oil field pumping units, tankage pressure vessels, treaters, production well testing equipment, and desanding equipment. Established in 1949, the company serves Canadian, U.S. and Caribbean clients. Universal Systems Ltd.

270 Rookwood Avenue Fredericion, New Brunswick Canada E3B 2M2 Telephone: (506) 458-8533 Facsimile: (506) 459-3849 Telex: UC 7601184 AnswerBack: usls

Universal Systems Ltd., incorporated in 1979, develops and markets digital mapping and Geographic Information Systems. The basis of these systems is their software package entitled CARIS (Computer Aided Resource Information System). Disciplines where CARIS can be applied include topographic mapping, geology, cadastral mapping and data management, hydrographic charting, and environmental sciences. The company conducts research into improved techniques for CARIS functionality and provides integrated solutions to clients interested in GIS technology. These solutions involve the assembly and integration of hardware and software solutions and the provision of training. support, software development services and consulting programs. The provision of consulting services in the field of spatial information systems includes the review of emerging technology to the prototype user requirements within a controlled pilot study. The company and its representatives market and support CARIS worldwide.

Industry, Science and Technology Canada

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## Universe Machine Corporation

5546 - 89th Street Edmonton, Alberta Canada T6E SP9 Telephone: (403) 468-5211 Facsimile: (403) 468-5430 Contact: Kurt Feigel, President

Universe Machine Corporation manufactures and repairs medium to large machinery, including valves, material handling equipment and various other products for the pipeline, oil field, petrochemical, and steel fabrication. The company's products and services include custom valve manufacture, custom equipment manufacture, valve hydrostatic test equipment, welding and positioning equipment, oil field casing equipment, specialized hydraulic machinery, valve repair, machining and grinding, fabrication, and heavy equipment repair and assembly. The company and its 80 employees export to the U.S. and Australia

Valmet Automation (Canada) Ltd., Valmet-Sentrol Division

I, 6325 - 12th Street S.E. Calgary, Alberta Canada T2H 2K1 Telephone: (403) 253-8848 Facsimile: (403) 259-2926 Telez: 03-825784 Contact: David P. Jardine, Vice President, Marketing, Sales & Service

Valmet-Sentrol Division has been building and installing Supervisory Control and Data Acquisition (SCADA) systems for oil and gas pipeline/production since 1971. A SAGE SCADA system provides the accurate metering information essential in the operation of distribution and transmission lines. Field devices connect directly to Remote Terminal Units (RTUs) for accurate flow data to provide total control from a central location. A family of SAGE RTU 800s handle field applications from the wellhead to the consumer. The RTUs are fully integrated and can handle both control and monitoring at compressors or pump stations. Powerful software executes pipeline start up and shut-down procedures, and coordinates station control. A dynamic pipeline model for leak detection is also available.

Vanutuver Shipyards Co. Ltd.

50 Pemberion Avenue North Vancouver, British Columbia Canada V7P 2R2 Telephone: (604) 988-6361 Facsimile: (604) 984-1843 Telex: 04-352532 AnswerBack: seaspan vcr Contact: Bill Armstrong, Marketing Supervisor

Incorporated in 1902, Vancouver Shipyards Co. Ltd. has established itself as one of the foremost shipbuilding and ship repair operations on the Pacific coast. The company also constructs offshore platforms and platform modules, and provides complete engineering services.

# Variperin (Canada) Limited

8, 3424 - 26th Street N.E. Calgary, Alberta Canada T1Y 4T7 Telephone: (403) 250-7263 Facsimile: (403) 250-9695 Contact: Perry Parker, International Marketing

Variperm (Canada) Limited specializes in sand control equipment for the oil and gas industry. Incorporated in 1968, the company has supplied products and technical expertise throughout Western Canada, the U.S., Caribbean and the Middle East. Variperm can offer a wide range of products and services from open-hole gravel packs, cased-hole barefoot completions, or engineering support for completion designs. Variperm manufactures all of its own wire-wrapped screen, pre-pack equipment and liner

Industry, Science and Industrie, Sciences et Technology Canada Technologie Canada hangers. The company offers its expertise in heavy oil thermal projects, high volume conventional oil and gas wells and domestic water well programs. Variperm's reaction time throughout the world is excellent because products are manufactured in-house and are shipped under a general export permit.

Velan Inc.

2125, promenade Ward Montreal, Quebec Canada H4M IT6 Telephone: (514) 748-7743 Facsimile: (514) 748-7743 Telex: 05-835668 Contact: Thomas C. Velan, Vice President, Export Sales

Velan Inc. is one of the world's largest manufacturers of industrial valves, and exports to 60 countries. Established in 1950 as a supplier of nuclear valves, the company applies the same expertise and strict quality control in the production of gate, check, knife gate and ball valves (manual and automated) in carbon, stainless or alloy steel, and in sizes ranging from 0.25 to 36 in. Velan ball valves feature a patented seat design which guarantees long cycle life, low operation torque, and bubble tight shut-off. Velan also offers stainless steel gate, globe and check valves for corrosive service, as well as specialty products, such as metal-seated ball valves, beliows seal valves, cryogenic and slurry valves.



#### Veritas Seismic (1987) Ltd.

615 - 3rd Avenue S.W. Calgary, Alberta Canada T2P 0G6 Telephone: (604) 266-9200 Facsimile: (604) 266-9292 Contact: Judi MacDonald, Marketing Manager

Veritas Seismic (1987) Ltd. is a comprehensive seismic processing service company. Established in 1975, the company has 76 professional and support staff. The company has gained worldwide expertise over the years, processing seismic data on all major continents and offshore reserves. Veritas is an acknowledged leader in seismic technology. Through ongoing in-house research and development programs and improved hardware capability and capacity, all 2D and 3D services provide the best data interpretation available.

Viking Pump Company of Canada Ltd.

661 Grove Avenue Windsor, Ontario Canada N9A 6M3 Telephone: (519) 256-5438 Facsimile: (519) 256-5070 Contact: David Booth, Vice President, Export Sales

Viking Pump Company of Canada Ltd. manufactures rotary gear pumps, centrifugal pumps and regenerative turbine pumps. These products have been made in Canada since 1924 and are competitive in world markets. Rotary gear pumps are available to 750 USGPM pressures to 200 psi and viscosities to 1 000 000 ssu. Viking supplies the oil industry in Canada and the U.S. with pumps for gathering crude oil, trucking and transportation by ship and rail, and pipeline oil and oil products. Its products are used widely in oil and grease manufacturing.



4300, promenade Beaudry St-Hyacinthe, Quebec Canada J2S 845 Telephone: (514) 774-5326 Facsimile: (514) 774-3887 Contact: Henri Reiher, General Manager, Marketing and Sales

Volcano Energy Systems Inc. specializes in the manufacture of tubes, plate and structural steel, including boilers, pressure vessels, heat exchangers and tanks for the petrochemical industry, environmental works, incineration and various other industrial and commercial clients. Their equipment is exported to the U.S., Mexico and Africa.



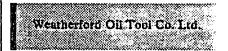
2210, 510 - 5th Avenue S.W. Calgary, Alberta Canada T2P 2R7 Telephone: (403) 264-4146 Facsimile: (403) 269-4224 Telex: 03824869 Contact: John Badger, Technical Services

Walker Steel Corporation has 100 employees, was established in 1979, and is now a major manufacturer of wellhead equipment, gate valves and swivel joints. The company exports to the U.S.



9924 - 29th Avenue Edmonton, Alberta Canada T6N 1A2 Telephone: (403) 462-4744 Facsimile: (403) 462-4746 Contact: Wally Walters, President

Walters Oil Tool Machine Ltd. has served the oil, gas and mining industries in Canada, the U.S., U.S.S.R., U.K., Asia and Africa since 1957. The company manufactures downhole tools, drill stem testing tools, shock subs, directional drilling tools, rotary subs and oil field accessories, core barrels, stabilizers and surface equipment.



14435 - 116th Avenue Edmonton, Alberta Canada TSM 3E8 Telephone: (403) 455-2176 Facsimile: (403) 452-6830 Telex: 037-2868 AnswerBack: wotcoedm Contact: Dick Goebel, Assistant General Manager

Weatherford Oil Tool Co. Ltd. has been serving the Canadian oil industry for more than 40 years and exports its products and services to all major oil producing countries. The company is Canada's largest tubular running service organization and has equipment and crews available in all active exploration and producing areas. Hydraulic power tongs are used for threaded connections. Comprehensive service packages are available which cover all of the tools and services needed to successfully run casing and completion strings. The company is an industry leader in technology related to the make-up and installation of oil field tubulars. This is important technology because casing and tubing strings constitute a high percentage of the total cost of well drilling. The company also manufactures a complete line of





mechanical comentation products and other specialty tools used in oil and gas exploration and development.

## Wega-D: Geophysical Ltd.

100, 1301 - 8th Street S.W. Calgary, Alberta Canada T2R 1B7 Telephone: (403) 228-9448 Facsimile: (403) 228-6468 Telex: 03-825865 AnswerBack: intcan cgy Contact: Werner J.M. Wenzil, President

Wega-D Geophysical Ltd. offers a new, patented electrical geophysical technology for oil and gas exploration. Using computerized pattern recognition, the technology determines the probability of finding hydrocarbons at a given location by comparing a template of deep geochemical alteration responses associated with hydrocarbon occurrence to nearby barren areas. The technology is useful for diagnosing the hydrocarbon potential of seismically defined structures or where seismic is non-diagnostic. The system has been successfully employed to locate new hydrocarbon reserves to depths of 3 500 m in Eastern Europe, the Middle East and Canada.

Weir-Jones Engineering Consultants Ltd.

1574 West 2nd Avenue Vancouver, British Columbia Canada V6J 1H2 Telephone: (604) 732-8821 Facsimile: (604) 732-4801 Contact: Keith Witney, Manager, Engineering

Since 1971, Weir-Jones Engineering Consultants Ltd. has performed a number of investigations for and provided equipment and services to the oil and gas industry. These have primarily involved the measurement, display and analysis of stress, movement and vibrations in structures and machinery, including gas pipelines and compressor stations. The company will conduct specialized tests, such as pipe-burst instrumentation, blow down tests and heat loss studies.

Structural monitoring systems have been designed, manufactured and installed on offshore structures, including Jackup leg load monitoring systems, as well as Arctic ice, geotechnical and structural systems. These systems have emphasized real-time engineering information displays for on-site information, as well as archival data for later analysis. Specialized instruments are also designed and manufactured to meet specific needs. The company has instrumentation development laboratories, including mechanical and electronic test facilities, as well as a full vibration and temperature environmental qualification facility.

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3202 Beta Avenue Burnaby, British Columbia Canada VSG 4K4 Telephone: (604) 294-2222 Facsimile: (604) 294-1292 Contact: Paul Cox, Vice President, Marketing and Sales

The Weldco-Beales Division of Weldco Limited is an established organization with 45 years of attachment design and custom manufacturing experience. It offers an extensive line of material handling products for the resource industries throughout North America. The company will convert standard machines into unique problem solvers. For loaders and excavators, it manufactures a variety of work tools—from versatile quick coupler systems to a comprehensive line of buckets and material handling grapples. Wellmaster Pipe and Supply Inc.

62 Goshen Street Tillsonburg, Ontario Canada N4G 4J1 Telephone: (519) 688-0500 Facsimile: (519) 688-0563 Telex: 064-73538 AnswerBack: wellmster tisn Contact: James McKenzie, President

Wellmaster Pipe and Supply Inc. was established in 1949 and manufactures API oilwell casing and tubing couplings in sizes ranging from 2 % in. EUE to 16 in. OD in 8 round and buttress threads. Grades manufactured are K-55, N-80, L-80, C-95 and P-110. The unique chucking arrangement in Wellmaster's manufacturing procedure assures perfect thread alignment. All Wellmaster couplings have their own serial number for complete traceability. The company has shipped their API couplings to Asia, South America, the U.K., Europe and the U.S.



6115 - 30th Street Edmonton, Alberta Canada T6P 1J8 Telephone: (403) 465-3391 Facsimile: (403) 465-3402 Contact: John Wells, President

Wells-Hall Fabrication and Construction Ltd. design and fabricate oil and gas wellhead production equipment. This equipment includes horizontal and vertical gas and oil separators, horizontal and vertical emulsion treaters, glycol dehydrators, and indirect fired heaters. The company and its 60 employees target the Canadian, U.S., U.S.S.R. and Asian markets.



#### Western Instruments, Inc.

100, 10411 - 178th Street Edmonton, Alberta Canada T5S 1R5 Telephone: (403) 484-2410 Facsimile: (403) 484-3386 Contact: M.B. Palynchuk, Sales Manager

Western Instruments, Inc., established in 1966, builds testing systems for the tube and pipe industry. The company is now recognized worldwide for its weld testing equipment and for its ultrasonic testing systems for tube and pipe. The function of this equipment is to test longitudinal resistance and fusion type welds for defects, lamination in the body, and drawing the profile of the weld to provide the welder operator with the location of existing problems in the product. Another product is the Flash Gauge. This unit measures the thickness of the tube around the weld area and draws a graphical representation of the weld profile to determine whether the trim condition is accurate to specification. All mechanical and electronic designs are on CAD systems and digital electronics with the integration of computers.

## Westinghouse Canada Inc., Power Generation Division

110 King Street West Hamilton, Ontario Canada L8N 3K2 Telephone: (416) 528-8811 Facsimile: (416) 528-3415 Telex: 061-8832 AnswerBack: wecan Contact: T. Beese, Manager, Power Equipment Marketing

Westinghouse Canada Inc.'s Power Generation Division manufactures heavy industrial gas turbine generator sets (50 MW class) and steam turbine generators (less than 100 MW) for 50 and 60 Hz markets. Parts and service support for this equipment is provided worldwide.

# Wheatley Canada Ltd.

4616 Manhattan Road S.E. Calgary, Alberta Canada T2G 4B4 Telephone: (403) 243-4236 Facsimile: (403) 243-4236 Telex: 03-821521 AnswerBack: wheathy cgy Contact: Jim Keating, Material Supervisor

Wheatley Canada Ltd. has been operating in Canada since 1947. It operates a manufacturing facility and a pump fabrication facility. In 1988, the company was recognized as the first and only Canadian manufacturer of horizontal swing check valves registered under the CSA Z299.3 quality program and the ISO 9003 quality program. In 1990, it expanded its quality program to include the plunger pump product line under CSA Z299.3. The company offers a broad range of quality valve and pumping products. A line of 36 low profile plunger pumps are available to fit an endless list of pumping applications, including glycol systems, hydraulic systems, CO<sub>2</sub> injection, salt water injection and disposal, LPG storage and pipelines, crude oil transfer and high-pressure boiler feed pumps.



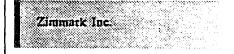
5501 Trans Canada Highway Pointe Claire, Quebec Canada H9R 1B7 Telephone: (514) 697-9711 Facsimile: (514) 697-6779 Contact: Kevin Tellier, Manager, International Sales

Wire Rope Industries Ltd. was establishe : in 1886. The company is the largest wire rope manufacturer in Canada and it operates two plants and 20 service centres in Canada and the U.S. The company has one of the most extensive product lines in the business and manufactures a full range of ropes for oil drilling. The company is active on all continents.



4129 Harvester Road Burlington, Ontario Canada L7L SM3 Telephone: (416) 632-3123 Facsimile: (416) 632-0301 Telex: 061-8678 AnswerBack: ZETON INC BURL Contact: David Beckman, Vice President

Zeton Inc. provides automated pilot plant systems to oil refining, petrochemical and chemical clients worldwide. The company was formed in 1986 and has earned a reputation for building pilot plants and other systems on a small scale to a high level of quality and operability. The company provides a full turnkey service in the provision of its pilot plants and other small scale, skid-mounted systems, including design studies, detailed engineering, manufacture, installation, commissioning, start up and operator training. Zeton also provides field service for existing plants. The majority of Zeton's products are exported. It is represented by agents in more than 30 countries.



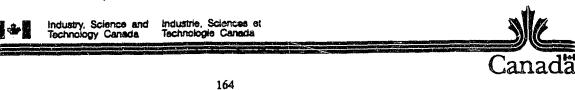
4380 South Service Road Burlington, Ontario Canada L7L 5Y6 Telephone: (416) 632-5410 Facsimile: (416) 632-5171 Contact: Lowell A. Wilson, President

Zimmark Inc. has automated the procedures for oil clarification and recovery. Zimmark has installed systems in every major rail yard in Canada and in rail yards in the U.S. and the Far East. Transit companies, marine/naval shipping, and countries producing electric power with diesel generators are considering the system. Significant cost savings are realized and toxic waste volumes are reduced. The reclamation process recovers 90 percent of used lube oil for continued use and involves laundering the





oil with the help of a chemical coagulant, heat and time. After dirt and metal contaminants have been removed, the recycled oil is blended with new oil at a ratio of 1:4. The process does not remove additives that are still active. Zimmark will install, operate and manage the system, working closely with shop management personnel. The system produces detailed analysis and quality assurance reports.





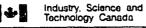


Industry. Science and Industrie, Sciences et Technologie Canada

#### Introduction

The Canadian nuclear industry is a major contributor to the safe, reliable and economical generation of electricity in Canada. The Canadian nuclear industry alone contributes \$4.5 billion annually to the economy and generates 28,000 jobs directly and 60,000 jobs indirectly. Nuclear energy accounts for 15% of Canada's total electricity supplies. In the province of Ontario, nuclear energy provides 50% of generating capacity. Atomic Energy of Canada Limited leads the world in the development of clean, safe and reliable electrical energy systems. CANDU nuclear power plants are among the most advanced and best performing reactors over designed. CANDU's have been consistently rated high in the list of almost 300 nuclear reactors world-wide. As of September 30, 1991, New Brunswick Power's, Pointe Lepreau nuclear generating station achieved a 97.5% capacity factor and ranked first in the world with a lifetime reactor performance of 90.9%. AECL's dynamic research team nas engineered major technical breakthroughs in the mining sector and is helping to ensure the CANDU reactors continue to operate at peak efficiency. Canada is also a major producer of uranium, accounting for approximately 30% of the Western World's supply.

This directory provides a brief summary of the capabilities of Canadian firms active in the manufacture and supply of nuclear equipment.



and Industrie, Sciences et da Technologie Canada



#### Alphabetical Listing of Companies

Alfa-Laval Ltd. Ascolectric Limited Atlantic Nuclear Services Ltd.

Bailey Canada Inc. B.C. Instruments Inc. Blenkhorn and Sawle Ltd.

CAE Electronics Ltd. Canada Alloy Castings Limited Canada Forgings Inc. Canadian Fusion Fuels Technology Project Canatom Inc. CDS Research Ltd. Centre for Nuclear Engineering, University of Toronto College Tool and Die Contro Valve Inc. CTS of Canada, Limited

DeVilbiss Air Compressor Products Dominion Bridge Donlee Precision Dresser Canada Inc., Valve & Controls Canadian Operations Drummond Welding & Steel Works Limited

Ellett Industries Limited Energy Management Systems (EMS/DACS) Exotemp Ltd.

FAG Bearings Ltd. Farris Industries Canada Fisher Controls Company of Canada Ltd. Foxboro Canada Inc.

GBF Forging Specialists Inc. GEC Alsthom Electromechanical Inc. Glitsch Canada Ltd.

Hayward Gordon Ltd. Hitachi Canadian Industries Ltd. Hoke Controls Limited Hooper Welding Enterprises Ltd. Howden Group Canada

Ingersoll Rand Canada Inc. Invar Manufacturing Ltd. ITT A-C Pump Canada

#### **ITT Barton Instruments**

John T. Hepburn, Limited

Keystone Canada Inc. Koch Engineering Company Ltd. Kubota Metal Corporation, Fahramet Division

Metscor Steel Products MIL Davis Inc. Milton Roy Industries Ltd. MPB Technologies Inc.

NEI Parsons Canada Limited Neles-Jamesbury Ltd./Ltee.

Ontario Hydro

Proquip International

Ralfor Plus Inc. Ritepro Inc. Robert Mirchell Inc., Douglas Bros. Industrial Division Rosemount Instruments Ltd.

Sandvik Canada Inc. Scintrex Ltd. Shawflex Inc. Sihi Pumps Ltd. Spar Aerospace Limited Spectrum Engineering Corporation Ltd. Stern Laboratories Inc. Sulzer Bingham Pumps Inc.

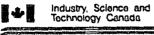
Taylor Forge of Canada Corporation Trench Electric

Unifin International Inc. Union Pump (Canada) Ltd.

Valpro Inc. Velan Inc.

Willowglen Systems Ltd.

Zircatec Precision Industries Inc.



industria, Sciences et Technologia Canada



**Company Profiles** 

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# 3-L Filters Limited

427 Elgin St. N., P.O. Box 371 Cambridge, Ontario Canada NIR 5V5 Telephone: (519) 621-9949 Fox: (51() 621-3371 Contact: Dr. Bob Goel, Chief Engineer

For over 25 years, 3-L Filters has designed, engineered, built and serviced filtration systems utilizing pressure vessel technology for refineries, pipelines, nuclear power plants and numerous industrial applications. From its original position as a petroleum industry supplier, the company has extended its expertise into filtration for waste water treatment, coolants, solvents, lubricants and gases. As well the company engineers and fabricates ion exchangers, vapour recovery driers, filters vessels and other process equipment for nuclear power plants in several countries.

Products: Liquid, gas filters, filter separators, gas coalescers, ion exchange columns, air, gas dryers strainers, process vessels.



101 Milner Ave. Scarborough, Ontari. Canada M1S 4S6 Telephone: (416) 299-6101 Fax: (416) 299-6476 Contact: Mr. Lars Warlin, General Manager, Thermal Division

Alfa-Laval AB, headquartered in Lund, Sweden, is a large, world-leading engineering group with business operations in 150 countries and over 20,000 employees worldwide. Business activities are in three main areas: Food, Industry and Agri. In Canada, Alfa-Laval is located in modern 120,000 sq. ft. manufacturing facilities and has 200 employees.

Alfa-Laval Thermal's Business Area is the design and manufacture of plate heat exchangers, spiral heat exchangers, brazed heat exchangers and strainers for chemical process, heating and ventilation, steel and power generation industries. Products include plate heat exchangers for Nuclear Steam Supply System (NSSS) including emergency core coolers, moderator coolers and heavy water coolers; plate heat exchangers for Balance of Plant including transformer oil coolers, lube oil coolers, central cooling systems manufactured to CSA Z299.3. CSA B51-M and ASME Section VIII, Div. 1. standards. Alfa-Laval has the ASME N-Stamp (from Sweden)



10 Airport Rd., P.O. Box 160 Brantford, Ontario Canada N3T SM8 Telepheret: (S19) 758-2700 Fax: (L.) 758-5540 Contact: D.H. Laackman, Manager Sales & Markesing

Ascolectric Limited is a major Canadian manufacturer of control products used for the automation of machinery and processes as well as the control of electrical power. The company is based in Brantford, Ontario, with a coast-to-coast network of distributors as well as district sales offices. Ascolectric has been in operation since 1965.

Products: 2, 3, and 4-way solenoid valves; pressure & temperature switches; fluid power controls; air-preparation equipment; linear drives (pneumatic & hydraulic); automatic transfer switches; automatic transfer & bypass isolation switches; remote control switches; power control systems; dry pipe sprinkler systems. Atlantic Núclear Services Ltd.

P.O. Box 1268, Station A, S00 Beaverbrook Court Fredericton, New Brunswick Canada E3B 5C8 Telephone: (S06) 458-9552 Fox: (S06) 451-0525 Contact: C. Keith Scott, President

Atlantic Nuclear Services was founded in 1983 with its head office located in Fredericton, New Brunswick, The initial area of business was reactor safety analysis and design for CANDU power reactors. The company has expanded to offer services generally in nuclear science and engineering. The current staff complement is supplemented by joint venture arrangements with selected Canadian and international companies. Atlantic Nuclear has dedicated scientists, engineers, and technologists with project experience in a wide range of areas including: safety and licensing requirements, thermalhydraulics and heat transfer, reactor physics and core analysis, fuel engineering and testing, reliability, power plant operators and staff. probabilistic risk assessment, environmental pathway models, instrumentation and control, data acquisition, software engineering and quality assurance.

Atlantic Nuclear's client base includes New Brunswick Power and the Pt.Lepreau NGS, Hydro Quebec and the Gentilly-2 NGS, Ontario Hydro, AECL - CANDU Ops, AECL - Chalk River Laboratories, Atomic Energy Control Board, IAEA, and the Canadian Space Agency.



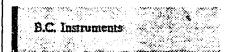


# Beiley Canada Inc.

860 Harrington Court Burlington, Ontario Canada L7N 3N4 Telephone: (416) 639-8840 Fax (416) 639-8639 Contact: Richard P. West, Marketing Manager, Utilities Industries

Bailey Canada, established in 1921, is a world leader in the development of stateof-the-art instrumentation, controls, and distributed systems for the process, utility, and industrial power markets. Bailey Canada has considerable domestic and international utilities experience with units up to 600 MW. Applications include conventional thermal plants, combined cycle plants, cogeneration plants, turbine control, and flue gas desulphurization. Projects range from small retrofits and upgrades through to complete new control systems. Bailey's comprehensive services include engineering, project management, applications engineering, implementation, testing, commissioning, and training.

Products: NETWORK 90 and INFI 90 microprocessor-based control systems, Operator Interface Stations, Application Software Packages, Transmitters, Drives, Sensors



P.O. Box 430, Proctor Road Schomberg, Ontario Canada LOG 1T0 Telephone: (416) 939-7323 Fax: (416) 939-8206 Contact: Bruce Conzelmann

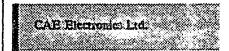
B.C. Instruments manufactures small to medium size precision machined components for the Aerospace, Electronics and Nuclear Industry. We have developed extensive experience in machining complex thin wall investment castings to close tolerances. For the Nuclear Industry we manufacture a variety of parts and assemblies including Nuclear Class 1 Adaptors, journal rings, thimble & guide tube assembly, thermowell assembly and others.



P.O. Bax 3010, 100 Grantham Avenue St. Catherines, Ontorio Canada L2R 7B9 Telephone: (416) 684-9251 Fax: (416) 684-3336 Contact: Mr Put Dowds

Blenkhorn and Sawle Limited is a diversified manufacturer of electrical/electronic/pneumatic control assemblies and medium voltage range awitchgear up to 44 KV in both metal enclosed and metalclad application. The company also specializes in design/build control systems for smal hydro applications up to 10 MW.

Products: medium range switchgear to 44 KV, control systems - small hydraulic stations, plc systems



8585 Côte de Liesse St-Laurent, Québec Canada H4T 1G6 Telephone: (514) 341-6780 ext. 2296 Fax: (514) 341-7699 Contact: Terence J Kerwin, Manager, Marketing-Energy Systems

This Montreal company is a leading designer and manufacturer of supervisory control and data acquisition systems for nuclear and foasil fuel-fired electric power generating stations and electric substations. CAE provides control systems for electric power distribution and energy management systems, oil and gas pipelines and a variery of other applications, including military-qualified ship-board integrated machinery control systems. The company also produces control room simulators for nuclear power generating stations, to train personnel in responding to all normal and abnormal occurences which could take place in a nuclear power plant. CAE is a also a world leader in flight simulation. It dominates the commercial flight simulator and training devices market worldwide, with sales to commercial airlines, aircraft manufacturers, flight training establishments and aviation agencies. What's more, CAE Electronics continues to make inroads globally into the defence market with simulators for fixed-wing aircraft and helicopters. The company has achieved world leadership in the development of airborne magnetic anomaly detection systems for both fixedwing aircraft and helicopters used by military forces for anti-submarine patrol activities. CAE Electronics is also a major manufacturer of air traffic control system equipment. The company provides control systems for the remote manipulator arm of NASA's manned space shuttle and training devices for the European HERMES manned space flight program. Almost half of the company's 34( , employees are scientists, engineers and technicians.

Canada Alloy Costings Ltd. 

529 Manitosi Drive Kitchener, Ontario Canada N2C 152 Telephone: (519) 895-1161 Fac: (519) 895-1169 Contact: Ben A. Bjorkenstam

Canada Alloy Castings Ltd. manufactures castings for customers at the leading edge of their industries. We specialize in pressure retaining castings for the pump and valve industry. Canada Alloy Castings Ltd. also possesses considerable experience and expertise in producing castings for hydro turbine manufacturers. Our more than 82,000 sq.ft. of production space, modern equipment and highly qualified personnel provide the measure of efficiency necessary to meet the most demanding standards of the ASTM. ASME, CSA and ISO codes.

Products: steel and stainless steel sand molded castings up to 15,000 lbs. ship weight



Industry, Science and Industrie, Sciences of Technology Canada Technologie Canada Canadä

## Canada Forgings Inc.

P.O. Bax 308, 130 Hagar Street Welland, Ontario Canada L3B 5P8 Telephone: (416) 735-1220 Fax: (416) 735-6992 Contact: John E. Mires

Canada Forgings was founded in 1912; the company employs some 180 people in two separate facilities located in the city of Welland, Ontario. A large percentage of the company's sales are made to the aircraft, aerospace and defense markets in both Canada and the United States. The company also serves the following industries: power generation (nuclear and fossil), energy exploration and pipeline, mass transit, off-road equipment, shipbuilding, steelmaking, mining, equipment manufactuirng, etc.

Products: Canada Forgings produces open die forgings up to 30,000 lbs. in weight, impression die forgings up to 450 lbs. and contoured or rectangular seamless rolled rings up to 120" in diameter; these are produced from a complete range of carbon, alloy, and stainless steel grades. The company meets the following quality standards: National Defense Z299.3; Military MIL-I-45208; Commercial AQAP4.

Conadian Fusion Fuels Technology Project

2700 Lakeshore Road West Mississauga, Ontario Canada LSJ 1K3 Telephone: (416) 823-0200 Fax: (416) 823-8020 Contact: Allan Meikle

The Canadian Fussion Fuels Technology Project (CFFTP) was established in 1982 as one of Canada's major fusion initiatives. CFFTP's mission is to extend Canada's fusion capabilities by developing and applying technologies to fusion and related projects worldwide. CFFTP is a technology focused organization which builds on internationally recognized strengths in the management of tritium, advanced materials, remote handling and nuclear facilities safety and design. By concentrating on a few strategically selected technologies, developed from Canada's nuclear program, CFTP has established an international reputation for its capabilities. The project works in close cooperation with industry, universities and international fusion projects to develop processes, systems, hardware and services to serve the fusion community and related facilities.

Products: CFFIP will design, construct and commission systems and facilities for customers enagaged in fusion and fusion fuels development and in projects using tritium or tritium-related technology. We can supply equipment and materials. arrange for the supply of fusion fuels, and take back used tritium in gaseous and liquid forms. CFFTP offers services based on demonstrated expertise in these applied technology areas: fusion fuel systems and laboratory facilities for fusion reactors burning tritium; fusion fuel storage and handling systems and laboratory facilities; fusion reactor exhaust gas cleanup systems; accelerator active gas handling systems; fusion reactor and breeder blanket technology; remote handling systems for fusion reactor maintenance and operation; safety assessment and equipment; environmental studies for fusion establishments: radioactive waste management.

# CANATOM Inc.

2020 university Street Montreal, Quebec Canada H3A 2A5 Telephone: (514) 288-1990 Fax: (514) 289-9300 Contact: T. Gellathy, Vice President and Manager, Operations.

Canatom Inc. is Canada's largest independent nuclear engineering. procurement, construction and project management company. Canatom was founded in 1967 by three leading Canadian consulting companies: Montreal Engineering Company Ltd., Shawinigan Group Inc. (now SNC-Lavalin Inc.) and SNS Enterprises Ltd. Canatom's operations are backed by the diversified expertise of its parent companies, who have a combined staff exceeding 10,000 employees. Canatom specializes in nuclear, civil, mechanical and electrical engineering design and analysis, and in the Balance on Nuclear Steam Plant (BNSP) and Balance of Plant (BOP) engineering services for nuclear power stations, and provides similar services for the construction of heavy water plants. Other services provided by Canatom included prudence auditing, technical review, feasability studies, site investigations and evaluations, plant commissioning and operations assistance.

CDS Research Ltd.

Suite 100, 565- 17th Street West Vancouver, B.C. Canada V7V 3S9 Telephone: (604) 925-2860 Fax: (604) 925-2861 Contact: Dr. Z. Meratla, Senior Consultant

CDS Research Ltd. is a consulting company based in Vancouver, B.C. specializing on major energy projects including nuclear fission primary cooling, development work on nuclear fusion and extensive involvement on world class LNG facilities. In the nuclear industry the



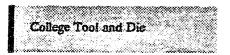


following services are provided: advanced condition monitoring and diagnostic for electrical motors in critical service, failure analysis and remedial actions, modeling for seismic analysis, hazard analysis and remedial actions, inspection of equipment fabrication and testing, development and implementation of proprietary quality assurance programs. The company has developed in-house extensive commissioning procedures for major equipment.

Centre for Nuclear Engineering

University of Toronto 184 College Street Toronto, Ontario Canada MSS LA4 Telephone: (416) 978-2127 Fax: (416) 978 4155 Contact: Professor B. Cax

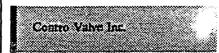
The Centre for Nuclear Engineering provides courses and performs research in various aspects of nuclear engineering. The main areas of expertise lie in the behaviour of reactor materials in high radiation fields; behaviour of fission products (especially iodine) under reactor accident or waste storage conditions; and the use of plasmas for protective coating application and cutting of irradiated materials. Members of the Centre also provide consulting services in these and other areas of nuclear technology.



3845 Nashua Drive Mississauga, Ontario Canada LAV IR3 Telephone: (416) 677-5130 Fax: (416) 677-4426 Contact: Mr. Micah Fletcher

College Tool and Die manufactures a variety of precision components for the nuclear and commercial industries. The company currently has a quality control system approved to Z299.3-85 as well as MCCR registration (#OQP-309).

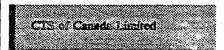
Products: Machined components for CANDU NGS, mining industry industry, military, etc...



11-B Place du Commerce Brossard, Quebec Canada J4W 2T9 Telephone: (514) 465-3330 Fax: (514) 671-0988 Contact: Michael Wilson, President

Contro Valve Inc. is a Canadian owned corporation which assembles and tests control valves for the Masoneilan division of Dresser Industries. Established in 1977, Contro Valve offers a complete line of Canadian assembled control valves for all process industries. Contro Valve Inc. is a major valve supplier to the Canadian Patrol Frighte Program. As well, "Balance Of Plant" near nuclear valves are supplied to the Canadian nuclear industry.

Products: Globe, ball and butterfly control valves, and process control equipment to complete small process control loops.



60 Thomas Street Streetsville, Ontario Canada LSM 1Y9 Telephone: (416) 826-1141 Fac (416) 858-9058 Contact: Tony Colledge, Plant Manager

CTS of Canada is a wholly-owned subsidiary of CTS Corporation, Elkhart, Indiana, (est.1896) a publicly owned company listed on the New York Stock Exchange with net sales exceeding US \$250 million annually. CTS of Canada is located in a modern 110,000 sq. ft. facility, employs 250 people. CTS is engaged in the design, manufacture, and service of custom electrical power conversion equipment for industrial, military and scientific applications. Products manufactured are converters, rectifiers, inverters, transformers and transfer switches. CTS equipment is qualified to all nuclear, MIL and commercial standards. Complimenting the company's sound engineering practices and effective production systems is a Quality Control Program meeting CSA Z299.2, 3 and 4 requirements.



50 Wood Street Barrie, Ontario Canada L4M 6K3 Telephone: (705) 728-5657 Fax: (705) 739-5971 Contact: Eric Fuller

DeVilbiss is a Canadian manufacturer of high quality air compressor products. We export all over the world with principal markets in the U.S. and France, as well as Canada. The company is a division of ITW Canada Inc, an Illinois Tool Works Company, U.S.A.

*Products:* reciprocating, air cooled, air compressors from 1/4 to 40 HP; and related accessories.

Dominion Bridge

500 Notre Dame Street Lachine, Québec Canada H8S 2B2 Telephone: (514) 634-3551 Fax: (514) 631-2668 Contact: Denis Robert, Manager, Sales

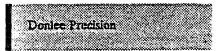
Dominion Bridge is Canada's driving force in construction, offering a wealth of associated expertise including turnkey capability. And we are the nation's largest fabricator of steel. Since 1882, the name Dominion Bridge has been synonymous with technical excellence, quality products and services, and financial strength. Our capabilities include project and construction management, specialty engineering, turnkey projects large and small. The versatility of our platework and engineered products make Dominion

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Bridge unique in the world of steel fabrication. And, as Dominion Bridge technological excellence grows, so do our horizons. With a vast range of capabilities to satisfy engineering, fabrication, procurement and construction needs across Canada and around the world.

Products: Structural steel for industrial plants, hotels, office towers, sports complexes, bridges. Mechanical components such as portainer cranes, gates and penstocks. Platework and we have participated in the CANDU program since its inception by supplying components such as: pressurizers, calandrias, E.C.C. vessels, degasser condensers, fueling machines, gadolinium vessels, feeder tubes, airlocks, heavy water towers.



9 Fenmar Drive Toronto, Ontario Canada M9L 1L5 Telephone: (416) 743-4417 Fax: (416) 746-8998 Contact: Wayne Bacik, Sales Manager

Donlee Precision specializes in the production of precision tubular and shaft type components/assemblies in size ranges from 6 inches to 10 feet in length and up to 24 inches diameter. A full complement of capabilities include gun drilling and trepanning, NC turning and boring, NC milling, NC grinding including thread/ball screws, engineering, CAD/CAM, QC/QA and NDE, procurement and processing. Gear and spline cutting are provided by a sister company. The company has operated since 1966.

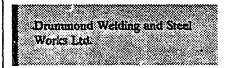
Products: Typical products produced include gas turbine engine power, compressor and propellor shafts, helicopter rotor masts and grips, hydraulic cylinders, pistons and struts, and axles. Donlee Precision also produces various critical nuclear components for the CANDU system such as end fitt<sup>1</sup> various flow elements/meters, fu machine components, hubs, flange. 15, as well as larger assemblies.



5010 North Service Road Burlington, Ontario Canada L7L 5R5 Telephone: (416) 335-3529 Fax: (416) 336-7628 Contact: Ray Briggs, General Manager

Dresser Canada Inc., Valve & Controls Canadian Division maufactures and distributes a full range of Masoneilane automated process control valves, complete with all associated instrumentation. A full line of safety and safety relief valves are also supplied under the brand names of Consolidatede, Hancocke and Dewrancee. The Burlington facility is certified to manufacture products to the following quality programs: ISO 9002, CSA Z299.2 (1985), and ASME Sections I, III, and VIII.

Products: automated process controls valves, valve instrumentation, safety and safety relief valves, liquid level controllers.



700 Talon Longueuil, Quebec Canada J4G 1P7 Telephone: (514) 526-4411 Fax: (514) 679-1686 Contact: Maxime Davila, Vice President, Custom Sales Fabrication

Established in 1950, Drummond Welding and Steel Works is a manufacturer of fabricated stainless steel, alloy and carbon steel structures, pressure vessels, tanks and general plate work for industry. The company is located in a 65,000 sq.ft. well equipped facility, located close to rail, road, sea and air ransportation facilities.

Products: Typical manufactured products are pressure vessels, propane tanks, chemical storage tanks, autoclaves, distillation towers, penstocks, ductworks, spheres and miscellaneous structural steel work.

ELLETT Industries Ltd.

1575 Kingsway Avenue Port Coquitlam, British Columbia Canada V3C 4E5 Telephone: (604) 941-8211 Faz: (604) 941-7669 Contact: R.D. (Bob) Gill

ELLETT is Canada's premier manufacturer of heat exchangers and pressure vessels in titanium, zirconium, stainless steel and nickel alloys. It is Canadian owned and has been operated for over 7 decades.

Products: custom design and fabrication of process equipment; heat exchangers, pressure vessels, towers, pipe and fittings, jacketed kettles, reactors, autoclaves, brew kettles, coils and storage tanks; manufacturers of valves in titanium, zirconium, tantalum and nickel alloys; sales and distribution of rolled and welded stainless steel and titanium pipe and fittings; sales and distribution of titanium mill products.

Energy Management Systems (EMS/DACS)

#1-225 Traders Bivd. East Mississauga, Ontario Canada L4Z 2E5 Telephone: (416) 890-1233 Fac: (416) 890-7630 Contact: Paulette Greig

Systems integrators of environmental and automation control systems. The company produces analysis control systems for a variety of industries. Manufacturer of environmental and process control components interfacing electrical devices such as heaters, motors and meters to high logic controllers.





#### Exotemp Ltd.

320 Boundary Road, unit 130, R.R.#4 Pembroke, Ontario Canada KBA 6W5 Telephone: (613) 735-3996 Fax: (613) 735-3814 Contact: Mr. Dobbs, President

Exotemp Ltd. is a Canadian owned manufacturer of systems which actively cool the human body exposed to extremely hot environments. Workers exposed to ocnditions of high ambient temperatures and/or who need personal protective clothing because of other threats can work longer and more comfortably because Exotemp systems can keep their body core temperatures at normal levels. Hot entry work and valving operations are only two examples of radiation worker applications in the nuclear industry. Exotemp body cooling systems ahve been proven effective by a number of independent laboratories.

Among Exotemp's products are cooling undergarments including shirts, pants, hoods in polyester/cotton ot fire retardent Nomex knit fabrics. The cooling units to feed garments with chilled water can be protable or umbilical style, and can derive cooling from ice or thermoelectric or mechanical refrigeration. These products are sold into industry under the tradename CORE-CONTROL by Mine Safety Appliances Company.

## FAG Bearings Ltd.

National Sales Division 5965 Coopers Avenue Mississauga, Ontario Canada LAZ IR9 Telephone: (416) 890-9770 Fax: (416) 890-9779 Contact: Grant F. Wilmot, Nuclear Industry Sales

This company's manufacturing facility. located in Stratford, Ontario. All types of automative and aerospace bearings are manufactured on these premises. The national sales division located in Mississauga, Ontario is the sole representative for North America of FAG Radiation Measuring Products in Germany.

Products: nuclear fuelling machine bearings; radiation measuring instruments

Factis Industries Canada

Hwy. #2 & Shaver St. Brantford, Ontario Canada N3T 5T3 Telephone: (519) 756-4800 Fax: (519) 756-40!6 Contact: Mike Whitton, Sales Manager

Farris Industries Canada manufactures spring loaded and piloted operated pressure relief valves for use in the refinery, petrochemical, nuclear power, pharmaceutical, processing mining and pulp and paper industries. These valves are safety devices designed to prevent the over pressure of vessels, pipe lines and other critical equipment. Valves are available in sizes ranging from small 1/2" models with screwed connections to large flanged models with up to 20" inlet connections. Pressures of up to 10,000 PSI can be accomodated Fisher Controls Company of Canada Limited

1039 Dundas Street, P.O. Box 578 Woodstock, Ontario Canada N4S 7Z6 Telephone: (519) 539-9892 Fax: (519) 537-2479 Contact: Jerry Balcom

Established in 1956, Fisher Controls manufactures process control equipment for a broad range of industries, including fossil and nuclear generating stations. The equipment manufactured ranges from automatic control valves to large Distributed Control Systems. Several designs specific to CANDU plants, such as bellows-sealed valves, are manufactured here.



4 Lake Rood Dollard-des-Ormeaux, Quebec Canada H9B 3H9 Telephone: (514) 421-4210 Fax: (514) 421-8057 Contact: Ralph Tozzi

Foxboro is a leading worldwide supplier of products and related services for the intelligent automation of the industrial process. Its customers include the chemical and petrochemical, oil and gas, pulp and paper, food, pharmaceutical, mining and metals, electric power, textile, and water and wastewater industries. Foxboro Canada Inc., founded in 1933 as a small instrument assembly operation, today maintains headquarters in the Montreal area and sales, service and engineering centres in eight cities from coast to coast. These offices are staffed with engineers who are experienced in advanced industrial processes and equipment and who have the support of Foxboro experts worldwide.

*Products:* Foxboro products range from electronic and pneumatic instruments to complete process control systems. They are



used to measure and control the condition of process variables (flow, pressure, temperature, liquid level) and the composition of materials being processed (pH, ORP, conductivity, resistivity).

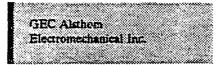
Services: Foxboro offers extensive engineering, education, and field services that include: system project management; field application engineering; installation & startup assistance; commissioning; maintenance & repair; training; and systems demonstration centres (Montreal, Toronto, Calgary).

GBF Forging Specialists Inc.

P.O. Box 996, 280 Henry St. Brantford, Ontario Canada N3T 557 Telephone: (519) 758-8100 Fax: (519) 756-2041 Contact: Mr. John Ottewell

GBF Forging Specialists manufacture open die forgings in carbon, alloy and stainless steels. Size capability is up to approximately 25000 lbs. at the rough machined state. The company has in-house facilities for machining, heat-treating and non-destructive testing (including immersion ultrasonics). Quality control system meets CSA Z299.2 and ASME NCA-3800.

Products: bars, shafts, hollow shafts, rings, flanges, discs and special shapes.



1500 Vandal Street Tracy, Quebec Canada J3R 1W7 Telephone: (514) 746-6500 Faz: (514) 746-6510 Contact: Paul Hudon, Vice President

The company, formerly Marine Industries Limited, was established in Canada in 1937 a.id is a leading manufacturer of power generation equipment for hydroelectric, thermal and nuclear power plants. The company provides its customers with a comprehensive service for design, manufacturing, installation, commissioning and maintenance for new equipment and a complete range of services for rehabilitation of existing equipment. The company has joint technology agreements with several divisions and subsidiaries of GEC Alsthom.

Products: Hydro Turbines: bulb, Francis, Kaplan, Pelton, propellor, pump-turbines; Hydro Mechanical: butterfly valves, spherical valves, ring gates; Hydro Generators: for bulb units, large generating units, reversible pump-turbine units; Electrical Machines: synchronous condensors, large motors; Turbo Generators: for medium size steam turbine, gas turbine units; Nuclear Components: equipment for CANDU system, reactor units. Glitsch Canada Ltd.

18 Dallas Street, P.O. Box 880 Uxbridge, Ontario Canada L9P 1N2 Telephone: (416) 852-3381 Fax: (416) 852-7821 Contact: Michael McGuire

Glitsch Canada Ltd. has been established since 1950, servicing Canadian and world wide process industries. Glitsch is a world leader in design, manufacture, installation and troubleshooting of distillation equipment.

Products: fraction trays: Ballast<sup>™</sup>, Nye<sup>™</sup>, Sieve, Bubble, Dual Flow; tower packings (random): Cascade Mini Rings, Ballast Ring; (structured): Gempak, Glitsch Grid

Services: Iso-Scanning, Glitsch Field Services (installation), engineering services for distallation equipment and troubleshooting.

Hayward Gordon Ltd. 

7505 Bath Road Mississauga, Ontario Canada LAT 1L3 Telephone: (416) 677-6400 Fax: (416) 677-4159 Contact: John Hayward

Hayward Gordon Limited is a Canadian pump and mixer manufacturer with head office, warehouse and production facilities in Mississauga, Ontario. Hayward Gordon is also engaged in the sales and distribution of a variety of other manufacturers' pumps and environmental products. Our plant location gives ready access to all forms of shipping and to two major U.S. border clearance points, at Buffalo and Detroit. Hayward Gordon employs approximately sixty-five people of which 25% are professional engineers or technicians. The balance are from business accounting, manufacturing and clerical backgrounds. This "engineering" bias supports our engineered design and sails

Industry, Science and Industrie, Sciences et Technology Canada



approach to the industrial pump market. We are presently actively marketing our sperialty horizontal and vertical pumps in most major centres in North America.

Products: seal-less canned motor pumps; centrifugal process pumps

Hitschi Canadian Industriet Ltd.

826 - S8th Street East Saskatoon, Saskatchewan Canada S7K 5Z4 Telephone: (306) 242-9222 Fax: (306) 242-9211 Contact: Joe Vidal, Administration Manager

Hitachi Canadian Industries Ltd. (HCI), a subsidiarv of Hitachi Ltd., Japan, was established in 1988. HCI produces large size fabrications and machined components for industrial power generation equipment. Components are manufactured for steam turbines, gas turbines, heat exchangers, electrical switchgear equipment and other power generation equipment.

Products: castings for 60 to 400 MW steam turbines; castings for 100 to 150 MW gas turbines; pressure vessel components for 121 to 362 kV gas circuit breakers; pressure piping; heat exchangers for power generation systems, heavy welded structures. Hake Controls Limited

2240 Speers Road Oakville, Ontario Canada L6L 2X8 Telephone: (416) 827-9807 Fax: (416) 827-4507 Contact: Gary Shea, General Manager

Hoke Controls manufactures high quality, precision instrumentation and process control products. The current product offering includes a complete range of valves, including the best metering valves available. Hoke also manufactures inch and metric "Gyrolok" two ferrule flareless tube fittings in sizes to 1°/25mm, instrument manifolds and sampling cylinders. These products are available in a variety of materials including brass, carbon steel, 316 stainless steel, monel, hasteloy, inconel and a variety of other duplex stainless steels. In addition Hoke can supply leak detection fluid, teflon tubing, valves, fittings and purips, and pressure gauges.



1390 Advance Road Oakville, Ontario Canada L6L 6L6 Telephone: (416) 827-2600 Fax (416) 827-1600 Contact: Jim Wright, General Manager

The company designs and fabricates TEMA Shell and tube heat exchangers and ASME Coded pressure vessels. Code and non-code magneered steel fabrication in alloy and carbon stee is fabricated in a new 24000 sq. ft. plant with 28 feet under hook and 100 ton handling capacity. Established in Canada since 1952, the company now has the quality control CSA Z299.3 for applications in sections of the nuclear industry Howden Group Canada Limited

1510 Birchmount Road Scarborough, Ontario Cavada M1P 2G6 Telephone: (416) 752-7310 Fax (416) 752-0417 Contact: Bernard S. Chamberlain, Vice President, Turbine Division

Howden Group Canada Lis sited has expanded its manufacturing facility in Canada since 1956 to be one of the largest and most complete machining and fabricating plants in Canada. It is a leading supplier of Hourden Sircocco air and gas handling equipment, large steam turbines and fluid drives to power and industrial customers. It has a wellequipped and staffed service and installation division that has full capability for installation, start-up, trouble shooting and servicing of major power and industrial rotating machinery installations.

Products: centrifugal and axial fans; steam turbines; air preheaters; fluid drives.

Ingersoil Rand Canada Inc.

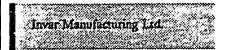
75 Savage Drive Cambridge, Ontario Canada NIR 5X3 Telephone: (519) 740-2250 Fax: (519) 740-2021 Contact: Mr. Jeff Latty, Marketing Manager

Ingersoll Rand Canada manufactures and sells a wide range of centrifugal and reciprocating pumps, for the oil & gas, utility, navy, pipeline, steel making, OEM and general industry market sectors. The company is qualified to quality standard CSA Z299.2 and approved by the MCCR to design and manufacture pumping equipment for the nuclear industry, to ASME section III, class 2 and 3

Products: 1/2 horsepower to 80,000 horsepower centrifugal pumps, 25 horsepower to 2700 horsepower reciprocating pumps. Materials range from



glass reinforced polymer to duplex, including commercially pure nickel. There are also complete repair and overhaul facilities and Ingersoll Rand is licenced to apply corrosion resistant and energy enhancement coating systems.



I Parry Drive Batawa, Ontario Canada KOK 1E0 Telephone: (613) 398-6106 Fac: (613) 966-7932 Contact: Ken Wigley

Invar Manufacturing Ltd. is one of the Linamar Group of Companies. Invar is one of Canada's leading contract batch manufacturing operations, recognized for its precision machined products and systems. The scope of the company's capabilities encompasses fabrication, machining and complete assembly. Complementing it's involvement in the nuclear energy industry, Invar also manufactures a wide variety of complex components for the aircraft/aerospace transportation and defense industry. With manufacturing facilities in excess of 150,000 sq.ft., Invar utilizes the most advanced NC/CNC machine tools. Invar has established quality control programs approved to AQAP 1 and MIL-Q-9858-A standards.

Products: Precision Machined Components and Assemblies: fuel channel components, control rods, control rod drive mechanisms, adjuster drive mechanisms, shield plug assemblies, channel closure assemblies, end fitting assemblies.



155 Dawson Road Guelph, Ontario Canada NIH LA4 Telephone: (519) 824-7750 Fax: (519) 824-9543 Contact: Ran Stokker

ITT A-C Pump Canada designs, manufactures and markets centrifugal pumps for the mining, pulp & paper, municipal water and general industrial markets. Manufacturing is carried out in a 105,000 sq.ft. company-owned facility in Guelph, Ontario. Pumps are produced in a range of capacities up to 115,000 litres/min. and in a variety of metallurgies.

Products: process pumps for pulpy solids and corrosives; ANSI standard chemical process pumps; double suction centrifugal pumps; rubber-lined slurry pumps; hard metal slurry pumps; s. 17 priming pumps; air operated diaphragm pumps.



3840 - 11 A Street NE Calgary, Alberta Canada T2E 7K9 Telephone: (403) 291-4814 Fax: (403) 291-5678 Contact: Bill Foose

ITT Barton Instruments is a division of ITT Industrier of Canada Ltd. and is involved with the manufacture of industrial process instrumentation. This equipment can be applied to any application requiring measurement or control of flow, level, pressure, temperature or density. Industrial applications are also very diverse ranging from oil and gas, shipbuilding, petrochemical plants to fossil fuel plants and has all of the qualifications and equipment for nuclear powered generating stations.

ITT Barton's extensive product line includes: temperature/flow pressure transmitters, level measurement systems, turbine meters, differential pressure switches, fuel measurement, steam measurement, recorders, and boiler drum level systems.

John T. Hepburn, Limited

7450 Torbram Road Mississauga, Ontario Canada LAT 1G9 Telephone: (416) 671-2200 Fax: (416) 671-0499 Contact: Danny H. McKinnon, Vice President, Sales & Marketing

John T. Hepburn, Limited has been designing and manufacturing custom engineered material handling machinery for over 87 years. Hepburn has supplied power house cranes to nuclear, fossil and hydro power plants around the world. Special single failure proof crane designs are offered to the nuclear industry. Hepburn also manufactures special design extrusion presses for the nuclear industry. AECL uses a 350 ton Hepburn press to extrude zirconium for full bundle tubes.

One area of specialty is the machinery for handling and transfer of waste fuel and contaminated tubes and fittings to storage facilities. This technology includes transfer casks up to 80 tons, transfer cars and automated cranes for removing the casks from transport vehicles to storage vault areas. Each project is unique; Hepburn specializes in developing the customer's conceptual ideas into working designs and drawings and the followup with manufacture, installation and startup.

Hepburn has an audited quality assurance system which meets the requirements of CAN 3 Z299.1, AQAP 1, MIL-Q-98584 and BS5750 part 1. Complete documentation packages are available for contracts to the nuclear industry.



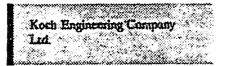


# Keystone Canada Inc.

1001 Century Drive Burlington, Ontario Canada LTL SJ8 Telephone: (416) 681-1100 Fax: (416) 634-9606 Contact: Roy Williams, Vice President, Sales & Marketing

Keymone Canada Inc. is a wholly owned division of Keystone International based Houston, Texas. Keystone is the world's largest manufacturer of Actuators and Flow Control products for industry. Keystone is strategically located around the world with manufacturing and sales facilities to serve its customers on a global basis. Keystone Canada has been involved in the construction of numerous nuclear generating stations around the world. Since 1978, Keystone has supplied valves built in accordance with ASME III CL 2 &3 for many critical services within containment areas. Keystone has built fully encapsulated rubber seated valves and high performance valves to these rigorous specifications.

Products: Fully encapsulated rubber seated Butterfly valves - F1000, F1020, F920, F104, F105; High performance Butterfly valves - K-LoK, F360, F362, F370, F372; AWWA-Compliance Butterfly valves -F47, F504, F506, F507; Actuators (Pneumatic, Electrical, Manual) - F790, F790R, F790A, F777, F427, F401; Chemical Industry valves - F240, F242; miscellaneous accessories for valve/actuator assemblies.



4750 Sheppard Avenue East Agincours, Ontario Canada MIS 3V7 Telephone: (416) 293-3666 Fax: (416) 293-6409 Contact: W. Peter Barker

Koch Engineering Company Ltd. designs and fabri-sites heat transfer equipment for both the domestic and export murket, with emphasis on applications for the oil refining, chemical, petrochemical, power generation (fossil and nuclear) and pulp and paper markets.

Product: shell and tube heat exchangers, plate and frame heat exchangers, hairpin (double pipe and multitube) heat exchangers, finned tank heaters.



25 Commerce Road, P.O. Box 1700 Orillia, Ontario Canada L3V 6L6 Telephone: (703) 325-2781 Fax: (705) 325-5887 Contact: Allun Gillespie, Vice President, Marketing & Sales

Kubota Metal is a custom steel foundry specializing in the supply of heat resistant and corrosion resistant castings for the oil, gas and petrochemical industry. Our facilities include static and centrifugal casting, machine shop, fabrication and complete in-house non-destructive testing.

Products: Somes typical products include furnace tubing and fittings for ethylene production, reformer tubes and hangers, and stainless steel centrifugal cast tubing.

100220 1. .... Metacor Steel Products

120 Industriel Blvd. Repentigny, Quebec Canada J6A 4X7 Telephone: (514) 582-1810 Fax: (514) 582-1008 Contact: Mr. Denis Houde

The company specializes in custom made plate work fabricatic Metacor's extensive product line include stacks, silos, cyclones, filters of ad sizes, hoppers, fans, ducts and structural, conveyors, pneumatic system, pressure vessels and furnaces. All done in Z.299.3 level of quality control. Custom fabrication also includes many other equipment not listed.



22 George D. Davie Street, P.O. Box 130 Lévis, Québec Canada G6V 6N7 Telephone: (418) 837-5841 Fax: (418) 833-9492 Contect: Mr. Brian M. Smith, Export Manager

MIL Davie, a member of the MIL Group of Companies, is headquartered in Lévis, Quebec, Canada. The company was founded in 1825 by Allison Davie. MIL Davie played a major role in Canada's development and has expanded and prospered over the years to become well known throughout the world for its quality workmanship in the marine construction and heavy industrial projects. MIL Davie has a modern facility and capability for building ships for clients worldwide and is active in the manufacture of a wide range of complex high quality industrial equipment in the hydroelectric and nuclear industries as well as specialized fabrications for the energy, pulp and paper and petrochemical industries.



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### Millon Roy Industries Ltd.

300 Milroy Drive, P.O. Box 2260 Peterborough, Ontario Canada K9J 7Y8 Telephone: (705) 743-6550 Fax: (705) 743-5831 Contact: Bill Tucker or Bill Kicloch

Established in Canada since 1966, Milton Roy Industries Ltd. is a division of a multi-national corporation and a world leader in the manufacturing of chemical injection pumps, chemical dosing systems, and steam and boiler water sampling, analyzing and monitoring systems. Other products include the state-of-the-art electronic actuator and streaming current detector. Major chemical injection pump rypes are diaphragm, packed plunger and solenoid. Pump accessories include pulsation dampeners and chemical liquid agitators. All of the above products and systems have been used successfully in nuclear power generating stations in Canada and in South Korea.

MPB Technologies Inc.

1725 North Service Road, Trans Canada Highway Dorval, Quebec Canada H9P 1J1 Telephone: (S14) 683-1490 Fax: (S14) 683-1727 Contact: George Earle

MPB Technologies Inc., founded in 1976, is a privately owned company specializing in high technology products and systems and in contract research and development. The staff consists of a unique combination of physicists, engineers and technical personnel, including over 40 Ph.D.'s on staff. Along with the diverse fields of lasers, telecommunications, microwaves, space technology and telrobotics, MPB Technologies Inc. is actively involved in magnetic and inertial fusion energy research. MPB Technologies Inc. was a founding member of the consortium responsible for the design and construction

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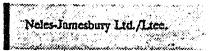
of the Tokamak de VArennes, and presently has an on-going association with Centre Canadien de Fusion Magnetique. The capabilities of the company encompass physics, engineering, and instrumentation for both in-house activities and as a service to customers.

Products: engineering studies/design; instrumentation; diagnostic measurements; data acquisition system; processing and control systems; encoder/decoder timing system; fibre optic links; graphic display systems; diagnostics: magnetic, Mirnov, Roagowski coils, microwave interferometer, Thomson scattering system, impurity injection system.

# NEI Parsons Canada Limited

40 Neilson Avenue St. Catherines, Ontario Canada L2M 7M9 Telephone: (416) 687-1170 Fax (416) 687-4998 Contact: William J. Cumming, Marketing/Sales Manager

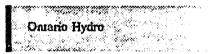
NEI Parsons Canada provides service and refurbishment of steam turbines and generators of unit sizes 1000 kW to 1,000,000 kW from its St. Catherines facility. It is capable of reblading turbines, rewinding generator rotors, rebuilding stators as well as undertaking machining and fitting work of spare parts.



1282 Algoma Road Ottawa, Ontario Canada KIB 3W8 Telephone: (613) 746-2211 Fax: (613) 746-0x39 Contact: Frank Ilrunet

Established in Canada in 1964, Neles-Jam/sbury is now part of the Repola group of companies. We are acknowledged leaders in metal seat valve technology as well as producing a variety of ball, B/F, globe and specialty valves and accessories. Plant locations are global, with our Canadian facility engaged in a variety of export projects in South America, Europe and Asia. Major activity in the past has included involvement in various CANDU reactor projects in Romania, Korea, Argentina, etc.

Products: "Stemball"<sup>55</sup> metal seated ball valves to 30" size, B/F/ valves in a range from 3" to 48", "Q" ball anti-cavitation valves for compressor stations, globe valves, valve accessories.



700 University Avenue, A14 C17 Toronto, Ontario Canada M5G LX6 Telephone: (416) 592-7119 Fax: (416) 592-8463 Contact: Leslie Barett-Sanderson

Ontario Hydro plans, designs, procures, constructs, operates and maintains its bulk electric system, with an installed capacity of 32,000 MW. Ontario Hydro also sells by-products, provides utility engineering, operations and maintenance services, research services, management consulting and training services to international utilities.

Products: construction management; design consultants; economic consultants; environmental consultants; geotechnical consultants; management consultants;



radiation and health consultants: stress. thermal, vibration consultants; radiation shielding containers; shipping containers; decontamination, chemicals, equipment and processes; deuterium and deuterium gas; nuclear education courses; engineering construction; fuel cycle services; heavy water, remote inspection devices; hydraulic laboratories; radioactive waste management services; radioisotopes; research and development; risk analysis; remote handling robotics; reactor safety analyzis; security systems; training simulators; utility consulting; electric utility software products; thermal plant rehabilitation.

Proquip Internacional

487 Speers Road Oakville, Ontario Canada L6K 2G4 Telephone: (416) 842-1721 Fac (416) 849-0923 Consact: G.R. Muddiman, General Manager

Proquip is an independent Canadian owned and controlled company that manufactures the three basic product lines listed below. All of our products are designed in house and we hold many Datents.

rupture discs and accessories

- wafer style, twin flapper design check valves

- quick acting Line Blinds

Our products are used by most industries including oil production and refining, chemical and petrochemical power, pulp and paper, steel producers and pipeline companies. Our largest domestic customers are TransCanada Pipelines Ltd. and Ontario Hydro. Close to 50% of our production is exported to customers in Scandinavia, Europe, Middle East, South Africa, Indonesia as well as the U.S.A. Our Quality Assurance program has been approved by AECL and Ontario Hydro and we have supplied the Calandria (Nuclear) rupture discs for every CANDU power plant built by AECL. We have also supplied check valves to nuclear specifications to Ontario Hydro.

#### i Maria Ralfor Plus Inc. en la companya

750 Lebeau Bivd. St-Laurent, Quebec Canada H4N IS4 Telephone: (\$14) 336-3460 Fax: (\$14) 333-6587 Contact: George Czerniak, Business Development

Since 1969, Ralfor has fabricated items such as exchangers, Colandria vault liner plates, spent fuel tubes and flasks for its nuclear customers as well as head covers, penstocks and stator frames for its hydro customers. Our 82-foot-wide bays, CNC burning equipment, 1500-ton press brakes and 90-ton crane have enabled us to handle work of varying size and complexity. Through its overall manufacturing expertise, Ralfor will assess assembly drawings and optimize all fabrication in order to capitalize on savings with shipping, trial assembly and the utilization of the customer's own resources. Ralfor will fabricate to varying degrees of completion to suit stringent needs. According to our manufacturing, plan, we will proceed with forming, shaping, surface preparation, welding and inspection. Ralfor conforms to: ASME Section III, Nuclear Power Plant; ASME Section VIII (U-Stamp), Boiler and Pressure Vessel: CSA Z.299.2; CSA W47.1.

Ritepro Int.

12,200 Albert Hudon Montreal-Nonh, Quebec Canada HIG 3K7 Telephone: (514) 324-8900 Fax: (514) 324-9525 Contact: D. Barclay, President

The company designs and manufactures a comprehensive range of flow control devices principally, wafer style and tilting disc check valves for industrial, commercial and nuclear applications. Products are sold primarily through independent distributors in Canada and OVETSCAS.

Products include check valves in a wide range of materials and international specifications, sizes 1 1/2" to 42", pressure ratings ANSI 125 to 1500 and API equivalents. Couplings are Cam & Groove 1/2" to 8" military specifications, and Camlock style 3" to 30", flange ratings ANSI 150, marine and industrial applications. There are also loading & unloading arms, sizes 2" to 6" top and bottom loading for tank truck and rail tank car, petroleum and chemical applications, as well as service station equipment including vapour recovery components.



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### Robert Mitchell Inc., Douglas Broz. Industrial Division

350 Decarie Blvd. Si-Laurent, Quebec Canada H4L 3K5 Telephone: (514) 747-2471 Fax: (514) 747-3124 Contact: Mr. A. Kraulis, Manager (ed. 4207)

Douglas Bros. Industrial Division specializes in the custom fabrication of process equipment. Our complete line of metal working and testing equipment provides the versatility to supply high quality products to vastly diversified industries including chemical, petrochemical, nuclear, pulp & paper, and others. The company is qualified to CSA 2299.2, 3 & .4; ASME Section VIII with U-stamp from National Board; and ASME Section III - Classes 2 & 3.

Products produced in this division include pressure vessels, towers, heat exchangers, tanks, sheet metal and plate custom products in carbon and stainless steels, aluminum, nickel and other alloys, modules for process plants.

Rosemount Instruments Ltd.

808 - 55th Avenue N.E. Calgary, Alberta Canada T2E 6Y4 Telephone: (403) 275-8400 Fax: (403) 275-4331 Contact: John Kirk, Marketing Services Manager

Rosemount Instruments Limited is a member of the Rosemount Group which is internationally recognized as a leader in the design, manufacture and marketing of high precision and quality measurement and analytical instrumentation, distributed control systems, and valves for the processing and aerospace industries. A broad based instrument company whose customers include the pulp & paper, oil & gas, chemical & petrochemical, food & beverage, metal & mining and aerospace sectors, Rosemount Instruments serves the Canadian and export markets through a head office and assembly plant in Calgary, and sales offices located in Vancouver, Edmonton, Saskatoon, Winnipeg, Ottawa, Sudbury, Sarnia, Toronto, Montreal, Halifax and Moncton.

Products: Industrial pressure, temperature, level, flow, and densiry measurement instruments; Gas analyzers that can measure as many as 15 different gases and liquid analyzers that measure pH. conductivity, and turbidity as well as water quality analyzers, sample handling systems and combustion monitoring equipment; Distributed control systems, HART® communications protocol; fluid flow products including Coriolis mass nowmeters, valves, actuators, positioners, switches, and accessories; full line of micro-processor based instruments with digital communications capabilities known collectively as the SMART FAMILY. products.



6835 Century Avenue Mississauga, Ontario Canada I.SN 2L2 Telephone: (416) 826-8900 Fax: (416) 826-4927 Contact: J.F. McGurn, Manager Engineering

Sandvik commenced commercial steel production in 1862 and stainless steel production in the 1920's. Sandvik has 160 subsidiary companies in 50 countries and employs 26,000 people. Sales for 1990 were Cdn \$3.8 billion. Sandvik has a production facility for pipe and tube in Amprior, Ontario which serves the Canadian and International markets. Our products have assisted in fabrication of components that are presently in nuclear CANDU and USA reactors, fossil-fired and hydroelectric power generation stations. The company currently comprises 6 key groups: Coromant, Rock Tools, Hard Materials, Steel, Saws & Tools, and Process Systems.

Products: carbide tools; carbide-tipped rock drilling tools; cemented carbide and

ceramics; stainless-Duplex stainless steels and high-nickel heat/corrosion resisting alloys, plus welding products; saws and tools; process conveyor belts/sorting systems.

Scintre: Ltd.

222 Snidercroft Road Concord, Ontario Canada LAK 1B5 Telephone: (416) 669-2280 Fax: (416) 669-5132 Contact: Mr. Abe Rolnick

Scintrex Ltd. is engaged in the research, design and manufacture of Earth Science Exploration Instrumentation, bomb aniffers, air pollution monitors, nuclear reactor monitoring devices, defence-related equipment and other scientific products. Scintrex operates its business from company owned premises in Canada and Australia. Scintrex employs 120 people whose technical and business skills place the company in the forefront of its selected areas.

Products: Nuclear: tritium, alpha, beta monitors; analytical: air monitoring equipment, odour vapour detectors fo gas industry, bomb sniffers and related explosive vapour detectors; Earth Sciences: gravity meters, magnetometers, seismic instruments, resistivity meters, etc.

Shawflex Inc. CISSCI WESSER

25 Bethridge Road Rexdale, Ontario Canada M9W 1M7 Telephone: (416) 743-7111 Fax: (416) 743-7199 Contact: Mr. T.W. Sutton

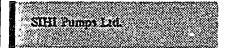
Shawflex Inc. is a manufacturer of quality wire and cable, process control tubing and air and fluid hydraulic products. The wire and cable product line specializes in low voltage power and, particularly, in instrumentation and control type cables employing various shielding techniques



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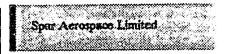
including aluminum/polyester and corrugated, lapped, intercalated and gapped copper tapes for high noise environments. Using electron beam curing technology and proprietary materials, Shawflex manufactures a high performance line of nuclear rated cables which have been certified and installed worldwide. Process control tubing includes both single line tubing and multi-tube bundles with either plastic or metal tubes and a variety of jackets and/or armours for the most rigorous applications. The air and fluid hydraulics product line includes self-storing air hose, specialty hydraulic assemblies and a complete line of medium and high pressure thermoplastic hydraulic hoses, fittings and accessories.



225 Speedvale Ave. West Guelph, Ontario Canada NIH 6L8 Telephone: (519) 824-4600 Fax: (519) 824-7250 Contact: Lisa Tyler, Marketing Coordinator

SIHI Pumps Limited is the Canadian division of SIHI International. SIHI International is a group of companies consisting of 14 manufacturing plants world wide with 2000 employees. SIHI Pump Limited's plant in Guelph, Ontario producesequipment for the North American market, including Mexico. Products can be produced to CSA Z299 standards in house and to ISO 9000 by its European plants.

Products ranges locally produced include liquid ring vacuum pumps (both single and two stage), liquid ring compressors, specialty liquid pumps, pumping systems. Products produced by associated companies include all of the above items with the further addition of specialty mixers for the sewage industry, high quality filtration products for the food and beverage industries, seal-less pumping equipment (both liquid and vacuum) for the chemical and refrigeration industries.



Advanced Technology Systems Group 9445 Airport Road Brampton, Ontario Canada LOS 4J3 Telephone: (416) 790-4439 Fax: (416) 790-4400 Contact: Brian Fuller, Director, Nuclear Systems Product Line

Spar Aerospace Limited has developed remote handling manipulators that have operated in hostile environments in a safe and reliable manner. Jpar has designed and built the robot arm which is currently operating successfully on the NASA space shuttle. Spar is now applying this technology to environmental restoration and fusion projects using reliable and cost effective equipment. Spar is also using its technology base and extensive experience in remoted handling applications to modify emisting construction equipment for remote operations.

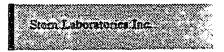
Produces: Long reach manipulators, remote excavators, in and ex vessel remote handling systems (fusion), remote handling systems engineering, manipulator control systems.

	Spectrum Engineering	
<b>.</b>	Corporation Ltd.	
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544 McDonnel Street, P.O. Box 687 Peterborough, Ontario Canada K9J 6Z8 Telephone: (705) 743-7520 Fax: (705) 743-9878 Contact: Dr. J.W. Richman, P.Eng.

Founded in 1971, Spectrum is a multi disciplinary consulting engineering firm, providing project management and niche manufactured products to clients in the energy, industrial, defence and public works sectors. The firm is wholly Canadian owned and managed by its active principals. The company has a staff of 65. Spectrum offers a full service engineering resource with a proven track record at home and abroad.

Products: remotely operated low torque tooling for reactor maintenance; control, shutdown, monitoring instrumentation and safety analyzes; reliability, availability, maintainability and safety systems; artificial intelligence and expert systems; nuclear processes, piping, nuclear ventilation; energy technologies for fusion and fission and high energy physics.



1590 Burlington Street East Hamilton, Ontario Canada L8H 3L3 Telephone: (416) 548-5300 Fax: (416) 545-5399 Contact: Mr. Frank Stern, P.Eng., President

Stern Laboratories Inc. is a Canadian employee owned company incorporated under the laws of the Province of Ontario on March 21, 1988 in order to purchase the assets (excepting the real estate) of the former Contract Engineering Department of Westinghouse Canada Inc. The purchase was completed on April 26, 1988 and Stern Laboratories has since then carried on without changes in management. The business started in 1958 under the direction of Frank Stern, and continues to serve the energy industry.

Services and Products: Design, construction and operation of experimental facilities representative of nuclear reactor systems, to provide results for the development and verification of design codes. This usually involves testing of full scale components, apparatus and systems to determine performance under normal and abnormal (design basis event) conditions in the nuclear environment. Special instruments and devices, such as simulated, electrically heated and heavily instrumented "nuclear reactor fuel" for use in experiments evaluating the thermal performance of fuel designs under normal and design basis event operating conditions, and turbine flow-meters sturdy enough to withstand two-phase steam/water conditions over wide velocity ranges.



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## Suizer Bingham Pumps Inc.

7900-B Taschereau Blvd., suite 106 Brossard, Quebec Canada J4X 1C2 Telephone: (514) 465-0595 Fax: (514) 465-3422 Contact: Francois Goudreau

Sulzer Bingham Pumps Inc. is a leading worldwide supplier of high technology pumping systems, serving power utility and petroleum related markets as well as select other industrial segments. Sulzer Bingham covers a wide range of horizontal, single stage, multi-stage centrifugal and vertical multi-stage turbine type pumps. Our manufacturing plant in Burnaby, British Columbia qualifies to the highest quality standard CSA Z299.1 for nuclear application such as boiler feedwater, feedwater booster, cooling water circulation, condensate extraction, heater drain and condensate booster.

Toylor Forge of Canado Corporation

1675 Burlington St. E., P.O. Box 2511 Hamilton, Ontario Canada L8N 3R5 Telephone: (416) 549-3051 Fax: (416) 544-6626 Contact: Mr. W.E. Summerhayes, Vice President and General Manager

A 100% Canadian owned company, Taylor Forge offers single source design and manufacturing services to meet the needs of pipeline, nuclear and process industries. Our plant operates to Quality Standards CSA Z299.2 and has been audited and approved by MCCR, ASME, AECL, NOVA and all major customers. Our unique ability to provide both engineering and manufacturing solutions to complex problems enhances the role we play in the market areas served.

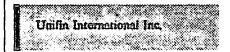
**Products:** manufacturer of high yield fittings, flanges and extruded headers, nuclear reactor headers, fittings, penetrations, vessels, specialty fabricated products, diaphragm valves, expansion bellows, and packaged air systems.



71 Maybrook Drive Scarborough, Ontario Canada M1V 486 Telephone: (416) 298-8108 Faz: (416) 298-2209 Contact: Allan Finn, Director, Corprovate Sules

Trench Electric is a designer and manufacturer of specialized electrical equipment for use by utilities and energy intensive industries. Recognized as a world leader producing products in both Canada and Europe, Trench Electric employs 800 people. Products are primarily sold direct to utilities or through turn key contractors.

Products: Inductors: power reactors, line traps; Instrument Transformers: capacitor voltage transformers, current transformers; Specialized power factor and voltage controller.



1030 Clarke Side Road, P.O. Box 5395, Station B London, Ontario Canada N6A 4P4 Telephone: (519) 451-0230 Fax: (519) 451-1732 Contact: Tom Yu, International Sales Manager

Unifin designs and manufactures specialty industrial heat exchangers principally for cooling power generation, T & D, and electric apparatus equipment. In addition, we supply engineered products for the pulp & paper, chemical and environmental industries. Unifin has a long history of dealing with a wide range of applications and materials. Many of our exchangers are based on our in-house manufactured extruded fin tube heat transfer surface. Design and fabrication capabilities include ASME code welding and 2299.3 quality assurance standards. In the nuclear industry, Unifin has supplied transformer oil coolers for two CANDU nuclear power stations in South Korea. Unifin is part of the Koch Heat Transfer Group which offers complimentary heat exchangers; i.e. shell and tube, plate and frame and hair pin heat exchangers.

Products: transformer oil coolers, transformer oil pumps, electrical apparatus coolers (lube oil and glycol), steam heaters, HVAC exchangers, heavy water condensers, D<sub>2</sub>0 coolers for fuel handling

\*\*\*\*\*C330.)3 Union Pump (Canada) Ltd. 

4211 Mainway Burlington, Ontario Canada L7L SN9 Telephone: (416) 335-2580 Fax: (416) 336-2693 Contact: Mr. Hani Fayed, Eastern Regional Manager

Union Pump is a leading company in the manufacturing of pumps for the oil and gas, petrochemical and related industries. the company also manufactures pumps for Reverse Osmosis and Industrial/Food Homogenization. The product line includes centrifugal pumps, reciprocating plunger pumps, and steam driven pumps. Centrifugal pumps are built to API 610 standard, latest edition or ANSI B73.2. The types of pumps range from horizontal overhung or between bearing to vertical inline and multistage pumps. Recirpocating pumps can be built to API 674 and range from a simplex to quintuplex designs, with horsepower ratings up to 1400 HP. Steam pumps can be built to meet very stringent requirements and are custom designed for specialty applications.



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### Valpro Inc.

2120 De La Province Longuessil, Quebec Canada J4G IR7 Telephone: (S14) 442-9252 Faz: (S14) 442-3659 Conuect: Andre Ayoste

Valpro Inc. is a Canadian owned corporation specializing in the assembly, testing and setting of safety and safety relief valves. Facilities include test air, test steam, and test water. The facilities are approved by ASME and the National Board to assemble and test valves.

*Products:* Valpro sells Consolidatedo safety and safety relief valves fully assembled and certified in Canada.



2125 Ward Avenus Montreal, Quebec Canada H4M 1T6 Telephone: (514) 748-7743 Fax: (514) 748-8635 Conatex: Mike Zivic, V.P. Canadian Sales

Velan Inc. is North America's largest manufacturer of steel, gate, globe and check valves. The compnay also produces ball, knife gate, pressure seal and bellows seal valves ranging in sizes form 1/4" to 42" in cast or forged carbon, stainless or alloy steel. The company's three plants in Quebec have manufacturing areas totalling 300,000 square feet and employ 650 people. Additional manufacturing facilities are located in the United States, France, Portugal, South Korea and Taiwaa.

### Willowgien Systems Ltd.

Willowglen Business Park, Manning Close N.E. Calgary, Alberta Canada T2E 7N5 Telephons: (403) 272-1800 Fas: (403) 272-2114 Contact: Emilienne Tremblay, International Marketing Coordinatar

Willowglen epecializes in the engineering, design and supply of Supervisory Control and Data Acquisition (SCADA) systems. Major applications of our advanced technology SCADA systems are in the Oil & Gas, Electric Power, Water/Wastewater, Telecommunications and Transportation industries. We have been a major supplier of SCADA systems worldwide since 1974. Our large, modern facility, consisting of Head Office and Manufacturing Plant, is located in Calgary, Alberta, with branch offices strategically located internationally. Willowylen personnel have a proven ability to design and implement safe and secure systems using state-of-the-art hardware and software. Thus, the Willowglen solution meets the stringent performance criteria essential to the SCADA environment.

Willowgien's SCADACOM® Master Station represents a new generation of SCADA systems. The SCADACOM® Master Station is designed with real time performance and incremental expansion as basic features. Coupled with a sophisticated high resolution man-machine interface and fault tolerant operation, the SCADACOMO Master Station brings new levels of reliability and flexibility to the SCADA markenplace. SCADACOM® works on a hardware platform of SUN Microsystems RISC-Architecture Workstations on a high speed Local Area Nerwork (LAN). Its implementation of a real-time Object Oriented Database multiplies performance factors by one to two orders of magnitude over conventional SCADA systems.

### Zircatec Precision Industries Inc.

Darset Street East Port Hope, Ontario Canada L1A 3V4 Telephone: (416) 885-4537 Fax: (416) 885-7:57 Contact: Mariyn R. Wash, Vine-President Marketing

Zircatec Precision Industries Inc. has been involved with nuclear nuclear energy since 1955 and is a major supplier of nuclear fuel, fuel cladding and reactor components for nuclear service. Zircatec is a leader in the Canadian nuclear industry and offers its manufacturing expertise to off-shore fuel fabricators.

#### Produces:

- Nuclear Fuel (Natural, Depleted and Enriched, Uranium Carbide, Uranium Metal Alloys: U-Si, U-th, U-ZR) - Nuclear Fuel Cladding (Zircaloy-2 & 4, Zr-Nb, DANDU, PWR, BWR, Specialty Sizing, Aluminum and Stainles Steel) - Nuclear Reactor Components (Calandria Tubes, Garter Springs, Guide Tubes & Assemblies, Fuel Latch Mechanisms, Closure Plugs, Reactivity Mechanisms) Services (manufacturing Technology, Fuel Design, Materials and Component Testing, Ultrasonic Flaw Detection, Helium Leak Testing, Resistance Welding, Vacuum Industion Brazing, Corrosion Testing and Vacuum Heat Treating.



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BUILDING AUTOMATION EQUIP. MANUFACTURERS AND SERVICES



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Industry. Science and Industria, Sciences et Technologie Canada



### Introduction

Automation for buildings is important to Canada today, and will be increasingly so during this decade. The evolution of this industry is resulting in products and systems that save energy, enhance lifestyles, and at the same time, create new industry opportunities. It will also stimulate existing industries to expand product benefits. Several market conditions will foster this evolution in Canada:

- New housing is reaching a cost/benefit plateau in reducing energy consumption through construction techniques. Automation offers an additional way to reduce energy consumption. By offering new home buyers reduced operational costs, extra convenience and lifestvie benefits, as well, builders will offset a pattern of declining construction growth. - Utilities are increasingly interested in energy conservation. Environmentally concerned governments and consumers are working with utilities to initiate programs for better control and better consumer usage. To effect these, utilities are developing innovative programs and encouraging consumers to purchase systems with advanced energy efficiency. - The population itself is changing. With over forty percent of all women in the work force today, there is increased need for daytime home security as well as convenience products.

The automation for buildings industry is represented in Canada by the Canadian Automated Buildings Association (CABA), whose head office is in Ottawa at the National Research Centre and whose president is Mr. Jack W. Fraser.





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# Alphabetical Listing of Companies

GE Canada

Honeywell Limited Horizon Technologies Inc.

Johnson Controls Ltd.

Landis & Gyr Powers, Ltd.

Salco Technology Inc. Siricon Société de Microélectronique Industrielle de Sherbrooke inc. (SMIS)

TRIO (Telecommunications Research Institute of Ontario)

VCI Controls Inc.

W.B. Cross Co. Limited

X-10 Hc e Controls Inc.



**Company** Profiles

#### **GE** Canada

2300 Meadowvale Boulevard Mississauga, Ontario Canada LSN SP9 Telephone: (416) 858-5466 Fax (416) 858-5218 Contact: Niraj Bhargava, Manager, Business Development Programs

General Electric worldwide has revenues of more than \$60 billion, more than 284,000 employees, and manufacturing operations in Canada, U.S., Europe, the Middle East, Africa, Asia, Japan and Latin America. In Canada, GE Canada has more than 100 Sales and Service locations and 16 manufacturing plants. GE Canada has annual revenues of more than \$2 billion and more than 8000 employees.

GE is committed to global leadership in each of its 13 businesses: Aerospace, Aircraft Engines, Appliances, Broadcasting (NBC), Financial Services, Industrial and Power Systems, Lighting, Medical Systems, Plastics, Electrical Distribution and COntrol, Information Services, Motor and Transportation Systems.

Products: Lighting, Electric Motors, Meters, Electrical Distribution and Control, Appliances, Hydro.

Honeywell Limited

740 Ellesmere Road Scarborough, Ontario Canada M1P 1V9 Telephone: (416) 293-8111 ext. 2293 Fax: (416) 297-4268 Contact: Paul Saabas, Market Manager

Honeywell Limited is a multi-divisional company that manufactues and services a wide variety of products from the thermostat on the wall to a complex integrated process control system for an oil refinery. Honeywell has been in business for over 100 years providing controls to help you control your world. Products: The products that en insize energy savings/automated building capabilities in the residential sector are: - TotalHome<sup>TM</sup>, an integrated Home Automation System that brings together HVAC control, lighting control and security into a package through the HBUS

communication network. Additional work is being done on TotalHome<sup>™</sup> to capand its capabilities to communicate with the D2B Bus, which is a protocol for consumer electronics, and to provide a communication link for demand side management.

- Other products that tie into the TotalHomen offering are the Perfect Climate Products. Perfect Climate products are designed to enhance the indoor air quality of the home while providing energy savings. The Perfect Climate products are the Chronotherm set back thermostat which provides precise temperature control allowing the homeowner to reduce energy consumption by 20 to 30%. The Electronic Air Cleaner is another product in this group whose function is to filter the air within the home which will keep the coil of your furnace clean ensuring that it operates at peak efficiency. The Perfect Window ERV is a heat exchanger has the unique ability to transfer moisture back to area of highest moisture concentration. This willensure the moist air is retained in the home during winter time operation thereby reducing the need to humidify your air and during the summer time it can dehumidify your air thus reducing the air conditioning load.

Honeywell also have a large number of electronic heat set back stats and water management devices.

Horizon Technologies Inc.

2758 Asquith Street Victoria, British Columbia Canada V8R 3Y5 Telephone: (604) 592-0487 Fax: (604) 592-1366 Contact: Ludo Bertsch, President

Horizon Technologies, Victoria, B.C. is an electronics technology company specializing in CEBUS and home automation. Ludo Bertsch, President, has been very active in the home automation area, both in North America as an active member of the CEBUS group, and internationally as representative for Canada. There are two main aspects of Horizon Technologies: custom contracts and supply of innovative home automation technology. The custom contracts involve working with manufacturers who are planning to enter the home automation field. Typical services include analyzing the effect of home automation on the manufacturer's product line(s), developing CEBUS versions of products, and detailed test analysis.

Johnson Controls Ltd.

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7400 Birchmount Road Markham, Ontario Canada L3R 5V4 Telephone: (416) 494-1575 Fax: (416) 474-5349 Contact: Douglas K. Cross

Johnson Controls Ltd. Canadian Headquarters in Toronto, Ontario is a leader in facility management and control systems, automotive seating, batteries and plastics. Founded in 1885, it operates in 30 locations nationwide with 350 worldwide. Johnson Controls securities (JCI) are listed on the NYSE with World Headquarters in Milwaukee, Wisconsin.

Products: automatic temperature controls, comprehensive facility management systems, card access and security systems.





lighting retrofit and control, fire alarm and management systems.

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Landis & Gyr Powers, Ltd.

1200 Couriney Park Drive Mississauga, Ontario Canada LST 1S2 Telephone: (416) 670-0133 Fax: (416) 670-9215 Contact: Gary Frayn, National Sales Manager

Landis & Gyr Powers, Inc. is an industry leader in providing building management solutions to commercial and other nonresidential facilities. With over 2500 employees and 115 field offices across North America, the company designs, manufactures and installs heating. ventilating, and air conditioning (HVAC) control systems in addition to integrated access management, life safety, lighting and laboratory applications. The company also provides service to technical building systems and overall facility management. The parent corporation, Landis & Gyr, is a \$2 billion international leader with special interests in comfort, control, energy management, and communications. The Comfort Controls Group is one of the largest installers and manufacturers of building automation and comfort controls in the world. As One Company/One Team, Landis & Gyr Powers leads the industry as an international marketer of Building Management Solutions.

Products: Landis & Gyr Powers man-factures a complete line of pneumatic and electronic (DDC) controls that are used to sequence and automate heating, ventilating and air conditioning equipment. Although manufactured in Buffalo Grove, Illinois, all components are distributed and serviced by branches throughout Canada. Sales Technology Inc.

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\$135 - 260 Adelaide St. East
Taronto, Ontario
Canada MSA 1N0
Telephone: (416) 840-4771
Fax: (416) 840-9809
Contact: Leo Salemi, Managing Director

Salco Technology specializes in the sale, installation and development of security and home automation products used in residential and commercial applications. Services include the pre-wiring of new residential construction for security, intercom, music, telephone, cable, video and low voltage wiring for environmental controls. Retrofit installations are also provided by making use of power line carrier technology and IR/RF links. The company's main objective is to integrate the various products and technologies to provide consumers with an affordable automated system which will provide security, convenience and energy conservation.

Products: Salco Technology is currently extending its product search to cover CEBus and SMART HOUSE related technologies. Manufacturers product lines which are currently being used or evaluated include DCS, Leviton, Stanley, Napco, X-10 Powerhouse, Tecktone and Enerlogic.



1455 Boul. de Maisonneuve Montreal, Quebec Canada H3G 1M8 Telephone: (514) 848-8770 Fax: (514) 848-3198 Contact: Dr. P. Faxio, President

Siricon is a non-profit corporation whose mission it is to transfer the latest technologies to the building industry and to assist it in acquiring the required knowledge to operate effectively and competitively. Siricon works closely with industry and universities to promote new technologies and improve old ones for increased energy efficiency in buildings. Siricon has acquired extensive experience in computer modelling, building thermal measurements, energy efficient envelope design and detailing. As well as passive and active solar energy utilization, thermal storage, and indoor air quality and environmental control.

Products: New product development includes HVAC, energy analysis software development, technical reports and building energy audits, and other engineering services.

Société de Microélectronique Industrielle de Sherbrooke inc. (SMIS)

3330, rue King Ouest, Suite 212 Sherbrooke, Québec Canada J1L 1C9 Telephone: (819) 829-5120 Fax: (819) 829-1133 Contact: Alain Boucher, General Manager

The Société de Microélectronique Industrielle de Sherbrooke (SMIS) offers professional research and development services in the fields of electronics and software engineering. The firm has specialized in several key applications like telecommunications, energy management, home automation and instrumentation. Noticeable projects include the implementation of demand-side energy controllers accessed from the utility by means of bidirectional telecommunications links

*Products:* consulting; technical and economic feasibility studies; design and development; prototype and low-volume manufacturing.



Industry, Science and Technology Canada

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#### TRIO (Telecommunications Research Institute of Ontario)

340 March Road, 4th Floor Kanata, Ontario Canada K2K 2E4 Telephone: (613) 592-9211 Faz: (613) 592-8103 Contact: Jim McPherson

TRIO manages a program of over \$5 million annually in precompetitive university research of relevance to the Canadian telecommunications industry. Members of TRIO enjoy royalty-free use of research results from 22 projects, in network architecture/access; protocols and software engineering; antennas and signal processing; mobile and satellite communications systems; photonic networks and systems; and high speed design and testing methods.

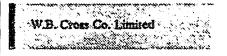
VCI Controls Inc.

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2081 Merivale Road Nepean, Ontario Canada K2G 1G9 Telephone: (613) 226-6712 Fax: (613) 226-2203 Contact: Hubert L. Stephens

VCI Controls Inc. is the largest Canadianowned company providing Canadiandesigned and manufactured electronic building control systems and have been meeting the needs of their Building Automation clients since 1979.

Products: The 9100 Networked Energy Manaegment Control System provides unprecedented power, flexibility and easeof-use. It features a full Windows Graphical User Interface with "point and shoot" operating controlled by the click of a mouse. The 9100 is the latest in a series of ground-breaking control systems engineered by VCI Controls - a series started in 1980 with the first all-electronic, direct digital control system in the industry. In keeping with our committment to our existing client base, VCI designed the 9100 to be compatible with existing VCI installations. With the 9100, VCI continues its committment to providing customers with the most advanced Building Automation Systems.



5380 King Road, P.O. Box 34 Nobleton, Ontario Canada LOG 1N0 Telephone: (416)859-9050 Fax: (416) 859-9066 Contact: W.T. David Cross, President

W.B. Cross Co. Limited is a distributor and an installer of customized automated building control systems for both commercial and residential applications. The company has been in the business for over 50 years. We specialize in the design of automated building systems to control lighting, heating and air conditioning using power line carrier technology (existing building electrical wiring) and hard wire to reduce energy costs.

X-10 Home Controls Inc.

1200 Aerowood Drive, Unit 20 Mississauga, Ontario Canada L4W 2S7 Telephone: (416) 624-4446 Fax: (416) 625-8480 Contact: Everett Stewart, Sales Manager

Established in 1976, the X-10 Manufacturing & Marketing Group has gained an enviable reputation as a world leader in automation, security products, and energy management. Our products have multiple application capabilities in the areas of wireless remote control and automation of lighting, appliance and heating/air condition. Our systems utilize existing powerlines as the means of signal transmission along with, and in some cases by means of, RF control.

*Products:* Programmable timers and computer interfaces, wireless remote controls, telephone responders, thermostat

Industry, Science and Technology Canada

d Industrie, Sciences et Technologie Canada heating/air conditioning set-back controllers, light and appliance control modules, wireless security systems with built-in voice dialers, key chain remotes, infrared remote controls.

