

Canada's iron and steel foundry industry has expanded dynamically in recent years to meet the many challenges of a rapidly expanding industrial economy and the increasingly sophisticated demands of the electronic and space age.

The industry, fully competitive with the best anywhere, serves an ever increasing number of customers with many diverse needs in Canada.

By constantly modernizing methods and plant, large and small producers have increased production, and have achieved the highest standards of quality control. The industry, fully proficient in long runs, also has exceptional capabilities for economical, specialized short run orders in both catalog and custom products — and especially in filling prototype orders at competitive prices.

Technological expertise, and highly skilled design work, combined with dependable Canadian craftsmanship and realistic pricing command the attention of alert, value-conscious buyers of quality castings everywhere.

Many Canadian producers have been approved for production to rigid military specifications and are recognized by international industry associations as fully meeting their standards.

This is the second directory of Canada's iron and steel foundries compiled by the Canadian Department of Trade and Commerce in co-operation with participating companies. It covers a comprehensive range of capabilities and is an invaluable guide for buyers in many industries in their quest for highly qualified, fully dependable sources of supply.

CONTENTS

	Page
A-1 Steel and Iron Foundry Ltd.	4
Abex Industries of Canada Ltd.	4
Anthes Imperial Limited	5
Auto Specialties Mfg. Co. (Canada) Ltd.	5
Babcock & Wilcox Canada Ltd.	6
Beach Foundry Limited	6
A. Bélanger Limitée	7
Benn Iron Foundry Limited	7
Black-Clawson-Kennedy Ltd.	8
Bowmanville Foundry Co. Limited	8
CAE Machinery Ltd.	9
Canadian Steel Foundries	9
Canadian Unitcast Steel Ltd.	10
Canron Limited	10
Cercast Inc.	11
Cornwall Brass & Iron Foundries Ltd.	11
Crouse-Hinds Company of Canada, Limited	12
Darling Brothers, Limited	12
Designed Precision Castings Limited	13
Dion Frères Inc.	13
Dominion Engineering Works Ltd.	14
Dominion Foundries and Steel, Limited	14
Dorr-Oliver-Long Limited	15
Esco Limited	15
Fahralloy Canada Limited	16
Fittings Limited	16
Forano Limited	17
Galt Malleable Iron Limited	17
General Manufacturing Co. Ltd.	18
John T. Hepburn, Limited	18
Holmes Foundry Limited	19

	Page
The Indiana Steel Products Co. of Canada Limited	19
Industrial Fine Castings Ltd.	20
International Malleable Iron Company Limited	20
Legare Foundry (1961) Limited	21
Lethbridge Iron Works Company Limited	21
Lunenburg Foundry & Engineering Limited	22
Lynn MacLeod Metallurgy Limited	22
Mainland Foundry & Engineering Ltd.	23
Manganese Steel Castings Limited	23
Manitoba Bridge & Engineering Works	24
Maritime Steel and Foundries Limited	24
Massey-Ferguson Industries Limited	25
Neelon Steel Limited	25
Otaco Limited	26
Preston Foundries Limited	26
Quebec Iron Foundries Ltd.	27
Rockwell Mfg. Co. of Canada Ltd.	27
Soo Foundry & Machine Co. Ltd.	28
Stanton Foundry Limited	28
Supreme Precision Castings (1963) Ltd.	29
Toronto Foundry Limited	29
United Nail and Foundry Co. Ltd.	30
The Wabi Iron Works Limited	30
Welland Iron and Brass Limited	31
Welmet Industries Limited	31
Western Foundry Company Limited	32
J. A. Wotherspoon & Son Ltd.	32
Casting Composition Directory	33
Canadian Trade Offices in the United States	35

A-1 Steel and Iron Foundry Ltd. 1775 Clark Drive Vancouver 12, British Columbia, Canada

Contact: W. D. Miles Boyd Sales Manager Tel: (604) 253-7171 Telex: 04-5106

A-1 STEEL AND IRON FOUNDRY LTD. began production of carbon and alloy steel in 1942, primarily for the shipbuilding industry and subsequently diversified to serve the primary industries of Canada's West Coast region. A-1 Steel has agents and dealers across Canada and in many parts of the world. Strategically located to serve the northwestern area, the company has complete facilities for pattern design and casting through to final machining. A-1 Steel manufactures l'ANCO products and its non-ferrous division produces aluminum and bronze alloys.

FOUNDRY LOCATION

A-1 Steel and Iron Foundry Ltd. 1775 Clark Drive Vancouver 12, British Columbia, Canada Main Industries Served: Sawmill; pulpmill; logging; mining; construction Size of Castings Produced: 8 ounces to 2,000 pounds **Compositions:** Carbon, low alloy, manganese and stainless steels **Molding Process:** Green sand **Melting Facilities:** 2 direct arc acid furnaces, 300 kva and 600 kva **Heat Treating Facilities:** On premises **Testing Facilities:** Chemical on premises; physical nearby **Capacity:**

175 net tons per month

Abex Industries of Canada Ltd.

Amsco Joliette Division P.O. Box 370 Joliette, Quebec, Canada

Contact: H. M. Brownrigg Vice-President and General Manager Joliette: Tel: (514) 756-4531 Telex: 0120202 Selkirk: Tel: (204) 453-2322 Telex: 035134

ABEX INDUSTRIES OF CANADA LTD. operates Amsco Joliette Division plants at Joliette, Quebec and Selkirk, Manitoba. In continuous operation since 1916, Amsco Joliette is one of Canada's leading producers of manganese steel, alloy steel and alloyed iron abrasion resistant castings, primarily for the mining, earthmoving, construction and railroad industries. Acquired by Abex Industries in 1957, the Selkirk plant specializes in track work and high alloy castings and has been in operation since 1916. Both plants are well situated to provide excellent service to its many customers.

FOUNDRY LOCATIONS

Abex Industries of Canada Ltd. Amsco Joliette Division Joliette, Quebec, Canada

Selkirk, Manitoba, Canada

Main Industries Served: Mining; construction; earthmoving; railroad Size of Castings Produced: 1 to 26,000 pounds

Compositions:

Austenitic and alloyed manganese steels; chromium-molybdenum abrasion resisting steels; high strength chromium nickel-molybdenum steel; carbon steel; high heat resistant alloy steels; martensitic white iron; high chromium martensitic iron

Molding Processes:

Green sand; dry sand; shell sand

Melting Facilities:

Joliette: 2 electric arc furnaces, capacities 22,000 and 12,000 pounds;

Selkirk: 2 electric arc furnaces, capacities 16,000 and 7,000 pounds

Testing Facilities:

Complete chemical, physical and metallurgical laboratory facilities including Magnaflux, dyepenetrant inspection and X-rays, on premises **Capacity:**

Joliette: 1,000 net tons per month Selkirk: 300 net tons per month

Anthes Imperial Limited

P.O. Box 6015, Toronto AMF 2 International Boulevard Toronto, Ontario, Canada

Contacts: J. G. Riley General Sales Manager, Eastern Tel: (416) 461-6311 Telex: 02-2080 C. R. McBain General Sales Manager, Western Tel: (204) 774-3421 Telex: 03-5357

ANTHES IMPERIAL LIMITED has been established for nearly 70 years as a major supplier to the plumbing and heating industry. The company is recognized continent-wide as a leader in the application of the spinning process and high volume foundry techniques. In a continuing program of improving facilities, new capital equipment is being added to provide improved quality control and reduce manufacturing costs. The company is well diversified in many product fields, and its versatility qualifies it to handle inquiries over a wide range of casting requirements.

FOUNDRY LOCATIONS

Anthes Eastern Limited P.O. Box 1009 St. Catharines, Ontario, Canada

La Fonderie Paquette 165 St. Paul Street St. Jean, Quebec, Canada

Anthes Western Limited 1350 Saskatchewan Avenue Winnipeg 21, Manitoba, Canada

9520 - 125th Avenue P.O. Box 698 Edmonton, Alberta, Canada

Ogden Road P.O. Box 1090 Calgary, Alberta, Canada

Main Industries Served:

Construction; automotive; agriculture; plumbing; heating

Size of Castings Produced: 1 to 2,500 pounds

Compositions:

Gray, ductile and alloy irons

Molding Processes:

Green sand; permanent mold; DeLavaud

Melting Facilities:

6 cupolas, capacities from 1 to 20 tons per hour; electric induction furnace, capacity 1 ton per hour Heat Treating Facilities:

Available on premises or nearby

Testing Facilities:

Available on premises or nearby Capacity:

6,600 net tons per month

Auto Specialties Mfg. Co. (Canada) Ltd.

614 Tecumseh Road East Windsor, Ontario, Canada

Contacts: G. L. Gratton Sales Manager R. M. Foote President and General Manager Tel: (519) 235-5261

AUTO SPECIALTIES MFG. CO. (CANADA) LTD. has operated a malleable iron foundry and machine shop for more than 50 years. Using automated processes for production speed and efficiency, the company produces standard and pearlitic malleable castings of high quality, unfinished or machined, as desired, for the automotive, agricultural and railway industries. Auto Specialties is generally classified as in the intermediate range of production.

FOUNDRY LOCATION

Auto Specialties Mfg. Co. (Canada) Ltd. 614 Tecumseh Road East Windsor, Ontario, Canada

Main Industries Served: Automotive; agriculture; railway Size of Castings Produced: 1 to 50 pounds Compositions: Standard ASTM Grade 32510 and all grades of pearlitic malleable iron **Molding Processes:** Sand molding; squeezer; cope and drag; semiautomated lines and floor molding; shell cores; oil sand cores **Melting Facilities:** 2 reverberatory air furnaces, 45 tons capacity each **Heat Treating Facilities:** Electric annealing ovens; continuous pearlitic heat treating with batch type draw furnaces **Testing Facilities:** Complete chemical laboratory; sand testing and Magnaglo on premises; physical laboratory nearby **Capacity**: 845 net tons per month

Babcock & Wilcox Canada Ltd. Galt, Ontario, Canada

Contact: V. A. Johnson Sales Promotion Manager Tel: (519) 621-2130 Telex: 0295-771

BABCOCK & WILCOX CANADA LTD., originated in Galt in 1859 as Goldie and McCulloch Ltd., was by 1923 a leading Canadian manufacturer of boilers, pumps, machinery and castings, and in that year became part of the world-wide Babcock-Wilcox organization. Today the Canadian company is one of North America's leading producers of nuclear, steam and conventional fuel generating equipment. Babcock & Wilcox also produces pumps and iron and steel castings for utility, industrial and institutional application in Canada and other countries.

FOUNDRY LOCATION

Babcock & Wilcox Canada Ltd. Galt, Ontario, Canada

Main Industries Served:

Utility; pulp and paper; petrochemical; marine; mining; automotive; iron and steel; food; rubber; textiles; brewers; distillers; railway; electrical Size of Castings Produced:

Gray iron, ounces to 40,000 pounds;

Steel, ounces to 1,600 pounds;

Ni-Resist, ounces to 32,000 pounds;

Ni-Hard, ounces to 32,000 pounds

Compositions:

Gray iron; alloy and stainless steel; Ni-Resist; Ni-Hard

Molding Processes:

Floor; pit; roll-over; squeezer; green sand; dry sand: air set sand

Melting Facilities:

3 cupolas, capacities of 4, 7, and 10 tons per hour; 2 steel casting induction furnaces, 1,300 pounds capacity

Heat Treating Facilities:

3 gas fired furnaces, including a 15' x 15' x 30' double-ended furnace, on the premises

Testing Facilities:

Sand testing; carbon testing; radiographic; nondestructive; quality control laboratory, including X-ray, gamma ray, dye penetrant, ultrasonic, on the premises; chemical analysis nearby

Capacity:

200 net tons per month

Beach Foundry Limited 75 Spencer Street

Ottawa 3, Ontario, Canada

Contact: N.S. Coxford Vice-President and General Manager Tel: (613) 728-5871 Telex: 013-449

BEACH FOUNDRY LIMITED, established in 1894, is a well-known Canadian manufacturer of gas and electric ranges and oil and gas furnaces which are sold from coast to coast. The company is also an extensive producer of castings in gray and ductile iron and Ni-Resist and has more than 90 per cent of its capacity available for jobbing. Iron production is controlled through an electric furnace to assure uniformity of structure and constant machinability. A continuous sand system and machine molding speed production and allow Beach to handle castings from ounces to 400 pounds. Machining to customer specifications is available on the premises. A siding connected with the Canadian Pacific Railway transcontinental line makes it easy to ship anywhere.

FOUNDRY LOCATION

Beach Foundry Limited 75 Spencer Street Ottawa 3, Ontario, Canada

Main Industries Served:

Electric motors and appliances; pulp and paper; general industry for medium to long production runs

Size of Castings Produced:

Ounces to 400 pounds

Compositions:

Grav and ductile iron; Ni-Resist

Molding Process: Green sand, shell cores, CO₂ core process **Melting Facilities:**

Electric carbon arc furnace; coke cupola **Heat Treating Facilities:**

Normalizing and annealing on premises **Testing Facilities:**

Metal and sand testing on premises Capacity:

Contact: E. Weemaes Vice-President Tel: (418) 248-2332 Telex: 011-3410

A. BELANGER, LIMITEE, established in the year of Canada's confederation, 1867, started as a producer of castings for stoves and farm implements. In 1960, the company obtained a Meehanite license to add to its production in gray and ductile iron and to serve an expanding range of customers. This increased markets considerably and Bélanger components now are widely used in mining and many metalworking industries.

FOUNDRY LOCATION

A. Bélanger, Limitée Montmagny, Quebec, Canada

Main Industries Served:

Mining; heavy machinery and paper mill machinery; manufacturers of transport equipment, pumps and dies; road building equipment **Size of Castings Produced:** 8 ounces to 12,000 pounds **Compositions:** Gray iron; all Meehanite alloys; iron **Molding Processes:**

Synthetic sand; CO₂

Melting Facilities:

2 cupolas, capacities 6 and 9 tons per hour **Heat Treating Facilities:**

On premises

Testing Facilities:

Complete laboratory on premises Capacity:

250 net tons per month

Benn Iron Foundry Limited 3 Mason Street Wallaceburg, Ontario, Canada

Contacts: D. B. Benn President and General Manager N. Sharpe **Assistant Sales Manager** Tel: (519) 627-3314

BENN IRON FOUNDRY LIMITED, established in 1932, has since expanded substantially. The present foundry facilities, built in 1957, have been enlarged three times since, with new processes incorporated as they have become available to ensure continuing efficiency in production and quality of castings. This policy has enabled the company to develop a highly competitive marketing position and to continually broaden its market area. Monthly capacity in net tons has doubled from 300 in 1965 to 600 in 1968.

FOUNDRY LOCATION

Benn Iron Foundry Limited **3 Mason Street** Wallaceburg, Ontario, Canada

Main Industries Served:

Automotive; agricultural; appliance; railway; hardware: electrical

Size of Castings Produced:

1 to 300 pounds, production;

- 1 to 3,000 pounds, custom
- **Compositions:**

Grav and ductile iron

Molding Processes:

Green sand; squeezers; cope and drag; shell; oil sand cores; hot box and CO_2 cores; CO_2 molding; air set cores and molding

Melting Facilities:

Cupola, 4 tons per hour; coreless induction, 3 tons per hour

Heat Treating Facilities:

Normalizing and annealing on premises **Testing Facilities:**

Sand and metallurgical laboratory on premises Capacity:

Black Clawson-Kennedy Ltd.

Owen Sound, Ontario, Canada

Contact: R. Warburton Sales Manager, Industrial Products Tel: (519) 376-8860 TWX: 610, 354-9602

BLACK CLAWSON-KENNEDY LTD. has continued to expand and modernize its facilities ever since the firm was established in 1857 as a foundry and millwright business. The engineering, foundry, pattern and machine shops and fabricating departments are noted for skillful quality production. Because of diversification, the company can produce a large variety of quality castings to customer specifications. Product range includes castings of various alloys for hydraulic equipment, valves, cement mill, pulp and paper machinery and shipbuilding, pressure castings for pumps, and centrifugal cast liners.

FOUNDRY LOCATION

Black Clawson-Kennedy Ltd. Owen Sound, Ontario, Canada

Main Industries Served:

Railroads; mining; cement mill; shipbuilding; pulp and paper; industrial; custom castings

Size of Castings Produced:

Iron, 1 to 20,000 pounds; steel, 1 to 12,000 pounds

Compositions:

High and low alloy steels; stainless steels; ductile irons; Ni-Resist and alloy irons

Molding Processes:

Baked sand; green sand; hand and machine molding

Melting Facilities:

Direct arc and induction furnaces

Heat Treating Facilities:

Annealing; normalizing; stress relieving; water quench, on premises

Testing Facilities:

Physical; chemical; gamma ray; magnetic particle; dye penetrant, on premises

Capacity:

400 net tons per month

Bowmanville Foundry Co. Limited Bowmanville, Ontario, Canada

Contact: T. F. Rehder General Manager Tel: (416) 623-3313

BOWMANVILLE FOUNDRY CO. LIMITED, established in 1902, built a new plant in 1960 equipped with the latest molding equipment and modern machinery and specializes in very small lightweight castings. With up-to-date heating and melting facilities complementing modern sand and shell coremaking equipment, the company can produce multiple or short run castings in record time. A highly competent engineering staff is available to assist in the design of proposed castings to provide the most economical method of meeting customer requirements.

FOUNDRY LOCATION

Bowmanville Foundry Co. Limited Bowmanville, Ontario, Canada

Main Industries Served:

General jobbing of high volume, very small, lightweight fittings and electrical fittings Size of Castings Produced: Ounces to 10 pounds **Compositions:** Malleable iron, all grades Molding Processes: Green sand: CO₂ shell **Melting Facilities:** 2-line frequency induction furnaces, capacity 1,500 pounds per hour each Heat Treating Facilities: 16 electric ovens on premises **Testing Facilities:** Chemical analysis and hardness on premises Capacity: 150 net tons per month

CAE Machinery Ltd. Division of CAE Industries Ltd. 3550 East Broadway Vancouver 12, British Columbia, Canada

Contact: Mel Oughton General Sales Manager Tel: (604) 299-3431

CAE MACHINERY LTD., originally incorporated in 1919 as Canadian Sumner Iron Works, has continuously expanded and modernized its facilities. The company is highly qualified to produce a wide range of iron and steel castings for the forest products industry, as well as for mining companies and a wide range of industrial concerns. Castings are produced in carbon steel, stainless and austenitic manganese (steels). CAE has a Meehanite license and produces all grades of iron, including the ductile grades. Facilities include pattern, machine and welding shops, fabrication and assembly plant.

FOUNDRY LOCATION

CAE Machinery Ltd. Division of CAE Industries Ltd. 3550 East Broadway Vancouver 12, British Columbia, Canada

Main Industries Served:

Forest products; pulp and paper; wear plates for mines; general industry

Size of Castings Produced:

- Steel, ounces to 6,000 pounds;
- iron, ounces to 10,000 pounds

Compositions:

Gray iron; Meehanite alloys; ductile iron; carbon and stainless steels; austenitic manganese

Molding Processes:

Green sand; dry sand, with shell cores

Melting Facilities:

2 arc furnaces, $1\frac{1}{2}$ tons per hour; 1 cupola, $36^{\prime\prime}$ Heat Treating Facilities:

Oil and gas fired furnaces; quenching facilities, on premises

Testing Facilities:

4,000-amp. magnetic particle testing; dye check; complete chemical-metallurgical laboratories, on premises

Capacity:

300 net tons per month

Canadian Steel Foundries

Division of Hawker Siddeley Canada Ltd. P.O. Box 160 8000 Notre Dame Street West Montreal, Quebec, Canada

Contact: F. W. Hore General Sales Manager, Industrial Products Tel: (514) 482-8610 Telex: 01-20988

CANADIAN STEEL FOUNDRIES, a Division of Hawker Siddeley Canada Ltd., built its Montreal plant in 1913. Through continuous expansion in plant and facilities, the company today is the largest iron and steel foundry in Canada. Specialties include the larger-size castings used in the mining, cement, steel, hydro and thermal power industries. With a modern plant, and a team of highly skilled engineers and foundrymen, the company produces more than 3,000 tons of castings a month. A supplier of castings to Canadian railways for more than 50 years, the company now serves almost every type of industry with castings ranging from 3 to 300,000 pounds in a wide range of alloys.

FOUNDRY LOCATION

Canadian Steel Foundries 5227 Notre Dame Street East Montreal 5, Quebec, Canada

Main Industries Served:

Mining; railway; marine; pulp and paper; automotive; cement; steel; hydro and thermal power Size of Castings Produced:

Up to 300,000 pounds

Compositions:

Mild and alloy steels; ductile iron; austenitic manganese and stainless steel

Molding Process:

Dry and green sand; machine molding; core assembly in pits and on plates; dry and green sand cores; blower type cores

Melting Facilities:

Electric arc furnaces, capacities 3, 6, 20 and 50 tons; induction furnaces, capacities 300, 500, and 1,000 pounds

Heat Treating Facilities:

16 annealing furnaces up to 200-ton load with quenching on premises

Testing Facilities:

X-ray pit, 20' x 24' x 10', 100 curie cobalt source; iridium gamma ray (0.5 curie cobalt source); ultrasonic; spectograph (10 elements); Magnaflux; Magnaglo; metallographic microscope; all usual metallurgical laboratory equipment, on premises **Capacity:**

3,500 net tons per month

Canadian Unitcast Steel Ltd.

614 St. James Street West Montreal 3, Quebec, Canada

Contact: H. S. Berry Manager of Sales Tel: (514) 849-3131 Telex: 01-2362

CANADIAN UNITCAST STEEL LTD., formed in 1948, produces a wide variety of castings for many industries. The company's personnel have high technical qualifications, lengthy experience in the foundry industry, and have excellent facilities to work with. Management takes an active interest in all research committees and projects keyed to the development of modern techniques. As a result, the company has built up an enviable reputation for quality products. efficient service and firm delivery dates, particularly in the small castings field.

FOUNDRY LOCATION

Canadian Unitcast Steel Ltd. 455 Belvedere Street Sherbrooke, Quebec, Canada

Main Industries Served:

Automotive; agriculture; valve industry; pulp and paper; pumps and impellers; conveyer; mining; railway; marine and general industry Size of Castings Produced:

Ounces to 1,500 pounds

Molding Process:

Green sand

Melting Facilities:

Acid-electric furnace, capacity 3 tons

Heat Treating Facilities: Annealing on premises

Testing Facilities:

Magnaflux, Zyglo, pressure testing on premises; radiographic available nearby

Capacity:

300 net tons per month

Canron Limited

Foundry Division 169-171 Eastern Avenue Toronto 2, Ontario, Canada

Contact: W.E.Burton **District Sales Manager** Tel: (416) 363-8801

CANRON LIMITED (formerly Canada Iron Foundries, Limited) is one of the largest and most diversified industrial organizations of its kind in Canada. Incorporated in 1915, it is now a leading producer of gray and alloy iron castings. Canron also produces iron and concrete pressure pipe, ingot molds, hydrants, valves, industrial machinery, electric motors and generators, and railway track maintenance equipment. The company also fabricates and erects steel structures and its sales agency division markets a wide range of industrial supplies and equipment, including other companies' products. Variety and versatility in manufacturing methods and a high level of technical knowledge have established Canron as outstanding in its various fields.

FOUNDRY LOCATIONS

Canron Limited Stuart Street West Hamilton, Ontario, Canada

Burlington Street Hamilton, Ontario, Canada

1010 Talbot Street St. Thomas, Ontario, Canada

Main Industries Served:

Railroad; mining; electrical; municipal; pulp and paper; steel mills; general industry

Size of Castings Produced: 1 to 1,500 pounds

Compositions:

Alloy irons and all grades of gray and ductile irons Molding Processes:

Green sand; floor and high pressure squeezer **Melting Facilities:**

Electric arc, induction and cupola

Heat Treating Facilities:

Gas fired 6' and 12' furnaces, also vacuum heat treating, on the premises

Testing Facilities:

Chemical and physical on the premises Capacity:

12,000 net tons per month

Cercast Inc.

3905 Industrial Boulevard Montreal 39, Quebec, Canada

Contact: E. Heimbach Manager, Quality Control Tel: (514) 322-2371

CERCAST INC., established in 1959, currently exports 80 per cent of its output. The company has consistently pioneered in new techniques in the investment casting process and can produce ferrous castings of any weight up to 30 pounds with surface tolerances down to \pm .002 inch per inch. Established in 1959 to produce both ferrous and non-ferrous investment castings, the company casts a wide variety of complex shapes and configurations to customer specifications, with individual parts weighing as little as 2 grams. Cercast offers U.S. customers a complete customs clearance service and will supply names of United States representatives on request.

FOUNDRY LOCATION

Cercast Inc. 3905 Industrial Boulevard Montreal 39, Quebec, Canada

Main Industries Served:

Aircraft components and instruments; electronics; small arms and weapons systems; agricultural; pulp and paper; computers; printing and textile machinery; machine tools; a wide variety of industries needing special machine parts

Size of Castings Produced:

No minimum, maximum 30 pounds

Compositions:

Aluminum, brass, copper, BE. copper machinery and tool steels; stainless and heat resistant steels; high speed steels and stellites

Molding Process:

Precision investment casting

Melting Facilities:

High frequency induction furnaces **Heat Treating Facilities:**

Available from Ca

Available from Canadian government-approved sources nearby

Testing Facilities:

Chemical and physical; mechanical; X-ray and Zyglo, from government-approved sources nearby Capacity:

Varied

Cornwall Brass & Iron Foundries Ltd.

Boundary Road P.O. Box 38 Cornwall, Ontario, Canada

Contact: J. E. Leroux President Tel: (613) 932-5591

CORNWALL BRASS & IRON FOUNDRIES LTD. has grown progressively since its inception in 1932 and has enjoyed a consistently high reputation for producing quality castings at competitive prices. It supplies ingot molds and castings to primary manufacturers in the United States, South America and Canada. Served by two major railroads and with excellent docking facilities on the St. Lawrence Seaway, the company is in a favorable position for making fast deliveries. Recent modernizations and extensions to the plant have increased production facilities by 60 per cent.

FOUNDRY LOCATION

Cornwall Brass & Iron Foundries Ltd. Boundary Road P.O. Box 38 Cornwall, Ontario, Canada

Main Industries Served:

Ingot molds; municipal castings; machinery castings for pulp and paper, chemical, railroad, mining and other industries

Size of Castings Produced: 1 to 10,000 pounds Compositions:

Gray iron; heat-resisting iron; ductile iron of all types to ASTM specifications

Molding Processes:

Green and dry sand; air set; core making

Melting Facilities:

Cupolas, capacity 20 tons per day

Heat Treating Facilities: Available nearby

Testing Facilities:

Laboratory chemical; mechanical and microscopy analysis, on premises

Capacity:

Crouse-Hinds Company of Canada, Limited 1160 Birchmount Road Scarborough, Ontario, <u>Canada</u>

Contact: R. Cornelissen Manager, Manufacturing Engineering Tel: (416) 757-8781 Telex: 02-2711

CROUSE-HINDS COMPANY OF CANADA, LIMITED which began as a distributing agency in 1910 in Toronto, started its manufacturing operations by producing condulet conduit for the electrical industry. The company's sales have consistently kept pace with the growth of the Canadian economy and the range of its products has expanded accordingly — it now includes conduit fittings, cable connectors, traffic control systems, floodlights, explosion-proof electrical fittings and lighting. Crouse-Hinds personnel work to all the highest industry and government standards. Casting orders related to the firm's sphere of operations will be carefully produced to suit the precise requirements of customers.

FOUNDRY LOCATION

Crouse-Hinds Company of Canada, Limited 1160 Birchmount Road Scarborough, Ontario, Canada

Main Industries Served:

Electrical construction; airport, marine and outdoor floodlighting; municipal traffic systems Size of Castings Produced:

4 ounces to 70 pounds

Compositions:

Gray iron Molding Process:

Green sand

Melting Facilities:

3 reverberatory oil-fired furnaces Heat Treating Facilities:

None

Testing Facilities:

Sand testing and some metallurgical, on premises Capacity:

180 net tons per month

Darling Brothers, Limited 140 Prince Street P.O. Box 187 Montreal 3, Quebec, Canada

Contact: L. Labarre Foundry Superintendent Tel: (514) 866-3451 Telex: 01-2487

DARLING BROTHERS, LIMITED has been in operation for 80 years, manufacturing pumps, heat exchangers, elevators, traps and valves. A gray iron foundry was added in 1918 to supply the company's machine shop with a superior grade of casting and to supply a variety of other industries. The company invites inquiries for pressure castings made to customer specifications and having outstanding characteristics of machinability. Storage capacity for active patterns is available.

FOUNDRY LOCATION

Darling Brothers, Limited 735 Ottawa Street Montreal, Quebec, Canada

Main Industries Served: Aircraft; automotive; general industry Size of Castings Produced: 1 to 4,000 pounds **Compositions:** Gray iron **Molding Processes:** Green sand; dry sand; core sand; CO₂ cores **Melting Facilities:** Cupola, 9 tons per day **Heat Treating Facilities:** Available nearby **Testing Facilities:** Available nearby Capacity: 90 net tons per month

Designed Precision Castings Limited 75 Eastern Avenue Brampton, Ontario, Canada

Contact: H. N. Clark Sales Manager Tel: (416) 677-4422

DESIGNED PRECISION CASTINGS LIMITED was established in 1958 to produce ferrous and nonferrous castings for the aircraft and electronics industries and is actively engaged in export. The company specializes in stainless steel castings, and has gained valuable experience in producing for many industries as a jobbing foundry. The modern production and inspection facilities have been approved for the manufacture of aircraft and defense castings for the Canadian Forces, and by major United States aircraft companies. A recent expansion makes machining facilities available to finish parts to customer specifications.

FOUNDRY LOCATION

Designed Precision Castings Limited 75 Eastern Avenue Brampton, Ontario, Canada

Main Industries Served:
 Electronic and aircraft, both commercial and military; agricultural; chemical; packaging; light manufacturing
 Size of Castings Produced:
 8 ounces to 20 pounds

Compositions: Stainless and alloy steels

Molding Process:

Investment casting by lost wax process Melting Facilities:

Electric induction, electric arc and gas-fired furnaces

Heat Treating Facilities:

On premises Testing Facilities:

Radiographic; Zyglo and physical, on premises Capacity:

Varies

Dion Frères Inc. Ste-Thérèse Ouest, Québec, Canada

Contact: Paul Dion General Manager Tel: (514) 435-3641

DION FRÈRES INC., primarily a manufacturer of a range of farm implements for which it produces its own castings, has recently diversified. Currently 80 per cent of the foundry's capacity can be used for industrial contracts. The company specializes in the casting of gray iron, classes 30, 40 and 50, and produces various alloys to specifications provided by customers.

FOUNDRY LOCATION

Dion Frères Inc. Ste-Thérèse Ouest, Québec, Canada

Main Industries Served: Pulp and paper; agriculture; casting pressure valves; general jobbing Size of Castings Produced: 4 ounces to 5,000 pounds Compositions: Gray iron, classes 30, 40 and 50; alloyed irons Molding Processes: Green sand; baked sand **Melting Facilities:** Cupola, capacity 5 tons per hour Heat Treating Facilities: Available nearby **Testing Facilities:** Available nearby Capacity: 300 net tons per month

Dominion Engineering Works Ltd. Lachine, Quebec, Canada

Contact: H. G. Kreutz Foundry Manager Tel: (514) 634-3411 Telex: 012-114

DOMINION ENGINEERING WORKS LTD. designs and builds heavy industrial machinery, operates a large iron foundry and has facilities for the production of steel castings and rolling mill rolls. The company specializes in the high quality, very large castings required for the largest paper machines, hydraulic turbines, rolling mills and ball mills, and produces them under the strictest metallurgical and quality controls. Dominion also makes the chilled and alloy iron rolls used throughout industry. From the experience gained in making this wide range of specially designed products the company can offer a comprehensive custom service in production of castings.

FOUNDRY LOCATION

Dominion Engineering Works Ltd. Lachine, Quebec, Canada

Main Industries Served:

Pulp and paper; steel; mining; rubber and plastics; general manufacturing; produces hydraulic turbines, power shovels, gear products and hydraulic presses

Size of Castings Produced:

Iron, 1 to 150,000 pounds; steel, 1 to 40,000 pounds

Compositions:

Gray and ductile iron; carbon, low alloy and stainless steels

Molding Processes:

Dry sand; green sand

Melting Facilities:

Steel, 1 5-ton and 1 15-ton Lectromelt furnace; iron, 1 54" and 1 60" cupola; 1 3-ton induction furnace; 2 25-ton air furnaces

Heat Treating Facilities:

3 annealing gas fired furnaces on the premises Testing Facilities:

X-ray; ultrasonic; magnetic particle, on premises Capacity:

Iron, 1,000 net tons per month; steel, 400 net tons per month

Dominion Foundries and Steel, Limited P.O. Box 460

Hamilton, Ontario, Canada

Contact: T. F. Parisi Assistant Sales Manager, Castings Tel: (416) 544-3761 Telex: 021-682

DOMINION FOUNDRIES AND STEEL, LIMITED well known as Dofasco — was established nearly 60 years ago and has grown with the development of the Canadian railroad and machinery industries. Dofasco operates Canada's third largest, and North America's thirteenth largest steel mill and the foundry division benefits in resources and experience from this association. This enables it to provide almost every type of steel casting for industry's most demanding requirements. The company's extensive metallurgical facilities and staff and Dofasco's research personnel are available to assist in any casting requirement.

FOUNDRY LOCATION

Dominion Foundries and Steel, Limited P.O. Box 460 Hamilton, Ontario, Canada

Main Industries Served:

Railway, automotive, mining, earthmoving and construction machinery; oil country goods; pump and valve; cement mill and rolling mill machinery
Size of Castings Produced:

to 70,000 pounds

Compositions:

Carbon, low alloy, high alloy and stainless steels; austenitic manganese steels

Molding Processes:

Green sand; baked sand; centrifugal molding

Melting Facilities:

Electric arc, 3, 10 and 50 tons; electric induction, 500, 1,000 and 2,000 pounds

Furnaces to 35 tons capacity; quenching on the premises

Testing Facilities:

Physical, chemical and metallurgical laboratories; X-ray, magnetic particle; ultrasonic; dye penetrant, on premises

Capacity:

2,500 net tons per month

Dorr-Oliver-Long Limited West Street South Orillia, Ontario, Canada

Contact: R. C. Johnston Foundry Manager Tel: (705) 326-7311 Telex: 02-8715

DORR-OLIVER-LONG LIMITED operates a jobbing foundry specializing in short runs of miscellaneous castings in the 50 to 25,000 pounds range. The company can supply more than 20 different specifications of Meehanite and 6 specifications of ductile iron castings to ASTM standards with test reports when required. Pattern shop, plate shop and machine shop facilities are available and castings can be fully machined. Prices can be quoted f.o.b. the customer's plant regardless of location.

FOUNDRY LOCATION

Dorr-Oliver-Long Limited West Street South Orillia, Ontario, Canada

Main Industries Served:

Mining; automotive; machine tool; general industry jobbing

Size of Castings Produced:

50 to 25,000 pounds

Compositions:

Gray and ductile irons; Meehanite

Molding Processes:

Green and dry sand; sand slinger; machine; bench; squeezer pit and styroform molding; oil-baked and air-set cores

Melting Facilities:

Cupola, capacity 8 tons per hour

Heat Treating Facilities:

Annealing and stress relieving on premises Testing Facilities:

Metallurgical laboratory for chemical and physical analysis on premises

Capacity:

500 net tons per month

Esco Limited 1855 Kingsway Port Coquitlam, British Columbia, Canada

Contact: B. P. Nyline President Tel: (604) 942-7261 Telex: 045-2222

ESCO LIMITED, with two fabricating plants, one in Vancouver, the other in Toronto, started production of wear-resistant quality castings for primary industries in 1958 in a 300-ton alloy steel foundry near Vancouver. Facilities have been constantly expanded and the company has a highly experienced metallurgical and engineering staff working with fully up-to-date equipment. Many Esco products are covered by patents and engineered for the severest applications. The company has also produced an increasing volume of nuclear quality castings in recent years for atomic energy plants in Canada and for export. While the company makes a number of proprietary castings, there is ample capacity for contractual custom work.

FOUNDRY LOCATION

Esco Limited 1855 Kingsway Port Coquitlam, British Columbia, Canada

Main Industries Served:

Mining; construction, logging; pulp and paper; cement; nuclear

Size of Castings Produced:

Ounces to 12,000 pounds

Compositions:

Corrosion, heat, impact and abrasion resistant alloys of steel and iron; Ni-Hard and Ni-Resist of all types; all to ASTM specifications

Molding Processes:

Slinger; squeezer; spuncast; pinlift; floor; shell; green sand; CO₂; airset; dry sand cores and molds **Melting Facilities:**

1 electric arc furnace, capacity 3 tons per hour; 3 1,000-pound induction furnaces; 2 350-pound induction furnaces; 1 50-pound induction furnace

Heat Treating Facilities:

3 high temperature ovens; 2 stress relieving ovens, on premises

Testing Facilities:

Cobalt 60 and iridium 192 isotopes; magnetic particle; liquid penetrant; ultrasonic; chemical and physical quality control, on premises

Capacity:

Fahralloy Canada Limited

Orillia, Ontario, Canada

Contact: R. E. Dunster Vice-President, Sales Tel: (705) 325-2781 Telex: 02-8725

FAHRALLOY CANADA LIMITED, formed in 1935 as a foundry specializing in stainless steel castings, has followed a program of continuous modernization, expansion and diversification. It now produces carbon steels, low alloy steels, manganese steels and related abrasion-resisting castings as well as stainless. This program has resulted in a flexibility of melting facilities that permits the most economical production of castings of various weights, qualities and quantities, in a wide range of alloy compositions to meet specific customer requirements. Fahralloy has three plants in Orillia and is one of the largest producers of heat-resisting castings in Canada.

FOUNDRY LOCATION

Fahralloy Canada Limited Orillia, Ontario, Canada

Main Industries Served:

Mining; petrochemical; basic steel; industrial furnaces; automotive; agricultural; cement

Size of Castings Produced:

Ounces to 6,500 pounds

Compositions:

All grades of high alloy, heat and corrosion resistant stainless steels; manganese and abrasion resisting steels; low alloy, high strength steels; carbon steels; ductile iron (shell molding only)

Molding Processes: Shell; green sand; dry sand

Melting Facilities:

4 induction furnaces, capacities 700 to 900 pounds; 9 direct arc furnaces, capacities 300 to 8,000 pounds

Heat Treating Facilities:

Car-type annealing and draw furnaces; oil and water quench, on premises

Testing Facilities:

Automatic X-ray spectrometer; complete physical, X-ray and gamma ray, Magnaflux, dye penetrant, and metallographic, on premises

Capacity:

600 net tons per month

Fittings Limited

135 Bruce Street Oshawa, Ontario, Canada

Contact: H. G. Palmer Vice-President and Sales Manager D. A. Campbell Asst. Sales Manager Tel: (416) 723-3433 Telex: 02-29659

FITTINGS LIMITED, established in 1902, is one of the largest Canadian manufacturers of a wide range of malleable and gray iron pipe fittings and castings. The company has continued to modernize its plant and develop new products and markets and now manufactures more than 13,000 individual items. Constantly keeping abreast of new developments in metallurgy and manufacturing techniques, the company has achieved an outstanding reputation for service, quality, dependability and workmanship. Ample capacity is available for custom casting, and services include machining and hot dip and electroplate galvanizing.

FOUNDRY LOCATION

Fittings Limited 135 Bruce Street Oshawa, Ontario, Canada

Main Industries Served:

Pipe fittings; conveyer chains; agriculture; railroad; electrical conduit fittings; water works; industrial castings

Size of Castings Produced:

Malleable iron, 4 ounces to 50 pounds; gray iron, 8 ounces to 500 pounds

Compositions:

Standard and pearlitic malleable iron; gray iron Molding Processes:

Green sand; shell and oil sand coremaking Melting Facilities:

Duplex melting, cupola to air furnace, capacity 15 tons per hour, malleable iron; cupola, capacity 10 tons per hour, gray iron

Heat Treating Facilities:

On premises

Testing Facilities:

Chemical and physical on premises

Capacity:

Malleable iron, 600 net tons per month; gray iron, 500 net tons per month

Forano Limited

Plessisville, Quebec, Canada

Contact: P. M. Forand President and General Manager Tel: (819) 362-7361 Telex: 01-26116

FORANO LIMITED, established in 1873, has an outstanding reputation for the design and production of standard and highly specialized industrial equipment. The company provides complete package service — modern foundry, pattern shop and storage, heavy, medium and light duty machine shop and an extensive design department. In addition to designing and making a wide variety of its own products, the firm has helped solve production problems for many industries by designing and producing special machinery for their specific needs. Sales engineering offices are maintained from coast to coast in Canada.

FOUNDRY LOCATION

Forano Limited Plessisville, Quebec, Canada

Main Industries Served:

Pulp and paper; sawmills; mining; agriculture; cement; fertilizer; metallurgical; hydro-electric Size of Castings Produced:

1 to 25,000 pounds

Compositions:

Gray iron, ASTM grades 30, 40 and 50; some special iron alloys containing nickel, manganese or chromium

Molding Processes:

Green sand; baked sand; pit molding; mechanical molding; cores baked and hardened synthetically Melting Facilities:

Cupola, capacity 25 tons per 8-hour day Heat Treating Facilities:

On premises

Testing Facilities:

Chemical; metallurgical; metallographic; physical; sand analysis, on premises

Capacity:

500 net tons per month

Galt Malleable Iron Limited P.O. Box 396 60 Kerr Street Galt, Ontario, Canada

Contact: H. C. Mackay President and General Manager Tel: (519) 621-5710

GALT MALLEABLE IRON LIMITED, established in 1906, currently produces approximately 20 per cent of the malleable iron castings made in Canada. Operating almost exclusively in the jobbing field, the company has had considerable experience in producing malleable castings for widely diversified markets. Approximately 50 per cent of the company's production is exported. The company also operates a wholly-owned subsidiary foundry, Galt-Brantford Malleable Limited which started production in 1966 and is now operating at full-rated capacity on two shifts.

FOUNDRY LOCATIONS

Galt Malleable Iron Limited 60 Kerr Street Galt, Ontario, Canada

Galt-Brantford Malleable Limited Power Line Road Brantford Township, Ontario, Canada

Main Industries Served:

Automotive; agricultural; mining; electrical power transmission

Size of Castings Produced:

8 ounces to 15 pounds

Compositions:

Malleable iron ASTM A47-52 grade 32510 Molding Processes:

Conveyer production lines with overhead sand systems; squeezer matchplate; cope and drag; shell and Furan core making; continuous pour

Melting Facilities:

Duplex melting: cupola to air furnace and cupola to electric

Heat Treating Facilities:

Continuous roller hearth; controlled atmosphere; electric heat treat furnaces, on premises

Testing Facilities:

Sand laboratory; chemical and physical laboratory, on premises

Capacity:

1,000 net tons per month

General Manufacturing Co. Ltd. 835 Cherrier Street

Drummondville, Quebec, Canada

Contact: Gregoire Guerette General Manager Tel: (819) 472-5426

GENERAL MANUFACTURING CO. LTD., established in 1947, is one of the largest manufacturers of woodworking machinery in Canada. Its foundry was built in 1958 to insure a steady supply of castings needed in these operations. This was expanded in 1967 to meet an increased demand for woodworking machinery and the requirements of special customers in the heavy equipment, specialized machinery and pump industries, as well as other industry users. A large property was acquired and a fully up-to-date foundry with 10 hoppers for machine molding and a sand slinger for floor molding was installed. Now General Manufacturing is ready to serve a still greater range of customers.

FOUNDRY LOCATION

General Manufacturing Co. Ltd. Boulevard St. Joseph Drummondville, Quebec, Canada

Main Industries Served:

Woodworking machinery; electric engines; boilers; railways; mining; concrete molds and pipes; all kinds of pumps

Size of Castings Produced:

Ounces to 5,000 pounds

Compositions:

Gray iron, ASTM grades 35 and 40

Molding Processes:

Green sand; baked sand; CO₂; floor molding and mechanical molding with slingers

Melting Facilities:

Cupola, 7 tons per hour

Heat Treating Facilities:

Electric furnace with automatic control

Testing Facilities:

Sand testing; Brinell hardness testing, on premises; chemical available nearby

Capacity:

250 net tons per month

John T. Hepburn, Limited 914 Dupont Street Toronto 4, Ontario, Canada

Contact: W. J. L. Hutchison Vice-President — Foundry Tel: (416) 534-8871 Telex: 02-21305

JOHN T. HEPBURN, LIMITED has been producing quality castings since 1905 for some of the largest companies in industry and supplying castings to a wide range of manufacturers requiring consistent quality. The company has pursued a progressive program to ensure quality of product and customer satisfaction. The company is a Meehanite licensee.

FOUNDRY LOCATION

John T. Hepburn, Limited 914 Dupont Street Toronto 4, Ontario, Canada

Main Industries Served:

Agricultural; automotive; primary industries; machine tools; pumps; valves, meters, compressors Size of Castings Produced: Ounces to 6,000 pounds **Compositions:** Gray, ductile, Meehanite **Molding Processes:** Green sand, air set, shell **Melting Facilities:** Cupola **Heat Treating Facilities:** Available nearby **Testing Facilities:** Sand, chemical, carbon equivalent determination, on premises Capacity: 450 net tons per month

Holmes Foundry Limited P.O. Box 970 200 Exmouth Street Sarnia, Ontario, Canada

Contact: C. N. Blunt Vice-President Tel: (519) 337-3721 Telex: 024-7613

HOLMES FOUNDRY LIMITED, founded 45 years ago, is situated on the United States-Canadian border just 60 miles north of Detroit and offers excellent shipping facilities. A production foundry, it makes relatively few castings, but turns these out in consistent volume. Typical castings by Holmes are cylinder blocks, truck hubs, tractor axle housings, crankshafts, brake drums, brake spiders, rocker arms, vibration dampeners and pressure plates.

FOUNDRY LOCATION

Holmes Foundry Limited 200 Exmouth Street Sarnia, Ontario, Canada

1

Main Industries Served:

Automotive; agricultural; refrigeration Size of Castings Produced:

For squeezer machine, flask $35'' \times 50'' \times 15''$, cope with 15'' drag; for disamatic machine, flask 18'' x 20'' x 4'' to 12''

Compositions:

Ductile and gray iron

Molding Processes:

1 high pressure squeeze molding line cycling at 90 molds per hour; 1 disamatic molding machine cycling at 240 molds per hour; oil sand; Furfuryl and shell core equipment, with vertical and horizontal core ovens; mechanical cleaning rooms

Melting Facilities:

2 cupolas for continuous pouring, capacity 120 tons per shift; 1 electric induction furnace, capacity 5,000 pounds per hour, 15 tons holding capacity; 1 shaking ladle, capacity 2,000 pounds

Heat Treating Facilities:

1 60-ft continuous annealing furnace on premises Testing Facilities:

Spectrograph; metal and sand laboratory, on premises

Capacity:

4,250 net tons per month

The Indiana Steel Products Co. of Canada Limited 529 Manitou Drive Kitchener, Ontario, Canada

Contact: C. D. McLeish Vice-President and General Manager Tel: (519) 744-1161

THE INDIANA STEEL PRODUCTS CO. OF CANADA LIMITED was started in 1956 to produce Alnico permanent magnets. With the experience thus gained in casting high alloys, the company quickly expanded into stainless steel casting. Excellent product acceptance has since influenced the company to expand four times. The most recent expansion came in 1966, when a large new plant was built incorporating the latest equipment for melting, sand handling and quality control. Today, Indiana Steel is a leader in the production of a wide range of high alloy steel castings for corrosion and heat resistance applications.

FOUNDRY LOCATION

The Indiana Steel Products Co. of Canada Limited 529 Manitou Drive Kitchener, Ontario, Canada

Main Industries Served:

Pulp and paper; pumps; valves; agricultural; chemical and petrochemical; automotive; iron ore pelletizing plants

Size of Castings Produced:

Ounces to 4,500 pounds

Compositions:

High alloy corrosion and heat resistant steels only **Molding Processes:**

Green sand; baked sand; shell; CO₂

Melting Facilities:

4 electric induction furnaces, capacities 600, 1,000, 2,000 and 3,000 pounds

Heat Treating Facilities:

On premises

Testing Facilities:

Chemical analysis; hardness; metallographic; dye penetrant; sand testing on premises. Mechanical and radiography available nearby

Capacity:

Industrial Fine Castings Ltd. 260 Geary Avenue

Toronto 4, Ontario, Canada

Contact: William Cairns Sales Manager Tel: (416) 533-7917

INDUSTRIAL FINE CASTINGS LTD. was one of the first companies in Canada to produce castings by the investment process. Recent expansion and modernization has more than doubled production capabilities and enables the company to serve a growing number of customers more efficiently and to seek new markets. Carbon steel, stainless steel and cobalt-based alloys are company specialties and are induction-melted by modern equipment. The company, a member of the Investment Casting Institute, is well located to serve the North American and European markets.

FOUNDRY LOCATION

Industrial Fine Castings Ltd. 272 Geary Avenue Toronto 4, Ontario, Canada

Main Industries Served:

Valve manufacturers; aircraft; agricultural; electronic and food processing equipment manufacturers

Size of Castings Produced:

¹/₂ ounce to 15 pounds

Compositions:

Stainless steel; carbon steels; cobalt base alloys Molding Processes:

Investment; ceramic shell

Melting Facilities:

100-kw Inductotherm unit with 2 furnaces, capacities 30 and 50 pounds

Heat Treating Facilities:

Available on premises

Testing Facilities:

Radiographic, Magnaflux, Zyglo, chemical and tensile testing subcontracted to nearby government-approved sources

Capacity:

Varies

International Malleable Iron Company Limited 200 Beverly Street Guelph, Ontario, Canada

Contact: L. Howat Sales Manager Tel: (519) 822-2560

INTERNATIONAL MALLEABLE IRON COMPANY LIMITED, in successful operation since 1913, has two modern foundries, one for malleable iron and one for gray iron in addition to a pattern shop and a machine shop. The company produces custommade malleable, pearlitic malleable and gray iron castings and the IMICO line of malleable and gray iron pipe fittings. Both foundries are mechanized, and melting facilities are electric for fast, efficient service. The company's extensive equipment enables it to coin straighten, heat treat, paint, machine and galvanize where necessary.

FOUNDRY LOCATION

International Malleable Iron Company Limited 200 Beverly Street Guelph, Ontario, Canada

Main Industries Served:

Railroad; agricultural; automotive; mining; pipe fittings; appliances; tank lugs; pipe shoes; timber washers; bed corners

Size of Castings Produced:

10 ounces to 200 pounds

Compositions:

Gray iron, ASTM classes 20 to 35; malleable iron, ASTM class 35018 grade A; pearlitic malleable, all ASTM grades

Molding Processes:

Green sand; jolt squeeze; match plate; cope and drag; roto lift; oil sand; shell; CO₂; air set cores **Melting Facilities**:

3 electric induction furnaces, capacity 6 tons each Heat Treating Facilities:

Batch-type annealing and electric heat treat furnaces on premises

Testing Facilities:

Sand laboratory and Magnaglo on premises. Complete chemical and physical laboratory nearby Capacity:

Legare Foundry (1961) Limited 2375 Roy Street

Sherbrooke, Quebec, Canada

Contacts: J. R. Fontaine Manager C. W. Singleton President Tel: (819) 567-4879

LEGARE FOUNDRY (1961) LIMITED, founded in 1920, conducts a jobbing foundry business for a wide range of industries. The company offers a wealth of experience gained through producing an extensive variety of gray iron, Ni-Hard and white iron castings to customer specifications. The plant includes a complete pattern shop with highly skilled technicians qualified to produce wood or metal patterns on demand. Castings range from valve bodies and pumps for heavy industry to liners for mills and mines.

FOUNDRY LOCATION

Legare Foundry (1961) Limited 2375 Roy Street Sherbrooke, Quebec, Canada

Main Industries Served: Mining; pulp and paper; general industry Size of Castings Produced: 1 to 6,000 pounds **Compositions:** Gray iron; Ni-Hard; white iron Molding Processes: Green sand **Melting Facilities:** Cupola **Heat Treating Facilities:** Available nearby **Testing Facilities:** Available nearby Capacity: 140 net tons per month

Lethbridge Iron Works Company Limited

120 First Avenue South P.O. Box 967 Lethbridge, Alberta, Canada

Contact: G. B. Davies, P.Eng. Vice-President and General Manager Tel: (403) 327-3576 Telex: 038-4996

LETHBRIDGE IRON WORKS COMPANY LIMITED, established in 1898, up-dated its operations in 1962, building a new plant addition and installing modern equipment. This modernization program is continuing with new buildings and equipment being added as volume increases. Production is concentrated on smaller castings produced to customer specifications. Services include a pattern shop, heat treating facilities, a quality control department, a machine shop and a steel fabricating department.

FOUNDRY LOCATION

Lethbridge Iron Works Company Limited 120 First Avenue South Lethbridge, Alberta, Canada

Main Industries Served: Agricultural; mining; milling; valves; hydraulic castings Size of Castings Produced: Ounces to 1,000 pounds Compositions: Gray iron; ductile iron; Ni-Hard; Ni-Resist Molding Processes: Green sand; shell cores; CO₂ cores Melting Facilities: 2 cupolas; 2 electric rocking furnaces **Heat Treating Facilities:** 2 heat treat furnaces **Testing Facilities:** Metallurgical microscope on premises. Tensile tests and quantitative analysis by consulting laboratory Capacity: 100 net tons per month

Lunenburg Foundry & Engineering Limited 16 Brook Street Lunenburg, Nova Scotia, Canada

Contact: Dougald Burke Assistant Sales Manager Tel: (902) 634-8827 Telex: 014-42297

LUNENBURG FOUNDRY & ENGINEERING LIMITED has been actively engaged in producing castings and complete machinery for shipbuilders and general marine use since 1896. The product list of marine castings is a long one and includes both standard catalog and custom-designed products, manufactured machinery and parts. The company manufactures to Canadian military specifications and at present is supplying castings to the navy, shipowners, shipbuilders and paper mills. Facilities include supporting pattern-making, machining, electric welding and assembly departments. The company's location on Canada's east coast enables it to give fast deliveries to east coast and Caribbean markets.

FOUNDRY LOCATION

Lunenburg Foundry & Engineering Limited 16 Brook Street Lunenburg, Nova Scotia, Canada

Main Industries Served: Naval; shipbuilding; pulp and paper; fishing Size of Castings Produced: 3 ounces to 6,000 pounds Compositions: Gray iron Molding Processes: Green sand: baked sand **Melting Facilities:** Cupola, capacity 3 tons per hour **Heat Treating Facilities:** None **Testing Facilities:** Available nearby Capacity: 50 net tons per month

Lynn MacLeod Metallurgy Limited

8400 Cote de Liesse Road Montreal 9, Quebec, Canada

Contact: H. D. Jones Vice-President, Sales Tel: (514) 735-5631 Telex: 01-26131

LYNN MACLEOD METALLURGY LIMITED, founded in 1931, is now a modern foundry producing a variety of steel castings. Centrally located in an active mining area, the company specializes in castings for the mining industry. With continuing expansion of plant and other facilities, the firm now produces castings for shipyards, railroads, locomotive manufacturers, automotive equipment plants and other industries.

FOUNDRY LOCATION

Lynn MacLeod Metallurgy Limited P.O. Box 249 Thetford Mines, Quebec, Canada

Main Industries Served: Mining; pulp and paper; shipbuilding; railroad; steel plants; rolling mills; machine shop Size of Castings Produced: Up to 8,000 pounds **Compositions:** Carbon, low alloy and manganese steels; Ni-Hard **Molding Processes:** Green and drv sand **Melting Facilities:** 2 electric furnaces, capacities 1 and 3 tons per hour Heat Treating Facilities: Car-type furnaces sizes 7'6" x 14' x 5'6", on premises **Testing Facilities:** Chemical and physical laboratory on premises Capacity: 500 net tons per month

Mainland Foundry & Engineering Ltd. 1707 Pandora Street Vancouver 6, British Columbia, Canada

Contact: S. Cope General Manager Tel: (604) 255-1311 Telex: 04-5338

MAINLAND FOUNDRY & ENGINEERING LTD. has grown substantially since it began producing gray iron castings in 1935. From a modest beginning, the company has steadily expanded facilities. From 14 accounts in 1936 the account list has increased to more than 1,000 and annual sales volume now exceeds \$4,000,000. The foundry facilities are complemented by a machine shop, fabricating and steel metal shops. A large new foundry was built in nearby Richmond in 1967 with improved facilities, including the most modern high production machinery.

FOUNDRY LOCATION

Mainland Foundry & Engineering Ltd. 1510 River Road Richmond, British Columbia, Canada

Main Industries Served: Sawmills; pulp mills; mining; fishing; general industry Size of Castings Produced: 1 to 28,000 pounds **Compositions:** Gray iron in various alloys **Molding Processes:** Green sand; dry sand; floor and machine molding **Melting Facilities:** Cupola, automatic loading, capacity 8 tons per hour **Heat Treating Facilities:** Available nearby **Testing Facilities:** Available nearby

Capacity:

500 net tons per month

Manganese Steel Castings Limited 104 Abenaquis Street Sherbrooke, Quebec, Canada

Contact: H. R. Neville President and General Manager Tel: (819)569-6364

MANGANESE STEEL CASTINGS LIMITED, founded in 1922, and in continuous operation under the same management since, has the flexibility to handle many sizes and shapes of patterns. The major part of the company's operations is in hand-molded castings of accurate dimensions. This is a modest size company and offers the advantage of close contact with the management in specific projects, and personal interest in the customer's problems. Deliveries are excellent, and are maintained through close supervision and personal collaboration with the customer.

FOUNDRY LOCATION

Manganese Steel Castings Limited 104 Abenaquis Street Sherbrooke, Quebec, Canada

Main Industries Served: Pulp and paper; mining; smelting; hydro-electric; general machinery Size of Castings Produced: 8 ounces to 4,500 pounds, up to 6 ft. in diameter Compositions:

Austenitic manganese steel; low alloy steels; medium and high carbon steels

Molding Processes:

Green sand

Melting Facilities:

1 Heroult-type electric arc furnace, capacity 3 tons

Heat Treating Facilities:

On premises Testing Facilities:

Chemical and physical analysis and hardness testing, on premises

Capacity:

Manitoba Bridge & Engineering Works Division of Dominion Bridge Co. Limited

Bivision of Dominion Bridge Co. Limited 845 Logan Avenue Winnipeg 3, Manitoba, Canada

Contact: G. A. Bodie Sales Manager Tel: (504) 774-5441 Telex: 03-5189

MANITOBA BRIDGE & ENGINEERING WORKS, founded in 1903 under the name Manitoba Iron Works, changed to the present name when it became part of the Dominion Bridge Company organization. The company has operated a large cast iron foundry for almost 50 years, casting in gray and ductile iron and Ni-Hard. Other facilities include a plate fabrication shop, machining and galvanizing shops and a bolt manufacturing plant. Manitoba Bridge is strategically located to serve the industrial needs of the mid-west.

FOUNDRY LOCATION

Manitoba Bridge & Engineering Works Division of Dominion Bridge Co. Ltd. 845 Logan Avenue Wnnipeg 3, Manitoba, Canada

Main Industries Served:

Mining; grain handling; agricultural implements; pulp and paper; electrical utilities; sewer and water distribution

Size of Castings Produced:

8 ounces to 4,000 pounds; special to 5,000 pounds

Compositions:

Ni-Hard; gray and ductile iron

Molding Processes:

Green sand; baked sand

Melting Facilities:

Cupola, capacity 5 tons per hour

Heat Treating Facilities:

 $6' \times 6' \times 12'$ fully controlled furnace from 350° to 2,000°F.

Testing Facilities:

Sand; chemical analysis; Rockwell and Brinell hardness; microscopic, on premises. Complete physical and chemical nearby

Capacity:

375 net tons per month

Maritime Steel and Foundries Limited

New Glasgow, Nova Scotia, Canada

Contact: W. B. Wilson General Manager Tel: (902) 752-1511 Telex: 0144119

MARITIME STEEL AND FOUNDRIES LIMITED started operations in 1921, producing steel castings chiefly for railway car and locomotive shops, coal mines and shipyards. Since World War II, the firm has produced a large quantity of castings for power shovels and supplied mild and low alloy steel castings for paper companies, contractors and many other applications. Car wheels, bumpers, gears and sheaves are among products for the mining industry; railway car castings include coupler yokes, center plates and door castings. The company does considerable custom work for pulp and paper companies, supplying both the castings and necessary machinery. Maritime Steel also supplies castings to steel producers.

FOUNDRY LOCATION

Maritime Steel and Foundries Limited New Glasgow, Nova Scotia, Canada

Main Industries Served: Mining; railroad; contracting; paper mills; steel mills Size of Castings Produced: 1 pound to 6,000 pounds

Compositions:

Mild steel; low alloy steel

Molding Processes:

Green sand; baked sand; sand slinger; jolt-squeeze Melting Facilities:

Herault-type furnace, capacity 71/2 tons

Heat Treating Facilities:

Normalizing, annealing, water quench on premises Testing Facilities:

Metallurgical laboratory on premises; physical nearby

Capacity:

Massey-Ferguson Industries Limited Park Road North P.O. Box 370 Brantford, Ontario, Canada

Contact: G. L. White Director of Purchasing Tel: (519) 753-2681 Telex: 021-8132

MASSEY-FERGUSON INDUSTRIES LIMITED, well known throughout North America as a farm implement manufacturer, has a foundry that has been in operation since 1945 producing a full range of gray iron castings for the agricultural and automotive industries. This large operation, with facilities mechanized throughout, can handle moldings ranging from small match plate snap flasks to medium cope and drag snap flasks to large tight boxes. One of the first foundries to make large-scale use of the shell core process, it operates a shell sand coating plant that is equipped with some of the largest machines available. The facility includes a pattern department, modern shot blast equipment, and paint dip.

FOUNDRY LOCATION

Massey-Ferguson Industries Limited Greenwich Street Brantford, Ontario, Canada

Main Industries Served:

Manufacturers of tractors, combines, implements and automotive parts such as clutch pressure plates, engine flywheels, gear boxes

Size of Castings Produced:

2 ounces to 1,000 pounds

Compositions:

Gray iron up to SAE and ASTM Class G3500 Molding Processes:

Green sand machine; shell and oil bonded cores Melting Facilities:

4 no. 6 cupolas, acid lined, cold blast, capacity 350 tons per day

Heat Treating Facilities:

Available nearby

Testing Facilities:

Chemical laboratory; metallographic laboratory including photomicrography; sand control laboratory; 300 kva X-ray unit; general type Magnaflux unit (Air Force qualifications), on premises

Capacity:

5,000 net tons per month

Neelon Steel Limited

1 Place Ville Marie, Suite 4105 Montreal 2, Quebec, Canada

Contact: T. C. Hirst President Tel: (514) 866-2601 Telex: 0120683

NEELON STEEL LIMITED started foundry operations in Sudbury in 1958, processing steel castings for large mining companies in Northern Ontario. With the development of Molendure (a chromium molybdenum alloy) the company began serving a new market, the cement industry. Neelon specializes in grinding balls that are sold across Canada and are finding ever-increasing acceptance in other markets.

FOUNDRY LOCATION

Neelon Steel Limited Foundry Road, R.R. 1 Sudbury, Ontario, Canada

Main Industries Served: Primarily grinding balls for the mining, cement and light concrete industries Size of Castings Produced:

8 ounces to 25 pounds

Compositions:

Carbon, low alloy steels and Molendure (a chromium molybdenum alloy)

Molding Processes:

Green sand; shell molding

Melting Facilities:

Electric furnace, capacity 3 tons per hour

Heat Treating Facilities: For grinding balls

Testing Facilities:

Chemical laboratory; sand testing; hardness testing, on premises

Capacity:

1,000 net tons per month

Otaco Limited West Street South Orillia, Ontario, Canada

Contact: J. Bell Foundry Sales Manager Tel: (705) 326-3583 Telex: 02-8759

OTACO LIMITED, certified as a producer of ductile iron by the Ductile Iron Society, has been in operation since 1910 and has specialized in producing ductile iron since 1949. Plant capacity has been doubled in the last two years and plans are well under way to double capacity again by 1969. The company maintains in-plant pattern facilities and also uses the services of a first-rate commercial pattern shop nearby. A steel foundry, maintained in a separate building, is being combined with the foundry in the expansion program. Otaco is located 80 miles north of Toronto.

FOUNDRY LOCATION

Otaco Limited West Street South Orillia, Ontario, Canada

Main Industries Served:

Agricultural; automotive; pulp and paper; mining; steel mills Size of Castings Produced:

Ductile iron, 8 ounces to 2,000 pounds; steel to 350 pounds

Compositions:

Ductile iron; steel

Molding Processes:

Green sand; air set sand; oil sand; air set shell; CO_2 cores

Melting Facilities:

Steel, electric melt; iron, cupola melt at present, electric melt by 1969

Heat Treating Facilities:

On premises

Testing Facilities:

On premises

Capacity:

300 net tons per month

Preston Foundries Limited 633 Margaret Street P.O. Box 386 Preston, Ontario, Canada

Contacts: P. J. Kenny President W. S. Bere Sales Manager Tel: (519) 653-7121

PRESTON FOUNDRIES LIMITED operates a large plant which was completely re-equipped in 1966, and built around one of the largest high pressure production molding machines in operation. New shell core and air set facilities have also been installed, while highly qualified metallurgists and experienced foundry personnel enforce high levels of quality control and quality production methods. Castings in gray, ductile and Meehanite iron are produced in medium to large volume for a wide range of industries, including defense contractors.

FOUNDRY LOCATION

Preston Foundries Limited 633 Margaret Street Preston, Ontario, Canada

Main Industries Served:

Agricultural; glass; machine tool; construction machinery; defense contractors

Size of Castings Produced:

10 to 2,500 pounds

Compositions:

Gray iron; ductile iron; Meehanite

Molding Processes:

Green sand; shell mold; shell core; CO_2 core; air set mold and core; baked oil sand core

Melting Facilities:

Cupola with Gazel process, capacity 7 tons per hour

Heat Treating Facilities:

Annealing; stress relieving; normalizing, on premises

Testing Facilities:

Sand laboratory; photo micro-analysis; Brinell, on premises. Chemical and physical laboratory nearby

Capacity:

1,000 net tons per month

Quebec Iron Foundries Ltd. 345 Lakeshore East, Suite 202 Oakville, Ontario, Canada

Contact: E. A. Ritterspack General Manager Tel: (416) 844-3271 Telex: 022034

QUEBEC IRON FOUNDRIES LTD. has been successfully serving the mining industry of Canada for more than 30 years. The company specializes in grinding media, such as grinding balls and truncated billets. In addition, its Ni-Hard ball mill liners have a long established reliability. Quebec Iron has also developed a technique for fastening the liner sections to steel fabricated structures of all shapes, including cyclones. With four plants conveniently located to deepsea shipping, and a fifth planned, the company is well prepared to meet the increasing requirements of the mining industry in any area.

FOUNDRY LOCATIONS

Quebec Iron Foundries Ltd. P.O. Box 308 Noranda, Quebec, Canada

88 de la Fonderie Mont Joli, Quebec, Canada

Ocean Foundries Ltd. 8239 - 128th Street North Surrey, British Columbia, Canada

Atlantic Foundries Ltd. P.O. Box 500 Bathurst, New Brunswick, Canada

Main Industries Served:

Mining; cement

Size of Castings Produced: Grinding balls, 5%" to 4" diameter; other castings, 8 ounces to 7,000 pounds

Compositions:

Ni-Hard; gray and white iron

Molding Processes:

Sand; chill

Melting Facilities:

Noranda, Surrey, Bathurst, 1 cupola each, capacity 50 tons per day each, Mont Joli, 2 cupolas, total capacity 65 tons per day

Heat Treating Facilities:

Available at all plants except Bathurst; Bathurst, available nearby

Testing Facilities:

Hardness and sand testing on premises, chemical testing done locally; research and development in Montreal

Capacity:

800 net tons per month at Noranda; Mont Joli, 400; Bathurst, 700; Surrey, 800

Rockwell Mfg. Co. of Canada Ltd.

40 Wellington Street Guelph, Ontario, Canada

Contact: J. E. Randell Foundry Superintendent Tel: (519) 822-2840 Telex: 0295-6526

ROCKWELL MFG. CO. OF CANADA LTD., foundry division (formerly The Callander Foundry and Mfg. Co.) has been producing quality gray iron castings for more than 50 years. The foundry specializes in medium to high production castings from match plates and cope and drag patterns. Its in-plant facilities for the design and manufacture of patterns and other foundry tooling, together with complete production machining facilities, assure high quality finished parts to customer specifications.

FOUNDRY LOCATION

Rockwell Mfg. Co. of Canada Ltd. 100 Crimea Street Guelph, Ontario, Canada

Main Industries Served:

Gas heating; automotive; agricultural; electrical appliances; motors and power tools Size of Castings Produced: Ounces to 500 pounds Compositions: Gray iron Molding Processes: Green sand; shell; oil sand and Furan cores Melting Facilities: Cupola, capacity 30 tons per day Heat Treating Facilities: Available nearby Testing Facilities: Physical and chemical analysis nearby Capacity:

Soo Foundry & Machine Co. Ltd. 457 Bay Street

Sault Ste. Marie, Ontario, Canada

Contact: Lorne G. Rudolph General Manager Tel: (705) 256-7456 Telex: 027-7763

SOO FOUNDRY & MACHINE CO. LTD. has been in continuous operation since 1956, specializing in custom work and semi-production runs. The company is expert in the production of large watercooled cast iron sections, door lintels and jambs, drop-out skids and wall panels for industrial furnace builders. Facilities include pattern, match plate manufacture and repair and maintenance shop for customer pattern equipment, a fully equipped machine shop for custom and production work, in addition to a complete steel fabricating division. Soo Foundry products are supplied as cast or completely machined to customer specifications.

FOUNDRY LOCATION

Soo Foundry & Machine Co. Ltd. 457 Bay Street Sault Ste. Marie, Ontario, Canada

Main Industries Served:

Steel manufacturers; mining; pulp and paper; pump manufacturers; industrial furnace designers and builders; construction; general industry Size of Castings Produced:

3 ounces to 9,500 pounds

Compositions:

Grey and alloyed gray iron classes 20 to 60; Ni-Hard

Molding Processes:

Floor, bench and machine molding; green sand; oil sand; Furan process; core blowers; batch and car type core ovens

Melting Facilities:

36″ cupola

- Heat Treating Facilities:
- Available nearby
- Testing Facilities:
- Available nearby Capacity:

120 net tons per month

Stanton Foundry Limited 5335 Rue Ramsay Ville De St. Hubert, Quebec, Canada

Contact: G. Blanchet Foundry Manager Tel: (514) 866-3716 Telex: 01-20295

STANTON FOUNDRY LIMITED, located just outside Montreal, is one of Canada's newest foundries — it came into operation in 1967. Facilities include the most modern automatic sand handling, jolt squeeze molding, and casting cleaning equipment. Stanton specializes in cast iron pipe fittings, hydrants and related products which are marketed coast to coast in Canada. The company also has the capacity to supply gray iron castings to a wide range of industrial users and welcomes inquiries in this field.

FOUNDRY LOCATION

Stanton Foundry Limited 5335 Rue Ramsay Ville De St. Hubert, Quebec, Canada

Main Industries Served:

Municipal; construction; general industrial Size of Castings Produced: 1 to 1,000 pounds **Compositions:** Gray iron Molding Processes: Green sand; CO₂; shell core **Melting Facilities:** Cupola, capacity 3 tons per hour **Heat Treating Facilities:** Available nearby **Testing Facilities:** Some testing on premises; physical and chemical nearby Capacity: 250 net tons per month

Supreme Precision Castings (1963) Ltd. 550 Montée de Liesse St. Laurent, Montreal 9, Quebec, Canada

Contacts: H. H. Johnston President Robert Bleazard General Manager Tel: (514) 747-3528

SUPREME PRECISION CASTINGS (1963) LTD. started operations in 1954 primarily as a producer of castings for the aircraft industry. Subsequently the company added castings for the electronics industry, and is now producing for a variety of industrial uses. Supreme Precision castings meet specifications of the Canadian government defense authorities and the company certifies work to class 1A standards. The company makes its own molds (dies) in a fully-equipped tool shop and is able to maintain foundry molds in top condition and give prompt service when new tooling is necessary. Customers' molds may be stored in a fireproof vault free of charge.

FOUNDRY LOCATION

Supreme Precision Castings (1963) Ltd. 550 Montée de Liesse St. Laurent, Montreal 9, Quebec, Canada

Main Industries Served:

Aircraft; electronics; general industry Size of Castings Produced:

 $\frac{1}{2}$ ounce to 15 pounds

Compositions:

Carbon, alloy, stainless, tool and die steels; cobalt alloys (stellite)

Molding Processes:

Precision investment castings by the lost wax process, including mold and shell

Melting Facilities:

Electric induction and gas-fired furnaces

Heat Treating Facilities:

On premises

Testing Facilities:

X-ray; Magnaflux; Zyglo; chemical and physical, on premises

Capacity:

Varies

Toronto Foundry Limited

1884 Davenport Road Toronto 9, Ontario, Canada

Contact: G. R. Winkworth Vice-President and General Manager Tel: (416) 767-7508

TORONTO FOUNDRY LIMITED has been producing custom gray iron castings since 1915. With a change of management in 1965, new and more efficient facilities were added, including a modern squeezer line, roll over and slinger equipment. An experienced staff of supervisors and molders, fully conversant with the latest foundry procedures, produces firstclass work efficiently and promptly. A highly competent metallurgical staff brings a wealth of experience to the maintenance of quality in the company's alloyed and high strength gray iron castings.

FOUNDRY LOCATION

Toronto Foundry Limited 1884 Davenport Road Toronto 9, Ontario, Canada

Main Industries Served: Machine tools; elevator; mining; pump Size of Castings Produced: 1 to 10,000 pounds Compositions: Gray and alloy irons Molding Processes: Green sand; air set sand; shell mold; shell core Melting Facilities: Cupola, capacity 7 tons per hour Heat Treating Facilities: Available nearby Testing Facilities: Sand on premises; metal laboratory nearby Capacity:

United Nail and Foundry Co. Ltd. 133 Hamilton Avenue

St. John's, Newfoundland, Canada

Contact: J. B. Angel President and General Manager Tel: (709) 579-4006 Telex: 016-319

UNITED NAIL AND FOUNDRY CO. LTD. was formed in 1930 by the amalgamation of two manufacturing companies which had been in operation since 1856. The company has fully up-to-date equipment, including an electric arc furnace for melting, an electric heat treat furnace, and specializes in Ni-Hard casting for the mining industry. Some 90 per cent of its production is in cast iron quality products for a variety of industries. Included in the product range are nails, wire, stove castings, products for the construction industry, municipal works and marine projects. Sheet metal fabrication, machining and hot dip galvanizing services are also available on the premises.

FOUNDRY LOCATION

United Nail and Foundry Co. Ltd. 133 Hamilton Avenue St. John's, Newfoundland, Canada

Main Industries Served:

Mining; municipal; construction; marine, heating; general industry Size of Castings Produced:

Ounces to 3,000 pounds

Compositions:

Gray, white and alloyed cast iron; medium carbon steel; Ni-Hard

Molding Processes:

Green sand; baked sand

Melting Facilities:

Electric arc furnace, capacity 3,500 pounds Heat Treating Facilities:

Electric furnace with pyrometer control

Testing Facilities:

Chemical laboratory and hardness testing on premises; other facilities nearby

Capacity:

125 net tons per month

The Wabi Iron Works Limited New Liskeard, Ontario, Canada

Contact: E. W. Fraser Manager Tel: (705) 647-4383

THE WABI IRON WORKS LIMITED, located in the heart of Ontario's mining country, offers 60 years of experience in metallurgy, casting design and mining equipment to the mining, cement, and pulp and paper industries of Canada, the United States, South America and Africa. Wabi specializes in quality controlled Ni-Hard for liners and balls for grinding mills, slurry pumps, slurry pipe lines, and many other abrasion applications. Supported by an experienced team of capable engineers, the company has created substantial savings for its customers, through modified mill liner designs to fit varied grinding applications. Mine haulage and ore handling equipment --- designed and developed to meet the rugged requirements of the mining industry are manufactured in the company's machine shop and fabrication facilities.

FOUNDRY LOCATIONS

The Wabi Iron Works Limited New Liskeard, Ontario, Canada

Cobalt, Ontario, Canada

Main Industries Served: Mining; cement; pulp and paper Size of Castings Produced: 2 to 10,000 pounds Compositions: Ni-Hard; gray and ductile iron Molding Processes: Green sand; dry sand; permanent mold Melting Facilities: Cupolas, combined capacity 20 tons per hour Heat Treating Facilities: Low-temperature annealing furnaces on the premises **Testing Facilities:** Hardness tests and microstructures on premises, chemical tests at custom laboratories Capacity: 1,200 net tons per month

Welland Iron and Brass Limited 130 Niagara Street Welland, Ontario, Canada

Contact: George Murray Sales Manager Tel: (416) 735-5676

WELLAND IRON AND BRASS LIMITED, started as a small family business in 1917, has grown steadily since then concentrating on jobbing and specializing in short runs on castings ranging from one pound to 10,000 pounds. To offer industry a wider range of services, the company in 1955 added facilities for the production of ductile iron. It is now a major supplier of ductile iron castings in addition to producing a wide variety of castings to customer specifications in gray iron and non-ferrous alloys.

FOUNDRY LOCATION

Welland Iron and Brass Limited 130 Niagara Street Welland, Ontario, Canada

Main Industries Served: Pulp and paper; canning; machine building; steel; automotive Size of Castings Produced: 1 to 10,000 pounds **Compositions:** Gray and ductile iron **Molding Processes:** Green sand; dry sand; CO₂; air set **Melting Facilities:** Cupola, capacity 6 tons per hour **Heat Treating Facilities:** Available nearby **Testing Facilities:** Available nearby Capacity:

200 net tons per month

Welmet Industries Limited

P.O. Box 370 317 King Street Welland, Ontario, Canada

Contacts: R. C. O'Dell Vice-President and General Manager R. H. Ferguson Sales Manager Tel: (416) 734-7462 Telex: 021-551

WELMET INDUSTRIES LIMITED has specialized in stainless steel and high alloy castings for more than 40 years. The company's Welmet stainless steel valves are widely accepted by many industries throughout Canada and the United States — and especially by the pulp and paper and chemical industries. With one of the most modern jobbing foundries in Canada, the company excels in the production of high alloy castings to the most exacting specifications. Facilities are available on the premises for pattern making, machining, assembly and fabrication and a highly qualified engineering staff works with customers on design and selection of materials to fit their specific needs.

FOUNDRY LOCATION

Welmet Industries Limited P.O. Box 370 317 King Street Welland, Ontario, Canada

Main Industries Served:

Pulp and paper; chemical; automotive; heat treat; mining; equipment manufacturers; nuclear

Size of Castings Produced:

1 to 10,000 pounds Compositions:

Corrosion and heat resistant stainless steels; high alloys

Molding Processes:

Green sand; dry sand; resin-bonded sand; shell molding

Melting Facilities:

4 electric arc furnaces, capacities 1, 2, 3, and 4 tons; 2 induction furnaces, capacities 300 and 500 pounds

Heat Treating Facilities:

2 high temperature gas-fired car-type furnaces;

- 1 high temperature electric box furnace; 1 gas-
- fired stress relieving furnace; full circulating quench, on premises

Testing Facilities:

X-ray; gamma ray; dye penetrant; Magnaflux; air; hydrostatic; and fully equipped laboratory, on premises

Capacity:

Western Foundry Company Limited Wingham, Ontario, Canada

Contacts: D. P. Kennedy Vice-President R. W. LeVan President and General Manager Tel: (519) 357-3450

WESTERN FOUNDRY COMPANY LIMITED is a longestablished firm operating under modern-minded young management. In recently enlarging and modernizing facilities, the company added shell equipment to serve current markets more effectively and to develop new markets. The company specializes in thin section, highly machinable gray iron castings. Present production — machined on the premises consists mainly of gas burners, commercial cooking griddles, radiators, fireplace dampers, pumps and miscellaneous industrial equipment.

FOUNDRY LOCATION

Western Foundry Company Limited Wingham, Ontario, Canada

Main Industries Served:

Heating; commercial cooking; pump; industrial equipment; construction Size of Castings Produced: 1 to 300 pounds **Compositions:** Grav iron, classes 25 to 40 **Molding Processes:** Green sand; shell; CO₂; oil sand Melting Facilities: Cupola, capacity 7 tons per hour **Heat Treating Facilities:** Available nearby **Testing Facilities:** Sand testing on premises; complete laboratory nearby Capacity: 300 net tons per month

J. A. Wotherspoon & Son Ltd. 148 Cross Avenue Oakville, Ontario, Canada

Contact: John W. Wotherspoon Vice-President Tel: (416) 845-2873

J. A. WOTHERSPOON & SON LTD., incorporated in 1947, specializes in the production of quality gray iron soil pipe, fittings, service and valve boxes, manholes, catch basins, and production custom castings. Customers include wholesale plumbing firms, municipalities, contractors, and industrial users requiring custom castings. While currently producing entirely for Canadian users, the company is now ready to serve customers in other markets and welcomes inguiries on its capabilities.

FOUNDRY LOCATION

J. A. Wotherspoon & Son Ltd. 148 Cross Avenue Oakville, Ontario, Canada

Main Industries Served:

Construction; municipalities; drainage contractors Size of Castings Produced: 2 to 800 pounds

Composition:

Grav iron

Molding Processes:

Green sand; pneumatic and hand molding; CO₂; shell cores; blown oil sand cores

Melting Facilities:

2 cupolas, capacities of 4 to 5 tons per hour each Heat Treating Facilities:

None

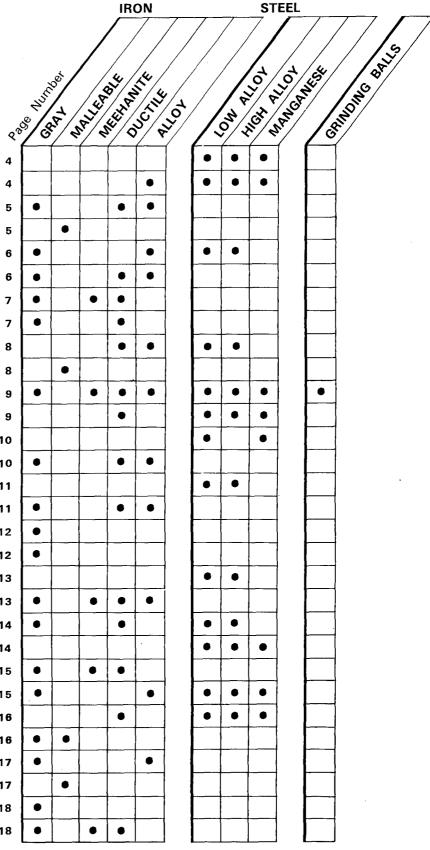
Testing Facilities:

Sand; Brinell hardness; transverse; tensile, on premises

Capacity:

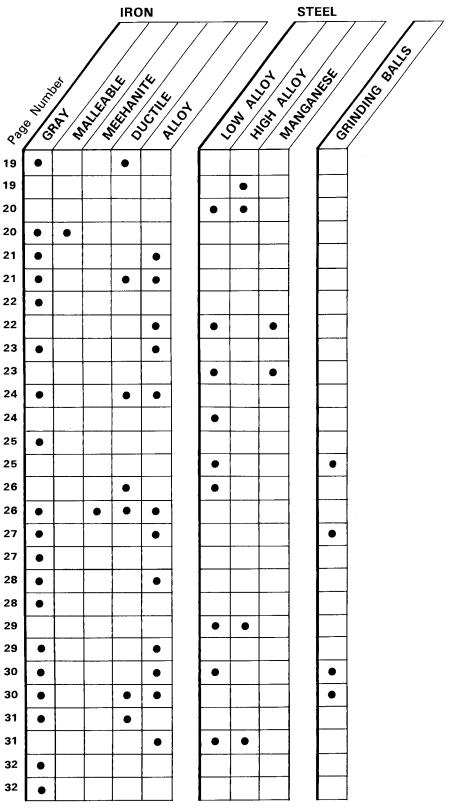
COMPANY NAME

A-1 Steel and Iron Foundry Ltd. 4 Abex Industries of Canada Ltd. 4 Anthes Imperial Limited 5 Auto Specialties Mfg. Co. (Canada) Ltd. 5 Babcock & Wilcox Canada Ltd. 6 **Beach Foundry Limited** 6 7 A. Bélanger Limitée 7 **Benn Iron Foundry Limited** Black-Clawson-Kennedy Ltd. 8 Bowmanville Foundry Co. Limited 8 CAE Machinery Ltd. 9 **Canadian Steel Foundries** 9 Canadian Unitcast Steel Ltd. 10 **Canron Limited** 10 Cercast Inc. 11 Cornwall Brass & Iron Foundries Ltd. 11 **Crouse-Hinds Company of Canada Limited 12** 12 **Darling Brothers, Limited Designed Precision Castings Limited** 13 Dion Frères Inc. 13 **Dominion Engineering Works Ltd.** 14 **Dominion Foundries and Steel, Limited** 14 **Dorr-Oliver-Long Limited** 15 **Esco Limited** 15 Fahralloy Canada Limited 16 **Fittings Limited** 16 **Forano Limited** 17 17 Galt Malleable Iron Limited General Manufacturing Co. Ltd. 18 John T. Hepburn, Limited 18



COMPANY NAME

Holmes Foundry Limited The Indiana Steel Products Co. of **Canada Limited** Industrial Fine Castings Ltd. International Malleable Iron Company Limited 20 Legare Foundry (1961) Limited Lethbridge Iron Works Company Limited Lunenburg Foundry & Engineering Limited Lynn MacLeod Metallurgy Limited Mainland Foundry & Engineering Ltd. **Manganese Steel Castings Limited** Manitoba Bridge & Engineering Works **Maritime Steel and Foundries Limited Massey-Ferguson Industries Limited Neelon Steel Limited Otaco Limited Preston Foundries Limited** Quebec Iron Foundries Ltd. Rockwell Mfg. Co. of Canada Ltd. Soo Foundry & Machine Co. Ltd. Stanton Foundry Limited Supreme Precision Castings (1963) Ltd. **Toronto Foundry Limited** United Nail and Foundry Co. Ltd. The Wabi Iron Works Limited Welland Iron and Brass Limited Welmet Industries Limited Western Foundry Company Limited J. A. Wotherspoon & Son Ltd.



Canadian Trade Offices in the United States

Boston

Consul and Trade Commissioner Canadian Consulate General 500 Boylston Street Boston, MA 02116 Tel: (617) 262-3760

Chicago

Consul and Senior Trade Commissioner Canadian Consulate General 310 South Michigan Avenue Chicago, IL 60604 Tel: (312) 427-1031

Cleveland

Consul and Trade Commissioner Canadian Consulate Illuminating Building 55 Public Square Cleveland, OH 44113 Tel: (216) 861-1660

Dallas

Consul and Trade Commissioner Canadian Consulate 2100 Adolphus Tower 1412 Main Street Dallas, TX 75202 Tel: (214) 742-8031

Detroit

Consul and Trade Commissioner Canadian Consulate 1920 First Federal Building 1001 Woodward Avenue Detroit, MI 48226 Tel: (313) 965-2811

Los Angeles

Consul and Trade Commissioner Canadian Consulate General 510 West Sixth Street Los Angeles, CA 90014 Tel: (213) MAdison 2-2233

New Orleans

Consul and Trade Commissioner Commercial Division Canadian Consulate General 2110 International Trade Mart 2 Canal Street New Orleans, LA 70130 Tel: (504) JAckson 5-2136

New York

Deputy Consul General (Commercial) Canadian Consulate General 680 Fifth Avenue New York City, NY 10019 Tel: (212) 586-2400

Philadelphia

Consul and Trade Commissioner Canadian Consulate 3 Penn Center Plaza Philadelphia, PA 19102 Tel: (215) LOcust 3-5838

San Francisco

Consul and Trade Commissioner Commercial Division Canadian Consulate General One Maritime Plaza Golden Gate Center San Francisco, CA 94111 Tel: (415) 981-2670

Seattle

Consul and Trade Commissioner Canadian Consulate General 1305 Tower Building Seventh Avenue at Olive Way Seattle, WA 98101 Tel: (206) MUtual 2-3515

Washington

Commercial Counsellor Canadian Embassy 1746 Massachusetts Avenue, N.W. Washington, DC 20036 Tel: (202) 232-1011

PRODUCED BY THE DEPARTMENT OF TRADE AND COMMERCE IN CO-OPERATION WITH PARTICIPATING COMPANIES

PRINTED IN CANADA UNDER THE AUTHORITY OF ROGER DUHAMEL, F.R.S.C. QUEEN'S PRINTER, OTTAWA, CANADA