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MARKET INTELLIGENCE

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

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Canada



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REFERENCE SOURCES

Industry, Science and Technology Canada
Statistics Canada, Tel.: (613) 951-9647
Revenue Canada, Tel.: (613) 954-6946
U.S. Department of Commerce,
Bureau of the Census,
Tel.: (301) 763-7754

TARIFFS

Enquiries concerning **Canadian** tariffs should be directed to the nearest Customs and Excise office or to:

Tariff Programs
Revenue Canada
Customs and Excise
Ottawa, Ontario K1A 0L5
Tel.: (613) 954-6946
Fax.: (613) 954-2509

Enquiries concerning tariffs and other government trade regulations in **foreign** countries should be directed to:

Info Export
External Affairs
Ottawa, Ontario
K1A 0G2
Tel.: (613) 993-6435 OR
1-800-267-8376
Fax.: (613) 996-9709

EXPLANATORY NOTES

Commodity Classification

Canadian Trade statistics are classified and published according to the International Convention on the Harmonized Commodity and Description Coding System (H.S.), as defined by the Canadian Customs Tariff and Statistical Nomenclature.

Valuation

Dollar values shown in this report are based on selling price F.O.B. plant, in Canadian dollars. This selling price represents the value paid by the importer, excluding all freight, packing and insurance costs when specified. All trade discounts, when applicable, are also deducted from the selling price.

Rounding

Figures may not add due to rounding.

Canada - U.S. Exchange Rate

The Bank of Canada exchange rates were used to convert U.S. imports reported in \$US to \$Cdn.

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INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

I. INTRODUCTION AND SCOPE

This is one of a continuing series of market intelligence reports designed to increase business awareness of the potential existing for production in Canada and to assist businesses and other organizations in their market research of specific products. The detailed information provided in these reports supports studies by organizations seeking to expand existing production lines, change individual product characteristics or engage in new manufacturing investment in Canada. The coverage of a market intelligence report is developed in close consultation with the client, and is tailored to meet their specific requirements. It is important to emphasize that this report does not attempt any assessment as to the feasibility of competing in a particular market.

This report was prepared for the Globe '92 Conference held in Vancouver, British Columbia. It contains import and export data on instruments and apparatus used for gas or smoke analysis.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

II. HARMONIZED CODING SYSTEM (H.S.) CANADIAN DESCRIPTIONS

<u>Harmonized Code</u>	<u>Description of Goods</u>
90.27	Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes.
9027.10	-Gas or smoke analysis apparatus
9027.10.10.00	-----Electrical analyzers
9027.10.90.00	-----Other

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

III. 1990 CANADIAN AND U.S. IMPORT MARKETS AND CANADIAN EXPORTS

H.S. Code	Canadian Imports				United States Imports					Canadian Exports				
	Total (\$M)	%Chg ¹	Major Country Country (\$M)		Total (\$M)	%Chg ¹	Canada (\$M)	%Chg ¹	Major Country Country (\$M)		Total (\$M)	%Chg ¹	Major Country ² Country (\$M)	
9027.10	Gas or smoke analysis apparatus													
	27.4	-8	U.S.A.	20.3	125.4	-7	3.9	11	Japan	69.7	5.5	-26	W. Germany	0.4

¹ Per cent change from 1989 to 1990

² For Canadian exports to U.S.A. see "United States Imports"

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS

BY PROVINCE OF CLEARANCE

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS
(H.S. 9027.10.10.00)**

Province of Clearance	1988	1989	1990	1991*	Average Annual Growth Rate 1988-90 (%)
-----	----	----	----	----	-----
Ontario Value (\$000)	12 565	13 191	13 475	8 247	3.6
Alberta Value (\$000)	7 100	6 849	5 128	4 082	-15.0
British Columbia Value (\$000)	1 028	945	1 438	1 132	18.3
Québec Value (\$000)	898	1 698	1 206	1 435	15.9
Nova Scotia Value (\$000)	296	113	450	253	23.4
Manitoba Value (\$000)	168	290	362	210	46.7
New Brunswick Value (\$000)	161	60	51	184	-44.0
Saskatchewan Value (\$000)	92	13	24	-	-48.9
Newfoundland Value (\$000)	10	18	1	96	-69.4
Total Value (\$000)	22 318	23 178	22 135	15 639	-0.4

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

IV. CANADIAN IMPORTS (Cont'd)

BY PROVINCE OF CLEARANCE

GAS OR SMOKE ANALYSIS APPARATUS - OTHER (H.S. 9027.10.90.00)

Province of Clearance	1988	1989	1990	1991*	Average Annual Growth Rate 1988-90 (%)
-----	----	----	----	----	-----
Ontario Value (\$000)	3 636	5 827	4 583	3 449	12.3
Québec Value (\$000)	169	338	454	158	63.8
Alberta Value (\$000)	82	294	123	67	22.6
British Columbia Value (\$000)	68	34	109	32	26.5
Manitoba Value (\$000)	2	36	22	11	232.8
New Brunswick Value (\$000)	-	8	6	7	-33.4
Saskatchewan Value (\$000)	0	-	1	-	77.7
Nova Scotia Value (\$000)	11	5	0	13	-84.7
Yukon Value (\$000)	-	1	-	-	0.0
Newfoundland Value (\$000)	0	-	-	-	0.0
-----	----	----	----	----	-----
Total Value (\$000)	3 969	6 543	5 297	3 737	15.5

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY PROVINCE OF CLEARANCE

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS
(H.S. 9027.10.10.00)**

Province of Clearance -----	1988 ----	1989 ----	1990 ----	1991* ----
	%	%	%	%
Ontario Value	56.3	56.9	60.9	52.7
Alberta Value	31.8	29.5	23.2	26.1
British Columbia Value	4.6	4.1	6.5	7.2
Québec Value	4.0	7.3	5.4	9.2
Nova Scotia Value	1.3	0.5	2.0	1.6
Manitoba Value	0.8	1.3	1.6	1.3
New Brunswick Value	0.7	0.3	0.2	1.2
Saskatchewan Value	0.4	0.1	0.1	-
Newfoundland Value	0.0	0.1	0.0	0.6
	-----	-----	-----	-----
Total Value	100.0	100.0	100.0	100.0

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY PROVINCE OF CLEARANCE

**GAS OR SMOKE ANALYSIS APPARATUS - OTHER
(H.S. 9027.10.90.00)**

Province of Clearance	1988	1989	1990	1991*
-----	----	----	----	----
	%	%	%	%
Ontario				
Value	91.6	89.1	86.5	92.3
Québec				
Value	4.3	5.2	8.6	4.2
Alberta				
Value	2.1	4.5	2.3	1.8
British Columbia				
Value	1.7	0.5	2.1	0.9
Manitoba				
Value	0.0	0.6	0.4	0.3
New Brunswick				
Value	-	0.1	0.1	0.2
Saskatchewan				
Value	0.0	-	0.0	-
Nova Scotia				
Value	0.3	0.1	0.0	0.3
Yukon				
Value	-	0.0	-	-
Newfoundland				
Value	0.0	-	-	-
	-----	-----	-----	-----
Total				
Value	100.0	100.0	100.0	100.0

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS
(H.S. 9027.10.10.00)**

Country of Origin	1988	1989	1990	1991*	Average Annual Growth Rate 1988-90 (%)
United States Value (\$000)	17 383	18 372	16 052	11 894	-3.9
United Kingdom Value (\$000)	1 275	2 307	3 103	1 732	56.0
Japan Value (\$000)	2 565	656	899	975	-40.8
Denmark Value (\$000)	113	230	665	336	142.7
Fed. Rep. of Germany Value (\$000)	640	561	572	325	-5.4
Switzerland Value (\$000)	193	523	267	98	17.8
Belgium Value (\$000)	-	-	248	-	0.0
Canada Value (\$000)	57	183	118	17	44.4
France Value (\$000)	1	69	84	45	720.2
Italy Value (\$000)	-	-	41	20	0.0
Other Value (\$000)	93	277	85	196	-4.1
Total Value (\$000)	22 318	23 178	22 135	15 639	-0.4

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

**GAS OR SMOKE ANALYSIS APPARATUS - OTHER
(H.S. 9027.10.90.00)**

Country of Origin	1988	1989	1990	1991*	Average Annual Growth Rate 1988-90 (%)
United States Value (\$000)	3 349	3 755	4 226	2 629	12.3
United Kingdom Value (\$000)	364	2 440	785	95	46.8
Japan Value (\$000)	217	210	212	274	-1.1
Fed. Rep. of Germany Value (\$000)	13	125	19	699	21.3
Italy Value (\$000)	-	-	17	36	0.0
Hong Kong Value (\$000)	-	-	14	-	0.0
France Value (\$000)	-	1	9	-	695.9
Switzerland Value (\$000)	10	-	9	3	-6.9
Spain Value (\$000)	-	-	5	-	0.0
Canada Value (\$000)	-	10	2	-	-75.7
Other Value (\$000)	15	2	-	-	-84.3
Total Value (\$000)	3 969	6 543	5 297	3 737	15.5

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY MAJOR COUNTRY OF ORIGIN

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS
(H.S. 9027.10.10.00)**

Country of Origin	1988	1989	1990	1991*
-----	----	----	----	----
	%	%	%	%
United States				
Value	77.9	79.3	72.5	76.1
United Kingdom				
Value	5.7	10.0	14.0	11.1
Japan				
Value	11.5	2.8	4.1	6.2
Denmark				
Value	0.5	1.0	3.0	2.2
Fed. Rep. of Germany				
Value	2.9	2.4	2.6	2.1
Switzerland				
Value	0.9	2.3	1.2	0.6
Belgium				
Value	-	-	1.1	-
Canada				
Value	0.3	0.8	0.5	0.1
France				
Value	0.0	0.3	0.4	0.3
Italy				
Value	-	-	0.2	0.1
Other				
Value	0.4	1.2	0.4	1.3
	-----	-----	-----	-----
Total				
Value	100.0	100.0	100.0	100.0

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

IV. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY MAJOR COUNTRY OF ORIGIN

**GAS OR SMOKE ANALYSIS APPARATUS - OTHER
(H.S. 9027.10.90.00)**

Country of Origin	1988	1989	1990	1991*
-----	----	----	----	----
	%	%	%	%
United States Value	84.4	57.4	79.8	70.4
United Kingdom Value	9.2	37.3	14.8	2.5
Japan Value	5.5	3.2	4.0	7.3
Fed. Rep. of Germany Value	0.3	1.9	0.3	18.7
Italy Value	-	-	0.3	1.0
Hong Kong Value	-	-	0.3	-
France Value	-	0.0	0.2	-
Switzerland Value	0.3	-	0.2	0.1
Spain Value	-	-	0.1	-
Canada Value	-	0.1	0.0	-
Other Value	0.4	0.0	0.0	0.0
	-----	-----	-----	-----
Total Value	100.0	100.0	100.0	100.0

Ranked in descending order by 1990 value.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

V. CANADIAN PRODUCTION

Statistics Canada reports that instruments and apparatus used for gas or smoke analysis are produced in Canada, however, Statistics Canada does not provide data on production by Canadian manufacturers.

Any enquiries and/or comments regarding Canadian production should be directed to:

Statistics Canada
Industry Division
Survey of Manufactures Section
Ottawa, Ontario
K1A 0T6
Tel.: (613) 951-3523

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

VI. CANADIAN EXPORTS BY MAJOR COUNTRIES OF DESTINATION

**GAS OR SMOKE ANALYSIS APPARATUS
(H.S. 9027.10)**

1989		1990		1991 *	
<u>Country</u>	<u>Value</u> (\$000)	<u>Country</u>	<u>Value</u> (\$000)	<u>Country</u>	<u>Value</u> (\$000)
U.S.	5 952	U.S.	3 839	U.S.	3 446
W.Germany	512	W.Germany	400	W.Germany	599
France	191	France	235	France	308
Netherlands	179	U.K.	207	Finland	250
Australia	117	Australia	206	Austria	201
Colombia	100	Switzerland	151	U.K.	163
India	64	Denmark	127	Spain	110
U.K.	58	Italy	116	S. Korea	109
Singapore	48	Sweden	50	Sweden	97
Taiwan	45	Singapore	41	Australia	81
Others	<u>229</u>	Others	<u>152</u>	Others	<u>481</u>
TOTAL	7 494		5 525		5 848

* The latest year is cumulative to the third quarter.
 Note : Major countries in descending order based upon value.
 Source: Statistics Canada

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

VII. CANADIAN IMPORTERS - 1990

GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS (H.S. 9027.10.10.00)

There were 461 known importers of gas or smoke analysis apparatus - electrical analyzers in 1990. The principal 25 importers accounted for 61 per cent of the total import value.

<u>Principal Importers</u> (No.)	<u>Cumulative Value</u> (\$000)	<u>Cumulative % of Total Value</u>
3	5 347	24
6	7 076	32
10	8 992	41
15	10 730	48
25	13 441	61
60	17 770	80
All Importers (461)	22 135	100

Major importers of gas or smoke analysis apparatus - electrical analyzers during 1990 are listed below in alphabetical order. Where the importer is not the same as the consignee (i.e. the recipient of the goods shipped), the name of the consignee rather than that of the importer is listed. The importer or consignee is not necessarily the end-user of the product.

NOTE: This list includes major importers except individuals.

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
Air Products Canada Ltd.	Brampton, Ont.	Atomic Energy of Canada Ltd.	Pinawa, Man.
Alberta Analysis	Edmonton, Alta.	Axel Johnson Inc.	Montréal, Qué.
Algoma Steel Corp. Ltd.		B & J Cleland Limited	
Steelworks Div.	Sault Ste-Marie, Ont.	Automation Specialists	Newmarket, Ont.
Allen Electric Manufacturing		B & W Technologies Ltd.	Calgary, Alta.
& Equipment Co. of Cda. Ltd.	Mississauga, Ont.	B F Goodrich Canada Inc.	
Alpha Controls and		Chemical Group	Waterloo, Ont.
Instrumentation	Markham, Ont.	Bach-Simpson Co. Ltd.	London, Ont.
Amko Consultants	Thornhill, Ont.	Bailey Controls A Div. of	
Amko Systems Inc.	Richmond Hill, Ont.	Babcock & Wilcox Industries	Burlington, Ont.
Analygas Systems Ltd.	Scarborough, Ont.	Brian Controls A Division	
Analytical Technical Services		of Axel Johnson (Canada) Inc.	Montréal, Qué.
Inc.	Oakville, Ont.	Bristol Babcock	Etobicoke, Ont.
Aquatronix Inc.	Markham, Ont.	C B Engineering (Eastern) Ltd.	Calgary, Alta.
Atmospheric Environment Services,		CD Nova Ltd.	Burnaby, B.C.
Government of Canada	Downsview, Ont.		

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

VII. CANADIAN IMPORTERS - 1990 (Cont'd)

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS (Cont'd)
(H.S. 9027.10.10.00)**

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
Cantech Corporation	Calgary, Alta.	Macdonald Dettwiler Technologies	
Chemex Labs Alberta (1984) Ltd.	Calgary, Alta.	Electro-Optical	Richmond, B.C.
Comteq Instruments Inc.	Richmond Hill, Ont.	Mandel Scientific Company Ltd.	Guelph, Ont.
Donaldson Pynch & Hume A Div. of Westburne Industries Enterprises Ltd.	Burnaby, B.C.	Micro Watt Control Devices Ltd.	Calgary, Alta.
Draefer Canada Ltd.	Mississauga, Ont.	Molson Breweries/Les Brasseries Molson	Listowel, Ont.
E S P Envirosience Products Ltd.	Vancouver, B.C.	Nortech Control Equipment Inc.	Etobicoke, Ont.
Enmet Canada Ltd.	Mississauga, Ont.	Nova Analytical Systems Inc.	Hamilton, Ont.
Esso Petroleum Canada Div. of Imperial Oil	Don Mills, Ont.	R A Kirby Sales Inc.	Toronto, Ont.
Fisher Scientific Ltd.	Ottawa, Ont.	RCA Inc. Electro Optique Division	Dorion-Vaudreuil, Qué.
Ford Motor Company of Canada Ltd.	Oakville, Ont.	Robco Industrial Supplies O/B 366630 Ontario Limited	Markham, Ont.
Galvanic Analytical Systems Ltd.	Calgary, Alta.	Robertson White Engineering Ltd.	Etobicoke, Ont.
Gastech Instruments Canada Ltd.	Calgary, Alta.	Romatec-R M L Division of Robert Muddiman Limited	Willowdale, Ont.
General Monitors Ltd.	Costa Mesa, CA, USA*	Rosemount Instruments Ltd.	Calgary, Alta.
Hadley Tekscience (Canada) Inc.	Oakville, Ont.	Safety Supply Canada Ltd.	Richmond Hill, Ont.
Hazco Canada Inc.	Mississauga, Ont.	Sampling Technology Inc.	Waldron, AK, USA*
Heath Consultants Limited	London, Ont.	Thermalloy Corporation	Markham, Ont.
HNU Systems Ltd.	Newton, MASS, USA*	U A P Inc. Diesel Traction Division	Halifax, N.S.
Imperial Oil Limited	Don Mills, Ont.	Université de Sherbrooke	Sherbrooke, Qué.
Instrument Service Laboratories Ltd.	Richmond, B.C.	Vanko Analytics Ltd.	Edmonton, Alta.
Kautex of Canada Inc.	Windsor, Ont.	Volkswagen Canada Inc.	Scarborough, Ont.
Labserco Limited	Oakville, Ont.	Westech Industrial Ltd.	Calgary, Alta.
Lumidor Inc. Safety Products (Canada)	Markham, Ont.	Western Research & Development Ltd.	Calgary, Alta.
		Westinghouse Canada Limited	Hamilton, Ont.
		Willer Engineering Limited	Willowdale, Ont.

* Non resident importer.

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

VII. CANADIAN IMPORTERS - 1990 (Cont'd)

GAS OR SMOKE ANALYSIS APPARATUS - OTHER (H.S. 9027.10.90.00)

There were 151 known importers of gas or smoke analysis apparatus - other in 1990. The principal ten importers accounted for 88 per cent of the total import value.

<u>Principal Importers</u> (No.)	<u>Cumulative Value</u> (\$000)	<u>Cumulative % of Total Value</u>
3	4 230	80
6	4 462	84
10	4 676	88
15	4 848	92
25	5 017	95
All Importers (151)	5 297	100

Major importers of gas or smoke analysis apparatus - other during 1990 are listed below in alphabetical order. Where the importer is not the same as the consignee (i.e. the recipient of the goods shipped), the name of the consignee rather than that of the importer is listed. The importer or consignee is not necessarily the end-user of the product.

NOTE: This list includes major importers except individuals.

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
A A F Canada Snydergeneral Canada Inc.	Montréal, Qué	Ontario Centre For Materials Research	Kingston, Ont.
Air Products Canada Ltd.	Brampton, Ont.	Petro Canada	Calgary, Alta.
Alberta Irrigation Supply Ltd.	Edmonton, Alta.	Prism Systems Inc.	Burnaby, B.C.
Bateaux Doré Ltée., Les	Grand'Mère, Qué.	Prodair Canada Ltée.	Brampton, Ont.
Bio-Rad Laboratories (Canada) Ltd.	Mississauga, Ont.	Pulp & Paper Research Institute Of Canada	Pointe-Claire-Dorval, Qué.
Bomem Inc.	Ancienne Lorette, Qué.	Safety Supply Canada Ltd.	Richmond Hill, Ont.
Canadian Fracmaster Ltd.	Calgary, Alta.	Snyder General Canada Inc.	Montréal, Qué.
Cantech Corporation	Calgary, Alta.	Spruce Falls Power & Paper Company Ltd.	Kapuskasing, Ont.
Department Of National Defence	Ottawa, Ont.	Stackpole Limited	Etobicoke, Ont.
Dur-Pro Canada Inc.	Burlington, Ont.	Steves Music Store Ltd.	Montréal, Qué.
Elitex Distributors	Don Mills, Ont.	Université de Sherbrooke	Sherbrooke, Qué.
Foxboro Canada Inc.	Roxboro, Qué.	Université d'Ottawa	Ottawa, Ont.
Heron Cable Industries Ltd.	Waterloo, Ont.	University of Alberta, The	Edmonton, Alta.
Ingram & Bell Inc.	Don Mills, Ont.	University of British Columbia, The	Vancouver, B.C.
Integra Environmental Inc.	Burlington, Ont.	University of Toronto	Toronto, Ont.
Mark II Innovations	Windsor, Ont.	University of Waterloo, The	Waterloo, Ont.
Matheson Gas Products Cda Inc.	Calgary, Alta.		
Merck Frosst	Pierrefonds, Qué.		
National Research Council	Ottawa, Ont.		

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

VIII. FOREIGN EXPORTERS TO CANADA - 1990

GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS (H.S. 9027.10.10.00)

Major exporters to Canada of gas or smoke analysis apparatus - electrical analyzers are listed by major country of origin in descending order of dollar value of exports to Canada in 1990. These exporters accounted for 68 per cent of the total value of Canadian imports.

<u>Country of Origin</u>	<u>Name of Foreign Exporter</u>	<u>Value of Exports to Canada 1990</u> (\$000)
United Kingdom	Neotronics Ltd.	2 742*
United States	Lear Siegler Measurement	
	E.I. Dupont de Nemours Ametek/Thermax Instruments	1 384*
Japan	Riken Keiki Co. Ltd.	1 190*
United States	Rosemont Analytical	
	Air Gage Co. Detector Electronics	1 052*
	Thermo Environmental Instr.	423
	Ta Instruments, Inc. Gastech Inc. Air Products & Chemicals	1 023*
	Microsensor Technology Inc.	285
	Horiba Instruments General Monitors Inc.	557*
Belgium	Baseline Industries Inc. Irm S.A.	497*
Denmark	Radiometer Analytical	715*
United Kingdom	Servomex Limited	
United States	Teledyne Analytical Instrument	
	Yellow Applied Automation Inc. Scott Aviation	635*
	Bacarach Inc. Foxboro Company	365*

* Aggregated to preserve confidentiality of Canadian importers.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

VIII. FOREIGN EXPORTERS TO CANADA - 1990 (Cont'd)

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS (Cont'd)
(H.S. 9027.10.10.00)**

<u>Country of Origin</u>	<u>Name of Foreign Exporter</u>	<u>Value of Exports to Canada 1990 (\$000)</u>
United States (Cont'd)	Micro Processor Systems Inc.	499*
	Core Lab Combustion Engineering	
	Tracor Atlas Inc.	285*
	Enmet Corporation	
Switzerland	Orbisphere Laboratories	415*
Denmark	Radiometer	
United States	Tess Com Inc.	
Japan	Sampling Technology Inc.	365*
	Saic-Radco	
	Shimadze Scientific Instr.	
Denmark	Radiometer Medical	325*
Fed. Rep. of Germany	Dragerwerk	
United Kingdom	Codel	
United States	Gas Measurement Sun Electric Corp.	208*
	Lassen Research Hnu Systems Inc.	206*
	Industrial Scientific Corp.	201*
	Allen Testprod Div.	
United Kingdom	Analytical Development Co.	196*
United States	Milton Roy Co.	
United Kingdom	Gas Measurement Inst	190*
United States	Cae Instrument Rental	
Fed. Rep. of Germany	Chandler Eng	275*
United States	Ratfisch	
	Tecan	

* Aggregated to preserve confidentiality of Canadian importers.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

VIII. FOREIGN EXPORTERS TO CANADA - 1990 (Cont'd)

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL ANALYZERS (Cont'd)
(H.S. 9027.10.10.00)**

<u>Country of Origin</u>	<u>Name of Foreign Exporter</u>	<u>Value of Exports to Canada 1990 (\$000)</u>
United Kingdom	Kane Way)	
Switzerland	Benz Ernst Ag)	210*
Denmark	Radiometer Analy)	
Japan	Gastech Inc.)	
Denmark	Dariometer)	174*
Fed. Rep. of Germany	Siemens)	
United Kingdom	City Technology Ltd.	49
Fed. Rep. of Germany	Ulc Inc.)	
Japan	Horiba Instr.)	136*
United Kingdom	Severn Science Ltd.)	
Fed. Rep. of Germany	Volkswagen A G)	
Denmark	Temax Instrumentering)	113*
Italy	Carlo Erba Strumentazione)	
Fed. Rep. of Germany	Land Combustion Inc.)	
United Kingdom	Sieger Ltd.)	68*
France	Smc Tbt)	
Fed. Rep. of Germany	Indust)	81*
Japan	Welding Industrles)	
Switzerland	Trafrag)	
Fed. Rep. of Germany	Erwin)	71*
France	Siemen)	
Fed. Rep. of Germany	H Eberhardt)	
France	Pillard)	53*
Fed. Rep. of Germany	Impulsphysik Gmbh)	
Fed. Rep. of Germany	Catalyst Technology)	
Switzerland	Zullig Ltd.)	39*
Fed. Rep. of Germany	Via)	
TOTAL		15 027

* Aggregated to preserve confidentiality of Canadian Importers.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

VIII. FOREIGN EXPORTERS TO CANADA - 1990 (Cont'd)

**GAS OR SMOKE ANALYSIS APPARATUS - OTHER
(H.S. 9027.10.90.00)**

Major exporters to Canada of gas or smoke analysis apparatus - other are listed by major country of origin in descending order of dollar value of exports to Canada in 1990. These exporters accounted for 86 per cent of the total value of Canadian imports.

<u>Country of Origin</u>	<u>Name of Foreign Exporter</u>	<u>Value of Exports to Canada 1990 (\$000)</u>
United States	Bio Rad Laboratories	2 995
United Kingdom	Graseby Ionics Ltd.	1 029*
United States	Ohoton Technology	
Japan	Nippon Bio Rad Laboratories	
United States	Infrared Analysis Inc. Astech Inc.	151*
Japan	Komyo Rikagaku Kogyo K K	108*
United States	Maga Machine Company	
	Air Products & Chemicals Scott Aviation	103*
	Particle Measuring Systems E Mu Systems	90*
	Skc Inc.	36
Italy	Tomasetto Achille	41*
United Kingdom	Neotronics Ltd.	
Fed. Rep. of Germany	Bio Rad Laboratories	
	Fischer Bomag Gmbh Germany Graetx	9*
TOTAL		4 562

* Aggregated to preserve confidentiality of Canadian Importers.

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

IX. CANADIAN SUPPLIERS

The following lists are taken from two sources: a) the Business Opportunities Sourcing System (BOSS), a computerized data bank established by the Federal Department of Industry, Science and Technology Canada; and, b) the Canadian Trade Index, published by the Canadian Manufacturers' Association (CMA). These lists may not include all suppliers of the products in question, as companies must themselves register in BOSS or the Canadian Trade Index. In both cases, information on Canadian products supplied is as given by the companies.

BOSS

Companies are arranged in alphabetical order.

Gas Analysis Apparatus

<u>Name</u>	<u>Address</u>
*Alby Technologies Limited	New Westminster, B.C.
*Anachemia Canada Inc..	Lachine, Qué.
*Analygas Systems Ltd.	Scarborough, Ont.
*Bomem Inc.	Québec, Qué.
*Bovar Inc.	Calgary, Alta.
*Canadian Centre for Advanced Instrument	Saskatoon, Sask.
*CD Nova Ltd.	Burnaby, B.C.
Cyclone Engineering Sales Ltd.	Edmonton, Alta.
Daniel Flow Products Inc.	Calgary, Alta.
Electro-Systems Inc.	Victoria, B.C.
Foxboro Canada Inc.	Dollard-des-Ormeaux, Qué.
Marimex Industries Ltd.	Calgary, Alta.
Metcon Sales & Engineering Ltd.	Concord, Ont.
Northwest Controls Canada Inc.	Calgary, Alta.
*Photovac Inc.	Thornhill, Ont.
Pillard Combustion Canada Inc.	Montréal, Qué.
*Q.E.L. - Dedesco Ltd.	Richmond, Ont.
*Quatrosense Environmental Ltd.	Richmond, Ont.
*Sciex-Division of MDS Health Group Ltd.	Thornhill, Ont.
Scintrex Limited	Concord, Ont.
*The Armstrong Monitoring Corporation	Nepean, Ont.
*Tri-Met Instruments Ltd.	Winnipeg, Man.
*Unisearch Associates Inc.	Concord, Ont.

* Company engaged in export trade.

Any enquiries and/or comments regarding the BOSS list should be directed to:

Business Opportunities Sourcing System
Industry, Science and Technology Canada
235 Queen Street
Ottawa, Ontario K1A 0H5
Tel.: (613) 954-5031
Telex: 053-4123 Fax.: (613) 954-1894

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

IX. CANADIAN SUPPLIERS (Cont'd)

CANADIAN TRADE INDEX

Companies are arranged in alphabetical order.

Gas Analysis Systems

<u>Name</u>	<u>Address</u>
*Acme Engineering Products Ltd.	Montréal, Qué.
*Analygas Systems Ltd.	Scarborough, Ont.
*Bailey Canada Inc.	Burlington, Ont.
Canadian Liquid Air Ltd.	Montréal, Qué.
MSA Canada Inc.	North York, Ont.
R A B Dedesco Ltd.	Kanata, Ont.
Syprotec Inc.	Pointe-Claire, Qué.
Thermalloy Corporation	Markham, Ont.
Westinghouse Canada Inc.	Hamilton, Ont.

* Company engaged in export trade.

Any enquiries and/or comments regarding the Canadian Trade Index list should be directed to:

The Canadian Manufacturers' Association
One Yonge Street
Toronto, Ontario
M5E 1J9
Tel.: (416) 363-7261
Telex: 065-24693
Fax.: (416) 363-3779

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

X. CANADIAN AND FOREIGN TARIFFS

Instruments and apparatus used for gas or smoke analysis included in this report are dutiable under the following Canadian tariff items.

Tariff Item	Description of Goods	Tariff Treatment - 1991		
		Most Favoured Nation Tariff	General Preferential Tariff	United States Tariff
9027.10.10	Gas or smoke analysis apparatus - electrical analyzers	FREE	FREE	FREE
	On and after January 1, 1992			FREE
9027.10.90	Gas or smoke analysis - other	7.5%	2.5%	5.2%
	On and after January 1, 1992			4.5%

TARIFF ARRANGEMENTS AND FOREIGN COUNTRIES OF EXPORT

Exporting countries which qualify for the Most Favoured Nation tariff treatment: Belgium, Denmark, Federal Republic of Germany, France, Italy, Japan, Switzerland, United Kingdom, United States.

Exporting country which qualifies for the Most Favoured Nation tariff treatment or General System of Preference tariff treatment*: Hong Kong.

* In order to qualify for the General System of Preference, a special certificate of origin is required.

Enquiries concerning tariffs should be directed to the nearest Revenue Canada Customs and Excise office as listed on page two of this report.

INSTRUMENTS AND APPARATUS USED FOR GAS OR SMOKE ANALYSIS

X. CANADIAN AND FOREIGN TARIFFS (Cont'd)

Instruments and apparatus used for gas or smoke analysis included in this report are dutiable under the following U.S. tariff items:

<u>Tariff Item</u>	<u>Description of Goods</u>	<u>Rates of Duty - 1991</u>		
		<u>General</u>	<u>Special⁽¹⁾</u>	<u>2</u>
9027.10.20	Gas or smoke analysis apparatus Electrical	4.9%	FREE (A,CA,E,IL)	40%
9027.10.40	Optical instruments and apparatus	10%	FREE (A,E,IL) 6% (CA)	50%
9027.10.60	Other	6.2%	FREE (A,E,IL) 3.7%	40%

FOREIGN COUNTRIES

Enquiries concerning tariffs and other government trade regulations in foreign countries should be directed to External Affairs as listed on page two of this report.

⁽¹⁾ Generalized System of Preferences	A
United States-Canada Free-Trade Agreement	CA
Caribbean Basin Economic Recovery Act	E
United States-Israel Free Trade Area	IL

2 Rates of Duty Column 2. Notwithstanding any other provisions, the rates of duty shown in column 2 shall apply to products, whether imported directly or indirectly, of the following countries and areas pursuant to section 401 of the Tariff Classification Act of 1962, to section 231 or 257(e)(2) of the Trade Expansion Act of 1962, to section 404(a) of the Trade Act of 1974 or to any other applicable section of law, or to action taken by the President thereunder:

Afghanistan	German Democratic Republic	Mongolia
Albania	Kampuchea	North Korea
Bulgaria	Laos	Romania
Cuba	Latvia	Union of Soviet Socialist Republics
Czechoslovakia	Lithuania	Vietnam
Estonia		

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

XI. UNITED STATES IMPORTS

BY MAJOR COUNTRY OF ORIGIN

The United States Department of Commerce reports U.S. data as follows:

**GAS OR SMOKE ANALYSIS APPARATUS - ELECTRICAL
(H.S. 9027.10.20.00)**

Country of Origin	1989	1990	1991*	Average Annual Growth Rate 1989-90 (%)
-----	----	----	----	-----
Japan				
Value (\$000)	89 190	67 431	68 837	-24.4
Fed. Rep. of Germany				
Value (\$000)	13 364	18 055	9 319	35.1
United Kingdom				
Value (\$000)	6 735	9 422	5 227	39.9
Switzerland				
Value (\$000)	4 651	7 256	6 075	56.0
Canada				
Value (\$000)	3 073	3 648	3 066	18.7
Ireland				
Value (\$000)	1 401	3 227	678	130.3
Italy				
Value (\$000)	1 454	469	87	-67.7
Denmark				
Value (\$000)	-	233	13	0.0
France				
Value (\$000)	176	164	1 120	-6.6
Netherlands				
Value (\$000)	332	125	84	-62.3
Other				
Value (\$000)	269	317	402	18.1
	-----	-----	-----	-----
Total				
Value (\$000)	120 644	110 350	94 906	-8.5

Ranked in descending order by 1990 value.

Canada ranked 5 overall.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

XI. UNITED STATES IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

**OPTICAL INSTRUMENTS AND APPARATUS
(H.S. 9027.10.40.00)**

Country of Origin	1989	1990	1991*	Average Annual Growth Rate 1989-90 (%)
Japan Value (\$)	91 466	49 378	11 014	-46.0
Fed. Rep. of Germany Value (\$)	151 575	47 599	1 741	-68.6
Belgium Value (\$)	-	11 842	-	0:0
Republic of Korea Value (\$)	-	5 684	-	0.0
United Kingdom Value (\$)	50 073	5 199	-	-89.6
Norway Value (\$)	4 977	5 106	7 835	2.6
Other Value (\$)	171 828	-	162 142	0.0
Total Value (\$)	469 919	124 808	182 732	-73.4

Ranked in descending order by 1990 value.

Canada is not ranked for this commodity.

* The latest year is cumulative to the third quarter.

**INSTRUMENTS AND APPARATUS
USED FOR GAS OR SMOKE ANALYSIS**

XI. UNITED STATES IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

**GAS OR SMOKE ANALYSIS APPARATUS - OTHER
(H.S. 9027.10.60.00)**

Country of Origin	1989	1990	1991*	Average Annual Growth Rate 1989-90 (%)
Fed. Rep. of Germany Value (\$000)	9 307	11 117	8 845	19.4
Japan Value (\$000)	2 200	2 169	1 869	-1.4
United Kingdom Value (\$000)	840	652	655	-22.5
Canada Value (\$000)	440	248	374	-43.7
Mexico Value (\$000)	-	180	150	0.0
Ireland Value (\$000)	-	160	244	0.0
Spain Value (\$000)	-	118	3	0.0
Switzerland Value (\$000)	198	85	18	-57.0
Taiwan Value (\$000)	22	58	47	170.1
Netherlands Value (\$000)	78	56	19	-27.8
Other Value (\$000)	193	46	290	-76.4
Total Value (\$000)	13 278	14 890	12 514	12.1

Ranked in descending order by 1990 value.

Canada ranked 4 overall.

* The latest year is cumulative to the third quarter.

DID YOU KNOW?

Effective May 1, 1991, the Market Intelligence Division of the Services to Business Branch of Industry, Science and Technology Canada became the Office of Primary Interest (OPI) for **dISTCcovery**. This service, developed by the New Brunswick Regional Office, is being implemented on a national basis and is available in most regional offices.

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For more information on this service, contact the Market Intelligence Division at (613) 954-4970 or the nearest **ISTC** Regional Office listed at the end of this publication.



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Environmental Affairs Branch
Industry, Science and Technology Canada
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