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MARKET INTELLIGENCE

INSTRUMENTS AND
APPARATUS FOR MEASURING
OR DETECTING
IONIZING RADIATIONS

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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, Ontarlo 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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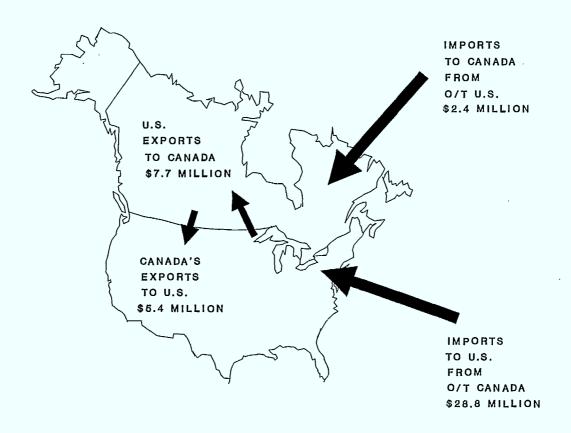
I. INTRODUCTION AND SCOPE

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 for measuring or detecting ionizing radiations for the following Harmonized System (H.S.) commodity codes:

Description	H.S. Commodity Codes Analyzed
-Instruments and apparatus for measuring or detecting ionizing radiations	
Alpha-beta geiger counters; geiger-mueller counters; instruments and apparatus for measuring or detecting nuclear radiation	9030.10.10.00
Other:	
Electrical instruments and apparatus	9030.10.91.00
Other	9030.10.99.00

II. NORTH AMERICAN IMPORTS - 1991



North American Imports - \$31.2 Million*

^{*} Excludes Canada - U.S. bilateral trade; Mexico.

III. CANADIAN IMPORTS

BY PROVINCE OF CLEARANCE

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

Province of Cleara	nce	1988	1989	1990	1991	Average Annual Growth Rate 1988-91
Ontario						(%)
Value	(\$000)	2 490	2 755	3 403	1 643	-12.9
Manitoba	,					
Value	(\$000)	34	242	49	187	76.2
Alberta						
Value	(\$000)	47	36	60	. 56	6.1
New Bruns		00	. 7	4-		
Value Québec	(\$000)	29	17	45	35	7.5
Value	(\$000)	100	120	19	30	-33.1
British C		100	120	13	30	-33.1
Value	(\$000)	25	17	52	26	1.1
Newfound1				02	20	1.1
Value	(\$000)	-	- .	. 11	-	0.0
Saskatche	wan					
Value	(\$000)	54	1	1	-	-90.1
Nova Scot						
Value	(\$0 00)	7	5	-	-	-29.9
Tabal						
Total Value	(\$000)	2 785	3 194	3 640	1 977	-10.8

III. CANADIAN IMPORTS (Cont'd)

BY PROVINCE OF CLEARANCE

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Province of Clearar	nce 	1988 	1989	1990 	1991 	Average Annual Growth Rate 1988-91 (%)
Ontario						
Value	(\$000)	7 367	7 66 8	6 822	4 847	-13.0
British Co						
Value	(\$000)	3 157	2 202	2 220	1 596	-20.3
Alberta						
Value	(\$000)	924	309	289	527	-17.1
Québec	(4000)		A == 1	60.6	407	22.2
Value	(\$000)	1 131	371	686	401	-29.2
Saskatchev		0.0	20	C7	1.05	04.0
Value	(\$000)	8 6	32	67	165	24.3
Nova Scot	(\$000)	6	27	51	112	159.4
Manitoba	(\$000)	O	21	91	112	133.4
Value	(\$000)	229	168	221	41	-43.4
New Bruns		fin (a. 4)	100	fee Las J.	7.4	10.7
Value	(\$000)	127	57	25	19	-46.9
Newfound1						
Value	(\$000)	-	3	3	-	-8.5
	ward Island					
Value	(\$000)	. 6	0	-	-	-94.0
Yukon						
Value	(\$000)	14	-	-	-	0.0
Total	(4000)	10.046	10.005	10 005	7 700	16.1
V alue	(\$000)	13 046	10 836	10 386	7 709	-16.1

III. CANADIAN IMPORTS (Cont'd)

BY PROVINCE OF CLEARANCE

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

Province of Cleara	nce	1988	1989	1990	1991	Average Annual Growth Rate 1988-91
						(%)
Ontario						(10)
Value	(\$000)	446	885	395	287	-13.6
Québec	(4555)			000	20,	10.0
Value	(\$000)	97	89	88	38	-26.9
Newfoundl						
Value	(\$000)	-	_	-	32	0.0
Alberta						
Value	(\$000)	25	84	28	28	4.3
British C						
	(\$000)	53	10	25	25	-21.9
Manitoba	(+)	_				
Value	(\$000)	0	20	21	21	528.3
Saskatche		•			_	
Value		2	-	-	3	13.6
Nova Scot		•	1	•		14 ~
Value Nov. Proves	(\$000)	2	1	9	2	14.7
New Bruns		1	10			1 051 0
Value	(\$000)	1	13	-	-	1 351.3
Total			~ ~ ~ ~ ~			
Value	(\$0 00)	625	1 101	566	436	-11.3

III. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY PROVINCE OF CLEARANCE

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

Province				
of Clearance	1988	1989	1990	1991
	%	%	%	%
Ontario				
Value	89.4	86.2	93.5	83.1
Manitoba		_		
Value	1.2	7.6	1.4	9.5
Alberta				
Value	1.7	1.1	1.7	2.9
New Brunswick				
Value	1.0	0.5	1.2	1.8
Québec		a -		
Value	3.6	3.8	0.5	1.5
British Columbia				
Value	0.9	0.5	1.4	1.3
Newfoundland	•			
Value	••	-	0.3	-
Saskatchewan				
Value	1.9	0.0	0.0	-
Nova_Scotia				
Value	0.3	0.2	-	-
Total	100.0		100.0	100 0
V alue	100.0	100.0	100.0	100.0

III. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY PROVINCE OF CLEARANCE

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Province				
of Clearance	1988	1989	1990	1991

	%	%	%	%
Ontario				
Value	56.5	70.8	65.7	62.9
British Columbia				
Value	24.2	20.3	21.4	20.7
Alberta				
Value	7.1	2.8	2.8	6.8
Québec				
Value	8.7	3.4	6.6	5.2
Saskatchewan	0.7		0.6	
Value	0.7	0.3	0.6	2.1
Nova Scotia Value	0.0	0.0	۰ ۳	1 F
Manitoba	0.0	0.2	0.5	1.5
Value	1.8	1.5	2.1	0.5
New Brunswick	1.0	1.5	۲.1	0.5
Value	1.0	0.5	0.2	0.2
Newfoundland		0.0	٠.٢	0.2
Value	-	0.0	0.0	_
Prince Edward Island				
Value	0.0	0.0		-
Yukon				
Value	0.1	-	-	_
Total				
Value	100.0	100.0	100.0	100.0

III. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY PROVINCE OF CLEARANCE

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

Province				
of Clearance	1988	1989	1990	1991
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	= 0 = =			
	%	%	%	%
Ontario				
Value	71.3	80.3	69.8	65.8
Québec				
Value	15.5	8.1	15.6	8.7
Newfoundland				7.0
Value	-	-	-	7.3
Alberta	A 0	7 6	r •	c =
Value	4.0	7.6	5.0	6.5
British Columbia	0.5	0.0	A A	г о
Value	8.5	0.9	4.4	5.8
Manitoba Value	0.0	1.8	3.7	4.8
Saskatchewan	0.0	1.0	3.7	4.0
Value	0.3	_		0.6
Nova Scotia	0.5	_	_	,0.0
Value	0.3	0.1	1.5	0.6
New Brunswick	0.0	0.1	1.0	0.0
Value	0.1	1.2	_	_
74,740				
Total				
Value	100.0	100.0	100.0	100.0
			= • •	

III. CANADIAN IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

Country of Origin		1988 	1989	1990	1991 	Average Annual Growth Rate 1988-91 (%)
United St	ates					
Value	(\$000)	1 541	1 948	2 249	1 101	-10.6
United Ki		•				
Value	(\$000)	286	278	263	342	6.2
	of Germany	205	0.40			
Value	(\$000)	286	942	1 100	318	3.5
Italy Value	(\$000)				161	0.0
France	(\$000)	_	-	-	151	0.0
Value	(\$000)	643	7	15	52	-56.9
Japan	(4000)	043	,	10	JŁ	-30.9
Value	(\$000)	0	1	10	15	1 046.7
Taiwan	(,,,,,	-	. "			1 010.7
Value	(\$000)	2	1	1	0	-57.1
Other other						
Value	(\$000)	27	17	1	_	-79.5
T-1-1	•		,			
Total Value	(\$000)	2 785	3 194	3 640	1 977	-10.8

III. CANADIAN IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Country of Origin		1988 	1989 	1990	1991 	Average Annual Growth Rate 1988-91
						(%)
United Sta	tes					
Value	(\$000)	9 387	8 204	7 846	6 311	-12.4
Japan						
Value	(\$000)	1 689	1 098	681	650	-27.3
Fed. Rep.						
Value	(\$000)	776	991	863	400	-19.8
United Kir		_			•-	
Value	(\$000)	704	359	638	280	-26.5
Austria						
Value	(\$000)	12	21	28	38	48.6
France		_	_			
Value	(\$000)	83	7	2	12	-48.1
Switzerlar						
Value	(\$000)	138	42	34	11	-56.4
Netherland		_				
Value	(\$000)	8	. 11	187	5	-13.9
Finland			_		_	
_ Value	(\$000)	109	1	-	2	-74.7
Taiwan			_	_	_	
Value	(\$000)	_ 26	1	9	1	-72.2
0ther						
Value	(\$000)	114	103	99	=	-6.6
Tota1						
Value	(\$000)	13 046	10 836	10 386	7 709	-16.1

III. CANADIAN IMPORTS (Cont'd)

BY MAJOR COUNTRY OF ORIGIN

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

Country of Origin		1988	1989	1990	1991	Average Annual Growth Rate 1988-91
						(%)
United Stat	tes	•				(,,,
Value	(\$000)	530	1 040	365	331	-14.6
Fed. Rep. o						11.0
Value	(\$000)	24	42	110	71	43.2
United King						
Value	(\$000)	15	14	53	17	5.0
Hong Kong						
Value	(\$000)	-	-	4	5	29.9
Netherlands		_		_	_	
Value	(\$000)	· 5	_	1	4	-5.5
Italy	(4000)				2	0.0
Value Republic of	(\$000)	_	-	-	3	0.0
Value	(\$000)	_			3	0.0
Japan	(\$000)	-	_	_	3	0.0
Value	(\$000)	15	1	10	2	-52.8
Other	(ψοσο)	10	•	10	۷	-32.0
Value	(\$000)	36	5	24	_	-19.2
	,					
Total						
V alue	(\$000)	625	1 101	566	436	-11.3

III. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY MAJOR COUNTRY OF ORIGIN

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

Country				
of Origin	1988	1989	1990	1991
	00 00 cm 00			
	%	%	%	%
United States				
Value	55.3	61.0	61.8	55.7
United Kingdom				
Value	10.3	8.7	7.2	17.3
Fed. Rep. of Germany				
Value	10.3	29.5	30.2	16.1
Italy				
Value	-	-	-	7.6
France				
Value	23.1	0.2	0.4	2.6
Japan		,		
Value	0.0	0.0	0.3	0.8
Taiwan				
Value	0.1	0.0	0.0	0.0
Other				
Value	1.0	0.5	0.0	0.0
Total				
Value	100.0	100.0	100.0	100.0

III. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY MAJOR COUNTRY OF ORIGIN

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Country				
of Origin	1988	1989	1990	1991
	%	%	%	%
United States	70.0			
Value	72.0	75.7	75.5	81.9
Japan	10.0	10.1		
Value	13.0	10.1	6.6	8.4
Fed. Rep. of Germany	г о			
Value	5.9	9.1	8.3	5.2
United Kingdom	- .		,	نہ یہ
Value	5.4	3.3	6.1	3.6
Austria	0.1			
Value	0.1	0.2	0.3	0.5
France	0.6	0.1	0.0	
Value	0.6	0.1	0.0	0.1
Switzerland	. 1 1	0.8	0.0	0.1
Value Netherlands	1.1	0.4	0.3	0.1
Value	0 1	0 1	1.0	0 1
Finland	0.1	0.1	1.8	0.1
Value	0.8	0.0		0.0
Taiwan	0.0	0.0	-	0.0
Value	0.2	0.0	0.1	0.0
Other	0.2	0.0	0.1	0.0
Value	0.9	1.0	1.0	0.0
,	0.5	1.0	1.0	0.0
Total				
Value	100.0	100.0	100.0	100.0
	100.0	100.0	100.0	100.0

III. CANADIAN IMPORTS (Cont'd)

MARKET SHARES BY MAJOR COUNTRY OF ORIGIN

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

Country				
of Origin	1988	1989	1990	1991
~ ~ _ ~ ~ ~ _ = ~ ~ ~ = ~ ~ ~ = ~ ~ ~ = =		** ** CH CH	~~~~~	
	%	%	%	%
United States	04.0	04.4		75.0
Value	84.8	94.4	64.5	75.9
Fed. Rep. of Germany				
Value	3.9	3.8	19.4	16.4
United Kingdom				
Value	2.3	1.3	9.3	3.9
Hong Kong				
Value	-	-	0.7	1.2
Netherlands				
Value	0.8	to	0.1	0.9
Italy				
Value		-	-	0.8
Republic of Korea				
Value	_	-	-	0.6
Japan				
Value	2.4	0.1	1.7	0.4
Other				
Value	5.8	0.4	4.2	0.0
Total				
Value	100.0	100.0	100.0	100.0
· · · · · ·				

IV. CANADIAN PRODUCTION

Statistics Canada reports that instruments and apparatus for measuring or detecting ionizing radiations 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 OT6 Tel.: (613) 951-3523

V. CANADIAN EXPORTS BY MAJOR COUNTRIES OF DESTINATION

INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING IONIZING RADIATIONS (H.S. 9030.10)

1989		1990		1991	Ĺ
Country	<u>Value</u> (\$000)	<u>Country</u>	<u>Value</u> (\$000)	Country	<u>Value</u> (\$000)
U.S.	1 326	U.S.	5 431	U.S.	5 376
France	117	S. Arabia	382	U.K.	226
India	97	U.K.	309	France	135
Italy	77	Brazil	148	Argentina	96
S. Korea	74	France	94	Czechos.	52
U.K.	60	Ireland	68	W. Germany	38
Netherlands	49	Jordan	53	Italy	35
Sweden	42	U.A.E.	50	Japan	34
Switzerland	39	Australia	36	Spain	23
Australia	37	W. Germany	26	U.A.E.	22
Others	<u>267</u>	Others	118	Others	107
TOTAL	2 184		6 717		6 145

Note: Major countries in descending order based upon value. Source: Statistics Canada

VI. CANADIAN IMPORTERS - 1990

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

There were 74 known importers of alpha-beta geiger counters; geiger-mueller counters; instruments and apparatus for measuring or detecting nuclear radiation in 1990. The principal ten importers accounted for 83 per cent of the total import value.

Principal <u>Importers</u> (No.)	Cumulative Value (\$000)	Cumulative % of Total Value
3	1 918	53
6	2 583	71
10	3 034	83
15	3 302	91
25	3 469	95
All Importers (74)	3 640	100

Major importers of alpha-beta geiger counters; geiger-mueller counters; instruments and apparatus for measuring or detecting nuclear radiation 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>
Atomic Energy of Canada Ltd.	Ottawa, Ont. Pinawa, Man.	Memorial University of Nfld. Merlan Scientific Ltd.	St. John's, Nfld. Georgetown, Ont.
Canberra-Packard Canada Ltd.	Mississauga, Ont.	Merlin-Gerin Canada Ltée.	Boucherville, Qué.
Ciba Corning Canada Inc.	Richmond Hill, Ont.	Montréal Armature Co. Limited	Toronto, Ont.
Eberline Instruments Canada Ltd.	Pickering, Ont.	Ontario Hydro	Toronto, Ont.
EG & G Instruments Div.		Rayonics Scientific Inc.	Downsview, Ont.
of EG & G Canada Ltd.	Markham, Ont.	Reltek Incorporated	Kanata, Ont.
Ford Motor Company of		Safety Supply Canada Ltd.	Richmond Hill, Ont.
Canada Ltd.	Oakville, Ont.	Saskatchewan Research Council	Saskatoon, Sask.
G E C Canada Ltd.	Mississauga, Ont.	The New Brunswick Electric	
GEC Alsthom International	Mississauga, Ont.	Power Commission	Fredericton, N.B.
ICN Bio Medical Canada Ltd.	Montréal, Qué.	Theratronics International Ltd.	Kanata, Ont.
Labserco Limited	Oakville, Ont.	Triumf	Vancouver, B.C.
Laurentide Controls Ltd.	Pointe-Claire-Dorval, Qué.	University Of British Columbia Western Atlas Canada Ltd.	Vancouver, B.C. Calgary, Alta.
McMaster University	Hamilton, Ont.	Westinghouse Canada Limited	Hamilton, Ont.

VI. CANADIAN IMPORTERS - 1990 (Cont'd)

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

There were 329 known importers of other: electrical instruments and apparatus in 1990. The principal 25 importers accounted for 71 per cent of the total import value.

Principal Importers (No.)	Cumulative <u>Value</u> (\$000)	Cumulative % of Total Value
3	2 818	27
6	4 087	39
10	5 270	51
15	6 258	60
25	7 383	71
41	8 342	80
All Importers (329)	10 386	100

Major importers of other: electrical instruments and apparatus 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>	Address	<u>Name</u>	Address
Allen Crawford Associates Ltd.	Mississauga, Ont.	Eberline Instruments Canada Ltd.	Pickering, Ont.
Alpha Technologies Ltd.	Burnaby, B.C.	EG & G Instruments Div. of	
Aptec Engineering Ltd.	Downsview, Ont.	EG & G Canada Ltd.	Markham, Ont.
Arius Canada Ltd.	Winnipeg, Man.	Engel Canada Inc.	Guelph, Ont.
Beckman Instruments Canada Inc	c.Mississauga, Ont.	F A G Bearings Ltd.	Stratford, Ont.
C D Nova Ltd.	Burnaby, B.C.	F/R Imaging Inc.	Burnaby, B.C.
Cabletel Communications		Gandalf Technologies Inc.	Nepean, Ont.
Inc. (1986)	Markham, Ont.	Health Sciences Centre, The	Winnipeg, Man.
Canadian Medical Laboratories	Mississauga, Ont.	Hitachi Denshi Ltd.	Scarborough, Ont.
Canadian Scientific Products	- '	Honeywell Ltd.	Scarborough, Ont.
Limited	Hyde Park, Ont.	Hotel Dieu De Quebec	Quebec, Qué.
Canberra-Packard Canada Ltd.	Mississauga, Ont.	Interfax Systems Inc.	Montréal, Qué.
Cansec Electronics Ltd.	Winnipeg, Man.	Kellogg Canada Inc.	Etobicoke, Ont.
Chrysler Canada Limited	Windsor, Ont.	Labserco Limited	Oakville, Ont.
D & L Metals Ltd.	Windsor, Ont.	Link Analytical Canada	Mississauga, Ont.
Department Of National Defence	Ottawa, Ont.	McMaster University	Hamilton, Ont.
Department of Communications	Ottawa, Ont.	Merlan Scientific Ltd.	Georgetown, Ont.

VI. CANADIAN IMPORTERS - 1990 (Cont'd)

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

<u>name</u>	Address	<u>name</u>	Address
Nissei Sangyo Canada Inc.	Etobicoke, Ont.	Recom Engineering Ltd.	Edmonton, Alta.
Northeastern Ontario		Ronan Engineering Ltd.	Toronto, Ont.
Oncology Program	Sudbury, Ont.	Safety Supply Canada Ltd.	Richmond Hill, Ont.
Northern Telecom Ltd.	Etobicoke, Ont.	Saskatchewan Telecommunication	n Regina, Sask.
Ontario Cancer Institute	Toronto, Ont.	Tektronix Canada Inc.	Barrie, Ont.
Ontario Hydro	Toronto, Ont.	Tractor Northern Canada	Etobicoke, Ont.
Philips Electronics Ltd.	Montréal, Qué.	University Of Guelph	Guelph, Ont.
Photon Technology		Valmet Automation Inc.	Pointe-Claire-Dorval,
International (Canada) Inc.	London, Ont.		Qué.
Prodatel Communications Inc.	Laval, Qué.	Wandel & Goltermann	Scarborough, Ont.
R C C Electronics Ltd.	Etobicoke, Ont.	Westinghouse Canada Limited	Hamilton, Ont.
Rayonics Scientific Inc.	Downsview, Ont.	Weyerhaeuser Canada Ltd.	Kamloops, B.C.

VI. CANADIAN IMPORTERS - 1990 (Cont'd)

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

There were 80 known importers of other: instruments and apparatus in 1990. The principal 11 importers accounted for 64 per cent of the total import value.

Principal <u>Importers</u> (No.)	Cumulative <u>Value</u> (\$000)	Cumulative % of Total Value
3	198	35
6	293	52
10	349	62
11	360	64
25	473	84
All Importers (80)	566	100

Major importers of other: instruments and apparatus 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>	Address	<u>Name</u>	<u>Address</u>
Allied Broadcasting Equipment Canada Ltd.	Richmond Hill, Ont.	Isomedix Corporation Kockums Cancar, Div. of Hawker	Whippany, NJ, USA*
Boreal Laboratories Ltd.	Mississauga, Ont.	Siddeley Cda Inc.	Surrey, B.C.
Bubble Technology Industries Inc.	Chalk River, Ont.	Labserco Limited Lockheed Canada Inc.	Oakville, Ont. Ottawa, Ont.
Canadian Institute For Radiation Safety	Toronto, Ont.	LOF Glass of Canada Ltd. Nintendo of Canada Ltd.	Collingwood, Ont. Richmond, B.C.
Canberra-Packard Canada Ltd. Crosfield (Canada) Inc.	Mississauga, Ont. Mississauga, Ont.	Ontario Hydro Raintree Products Ltd.	Toronto, Ont. Toronto, Ont.
Department of Revenue & Financial Services	Regina, Sask.	Saunders-Roe Canada Inc. Sears Canada Inc.	Pembroke, Ont. Scarborough, Ont.
F A G Bearings Ltd.	Stratford, Ont.	Stuart Hunt & Associates	St. Albert, Alta.
Hoffman Laroche Ltd. Honeywell Ltd.	Mississauga, Ont. Scarborough, Ont.	Université d'Ottawa University of Toronto	Ottawa, Ont. Toronto, Ont.
Huyck Canada Ltd.	Arnprior, Ont.	University Of Waterloo, The	Waterloo, Ont.

^{*} Non resident importer.

VII. FOREIGN EXPORTERS TO CANADA - 1990

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

Major exporters to Canada of alpha-beta geiger counters; geiger-mueller counters; instruments and apparatus for measuring or detecting nuclear radiation are listed by major country of origin in descending order of dollar value of exports to Canada in 1990. These exporters accounted for 91 per cent of the total value of Canadian imports during 1990.

Country of Origin	Name of Foreign Exporter		Value of Exports to Canada 1990 (\$000)
Fed. Rep. of Germany United States	Herfurth Gmbh Eberline Instrument Corp.)	1 539*
United Kingdom	EG & G Instruments GEC Alsthom Measurements)	405*
United States	Victoreen Instruments Nuclear Research Corp. Environment)))	377*
	Imaging & Sensing Tech Tennelec/Nucleus Inc.)	188*
	Canaberra Industries Inc. Dosimeter Corp.)	179*
	Merlin Gerin Inc.		88
	Nuclear Associates		53
	Bicron Corp.		52
	N.E. Technology Ltd. Ludlum Measurements Inc.)	88*
United Kingdom United States	N E Technology Ltd. Ackard Instruments)	74*

^{*} Aggregated to preserve confidentiality of Canadian Importers.

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

ALPHA-BETA GEIGER COUNTERS; GEIGER-MUELLER COUNTERS; INSTRUMENTS AND APPARATUS FOR MEASURING OR DETECTING NUCLEAR RADIATION (H.S. 9030.10.10.00)

Country of Origin	Name of Foreign Exporter	Name of Foreign Exporter			
United Kingdom United States	R.A. Stephen Reuter Stokes)	60*		
Fed. Rep. of Germany United States	Laboratorium Prof. Dr. Berthold Gmbh Thge Ohmart Parkard)))	68*		
	Engelhard Industries		18		
	Laboratory Technologies Nuclear Consulting Teha,tpc)))	48*		
·	Iso Data Princeton Gamma Tech Teledyne Isotopes)))	39*		
United Kingdom United States	Princeton Corporated Plaza Moisture Systems Corp. Ird Mechanalusis Inc.))·	33*		
TOTAL			3 309		

^{*} Aggregated to preserve confidentiality of Canadian Importers.

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

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Major exporters to Canada of other: electrical instruments and apparatus are listed by major country of origin in descending order of dollar value of exports to Canada in 1990. These exporters accounted for 79 per cent of the total value of Canadian imports during 1990.

Country of Origin	Name of Foreign Exporter		Value of Exports to Canada 1990 (\$000)
United States United Kingdom	Tektronix Inc. Beckman Instruments Inc. Link Analytical Ltd.)))	2 501*
United States	Wavetek Products		386
Japan Fed. Rep: of Germany United States	Advantest America Inc. Wandel & Goltermann Tracor Northern Inc.)))	812*
	Scientific Atlanta Inc. Eberline Instruments)	431*
Netherlands United States	Imaging and Sensing Tech Corp. Von Gahlen Nederland Canberra Industries Inc.)))	560*
	Eg and G Instruments		183
Fed. Rep. of Germany	Laboratorium Prof Dr Berthol		173
Japan United States	Herfuth Hitachi Denshi Ltd. Englehard Corp.)))	463*
Fed. Rep. of Germany	Bell Northern Research Wellhofer Dosimetrie)	257*
United States	Ronan Engineering Inc. Precision Filters Inc.)	251*
•	Moisture Systems Corporated		121
Japan United States	Tektronix Ludlum Measurements Inc.)	230*

^{*} Aggregated to preserve confidentiality of Canadian Importers.

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

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Country of Origin	Name of Foreign Exporter		Value of Exports to Canada 1990 (\$000)		
United States (Contd)	Packard Instruments Co. Inc.	Packard Instruments Co. Inc.			
	Solon Technologies Inc.)	216*		
	Tennelec Nucleus Inc.		90		
	Signetics National Nuclear Von Galhem International Corp.)))	246*		
Fed. Rep. of Germany United States	Fag Kugelfischer Berthold Systems Inc.)	143*		
	Sorrento Philips Electronics)	128*		
	Ne America Testron Corp.)	122*		
	Frequency & Time Systems Polymedco Inc. Virginia Panel Interface)))	165*		
	Fire Defense Dosimeter Corporation)	101*		
	Reuter Stokes Inc.		50		
	Bicron Corporation		48		
	A B Chance Co.		40		
	Alnor Nuclear Corporation Princeton Gamma Tech)	65*		
	Visonic Ltd. Chemagnetics CPC Supplies)))	88*		
	Delco Products Gandalf Data Inc. Williamsburg Mfg)))	87*		

^{*} Aggregated to preserve confidentiality of Canadian Importers.

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

OTHER: ELECTRICAL INSTRUMENTS AND APPARATUS (H.S. 9030.10.91.00)

Country of Origin	Name of Foreign Exporter		Value of Exports to Canada 1990 (\$000)
United States (Cont'd) Japan	Watkins-Johnson Intl. Mackie 3M Specialties)	79*
United States	Nti/Minnetonka)	
United Kingdom	Ionics Instrument Division Centronic Ltd. New Technology)	69*
Fed. Rep. of Germany	Dosimeter Corp. Cmte Berthold Analytical Inc.)))	57*
United Kingdom	Beckman Riic Molspin)	36*
United Kingdom	Wandel and Goltermann)	-
TOTAL			8 198

^{*} Aggregated to preserve confidentiality of Canadian Importers.

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

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

Major exporters to Canada of other: instruments and apparatus are listed by major country of origin in descending order of dollar value of exports to Canada in 1990. These exporters accounted for 83 per cent of the total value of Canadian imports during 1990.

Country of Origin	Name of Foreign Exporter	Value of Exports to Canada 1990 (\$000)	
United States Fed. Rep. of Germany	Crosfield Laboratorium Prof Dr Berthold Gmbh Fag Kugelfischer)))	181*
United States	Harris Corp. NDC Systems)	59*
United Kingdom United States	Saunders Roe Developments Kevex Instruments Isomedix Corporation)))	52*
United Kingdom United States	Carco World Ltd. Dupont and Fujifilm Lockheed Electronics Corp.)))	· 35* .
	Kockums Cancar Corp. Ludium Measurements Inc.)	19*
	Holaday Industries Inc. Central Scientific)	18*
	Princeton Gamma Tech. Keithley Instruments Inc. Honeywell Ltd.)))	24*
	Radon Environmental Monitoring Canberra Industries)	14*

 $[\]mbox{*}$ Aggregated to preserve confidentiality of Canadian Importers.

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

OTHER: INSTRUMENTS AND APPARATUS (H.S. 9030.10.99.00)

Country of Origin	Name of Foreign Exporter	Value of Exports to Canada 1990 (\$000)	
United Kingdom United States	Biotrack Dantec Electronics Inc. Macom)	18*
	Amsco Service Tracerco Inc. Time Mark Corp.) } }	13*
	Teledyne Isotopes Srb Tech Inc. General Microwave)))	12*
	Eti Systems Inc. Dasimeter Berthold Systems)))	12*
United Kingdom United States	Dawtric Electronics Strmens South Manufacturing Co.))	10*
TOTAL			467

^{*} Aggregated to preserve confidentiality of Canadian Importers.

VIII. 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.

Nuclear Radiation Detecting & Measuring Instruments

Name

*Alpha Nuclear Company

*Aptec Engineering Limited

*Bubble Technology Industries Inc.

*Cyberscope Industries Inc.
Datalog Technology Inc.

*DBS Escher WYSS

*EDA Instruments Inc.

*Exploranium G.S. Ltd.

Foxboro Canada Inc.

Graphic Controls Canada Ltd.

Gray Instruments Inc.

High Vacuum Systems Inc.

*Inspectech Div. of Inspectech Analygas International Radiochemical Centre Inc.

MIL Davie Inc.

National Electrical Carbon Canada

*Picodas Group Inc.

*Pylon Electronic Development Co. Ltd.

*Pylon Electronics Inc.

*R.A.D. Service & Instruments Ltd.

Richard Brancker Research Ltd.

*Russell Technologies Inc.

*Scintrex Limited

*Thomson & Nielsen Electronics Ltd.

*Tri-Met Instruments Ltd.

*Urtec Instruments Sales Ltd.

Address

Mississauga, Ont. Concord, Ont. Chalk River, Ont. Edmonton, Alta. Calgary, Alta. Lachine, Qué. Toronto, Ont. Bolton, Ont. Dollard-des-Ormeaux, Qué. Gananoque, Ont. Calgary, Alta. Mississauga, Ont. Edmonton, Alta. Edmonton, Alta. Levis, Qué. Mississauga, Ont. Richmond Hill, Ont. Lachine, Qué. Nepean, Ont. Scarborough, Ont. Ottawa, Ont. Edmonton, Alta. Concord, Ont. Ottawa, Ont. Winnipeg, Man. Markham, Ont.

^{*} Company engaged in export trade.

VIII. CANADIAN SUPPLIERS (Cont'd)

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

CANADIAN TRADE INDEX

Companies are arranged in alphabetical order.

Instruments, Radioactivity Measuring

<u>Name</u>

*Alphanuclear Co. *Aptec Engineering Limited Cyberscope Industries Inc. Non-Destructive Testing Products Limited *Pylon Electronic Development Company Ltd. Rayonics Scientific Inc. Russell Technologies Inc. Scintrex Limited Urtec Instruments Sales Limited

Address

Mississauga, Ont. Downsview, Ont. Edmonton, Alta. Oakville, Ont. Ottawa, Ont. Downsview, Ont. Edmonton, Alta. Concord, Ont. Markham, Ont.

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

The Canadian Manufacturers' Association 4th Floor 75 International Boulevard

Etobicoke, Ontario M9W 6L9

Tel.: (416) 798-8000 Fax.: (416) 798-8050

^{*} Company engaged in export trade.

IX. CANADIAN AND FOREIGN TARIFFS

Instruments and apparatus for measuring or detecting ionizing radiations included in this report are dutiable under the following Canadian tariff items.

		Tariff Treatment - 1992		
Tariff <u>Item</u>	Description of Goods	Most Favoured Nation Tariff	General Preferential Tariff	United States Tariff
9030.10.10	Alpha-beta geiger counters: instruments and apparatus for measuring or detecting nuclear radiation	10.3%	6.5%	6.1%
9030.10.91	Other: electrical instruments and apparatus	FREE	FREE	FREE
9030.10.99	Other: instruments and apparatus	7.5%	2.5%	4.5%

TARIFF ARRANGEMENTS AND FOREIGN COUNTRIES OF EXPORT

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

Exporting countries which qualify for the Most Favoured Nation tariff treatment or General System of Preference tariff treatment*: Hong Kong, Israel.

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

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

IX. CANADIAN AND FOREIGN TARIFFS (Cont'd)

Instruments and apparatus for measuring or detecting ionizing radiations included in this report are dutiable under the following U.S. tariff items:

Towiss	·	Rates of Duty - 1992			
Tariff <u>Item</u>	Description of Goods	General	Special(1)	2	
9030.10.00	Instruments and apparatus for measuring or detecting ionizing radiations	4%	FREE (A,C,E,IL) 2.8% (CA)	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	Α
	Agreement on Trade in Civil Aircraft	Ċ
	United States-Canada Free-Trade Agreement	CA
	Caribbean Basin Economic Recovery Act	Ε
	United States-Israel Free Trade Area	IL

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

X. UNITED STATES IMPORTS

BY MAJOR COUNTRY OF ORIGIN

IONIZING RADIATION DETECTORS (H.S. 9030.10.00.00)

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

Country of Origin		19	989]	1990]	1991	Average Annual Growth Rate 1989-91
		2	3 8 3 392	2 5	759 700	2 6	751 098	(%) 7.4 34.1
Finland Quantity () Value () Canada	No.) \$000)	1 5	509 635		417 635	5	910 484	-22.3 -1.3
Quantity (\$00 0)		745 812		988 507	5	254 366	
Quantity (No.) \$000)		458 306		902 224		193 470	-39.2 39.2
Quantity (No.) \$000)		879 162		135 121		484 339	66.2 24.3
Quantity (No.) \$000)		542 864		482 097		932 274	44.0 6.9
Quantity (No.) \$000)	3 4	685 483	1 3	704 609		300 876	-40.6 -19.9
Quantity (No.) \$000)		573 391		776 468		465 614	59.9 103.1
Quantity (No.) \$000)		239 614		263 843	1	555 134	52.4 35.9
Quantity (No.) \$000)		641 13	2	815 39	6	551 113	219.7 194.7
Quantity (No.) \$000)	. 3	954 837		330 544		460 370	-65.9 -55.1
Total Quantity (Value (No.) \$000)	63 26	608 510		571 786	88 34	855 139	18.2 13.5

Ranked in descending order by 1991 value. Canada ranked 3 overall.

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dISTCovery introduces you to companies and organizations from around the world who are willing to licence the right to manufacture and sell their product or use their process or know-how in an agreed market area. The reverse is also possible. A Canadian company can also use dISTCovery to promote their unique product or process for licensing internationally.

For more information on these and other opportunities, contact the nearest ISTC Regional Office listed at the end of this publication or the Market Intelligence and Technology Opportunities Service at (613) 954-4040.



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OR

FOR MORE INFORMATION PLEASE CONTACT:

Market Intelligence Division Services to Business Branch Industry, Science and Technology Canada 235 Queen Street Ottawa, Ontario K1A 0H5

Tel.: (613) 954-4970 Fax.: (613) 954-5463 **Environmental Industries Directorate Environmental Affairs Branch** Industry, Science and Technology Canada 235 Queen Street Ottawa, Ontario K1A 0H5

Tel.: (613) 954-3211 Fax.: (613) 954-3430

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401-119 4th Avenue South Saskatoon, Sask. S7K 5X2 Tel.: (306) 975-4386 Fax.: (306) 975-5334

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ISTC Suite 900 Scotia Tower 650 West Georgia St. P.O. Box 11610 Vancouver, B.C. V6B 5H8

Tel.: (604) 666-0266 Fax.: (604) 666-0277

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Fax.: (403) 495-4507

YUKON

ISTC Suite 210 300 Main Street Whitehorse, Y.T. Y1A 2B5

Tel.: (403) 667-3921 Fax.: (403) 668-5003

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ISTC 1st Floor, East Tower 235 Queen Street Ottawa, Ont. K1A 0H5 Tel.: (613) 952-ISTC

Fax.: (613) 957-7942

ISTC **Suite 1100** 510-5th Street Southwest Calgary, Alta. T2P 3S2 Tel.: (403) 292-4575 Fax.: (403) 292-4578

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ISTC 10th Floor Precambrian Building P.O. Bag 6100 Yellowknife, N.W.T. X1A 2R3

Tel.: (403) 920-8568 Fax.: (403) 873-6228