

HF
3221
.A1
C3
no.91-87
to 95-87



IMPORT PROFILE

Investment Opportunities

FIRE BRICKS

Pub. Nos.: 91-87 to 95-87 October 1987



Government
of Canada

Regional Industrial
Expansion

Gouvernement
du Canada

Expansion industrielle
régionale

Canada

DEPARTMENT OF REGIONAL
INDUSTRIAL EXPANSION
LIBRARY

FEB 9 1988

BIBLIOTHEQUE
MINISTERE DE L'EXPANSION
INDUSTRIELLE REGIONALE

FIRE BRICKS

Pub. Nos.: 91-87 to 95-87 October 1987

Including:

Fire bricks and Similar Shapes with Alumina	91-87
Fire bricks and Similar Shapes with Chrome	92-87
Fire bricks and Similar Shapes with Magnesite	93-87
Fire bricks and Similar Shapes with Silica	94-87
Fire bricks and Similar Shapes, Not Elsewhere Specified	95-87

AMERICAN TO BEING BASED
INDUSTRY EXPANSION
FOR MORE INFORMATION PLEASE CONTACT:

Market Information and Analysis Division
Market Development Branch
Department of Regional Industrial Expansion
235 Queen Street
Ottawa, Ontario
Tel: (613) 954-4970

OR

Metals and Minerals Processing Division
Metals and Minerals Directorate
Resource Processing Industries Branch
Department of Regional Industrial Expansion
235 Queen Street
Ottawa, Ontario
K1A 0H5
Tel: (613) 954-3131

OR

The nearest DRIE Regional Office.
These offices are listed on the last
page of this publication.

REFERENCE SOURCES

Department of Regional Industrial Expansion
Statistics Canada
Revenue Canada
Supply and Services Canada

EXPLANATORY NOTES

Valuation

Imports are generally recorded at the values established for customs duty purposes according to the provisions of the Customs Act. Customs values are identical to selling prices for most transactions between non-affiliated companies, but customs values exceed selling prices for many transactions between affiliated companies. All values are reported in Canadian dollars and do not include duty.

Average Growth Rate

Growth rates are calculated on the basis of annual compounding.

Rounding

Figures may not add due to rounding.

S U M M A R Y T A B L E O F C O N T E N T S

<u>PUBLICATION NUMBER</u>	<u>IMPORT PRODUCT</u>	<u>PAGE</u>
91-87 to 95-87	AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS	7
91-87	PART A - FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA	19
92-87	PART B - FIRE BRICKS AND SIMILAR SHAPES WITH CHROME	27
93-87	PART C - FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE	33
94-87	PART D - FIRE BRICKS AND SIMILAR SHAPES WITH SILICA	41
95-87	PART E - FIRE BRICKS AND SIMILAR SHAPES, NOT ELSEWHERE SPECIFIED	49

DETAILED TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION AND SCOPE	6
 <u>AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS (91-87 to 95-87)</u>	
- IMPORT TRENDS: OVERVIEW	7
- IMPORTS TRENDS BY TYPE	8
- CANADIAN PRODUCTION	9
- CANADIAN EXPORTS	9
- UNITED STATES' IMPORTS	9
- MARKET SUMMARY	10
- APPENDIX A - UNITED STATES' IMPORTS BY COUNTRY OF ORIGIN - 1985	11
- APPENDIX B - CANADIAN TARIFFS	12
- APPENDIX C - CANADIAN IMPORTERS	13
 <u>PART A - FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA (91-87)</u>	
- IMPORT TRENDS: OVERVIEW	21
- IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT	22
- IMPORTS BY PROVINCE OF CLEARANCE	23
- IMPORT MARKET CONCENTRATION	24
- TYPE AND LOCATION OF TOP IMPORTERS	24
- APPENDIX A - IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE	25
 <u>PART B - FIRE BRICKS AND SIMILAR SHAPES WITH CHROME (92-87)</u>	
- IMPORT TRENDS: OVERVIEW	29
- IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT	30
- IMPORTS BY PROVINCE OF CLEARANCE	31
- IMPORT MARKET CONCENTRATION	32

DETAILED TABLE OF CONTENTS (Continued)

	<u>PAGE</u>
<u>PART C - FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE (93-87)</u>	
- IMPORT TRENDS: OVERVIEW	35
- IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT	36
- IMPORTS BY PROVINCE OF CLEARANCE	37
- IMPORT MARKET CONCENTRATION	38
- TYPE AND LOCATION OF TOP IMPORTERS	38
- APPENDIX A - IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE	39
<u>PART D - FIRE BRICKS AND SIMILAR SHAPES WITH SILICA (94-87)</u>	
- IMPORT TRENDS: OVERVIEW	43
- IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT	44
- IMPORTS BY PROVINCE OF CLEARANCE	45
- IMPORT MARKET CONCENTRATION	46
- TYPE AND LOCATION OF TOP IMPORTERS	46
- APPENDIX A - IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE	47
<u>PART E - FIRE BRICKS AND SIMILAR SHAPES, NOT ELSEWHERE SPECIFIED (95-87)</u>	
- IMPORT TRENDS: OVERVIEW	51
- IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT	52
- IMPORTS BY PROVINCE OF CLEARANCE	53
- IMPORT MARKET CONCENTRATION	54
- TYPE AND LOCATION OF TOP IMPORTERS	54
- IMPORT TRENDS: SUMMARY	55
- APPENDIX A - IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE	56
- APPENDIX B - IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT BY TYPE:	
- B1 - SUPER DUTY	57
- B2 - INSULATING	58
- B3 - STOPPER HEADS	59
- B4 - NOT ELSEWHERE SPECIFIED	60
DRIE REGIONAL OFFICES	61

PUB. NOS.: 91-87 to 95-87
IMPORT COMMODITY CODES - 472-51 TO 472-62

CANADIAN MARKET OPPORTUNITIES - IMPORT PROFILE

FIRE BRICKS AND SIMILAR SHAPES

INTRODUCTION AND SCOPE

This report is one of a continuing series designed to increase business awareness of the potential existing for domestic production and to stimulate Canadian business to further explore potential opportunities in both the Canadian and export markets. It is important to emphasize that this report does not attempt any assessment as to the feasibility of manufacturing or competing in a particular market and should be treated as an indicator or starting point for the manufacturer or entrepreneur.

Fire bricks are made from clay and other materials and have the ability to retain their physical shapes and chemical identities when subjected to high temperatures. They are used in such industries as iron and steel, non-ferrous metals and cement as well as in some sectors of glass, ceramic and chemical products.

There are different types of fire bricks used by industry. This report covers imports of fire bricks and similar shapes classified in five product groups according to the Import Commodity Classification (M.C.C.). The first four import codes indicate the percentage of mineral content of fire bricks. These are:

<u>Code</u>	<u>Description</u>	<u>Mineral Content</u>
472-51	Fire Bricks and Similar Shapes	47 Per Cent and Over of Alumina
472-53	Fire Bricks and Similar Shapes	34 Per Cent and Over of Chrome
472-56	Fire Bricks and Similar Shapes	53 Per Cent and Over of Magnesite
472-59	Fire Bricks and Similar Shapes	80 Per Cent and Over of Silica

When the mineral content is less than that indicated in the above codes, or in some instances have been omitted from the import documents, the fire bricks are coded to the following MCC class:

472-62	Fire Bricks and Similar Shapes	Not Elsewhere Specified (N.E.S.)
--------	--------------------------------	----------------------------------

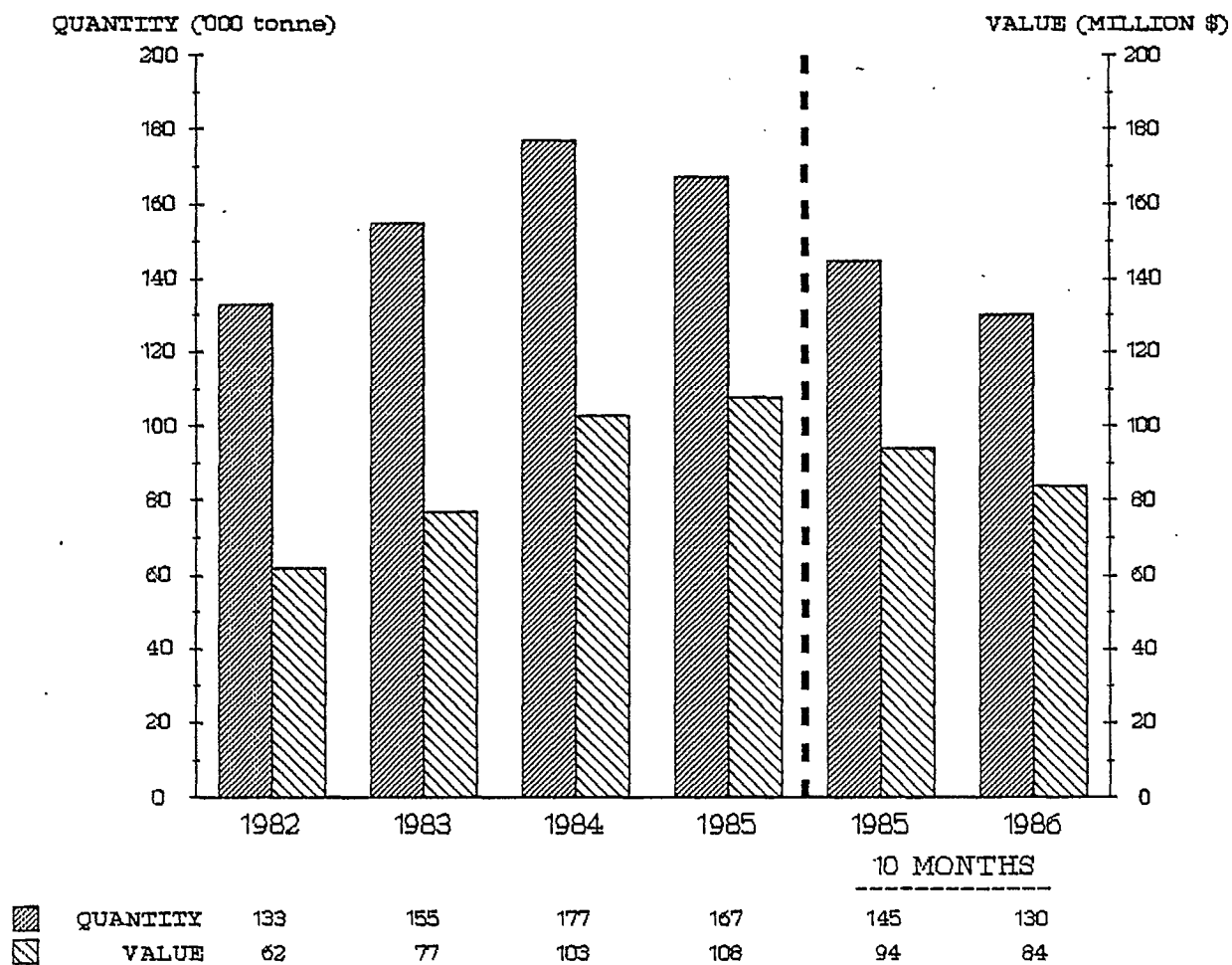
This N.E.S. class is sub-divided into four Canadian International Trade Classification (C.I.T.C.) classes as follows:

472-62-20	Fire Bricks and Similar Shapes, Super Duty
472-62-30	Fire Bricks and Similar Shapes, Insulating
472-62-50	Fire Bricks and Similar Shapes, Stopper Heads
472-62-90	Fire Bricks and Similar Shapes, Not Elsewhere Specified

- NOTE: (1) This report is divided into six parts. The first part provides aggregated data for all types of fire bricks. The next five parts (A to E) cover data for each specific type of fire bricks.
- (2) In this report, when the term "fire bricks" is mentioned, it should be understood to refer to "fire bricks and similar shapes".

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

IMPORT TRENDS: OVERVIEW



Between 1982 and 1984, imports of all types of fire bricks rose from 133 thousand tonnes to 177 thousand tonnes. They dropped to 167 thousand tonnes in 1985. Between 1982 and 1985, total value of imports increased from \$62 to \$108 million.

For the first 10 months of 1986, quantity and value of imports decreased by 10 and 11 per cent respectively when compared to the same period in 1985.

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

IMPORT TRENDS BY TYPE

M.C.C. Commodity Code	Description	1982	1983	1984	1985	Average Annual Growth Rate 1982-1985 %	Major Country of Export		10-Month Imports	
							1985 Value (\$000)	Per Cent of Total	Jan. to Oct. 1985	1986
472-51	With Alumina									
	Quantity (tonne)	14 050	20 176	24 750	27 989	26	United States		23 902	17 349
	Quantity (TON)	15 487	22 240	27 282	30 852	26			26 347	19 124
	Value (\$000)	13 007	16 347	20 682	23 628	22	22 160	94	20 619	15 181
	Unit Price \$/tonne	926	810	836	844				863	875
	\$/TON	840	735	758	766				783	794
472-53	With Chrome									
	Quantity (tonne)	190	534	1 539	219	5	United States		219	224
	Quantity (TON)	209	589	1 697	241	5			241	247
	Value (\$000)	222	492	1 848	356	17	356	100	356	401
	Unit Price \$/tonne	1 168	921	1 200	1 626				1 626	1 790
	\$/TON	1 062	835	1 090	1 477				1 477	1 623
472-56	With Magnesite									
	Quantity (tonne)	12 462	18 927	21 592	25 050	26	United States		21 477	16 565
	Quantity (TON)	13 738	20 864	23 802	27 611	26			23 674	18 260
	Value (\$000)	11 174	19 093	25 841	28 741	37	22 034	77	24 273	20 238
	Unit Price \$/tonne	897	1 009	1 197	1 147				1 130	1 222
	\$/TON	813	915	1 086	1 041				1 025	1 108
472-59	With Silica									
	Quantity (tonne)	2 985	3 027	3 918	1 956	-13	United States		1 702	1 555
	Quantity (TON)	3 290	3 337	4 319	2 156	-13			1 876	1 715
	Value (\$000)	2 406	2 671	3 292	3 299	11	2 822	86	2 866	1 940
	Unit Price \$/tonne	806	882	840	1 687				1 684	1 248
	\$/TON	731	800	762	1 544				1 527	1 131
472-62	Not Elsewhere Specified									
	Quantity (tonne)	102 916	112 131	124 968	111 978	3	United States		97 372	94 534
	Quantity (TON)	113 447	123 605	137 753	123 434	3			107 334	104 207
	Value (\$000)	35 256	38 395	50 927	52 439	14	42 515	81	45 569	45 833
	Unit Price \$/tonne	343	342	408	468				468	485
	\$/TON	311	311	370	425				425	440
TOTAL	Quantity (tonne)	132 603	154 795	176 767	167 192	8	United States		144 672	130 227
	Quantity (TON)	146 168	170 636	194 852	184 294	8			159 472	143 543
	Value (\$000)	62 065	76 998	102 585	108 463	20	91 887	85	93 683	83 593
	Unit Price \$/tonne	468	497	580	649				647	641
	\$/TON	425	451	526	589				587	582

Barring the category whose mineral content was undefined in 1985, the value of imports of magnesite fire bricks was the most significant at \$29 million. Imports of alumina fire bricks followed with a value of \$24 million. These categories were also those showing the most growth. Both magnesite and alumina experienced average annual growth rates of 26 per cent in terms of quantity and 37 and 22 per cent respectively in terms of value.

The United States was by far the principal exporting country for each of the categories of fire bricks under study.

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN PRODUCTION

There are at least six Canadian manufacturers of fire bricks; three are located in Québec, one in Ontario, one in Alberta and one in British Columbia. Statistics Canada reports data on fire bricks and similar shapes and refractories as follows:

	1983		1984	
	<u>QUANTITY</u> ('000 tonne)	<u>VALUE</u> (million \$)	<u>QUANTITY</u> ('000 tonne)	<u>VALUE</u> (million \$)
<u>Fire bricks and similar shapes:</u>				
- Alumina	15.9	10.5	(1)	(1)
- Magnesite	43.7	32.5	47.9	36.6
- Fire Clay	21.2	3.9	(1)	(1)
- Other Fire Bricks	-	(2)	54.3	30.5
<u>Refractories:</u>				
- Other Refractory Products	-	23.7	-	17.5
<hr/>				
TOTAL		70.6		84.6

NOTE: (1)Confidential - included in "other fire bricks and similar shapes"
 (2)Confidential - included in "other refractory products"

CANADIAN EXPORTS

Statistics Canada reports that exports of "fire bricks and similar shapes" during 1985 amounted to 38 thousand tonnes with a value of \$22 million.

UNITED STATES' IMPORTS

According to the United States Department of Commerce, U.S. imports of refractory and heat insulating bricks from all countries amounted to approximately 80.8 thousand tonnes in 1985. The value of these imports was C\$52.5 million. Canada accounted for 21.5 tonnes. The value of these imports was \$C16.7 million. For further details, see Appendix A, page 11.

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

MARKET SUMMARY

Refractories are defined as materials having the ability to retain their physical shapes and chemical identities when subjected to high temperatures. The refractories industry covers operations engaged in the manufacture of fire bricks made from clay and other materials as well as a wide range of crucibles, cements, tank liners, blocks, rings and floaters etc. which have heat, chemical and abrasion resistance properties.

The progress of the refractory industry is related closely to the levels of industrial and commercial activity in the country. The chief uses are in such industries as iron and steel, non-ferrous metals and cement as well as in some sectors of glass, ceramic and chemical products.

The industry tends to be both capital and energy intensive. There is continuous research, innovation and new product development taking place in the industry.

In Canada we have about 12 producing companies in the refractory sector plus several distributor firms. Annual production value has ranged up to \$132 million in recent years, but is probably currently about \$120 million annually. Production workers now total around 700 people.

Many of the Canadian producers have strong ties with foreign companies particularly in the United States which result in some advantages in research and marketing. In many cases energy costs and domestic raw materials provide advantages for producers in Canada. In other cases, materials such as specialty clays, bauxite and chrome ore, etc. are not available in Canada and have to be imported.

The substantial value of imports (\$108 million in 1985) coupled with the high growth rates witnessed for certain types (e.g. magnesite and alumina) indicate that significant opportunities may exist for increased domestic production.

This report was prepared by:

the Market Development Branch
in collaboration with the
Metals and Minerals Processing Division
Metals and Minerals Directorate
Resource Processing Industries Branch

DEPARTMENT OF REGIONAL INDUSTRIAL EXPANSION

Pub. Nos.: 91-87 to 95-87

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

UNITED STATES' IMPORTS BY COUNTRY OF ORIGIN - 1985

REFRACTORY AND HEAT INSULATING BRICKS

Due to differences in the import coding systems of the United States and Canada, the product content of commodity codes may differ slightly.

U.S. TARIFF SCHEDULE NUMBER	COMMODITY DESCRIPTION	COUNTRY OF ORIGIN	QUANTITY		VALUE(1) (C\$000)
			(tonne)	(TON)	
531-21-00	Chrome Bricks	Canada	-	-	2
		Federal Republic of Germany	96	105	1 148
		France	80	88	818
		Other	1	1	5
		Total	177	194	1 974
531-24-00	Magnesite Bricks	Canada	18 530	20 426	13 920
		Japan	1 820	2 007	3 088
		Austria	3 926	4 328	2 979
		Mexico	3 497	3 855	2 632
		Other	3 062	3 376	2 984
Total	30 837	33 992	25 603		
531-27-50	Bricks, Not Elsewhere Specified	Canada	3 007	3 316	2 778
		Federal Republic of Germany	32 237	35 541	11 162
		United Kingdom	4 896	5 397	3 669
		Japan	3 260	3 594	3 392
		Other	6 432	7 082	3 918
Total	49 832	54 930	24 919		
GRAND TOTAL		Canada	21 538	23 741	16 710
		Federal Republic of Germany	35 033	38 624	14 875
		Japan	5 080	5 601	6 484
		United Kingdom	5 094	5 615	3 894
		Other	14 086	15 535	10 538
		TOTAL	80 831	89 116	52 500

(1) Conversion factor for U.S. to Canadian dollars = 1.3652 (yearly average, 1985)

SOURCE: United States Department of Commerce. U.S. Imports for Consumption (Report No. IM 146, December, 1985).

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN TARIFFS

Tariff Item	Description	% of Total Import Value (1985)	Tariff Treatment				
			British Prefer- ential Tariff %	Most Favoured Nation Tariff %	General Tariff %	General Prefer- ential Tariff %	U.K. and Ireland %
28100-01	Rigid refractories (fire bricks, of any shape, size or composition)	98	Free	Free	15	Free	Free

Tariff Arrangements and Foreign Countries of Export:

Exporting countries which qualify for the Most Favoured Nation tariff treatment: United States,
Federal Republic of Germany, France, Spain, Switzerland, Denmark

Exporting country which qualifies for the Most Favoured Nation tariff treatment or U.K. and Ireland
tariff treatment: United Kingdom

ENQUIRIES CONCERNING 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) 954-6930

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN IMPORTERS

Importers of fire bricks and similar shapes during 1985, as indicated in this report, are listed below in alphabetical order. This list includes all importers except individuals and a minimal number of importers whose names were not available. The number in brackets following the names of the importers indicate the specific types of fire bricks they are importing as follows: (1) 47 per cent and over alumina; (2) 34 per cent and over chrome; (3) 53 per cent and over magnesite; (4) 80 per cent and over silica; (5) not elsewhere specified.

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
A A F Canada Ltd.(1)	Montréal, Qué.	Barmin Inc.(5)	Waterdown, Ont.
A H Lundberg Equipment Ltd.(1)	Richmond, B.C.	Baymag Mines Co. Ltd.(5)	Calgary, Alta.
A P Green Refractories Co.(1)(3)(4)(5)	Weston, Ont.	Betz Cut Stone Ltd.(1)(5)	Agincourt, Ont.
Acklands Limited(3)	Winnipeg, Man.	Bigelow-Liptak of Canada Ltd.(1)(5)	Cooksville, Ont.
Adhesive Application Systems Limited(5)	Scarborough, Ont.	Black Clawson - Kennedy Ltd.(5)	Owen Sound, Ont.
Alberta Ceramic Supplies Ltd.(5)	Edmonton, Alta.	Blaze King Canada Ltd.(5)	Penticton, B.C.
Alcan Canada Products Limited(5)	Richmond, B.C.	Brink Forest Products Ltd.(5)	Prince George, B.C.
Alchem Inc.(5)	Willowdale, Ont.	Brique & Pierre Trois Rivières 1982 Inc.(5)	Trois-Rivières, Qué.
Allied Chemical Canada Ltd.(5)	Mississauga, Ont.	Briqueterie St-Laurent, Division de Jannock Ltée(5)	Laprairie, Qué.
Allis Chalmers CDA Inc.(5)	Lachine, Qué.	Brown Foundry Ltd.(4)	Morrisburg, Ont.
Almax Industries Limited(5)	Lindsay, Ont.	Burlington Ceramics & Supply Limited(5)	Burlington, Ont.
Alphatherm Inc.(5)	Concord, Ont.	C & W Refractories Ltd.(1)(5)	Hamilton, Ont.
Aluminerie de Bécancour Inc.(5)	Bécancour, Qué.	C E Refractories By R & I Ramite (Canada) Limited(1)(4)(5)	Welland, Ont.
Aluminum Company of Canada Ltd.(1)(4)(5)	Montréal, Qué.	C I L Inc. Regular Staff(5)	Willowdale, Ont.
American Standard, Div. of Wabco Standard Ltd.	Toronto, Ont.	C M S Industries Inc.(5)	Fort Erie, Ont.
Armorall Inc.(5)	St-Hyacinthe, Qué.	CAE Metal Abrasive, Div. of Canadian Bronze Company Ltd.(4)	Welland, Ont.
Asbury Wilkinson, Div. of Graphite Asbury Québec Inc.(5)	Toronto, Ont.	CAE Montupet Die Cast Ltd.(5)	St. Catharines, Ont.
Atlas Steel Company, A Div. of Rio Algom Mines Limited(1)(3)(5)	Welland, Ont.	Can Steel Foundries, Div. Hawker Siddeley Can. Ltd.(5)	Montréal, Qué.
Atlas Steel Company(1)(3)(4)(5)	Tracy, Qué.	Can-Eng Manufacturing Ltd.(5)	Niagara Falls, Ont.
Atomic Energy of Canada Ltd.(5)	Ottawa, Ont.	Can-Eng Sales Ltd.(5)	Niagara Falls, Ont.
Autocrown Corporation Ltd. A/A Canadian Grinding Wheel(5)	Hamilton, Ont.	Canada Alloy Castings Ltd.(5)	Kitchener, Ont.
B M J Refractories Inc.(5)	Smithville, Ont.	Canada Cement Lafarge Ltd.(3)(5)	Montréal, Qué.
BASF Canada Inc.(1)(5)	Montréal, Qué.	Canada Colors & Chemicals Ltd.(1)(5)	Don Mills, Ont.
Babcock & Wilcox Industries Ltd. - Refractories Division(1)(4)(5)	Burlington, Ont.	Canada Wire & Cable Ltd.(5)	Don Mills, Ont.
Ballard Engineering Tank Co. Canada Inc.(5)	Trois-Rivières, Qué.	Canadian Ceramic Wholesalers Ltd.(5)	Surrey, B.C.
Barber Colman of Canada Ltd.(5)	Woodridge, Ont.		

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN IMPORTERS (CONT'D)

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
Canadian Ferro Hot Metal Specialities Limited(3)(5)	Stoney Creek, Ont.	Consumers Glass Co. Ltd.(1)(4)(5)	Etobicoke, Ont.
Canadian Foundry Supplies Ltd.(5)	Toronto, Ont.	Continental Refractories Company Limited(5)	Oakville, Ont.
Canadian General Electric Co. Ltd.(5)	Toronto, Ont.	Coro-Tech Incorporated(5)	Spring Lake, MI U.S.A.*
Canadian Gypsum Company(1)(5)	Toronto, Ont.	Corporation of Sault Ste. Marie (5)	Sault Ste. Marie, Ont.
Canadian Refractories, Division Dresser Industries Canada Ltd.(1)(3)(4)(5)	Grenville, Qué.	Crane Canada Inc.(4)(5)	New Westminster, B.C. Montréal, Qué.
Canadian Stebbins Engineering & Manufacturing Co. Ltd.(1)(3)(4)(5)	Ottawa, Ont.	Cyclone Engineering Group Ltd.(4)(5)	Edmonton, Alta.
Canadian Timken Limited(5)	St. Thomas, Ont.	Dayton-Walther Canada Ltd.(4)(5)	Guelph, Ont.
Canefco Ltd.(5)	Scarborough, Ont.	Dedert Corp. Chicago Heights Ill(5)	Toronto, Ont.
Canron Inc.(5)	Rexdale, Ont.	Designed Precision Castings(4)	Brampton, Ont.
Carborundum Abrasives Inc.(5)	Plattsville, Ont.	Detrick Company of Canada Ltd.(1)(3)(5)	Don Mills, Ont.
Carborundum Pulpstones Inc.(5)	Niagara Falls, Ont.	Didier Corporation de Produits Réfracteurs(1)(3)(4)(5)	Sault Ste. Marie, Ont.
Carpenter Ceramics Ltd.(5)	Lethbridge, Alta.	Dofasco Inc.(1)(3)(5)	Hamilton, Ont.
Cdn. Steel Wheel, Div. of Hawker Siddeley Canada Ltd.(1)(5)	Montréal, Qué.	Domglas Inc.(1)(3)(5)	Mississauga, Ont.
Ceraheat Industries Limited(5)	Port Robinson, Ont.	Dow Chemical Canada Inc.(5)	Sarnia, Ont.
Ceramic Arts Limited(5)	Burlington, Ont.	Dresser Canada Inc.(5)	Brantford, Ont.
Champion Spark Plug of Canada Ltd.(5)	Windsor, Ont	Duquesne Refractories Ltd.(5)	Toronto, Ont.
Chesher Equipment Inc.(3)	Mississauga, Ont.	Dural Products Ltd.(5)	Dorval, Qué.
Clayburn Industries Ltd.(1)(4)(5)	Abbotsford, B.C.	E R C O Industries Ltd.(5)	St. John's, Nfld.
Cleaver-Brooks of Canada Ltd.(5)	Stratford, Ont.	Eastern Steelcasting, Div. of Ivaco Inc.(1)(3)(5)	L'Orignal, Ont.
Cold Spring Granite (Canada) Limited(5)	Lac-du-Bonnet, Man.	Eclipse Fuel Engineering Company of Canada Limited(5)	Don Mills, Ont.
Colonial Tool Operations Div. of Ex-Cell-O Corporation Ltd.(1)(5)	Windsor, Ont.	Eco-Tech Laboratories Ltd.(4)	Kamloops, B.C.
Combustion Engineering Canada Inc.(5)	Ottawa, Ont.	École Polytechnique(5)	Montréal, Qué.
Cominco Ltd.(5)	Trail, B.C.	El-Chem Construction Co. Ltd.(5)	Burlington, Ont.
Commander Electrical Equipment Inc.(5)	Scarborough, Ont.	Electro Porcelain Co. Ltd.(5)	Waterloo, Ont
Compagnie Aciers Slater, Division les forges de Sorel(5)	St-Joseph-de-Sorel, Qué.	Elkem Metal Canada Inc.(5)	Beauharnois, Qué.
		Engelhard Industries of Canada Ltd.(1)(5)	Aurora, Ont.
		Esco Ltd.(3)(5)	Port Coquitlam, B.C.
		Estrin Manufacturing Ltd.(5)	Vancouver, B.C.
		Fahramet Limited(3)	Orillia, Ont.
		Fairey & Co. Ltd.(1)	Surrey, B.C.

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN IMPORTERS (CONT'D)

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
Falconbridge Nickel Mines Ltd.(3)(5)	Falconbridge, Ont.	Harber Mfg. Ltd.(5)	Fort Erie, Ont
Farr Acidproofing & Refractories Ltd.(5)	Montréal, Qué.	Haughs Products Limited(5)	Brampton, Ont.
Ferro Industrial Products Ltd.(5)	Oakville, Ont.	Hevac-Fireplace Furnace Mfg. Ltd.(5)	Burlington, Ont.
Fiberglass Canada Inc.(1)(2)(5)	Toronto, Ont.	Hickman Williams Canada Ltd.(5)	Cincinnati, OH, U.S.A.*
Fireline Energy Systems Ltd.(5)	Langley, B.C.	Hickson Sales Company Ltd.(1)	Toronto, Ont.
Fisher Scientific Company Ltd.(4)	Ottawa, Ont.	Holcroft & Co. (Canada)(5)	Livonia, MI, U.S.A.*
Flo-Con Canada Inc., Div. of Flo-Con Systems Inc.(3)(5)	Champaign, IL U.S.A.	Holmes Foundry Ltd.(5)	Sarnia, Ont.
Ford Glass Ltd.(1)(5)	Toronto, Ont.	Hoskins Alloys of Canada Ltd.(5)	Rexdale, Ont.
Ford Motor Company of Canada Ltd(4)(5)	Oakville, Ont.	Hurtsteel Products Ltd.(5)	Montréal, Qué.
Formothane Enr(1)	Sept-Îles, Qué.	Hycroft China Ltd.(1)(4)	Medicine Hat, Alta.
Foseco Canada Limited(5)	Guelph, Ont.	Hydro Electric Power Commission (5)	Milverton, Ont
Furniture de Céramique, Québec Inc.(5)	Chomedey-Laval, Qué.	Imperial Clevite Canada Inc.(1)(5)	Toronto, Ont.
Garland Commercial Ranges Ltd.(5)	Mississauga, Ont.	Imperial Oil Ltd. Regular(5)	Don Mills, Ont.
Gasmac Inc.(1)	Mississauga, Ont.	Inproheat Industries Ltd.(1)(5)	Vancouver, B.C.
General Motors of Canada Ltd.(1)	Oshawa, Ont.	Interprovincial Steel & Pipe Corporation Ltd. (1)(3)(5)	Regina, Sask.
General Refractories Company of Canada Ltd.(1)(4)(5)	Smithville, Ont.	J E Baker (Canada) Inc.(5)	Montréal, Qué.
Genstar Cement Limited(5)	Winnipeg, Man. Edmonton, Alta.	J I Case Company(5)	Hamilton, Ont.
Geo. E. White & Son Limited(5)	Windsor, Ont.	Joyce Ceramic Supplies Ltd.(5)	Sturgeon Falls, Ont.
George F Pettinos (Canada) Ltd.(4)(5)	Hamilton, Ont.	K T S Industries Inc.(5)	Kalamazoo, MI, U.S.A.*
Glasrock Products of Canada Ltd.	Hamilton, Ont.	Kaiser Refractories Co.(1)(2)(3)(5)	Oakville, Ont.
Graham Fibreglass Ltd.(1)(2)(4)(5)	Erin, Ont.	Keanall Distributors Ltd.(5)	Mississauga, Ont.
Granby Lumber & Supply Ltd.(5)	Granby, Qué.	Kidd Creek Mines Ltd.(3)(4)(5)	Timmins, Ont.
Graves Wolfenden Brick & Stone Supply Ltd.(5)	Barrie, Ont.	L E Shaw Limited(5)	Lantz, N.S.
Great Lakes Brick & Stone Ltd. (5)	Chatham, Ont.	L'Ami Ceramics Inc.(5)	Montréal, Qué.
Greater Barrie Chamber of Commerce(5)	Barrie, Ont.	La Poterie D'Art Laurentienne Inc.	Laval, Qué.
Greenwood Forest Products(5)	Penticton, B.C.	La Société D'Exploitation Pétro Canada(5)	Montréal, Qué.
Griffin Canada Inc.(5)	St-Hyacinthe, Qué.	Lake Ontario Steel Co. Ltd.(1)(5)	Whitby, Ont.
H E Vannatter Limited(5)	Wallaceburg, Ont.	Lakewood Manufacturing Ltd.(5)	Bobcaygeon, Ont.
Hamilton Brick Limited(5)	Hamilton, Ont.	Lanewood Corp.(5)	Port Perry, Ont
Hanson Inc.(5)	Toronto, Ont.	Lawter International (Canada) Inc.(5)	Rexdale, Ont.
		Leamington Ornamental Iron Supplies(4)	Leamington, Ont.
		Leco Instruments Ltd.(5)	Mississauga, Ont.
		Lee Wilson Eng Co of Canada Ltd.(4)(5)	Downsview, Ont.

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN IMPORTERS (CONT'D)

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
Les Carrières Ducharme Inc.(5)	Hemmingford, Qué.	Odette Energies of Canada,	
Les Produits Industriels de		Pioneer Stoves Ltd.(5)	Kingston, Ont.
Haute Température Pyrotek		Ottawa Fibre Industries	
Inc.(4)(5)	Drummondville, Qué.	Ltd.(1)(5)	Ottawa, Ont.
Les Réfractaires Certel		Overseas Commodities	
Ltée(1)(5)	St-Laurent, Qué.	Ltd.(3)(4)(5)	Vancouver, B.C.
Libbey - St. Clair Inc.(1)	Wallaceburg, Ont.	P P G Canada Inc. Ltd.(4)(5)	Owen Sound, Ont.
Longyear Canada Inc.(5)	North Bay, Ont.		Toronto, Ont.
Maçonnerie Rolland Inc.(5)	Carignan, Qué.	Pacific Refractories Ltd.(5)	Burnaby, B.C.
Manitoba Rolling Mills, Div. of		Petrosar Limited(4)(5)	Sarnia, Ont.
Dominion Bridge(1)(5)	Selkirk, Man.	Pilbrico (Canada) Ltd.(1)(4)(5)	Burlington, Ont.
Manville Canada Inc.(1)(5)	Denver, Co.	Placer Development Ltd.(5)	Vancouver, B.C.
	U.S.A.*	Pole-Lite Limited(5)	St-Phillipe-de-
Maritime Steel & Foundries			Laprairie, Qué.
Ltd.(5)	New Glasgow, N.S.	Prairie Belting and Rubber	
Matreco Ltd.(5)	Toronto, Ont.	Ltd.(1)	Saskatoon, Sask.
McCoy Foundry Company, Op by		Prescott & Co. (Canada) Ltd.(5)	Mississauga, Ont.
Archie McCoy (Hamilton)		Produits Forestiers	
Ltd.(1)	Troy, Ont.	McLaren Inc.(3)	Murdochville, Qué.
Medi-Scope Professional		Q I T Fer & Titan du Québec	
Products(1)	Toronto, Ont.	Inc.(1)(3)(5)	Sorel, Qué.
Metal Fabricating Service		R C Moffatt Supply Limited(1)(5)	Atikokan, Ont.
Ltd.(5)	Esterhazy, Sask.	R J I Scott Engineering & Sales	
Mid West Abrasive Company of		Ltd.(5)	Weston, Ont.
Canada Ltd.(5)	Strathroy, Ont.	Railalu Inc.(4)	St-Laurent, Qué.
Mines Noranda Limitée,		Recochem Inc.(5)	Montréal, Qué.
Division Horne(3)	Noranda, Qué.	Relco Shoe Machine Limited(5)	Toronto, Ont.
Mitsui & Co Canada Ltd.(5)	Toronto, Ont.	Reynolds Extrusion Company, Div.	
Morganite Canada		Canadian Reynolds Metal Co.	
Incorporated(5)	Toronto, Ont.	Ltd.(5)	Richmond Hill, Ont.
Morganite Canada Inc. A R M		Ritchev Supply Ltd.(5)	Mississauga, Ont.
Division(5)	Calgary, Alta.	Riverside Refractories Canada	
National Silicates Limited(1)(5)	Toronto, Ont.	Limited(5)	Nanticoke, Ont.
Noranda Mines Ltd.(3)	Toronto, Ont.	Robinson Products Limited(5)	Concord, Ont.
Noret Sales Company(4)	Weston, Ont.	Ruel & Frère Ltée(5)	Lévis, Qué.
North American Manufacturing		Saskatchewan Wheat Pool	
(Canada) Inc.(5)	Bolton, Ont.	6250(1)	Vancouver, B.C.
North American Refractories,		Scarborough & Grant Company	
Div. of Allied Canada		Limited(1)(5)	Weston, Ont.
Inc.(1)(2)(3)(5)	Caledonia, Ont.	Servco Refractories Inc.(1)	Burlington, Ont.
Norton Canada Inc.(5)	Hamilton, Ont.	Shell Canada Limited(5)	Calgary Alta.
Norton Company(5)	Niagara Falls, Ont.	Sherritt Gordon Mines Ltd.(5)	Fort Saskatchewan,
Norton Research Corporation			Alta.
(Canada) Limited(5)	Niagara Falls, Ont.	Sidbec Dosco Ltée(1)(3)(4)(5)	Contrecoeur, Qué.

AGGREGATED DATA FOR ALL TYPES OF FIRE BRICKS

CANADIAN IMPORTERS (CONT'D)

<u>Name</u>	<u>Address</u>	<u>Name</u>	<u>Address</u>
Simon-Day Ltd.(5)	Winnipeg, Man.	The Pottery Supply House Ltd.(5)	Oakville, Ont.
Slater Steels Corporation(1)(3)(5)	Hamilton, Ont.	The Stebbins Engineering & Mfg. Co., Div. Chemipulp Jensen Watertown NJ(5)	Montréal, Qué.
Société Canadienne Métaux Reynolds(5)	Baie Comeau, Qué.	The University of British Columbia, Dept. of Finance(4)	Vancouver, B.C.
St. Lawrence Cement Co.(5)	Mississauga, Ont.	Thermal Power Corporation Dryden Michigan(5)	Toronto, Ont.
St. Lawrence Starch Co. Ltd.(5)	Port Credit, Ont.	Thermalloy Corporation(2)(3)(5)	Thornhill, Ont.
Stanton Pipes Holding Ltd.(1)	Hamilton, Ont.	Thermo Electric Canada Ltd.(5)	Brampton, Ont.
Steel & Engine Products Ltd.(5)	Liverpool, N.S.	Thermo-Kinetics Co. Ltd.(4)(5)	Rexdale, Ont.
Steel Company of Canada Ltd.(1)(5)	Edmonton, Alta.	Thomas Marshall (Canada) Ltd.(3)(4)(5)	Hamilton, Ont.
Steetley Industries Ltd., Canada Crushed Stone Div.(5)	Hamilton, Ont.	Tri-Country Brick & Masonry Supply Ltd.(5)	Clinton, Ont.
Stelco Inc.(1)(2)(3)(4)(5)	Hamilton, Ont.	Trinity Brick Products 1972 Ltd.(5)	St. John's, Nfld.
Sumitoma Corporation of America New York, NY(5)	Toronto, Ont.	Vapor Canada Inc.(5)	Montréal, Qué.
Sunoco Inc.(5)	Toronto, Ont.	Vesuvius International Corp.(5)	Pittsburgh, PA U.S.A.*
Superior Performance Products(4)	Newmarket, Ont.	Webster & Fils Ltée(5)	Montréal, Qué.
Surface Division Midland Ross of Canada Ltd.(5)	Mississauga, Ont.	Webster & Sons Ltd.(5)	Toronto, Ont.
Sydney Steel Corporation(1)(5)	Sydney, N.S.	Wesmat Supplies Ltd.(1)(5)	Vancouver, B.C.
Syracuse China of Canada Ltd.(5)	Joliette, Qué.	Western Bag & Burlap Co.(5)	Downsview, Ont.
Technequip Limited(5)	Weston, Ont.	Western Canada Steel Ltd.(5)	Calgary, Alta.
Tempglass Division of Indal Limited(4)	Weston, Ont.	Westinghouse Canada Limited(1)	Vancouver, B.C.
Terra Cotta Ceramics Limited(5)	Agincourt, Ont.	William R Barnes Co. Ltd.(1)	Hamilton, N.S.
The Alberta Gas Ethylene Company Ltd.(5)	Red Deer, Alta.	Williams & Wilson Limited(1)(5)	Waterdown, Ont.
The Algoma Steel Corp. Ltd. Steelworks(1)(2)(3)(4)(5)	Sault Ste. Marie, Ont.	Wirth Limited(3)	Montréal, Qué.
The Canadian International Nickel Co. of Canada Ltd.(3)(5)	Copper Cliff, Ont.	Wolf Steel Ltd.(5)	Montréal, Qué.
The Ceramic Greenhouse(5)	Winnipeg, Man.	York-Shipley Inc. Pennsylvania Corporation(3)	Barrie, Ont.
The Hodge Podge Shop Ltd.(5)	Calgary, Alta.	Zarecki Leisurecrafts Ltd.(5)	York, PA, U.S.A.*
		Zollner Canada Limited(5)	Grand Centre, Alta Fort Wayne, IN U.S.A.*

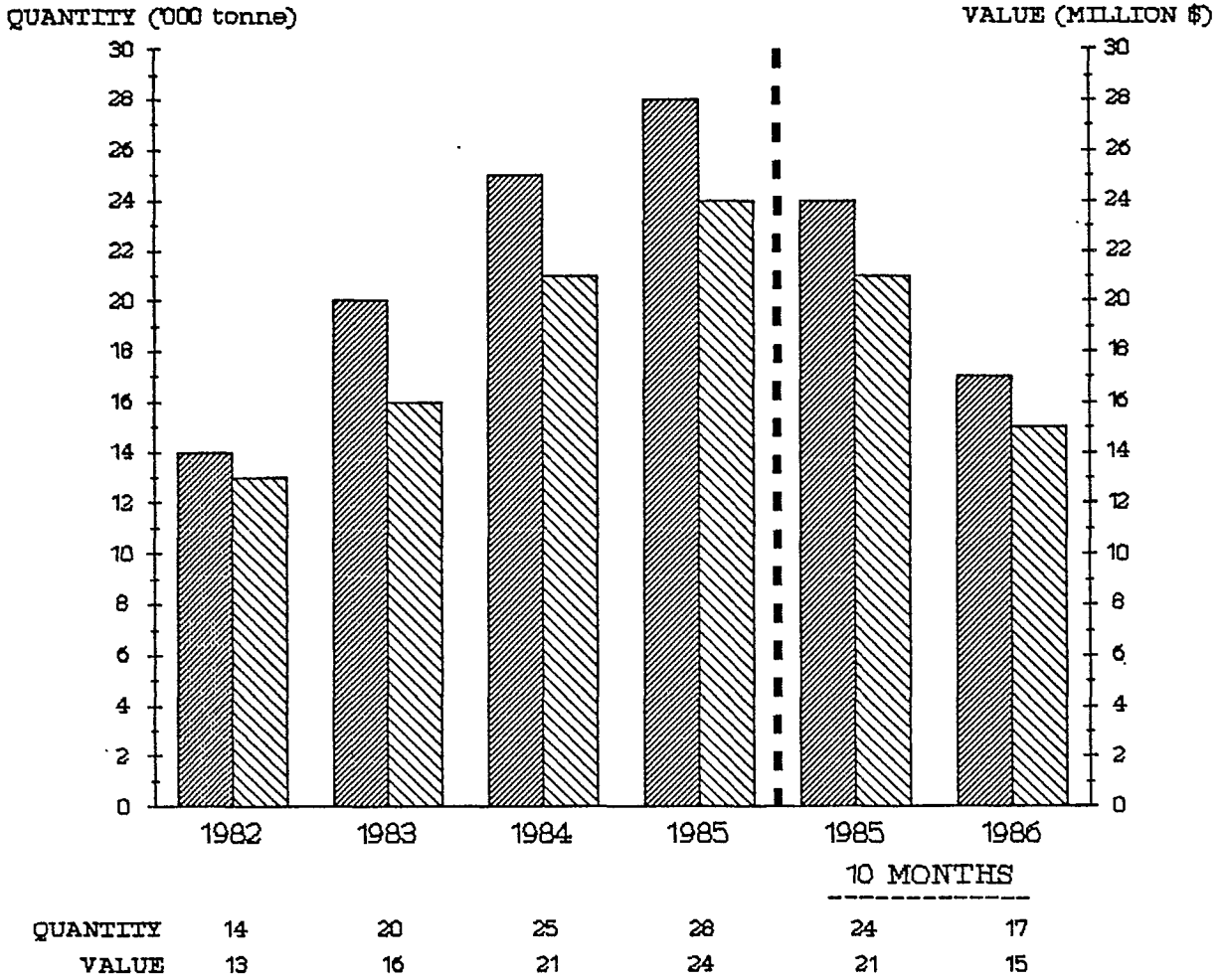
* Non-resident importer



PART A
FIRE BRICKS AND SIMILAR SHAPES
WITH ALUMINA
(91-87)

PART A: FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA

IMPORT TRENDS: OVERVIEW



Between 1982 and 1985, imports of fire bricks with alumina (47 per cent and over) rose steadily from 14 thousand tonnes to 28 thousand tonnes. The value of these imports followed the same pattern, increasing from \$13 million to \$24 million.

For the first 10 months of 1986, the quantity and value of imports both decreased by 29 per cent when compared to the same period of 1985.

PART A: FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA

IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT

Foreign Country of Export	1982	1983	1984	1985	Unit	Average	Per cent Change 1984-1985	10-Month Imports	
					Price 1985	Annual Growth Rate 1982-1985		Jan. to 1985	Oct. 1986
					\$	%			
UNITED STATES									
Quantity (tonne)	13 760	16 349	23 470	26 020	852	24	11	21 994	16 965
Quantity (TON)	15 168	18 022	25 871	28 682	773	24	11	24 244	18 701
Value (\$000)	12 356	14 050	18 193	22 160		21	22	19 181	14 798
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	287	1 970	782	698	974	34	-11	698	101
Quantity (TON)	316	2 172	862	769	884	34	-11	769	111
Value (\$000)	646	1 513	1 831	680		2	-63	680	200
FRANCE									
Quantity (tonne)	0	1 773	38	763	354	N/A	1 908	763	26
Quantity (TON)	0	1 954	42	841	321	N/A	1 908	841	29
Value (\$000)	0	688	30	270		N/A	800	270	16
JAPAN									
Quantity (tonne)	0	3	63	88	2 341	N/A	40	88	8
Quantity (TON)	0	3	69	97	2 124	N/A	40	97	9
Value (\$000)	0	19	297	206		N/A	-31	206	25
SPAIN									
Quantity (tonne)	0	18	0	304	668	N/A	N/A	246	0
Quantity (TON)	0	20	0	335	606	N/A	N/A	271	0
Value (\$000)	0	16	0	203		N/A	N/A	179	0
OTHER									
Quantity (tonne)	3	63	397	116	940	238	-71	113	249
Quantity (TON)	3	69	437	127	858	238	-71	125	274
Value (\$000)	5	61	331	109		179	-67	103	142
TOTAL									
Quantity (tonne)	14 050	20 176	24 750	27 989		26	13	23 902	17 349
Quantity (TON)	15 487	22 240	27 282	30 852		26	13	26 347	19 124
Value (\$000)	13 007	16 347	20 682	23 628		22	14	20 619	15 181
UNIT PRICE									
\$/tonne	926	810	836	844				863	875
\$/TON	840	735	758	766				783	794

N/A - Not Applicable

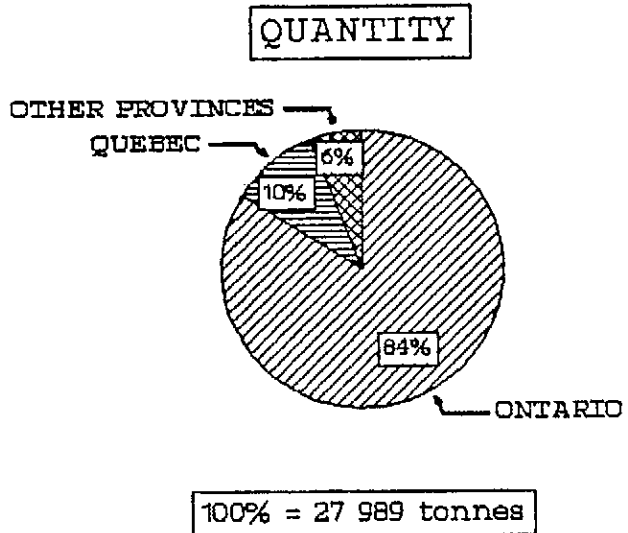
In 1985, the United States was the main exporter to Canada of fire bricks with alumina with 26 thousand tonnes, or 93 per cent of Canadian imports. The value of imports from the U.S.A. totalled \$22.2 million, or 94 per cent of total imports.

Between 1982 and 1985, the average unit price of imported fire bricks with alumina dropped from \$926 to \$844 per tonne. In the first 10 months of 1986, the average unit price was \$875 per tonne.

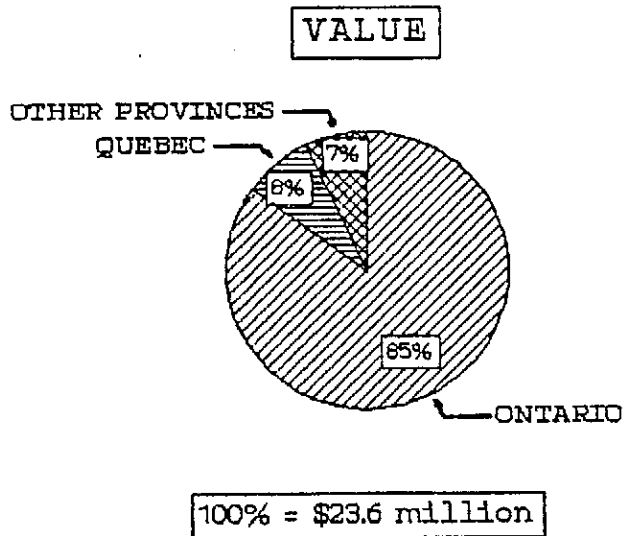
PART A: FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA

IMPORTS BY PROVINCE OF CLEARANCE - 1985

In 1985, imports of fire bricks with alumina cleared through the provinces of Ontario and Québec totalled 26.1 thousand tonnes, or 93 per cent of Canadian imports. Ontario was the biggest importer of all the provinces with 23.4 thousand tonnes, or 84 per cent of total imports. Québec came second with 2.7 thousand tonnes, or 10 per cent of Canada's imports.



By value, Ontario was also the main province of clearance with \$20.0 million, or 85 per cent of total imports. Québec was second with \$1.9 million, or eight per cent of Canada's imports.



NOTE: For more detailed data on imports of fire bricks with alumina, see Appendix A, page 25.

PART A: FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA

IMPORT MARKET CONCENTRATION - 1985

	<u>Top 5 Importers</u>	<u>Top 10 Importers</u>	<u>Top 15 Importers</u>	<u>All Importers</u>
Value (\$000)	12 549	16 934	19 630	23 628
Per Cent of Total Value	53	72	83	100

In 1985, the top 10 importers of fire bricks with alumina accounted for \$16.9 million, or 72 per cent of total imports. Of these 10 importers, nine were manufacturers. Eight of these 10 importers were located in Ontario.

NOTE: "Top importers" are the known importers with the largest imports by value in 1985.

TYPE AND LOCATION OF THE TOP 26 KNOWN IMPORTERS - 1985
(91% OF TOTAL IMPORT VALUE)

	<u>MANUFACTURERS</u>		<u>OTHER(1)</u>		<u>TOTAL</u>	
	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>
Ontario	19	16 736	2		21	
Québec	3	3 313	1	1 345*	4	21 395*
Western Provinces	-	-	1		1	
Atlantic Provinces	-	-	-	-	-	-
TOTAL	22	20 050	4	1 345	26	21 395
Per Cent of 1985 Total Value		85%		6%		91%

(1) Includes three wholesalers

* Ontario, Québec and Western Provinces aggregated to preserve confidentiality.

At least 86 companies imported fire bricks with alumina. The top 26 importers accounted for \$21.4 million, or 91 per cent of Canadian imports. Of these 26 importers, 22 were manufacturers. Three were producers of blast furnaces, steel works and rolling mills representing \$5.7 million, or 24 per cent of total imports.

PART A: FIRE BRICKS AND SIMILAR SHAPES WITH ALUMINA

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE

1985

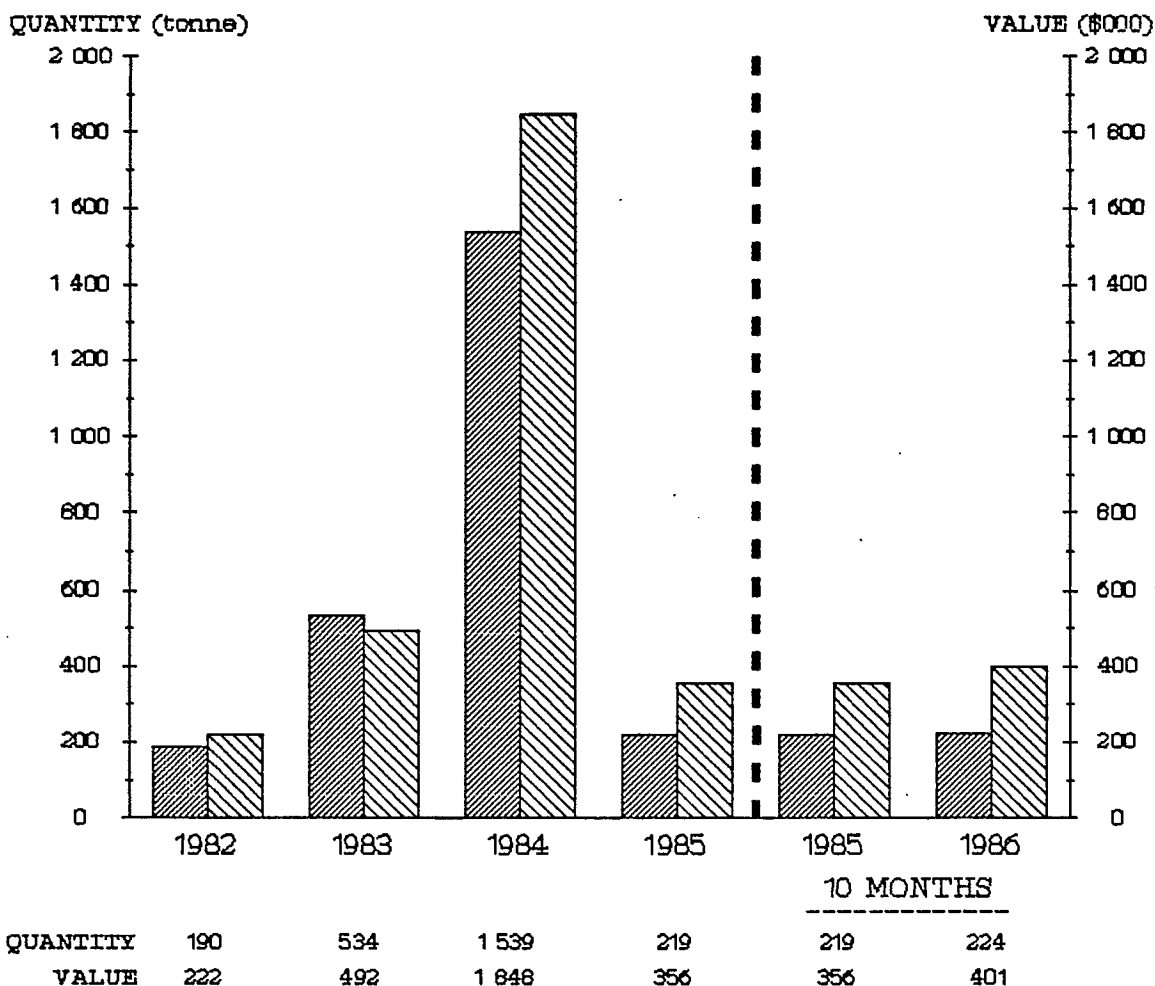
<u>Foreign Country Of Export</u>	<u>Canada</u>	<u>Nfld.</u>	<u>N.S.</u>	<u>P.E.I.</u>	<u>N.B.</u>	<u>Qué.</u>	<u>Ont.</u>	<u>Man.</u>	<u>Sask.</u>	<u>Alta.</u>	<u>B.C.</u>
UNITED STATES											
Quantity (tonne)	26 020	0	52	0	13	1 093	23 084	314	372	821	271
Quantity (TON)	28 682	0	57	0	14	1 205	25 446	346	410	905	299
Value (\$000)	22 160	0	47	0	12	904	19 765	203	365	643	221
FEDERAL REPUBLIC OF GERMANY											
Quantity (tonne)	698	0	1	0	0	514	182	0	0	0	0
Quantity (TON)	769	0	1	0	0	567	201	0	0	0	0
Value (\$000)	680	0	0	0	0	474	206	0	0	0	0
FRANCE											
Quantity (tonne)	763	0	0	0	0	763	0	0	0	0	0
Quantity (TON)	841	0	0	0	0	841	0	0	0	0	0
Value (\$000)	270	0	0	0	0	270	0	0	0	0	0
JAPAN											
Quantity (tonne)	88	0	0	0	0	2	4	0	0	0	83
Quantity (TON)	97	0	0	0	0	2	4	0	0	0	91
Value (\$000)	206	0	0	0	0	4	16	0	0	0	186
SPAIN											
Quantity (tonne)	304	0	0	0	0	304	0	0	0	0	0
Quantity (TON)	335	0	0	0	0	335	0	0	0	0	0
Value (\$000)	203	0	0	0	0	203	0	0	0	0	0
OTHER											
Quantity (tonne)	116	0	0	0	0	15	101	0	0	0	0
Quantity (TON)	127	0	0	0	0	17	111	0	0	0	0
Value (\$000)	109	0	0	0	0	22	87	0	0	0	0
TOTAL											
Quantity (tonne)	27 989	0	53	0	13	2 692	23 371	314	172	821	354
Quantity (TON)	30 852	0	58	0	14	2 967	25 762	346	410	905	390
Value (\$000)	23 628	0	47	0	12	1 877	20 074	203	365	643	407



PART B
FIRE BRICKS AND SIMILAR SHAPES
WITH CHROME
(92-87)

PART B: FIRE BRICKS AND SIMILAR SHAPES WITH CHROME

IMPORT TRENDS: OVERVIEW



Between 1982 and 1985, the overall volume of imports of fire bricks with chrome (34 per cent and over) increased slightly from 190 to 219 tonnes. Value in this period went up from \$222 000 to \$356 000. However, in 1984, the quantity and value tripled from 1983 to reach 1 539 tonnes and \$1.8 million. In 1985, it dropped to 219 tonnes, below the 1983 level. The value of imports followed the same pattern.

For the first 10 months of 1986, the volume of imports increased slightly from 219 to 224 tonnes, when compared to the first 10 months of 1985, with the value increasing from \$356 000 to \$401 000.

PART B: FIRE BRICKS AND SIMILAR SHAPES WITH CHROME

IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT

Foreign Country of Export	1982	1983	1984	1985	Unit	Average	Per cent Change 1984-1985	10-Month Imports	
					Price 1985 \$	Annual Growth Rate 1982-1985 %		Jan. to 1985	Oct. 1986
UNITED STATES									
Quantity (tonne)	190	522	1 534	219	1 626	5	-86	219	223
Quantity (TON)	209	575	1 691	241	1 477	5	-86	241	246
Value (\$000)	222	347	1 807	356		17	-80	356	387
OTHER									
Quantity (tonne)	0	12	5	0	N/A	N/A	-100	0	1
Quantity (TON)	0	13	6	0	N/A	N/A	-100	0	1
Value (\$000)	0	145	41	0		N/A	-100	0	15
TOTAL									
Quantity (tonne)	190	534	1 539	219		5	-86	219	224
Quantity (TON)	209	589	1 697	241		5	-86	241	247
Value (\$000)	222	492	1 848	356		17	-80	356	401
UNIT PRICE									
\$/tonne	1 168	921	1 200	1 626				1 626	1 790
\$/TON	1 062	835	1 090	1 477				1 477	1 623

N/A - Not Applicable

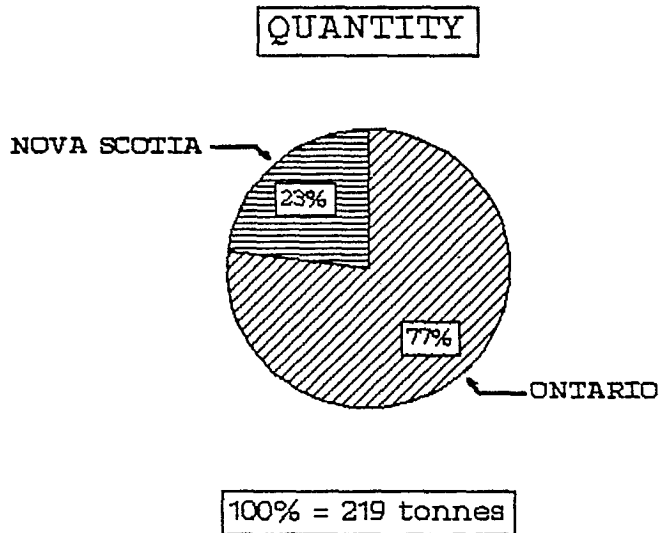
During the entire period since 1982, the United States was virtually the only exporter to Canada of fire bricks with chrome. In 1985, the volume of imports from the U.S. totalled 219 tonnes. The value of imports amounted to \$356 thousand.

In 1982 and 1983, the average unit prices were \$1 168 and \$921 per tonne, respectively. From 1984 onwards, the average unit prices rose steadily to reach \$1 626 per tonne in 1985. During the first 10 months of 1986, the average unit price increased to \$1 790 per tonne.

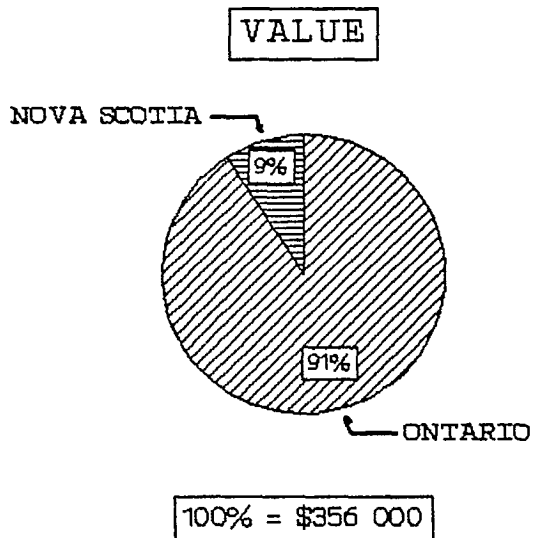
PART B: FIRE BRICKS AND SIMILAR SHAPES WITH CHROME

IMPORTS BY PROVINCE OF CLEARANCE - 1985

Only two provinces, Ontario and Nova Scotia, imported fire bricks with chrome in 1985. Imports totalled 219 tonnes. Ontario was the largest province of clearance with 168 tonnes, or 77 per cent of Canadian imports.



Similarly, in terms of value, fire bricks with chrome were cleared through two provinces, Ontario and Nova Scotia. Ontario was the main province of clearance with \$324 thousand, or 91 per cent of Canada's imports.



PART 8: FIRE BRICKS AND SIMILAR SHAPES WITH CHROME

IMPORT MARKET CONCENTRATION - 1985

	<u>Top 4 Importers</u>	<u>All Importers (7)</u>
Value (\$000)	285	356
Per Cent of Total Value	80	100

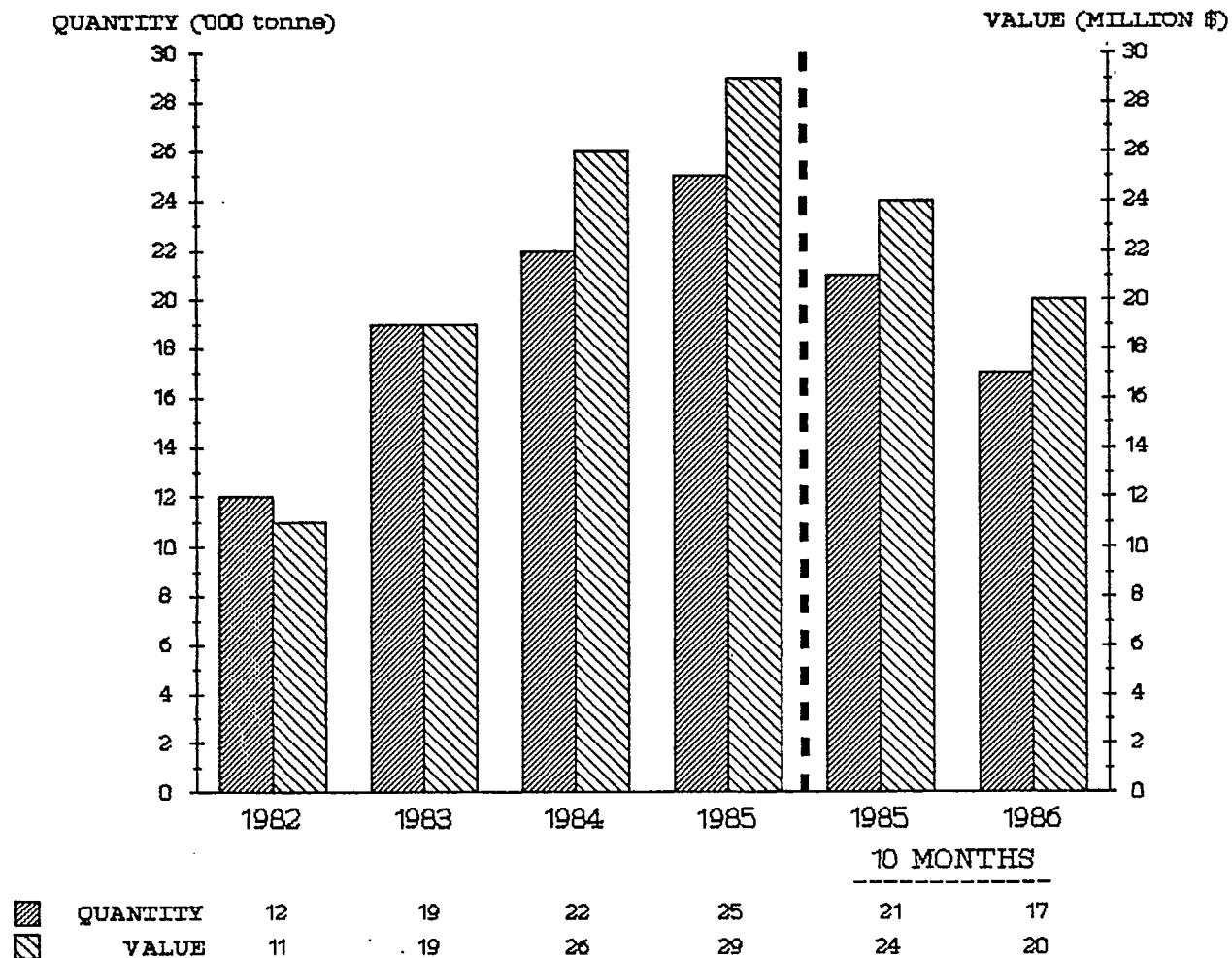
In 1985, there were seven importers of fire bricks with chrome. Four of the seven importers accounted for \$285 thousand, or 80 per cent of total imports. All seven importers were manufacturers.

PART C
FIRE BRICKS AND SIMILAR SHAPES
WITH MAGNESITE
(93-87)



PART C: FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE

IMPORT TRENDS: OVERVIEW



Between 1982 and 1985, imports of fire bricks with magnesite (53 per cent and over) increased steadily from 12 to 25 thousand tonnes. During the same period, the value of imports followed the same pattern, increasing from \$11 million to \$29 million.

During the first 10 months of 1986, the volume of imports decreased from 21 to 17 thousand tonnes, when compared to the same period of 1985. During this same period, the value decreased from \$24 to \$20 million.

PART C: FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE

IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT

Foreign Country of Export	1982	1983	1984	1985	Unit Price 1985 \$	Average Annual Growth Rate 1982-1985 %	Per cent Change 1984-1985	10-Month Imports	
								1985	1986
UNITED STATES									
Quantity (tonne)	10 619	13 896	18 491	17 469	1 261	18	-6	14 839	12 315
Quantity (TON)	11 705	15 318	20 382	19 256	1 144	18	-6	16 357	13 575
Value (\$000)	9 728	14 924	22 490	22 034		31	-2	18 464	15 228
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	209	3 625	1 377	4 655	711	181	238	4 182	1 129
Quantity (TON)	230	3 996	1 518	5 131	644	181	238	4 610	1 245
Value (\$000)	215	2 550	1 200	3 308		149	176	2 934	1 412
JAPAN									
Quantity (tonne)	190	589	827	1 213	1 711	86	47	1 010	979
Quantity (TON)	209	649	912	1 337	1 553	86	47	1 113	1 079
Value (\$000)	251	911	1 316	2 076		102	58	1 751	1 808
AUSTRIA									
Quantity (tonne)	1 444	651	667	1 089	819	-9	63	1 070	1 697
Quantity (TON)	1 591	717	735	1 200	743	-9	63	1 180	1 871
Value (\$000)	979	550	621	892		-3	44	816	1 495
FRANCE									
Quantity (tonne)	0	24	0	396	460	N/A	N/A	150	2
Quantity (TON)	0	26	0	436	416	N/A	N/A	165	2
Value (\$000)	0	4	0	182		N/A	N/A	73	3
OTHER									
Quantity (tonne)	0	142	230	228	1 092	N/A	-1	226	443
Quantity (TON)	0	157	254	251	942	N/A	-1	249	488
Value (\$000)	0	154	214	249		N/A	16	235	292
TOTAL									
Quantity (tonne)	12 462	18 927	21 592	25 050		26	16	21 477	16 565
Quantity (TON)	13 738	20 864	23 802	27 611		26	16	23 674	18 260
Value (\$000)	11 174	19 093	25 841	28 741		37	11	24 273	20 238
UNIT PRICE									
\$/tonne	897	1 009	1 197	1 147				1 130	1 222
\$/TON	813	915	1 086	1 041				1 025	1 108

N/A - Not Applicable

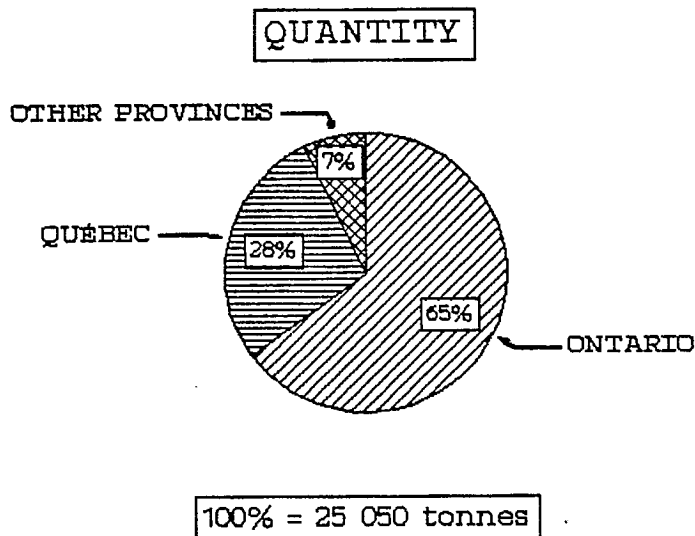
Between 1982 and 1985, the United States was the main exporter to Canada. In 1985, the U.S. accounted for 17.5 thousand tonnes, or 70 per cent of Canadian imports. The value of imports from the U.S.A. totalled \$22.0 million, or 77 per cent of total imports.

During the first three years of the study period, the average unit price of imported fire bricks with magnesite increased from \$897 to \$1 197 per tonne then dropped to \$1 147 per tonne in 1985. In the first 10 months of 1986, the average unit price increased again to reach \$1 222 per tonne.

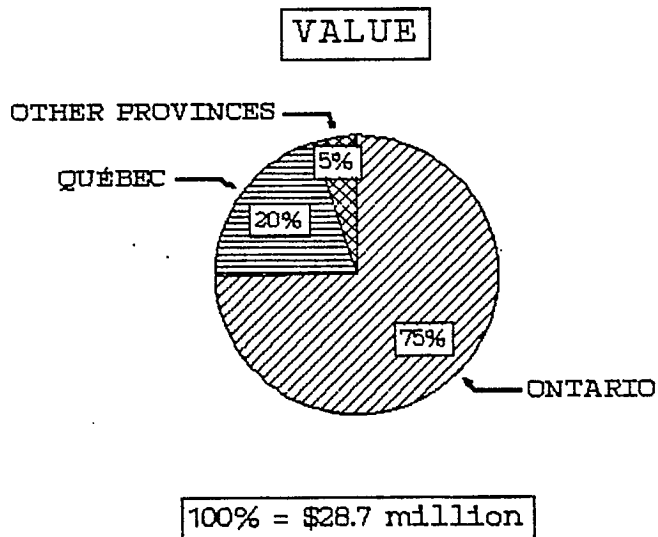
PART C: FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE

IMPORTS BY PROVINCE OF CLEARANCE - 1985

In 1985, imports of fire bricks with magnesite cleared through the provinces of Ontario and Québec totalled 23.4 thousand tonnes, or 93 per cent of Canadian imports. Ontario was the biggest importer of all the provinces with 16.4 thousand tonnes, or 65 per cent of imports. Québec came second with 7.0 thousand tonnes, or 28 per cent of Canada's imports.



By value, \$27.2 million, or 95 per cent of the imports of fire bricks with magnesite were cleared through Ontario and Québec. Of these, \$21.4 million, or 75 per cent were cleared through Ontario. Québec was second with \$5.8 million, or 20 per cent of Canada's imports.



NOTE: For more detailed data on imports of fire bricks with magnesite, see Appendix A, page 39.

PART C: FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE

IMPORT MARKET CONCENTRATION - 1985

	<u>Top 5 Importers</u>	<u>Top 10 Importers</u>	<u>All Importers</u>
Value (\$000)	21 172	26 763	28 740
Per Cent of Total Value	74	93	100

In 1985, the top 10 importers of fire bricks with magnesite accounted for \$26.8 million, or 93 per cent of total imports. Of these 10 importers, eight were manufacturers. Seven of these 10 importers were located in Ontario and three in Québec.

NOTE: "Top importers" are the known importers with the largest imports by value in 1985.

TYPE AND LOCATION OF THE TOP 13 IMPORTERS - 1985
(96% OF TOTAL IMPORT VALUE)

	<u>MANUFACTURERS</u>		<u>OTHER(1)</u>		<u>TOTAL</u>	
	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>
Ontario	6	19 938	2	3 177*	8	27 552*
Québec	4	4 436	1	-	5	-
Western Provinces	-	-	-	-	-	-
Atlantic Provinces	-	-	-	-	-	-
TOTAL	10	24 375	3	3 177	13	27 552
Per cent of 1985 total value		85%		11%		96%

(1) Includes two wholesalers

* Ontario and Québec aggregated to preserve confidentiality.

In 1985, there were at least 37 importers of fire bricks with magnesite. The top 13 importers totalled \$27.6 million, or 96 per cent of Canadian imports. Of these 13 importers, 10 were manufacturers. Of these 10 companies, three were manufacturers of non-clay refractories with imports that accounted for \$5.9 million, or 20.6 per cent of the total. Another three manufacturers with imports totalling \$5.8 million, or 20.2 per cent of total imports, were steel works or rolling mills or produced blast furnaces.

PART C: FIRE BRICKS AND SIMILAR SHAPES WITH MAGNESITE

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE

1985

<u>Foreign Country Of Export</u>	<u>Canada</u>	<u>Nfld.</u>	<u>N.S.</u>	<u>P.E.I.</u>	<u>N.B.</u>	<u>Qué.</u>	<u>Ont.</u>	<u>Man.</u>	<u>Sask.</u>	<u>Alta.</u>	<u>B.C.</u>
UNITED STATES											
Quantity (tonne)	17 469	0	0	0	0	650	16 001	658	112	3	45
Quantity (TON)	19 256	0	0	0	0	716	17 638	725	124	3	50
Value (\$000)	22 034	0	0	0	0	640	20 637	622	87	3	44
FEDERAL REPUBLIC OF GERMANY											
Quantity (tonne)	4 655	0	139	0	0	4 511	4	2	0	0	0
Quantity (TON)	5 131	0	153	0	0	4 972	4	2	0	0	0
Value (\$000)	3 308	0	91	0	0	3 212	4	2	0	0	0
JAPAN											
Quantity (tonne)	1 213	0	0	0	0	638	307	3	0	0	267
Quantity (TON)	1 337	0	0	0	0	703	338	3	0	0	293
Value (\$000)	2 076	0	0	0	0	1 069	581	3	0	0	420
AUSTRIA											
Quantity (tonne)	1 089	0	52	0	0	622	21	0	0	0	392
Quantity (TON)	1 200	0	57	0	0	686	23	0	0	0	432
Value (\$000)	892	0	29	0	0	538	100	0	0	0	221
FRANCE											
Quantity (tonne)	396	0	0	0	0	377	0	0	0	0	18
Quantity (TON)	436	0	0	0	0	416	0	0	0	0	20
Value (\$000)	182	0	0	0	0	168	0	0	0	0	14
OTHER											
Quantity (tonne)	228	0	0	0	0	187	41	0	2	0	0
Quantity (TON)	251	0	0	0	0	206	45	0	2	0	0
Value (\$000)	249	0	0	0	0	205	53	0	3	0	0
TOTAL											
Quantity (tonne)	25 050	0	191	0	0	6 984	16 372	662	114	3	721
Quantity (TON)	27 611	0	210	0	0	7 699	18 048	730	126	3	795
Value (\$000)	28 741	0	120	0	0	5 824	21 375	628	90	3	700

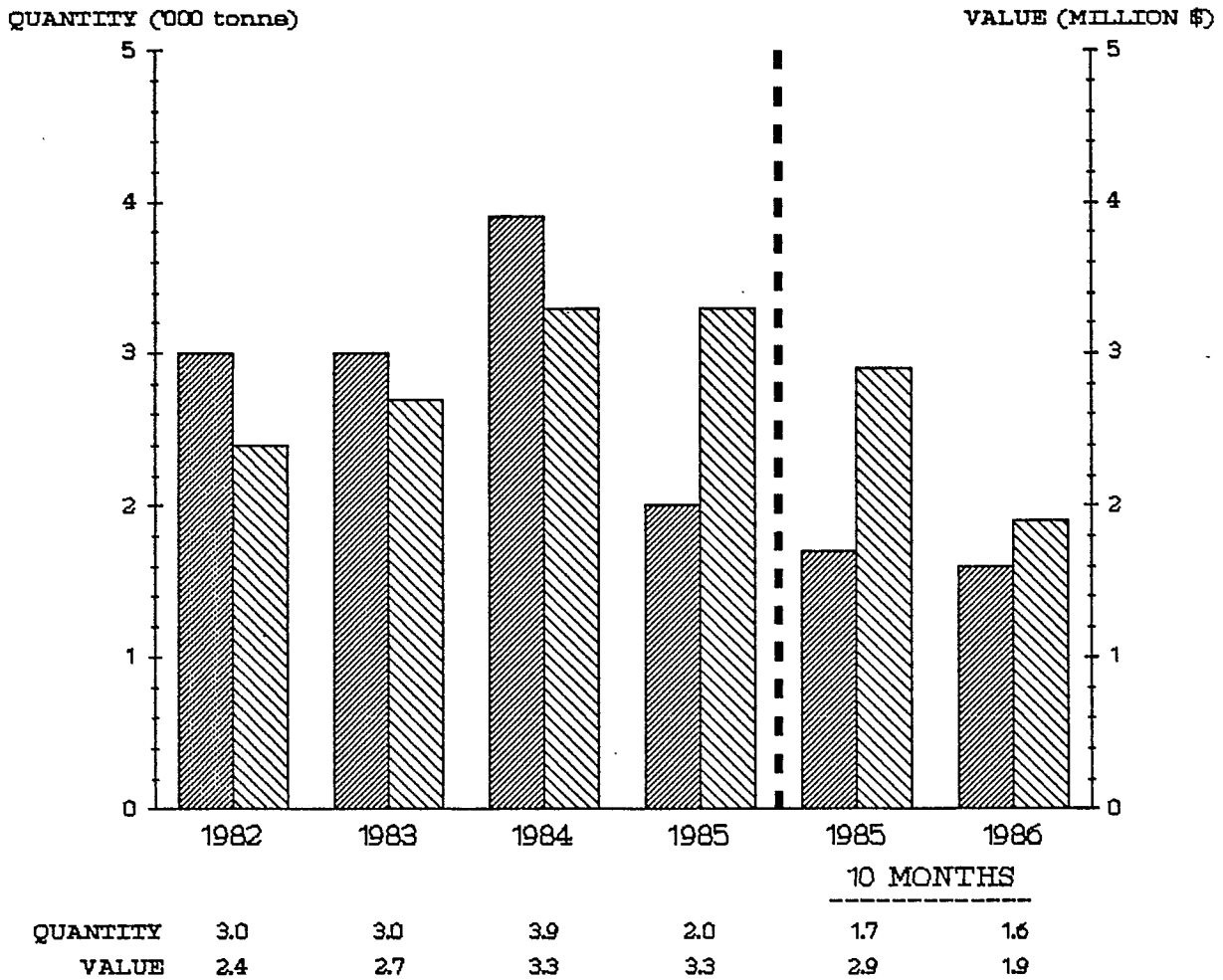


PART D
FIRE BRICKS AND SIMILAR SHAPES
WITH SILICA
(94-87)



PART D: FIRE BRICKS AND SIMILAR SHAPES WITH SILICA

IMPORT TRENDS: OVERVIEW



The volume of imports of fire bricks with silica (80 per cent and over) stayed at the same level at three thousand tonnes for the first two years, rose to 3.9 thousand tonnes in 1984, then decreased to two thousand tonnes in 1985. During the same period, the value of imports increased from \$2.4 to \$3.3 million for the first three years and stayed at the same level in 1985. In value, the average annual growth rate was 11 per cent, while the quantity of imports decreased at an annual rate of 13 per cent.

During the first 10 months of 1986, the volume of imports decreased slightly from 1.7 to 1.6 thousand tonnes, when compared to the same period in 1985. The value of imports dropped from \$2.9 to \$1.9 million.

PART D: FIRE BRICKS AND SIMILAR SHAPES WITH SILICA

IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT

Foreign Country of Export.	1982	1983	1984	1985	Unit	Average	Per cent Change 1984-1985	10-Month Imports	
					Price 1985	Annual Growth Rate 1982-1985		Jan. to 1985	Oct. 1986
					\$	%			
UNITED STATES									
Quantity (tonne)	2 585	1 981	3 423	1 582	1 784	-15	-54	1 329	905
Quantity (TON)	2 849	2 184	3 773	1 744	1 618	-15	-54	1 464	998
Value (\$000)	2 021	2 093	2 719	2 822		12	4	2 388	1 332
FRANCE									
Quantity (tonne)	219	649	444	312	1 176	13	-30	312	386
Quantity (TON)	241	715	489	344	1 067	13	-30	344	426
Value (\$000)	254	454	521	367		13	-30	367	319
SWITZERLAND									
Quantity (tonne)	19	35	0	43	1 326	31	N/A	43	95
Quantity (TON)	21	39	0	47	1 212	31	N/A	47	105
Value (\$000)	22	38	0	57		37	N/A	57	126
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	52	360	50	19	2 789	-29	-62	19	169
Quantity (TON)	57	397	55	21	2 650	-29	-62	21	186
Value (\$000)	49	84	52	53		3	2	53	164
OTHER									
Quantity (tonne)	110	2	0	0	N/A	-100	N/A	0	0
Quantity (TON)	121	2	0	0	N/A	-100	N/A	0	0
Value (\$000)	60	2	0	0		-100	N/A	0	0
TOTAL									
Quantity (tonne)	2 985	3 027	3 918	1 956		-13	-50	1 702	1 555
Quantity (TON)	3 290	3 337	4 319	2 156		-13	-50	1 876	1 715
Value (\$000)	2 406	2 671	3 292	3 299		11	0	2 866	1 940
UNIT PRICE									
\$/tonne	806	882	840	1 687				1 684	1 248
\$/TON	731	800	762	1 544				1 527	1 131

N/A - Not Applicable

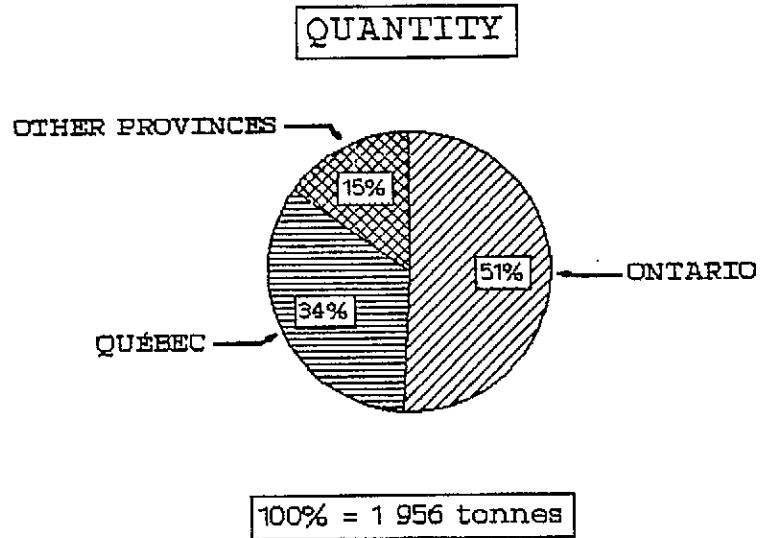
The United States was the principal exporter to Canada of fire bricks with silica. While the quantities fluctuated widely from year to year, the value of imports rose steadily from \$2.0 million in 1982 to \$2.8 million in 1985.

During the four-year period, unit prices increased from \$806 to \$1 687 per tonne. However, during the first 10 months of 1986, the average unit price decreased to \$1 247 per tonne. In 1985, unit prices of fire bricks with silica imported from France were the lowest at \$1 176 per tonne. Imports from the Federal Republic of Germany had the highest unit prices at \$2 789 per tonne.

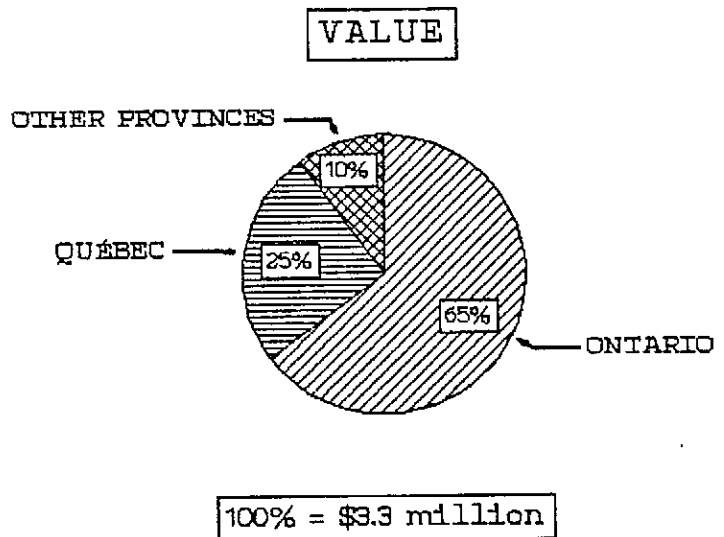
PART D: FIRE BRICKS AND SIMILAR SHAPES WITH SILICA

IMPORTS BY PROVINCE OF CLEARANCE - 1985

In 1985, imports of fire bricks with silica cleared through the provinces of Ontario and Québec totalled 1 669 tonnes, or 85 per cent of Canadian imports. Ontario was the biggest importer with 991 tonnes, or 51 per cent of total imports. Québec came second with 678 tonnes, or 34 per cent of Canada's imports.



The value of imports cleared through Ontario and Québec amounted to \$2.9 million, or 90 per cent of Canadian imports. Ontario was the main province of clearance with \$2.1 million, or 65 per cent of total imports.



NOTE: For more detailed data on fire bricks with silica, see Appendix A, page 47.

PART D: FIRE BRICKS AND SIMILAR SHAPES WITH SILICA

IMPORT MARKET CONCENTRATION - 1985

	<u>Top 5 Importers</u>	<u>Top 10 Importers</u>	<u>All Importers</u>
Value (\$000)	2 142	2 648	3 299
Per Cent of Total Value	65	80	100

In 1985, the top 10 importers of fire bricks with silica accounted for \$2.6 million, or 80 per cent of total imports. Five of these 10 importers were located in Québec and four in Ontario.

NOTE: "Top importers" are the known importers with the largest imports by value in 1985.

TYPE AND LOCATION OF THE TOP 10 IMPORTERS - 1985
(80% OF TOTAL IMPORT VALUE)

	<u>MANUFACTURERS</u>		<u>OTHER(1)</u>		<u>TOTAL</u>	
	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>
Ontario	3	1 234	1		4	
Québec	4	904	1	511*	5	2 648*
Western Provinces	-	-	1		1	
Atlantic Provinces	-	-	-	-	-	-
TOTAL	7	2 137	3	511	10	2 648
Per cent of 1985 total value		65%		19%		80%

(1) Includes two wholesalers

* Ontario, Québec and Western Provinces aggregated to preserve confidentiality.

In 1985, 47 known companies imported fire bricks with silica. Seven of the top 10 importers were manufacturers. Four of these 7 manufacturers were primary metal producers, accounting for \$1.5 million, or 46 per cent of Canadian imports.

PART D: FIRE BRICKS AND SIMILAR SHAPES WITH SILICA

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE

1985

<u>Foreign Country Of Export</u>	<u>Canada</u>	<u>Nfld.</u>	<u>N.S.</u>	<u>P.E.I.</u>	<u>N.B.</u>	<u>Qué.</u>	<u>Ont.</u>	<u>Man.</u>	<u>Sask.</u>	<u>Alta.</u>	<u>B.C.</u>
UNITED STATES											
Quantity (tonne)	1 582	0	14	0	53	305	991	0	73	127	20
Quantity (TON)	1 744	0	15	0	59	336	1 092	0	80	140	22
Value (\$000)	2 822	0	4	0	41	363	2 138	0	96	162	18
FRANCE											
Quantity (tonne)	312	0	0	0	0	312	0	0	0	0	0
Quantity (TON)	344	0	0	0	0	344	0	0	0	0	0
Value (\$000)	367	0	0	0	0	367	0	0	0	0	0
SWITZERLAND											
Quantity (tonne)	43	0	0	0	0	43	0	0	0	0	0
Quantity (TON)	47	0	0	0	0	47	0	0	0	0	0
Value (\$000)	57	0	0	0	0	57	0	0	0	0	0
FEDERAL REPUBLIC OF GERMANY											
Quantity (tonne)	19	0	0	0	0	19	0	0	0	0	0
Quantity (TON)	21	0	0	0	0	21	0	0	0	0	0
Value (\$000)	53	0	0	0	0	53	0	0	0	0	0
TOTAL											
Quantity (tonne)	1 956	0	14	0	53	678	991	0	73	127	20
Quantity (TON)	2 156	0	15	0	59	748	1 092	0	80	140	22
Value (\$000)	3 299	0	4	0	41	841	2 138	0	96	162	18

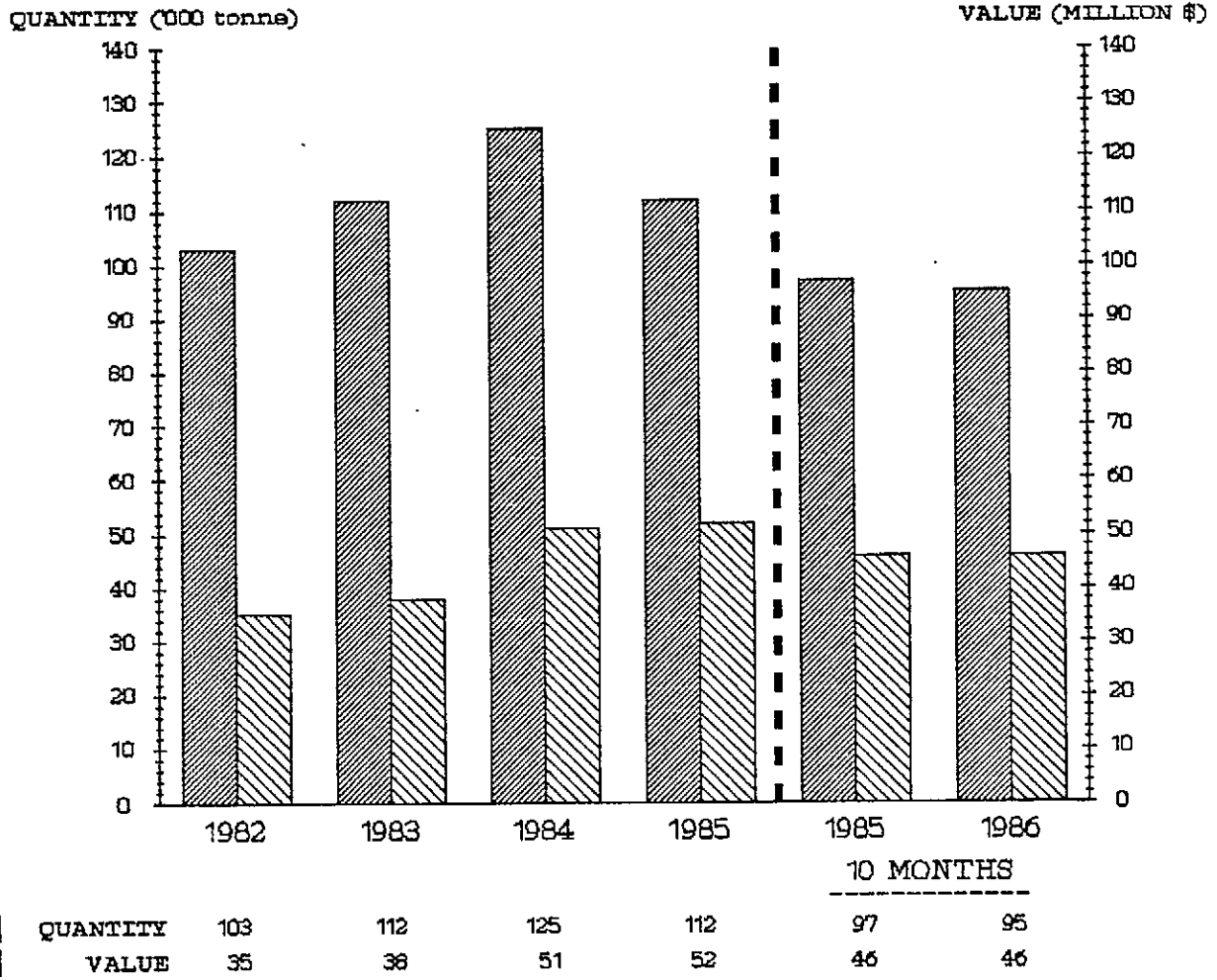


PART E
FIRE BRICKS AND SIMILAR SHAPES
NOT ELSEWHERE SPECIFIED (N.E.S.)
(95-87)



PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORT TRENDS: OVERVIEW



Between 1982 and 1985, imports of fire bricks, not elsewhere specified, rose steadily from 103 to 125 thousand tonnes then dropped to 112 thousand tonnes in 1985 (the same level as 1983). The value of imports for the same period increased steadily from \$35 million to \$52 million.

During the first 10 months of 1986, quantity and value remained at the same level as the same period of 1985.

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS TO CANADA BY MAJOR FOREIGN COUNTRY OF EXPORT

Foreign Country of Export	1982	1983	1984	1985	Unit	Average	Per cent. Change 1984-1985	10-Month Imports	
					Price 1985 \$	Annual Growth Rate 1982-1985 %		Jan. to 1985	Oct. 1986
UNITED STATES									
Quantity (tonne)	100 465	105 314	119 399	91 621	464	-3	-23	77 694	87 568
Quantity (TON)	110 744	116 089	131 616	100 995	421	-3	-23	85 643	96 528
Value (\$000)	33 204	33 367	45 954	42 515		9	-7	36 118	39 925
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	926	741	943	11 551	385	132	1 125	11 446	3 881
Quantity (TON)	1 021	817	1 039	12 733	349	132	1 125	12 617	4 278
Value (\$000)	716	886	1 167	4 447		84	281	4 440	4 201
FRANCE									
Quantity (tonne)	27	1	126	5 742	524	497	4 457	5 568	425
Quantity (TON)	30	1	139	6 329	475	497	4 457	6 138	468
Value (\$000)	29	5	69	3 006		370	4 257	2 892	243
UNITED KINGDOM									
Quantity (tonne)	481	4 952	1 939	1 163	1 117	34	-40	1 078	1 589
Quantity (TON)	530	5 459	2 137	1 282	1 013	34	-40	1 188	1 752
Value (\$000)	646	3 158	1 829	1 299		26	-29	1 112	830
DENMARK									
Quantity (tonne)	714	644	1 753	1 591	474	31	-9	1 377	563
Quantity (TON)	787	710	1 932	1 754	430	31	-9	1 518	521
Value (\$000)	389	418	832	754		25	-9	688	190
OTHER									
Quantity (tonne)	303	479	808	310	1 348	1	-62	209	508
Quantity (TON)	335	529	890	341	1 226	1	-62	230	660
Value (\$000)	272	561	1 076	418		15	-61	319	444
TOTAL									
Quantity (tonne)	102 916	112 131	124 968	111 978		3	-10	97 372	94 534
Quantity (TON)	113 447	123 605	137 753	123 434		3	-10	107 334	104 207
Value (\$000)	35 256	38 395	50 927	52 439		14	3	45 569	45 833
UNIT PRICE									
\$/tonne	343	342	408	468				468	485
\$/TON	311	311	370	425				425	440

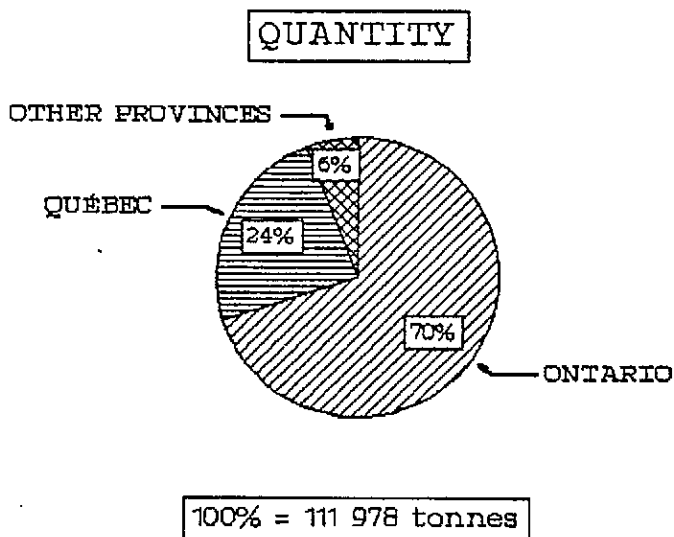
The United States was the main exporter to Canada with imports in 1985 of 91.6 thousand tonnes, or 81.8 per cent of Canadian imports. The value of imports from the U.S.A. totalled \$42.5 million or 81.1 per cent of total imports. The Federal Republic of Germany exported 11.6 thousand tonnes, or 10.3 per cent of total imports to Canada. The value of imports from this country amounted to \$4.4 million, or 8.5 per cent of Canada's imports.

Between 1982 and 1985, average unit prices increased steadily from \$343 to \$468 per tonne and continued to increase in the first 10 months of 1986, to reach \$485 per tonne. In 1985, the Federal Republic of Germany had the lowest average unit price with \$385 per tonne and the United Kingdom had the highest with \$1 117 per tonne. The main exporter to Canada, the United States, had an average unit price of \$464 per tonne.

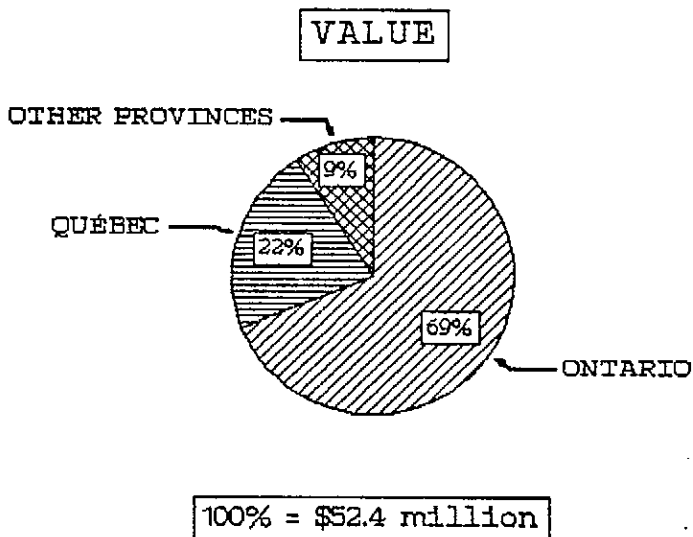
PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS BY PROVINCE OF CLEARANCE - 1985

Imports of fire bricks not elsewhere specified, cleared through the provinces of Ontario and Québec in 1985 totalled 104.7 thousand tonnes, or 94 per cent of Canadian imports. Ontario was the biggest importer with 78.3 thousand tonnes, or 70 per cent of imports. Québec was second with 26.3 thousand tonnes, or 24 per cent of Canada's imports.



By value, imports cleared through the provinces of Ontario and Québec amounted to \$47.5 million, or 91 per cent of Canadian imports. Again, Ontario was the main province of clearance with \$36.2 million, or 69 per cent of total imports. Québec was second with \$11.3 million, or 22 per cent of Canada's imports.



NOTE: For more detailed data on imports of fire bricks not elsewhere specified, see Appendix A, page 56.

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORT MARKET CONCENTRATION - 1985

	<u>Top 5 Importers</u>	<u>Top 10 Importers</u>	<u>Top 25 Importers</u>	<u>Top 30 Importers</u>	<u>All Importers</u>
Value (\$000)	19 817	29 575	35 007	42 113	52 439
Per cent of Total Value	38	56	67	80	100

In 1985, the top 10 importers of fire bricks, not elsewhere specified, accounted for \$29.6 million, or 56 per cent of total imports. These 10 importers were all manufacturers. Of these 10 importers, five were located in Ontario and four in Québec.

NOTE: "Top importers" are the known importers with the largest imports by value in 1985.

TYPE AND LOCATION OF THE TOP 40 KNOWN IMPORTERS - 1985
(85% OF TOTAL IMPORT VALUE)

	<u>MANUFACTURERS</u>		<u>WHOLESALERS</u>		<u>OTHER</u>		<u>TOTAL</u>	
	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>	<u>No. of Importers</u>	<u>Value (\$000)</u>
Ontario	17	23 745	4	2 707**	3	1 486	24	41 654**
Québec	9	15 371*	2		1		12	
Western Provinces	2		-	-	1	1 152***	3	2 808****
Non-Resident Importers	-	-	-	-	1		1	
Atlantic Provinces	-	-	-	-	-	-	-	-
TOTAL	28	39 116	6	2 707	6	2 638	40	44 462

Per cent of 1985 total value	75%	5%	5%	85%
---------------------------------	-----	----	----	-----

* Québec and Western Provinces aggregated to preserve confidentiality.

** Ontario and Québec aggregated to preserve confidentiality.

*** Québec, Western Provinces and non-resident importers aggregated to preserve confidentiality.

**** Western Provinces and non-resident importers aggregated to preserve confidentiality.

In 1985, there were at least 287 importers of fire bricks, not elsewhere specified. The top 40 importers accounted for \$44.5 million, or 85 per cent of Canadian imports. Of these 40 importers, 28 were manufacturers. Six of these 28 companies produced blast furnaces, or were steel works and rolling mills, representing \$13.6 million, or 26 per cent of Canada's imports.

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORT TRENDS - SUMMARY

<u>C.I.T.C. Commodity Code</u>	<u>Description</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>Average Annual Growth Rate 1982-1985 %</u>	<u>Major Country of Export 1985 Value (\$000)</u>
472-62-20	Super Duty						
	Quantity (tonne)	3 738	4 057	6 814	12 637	50	United States
	Quantity (TON)	4 120	4 472	7 512	13 930	50	
	Value (\$000)	1 407	1 268	2 429	3 888	40	2 528
472-62-30	Insulating						
	Quantity (tonne)	5 912	5 488	9 013	10 525	21	United States
	Quantity (TON)	6 517	6 050	9 935	11 602	21	
	Value (\$000)	4 419	2 770	5 423	5 491	8	3 621
472-62-50	Stopper Heads						
	Quantity (tonne)	254	291	183	457	22	United Kingdom
	Quantity (TON)	280	321	202	504	22	
	Value (\$000)	540	583	370	236	-24	135
472-62-90	Not Elsewhere Specified						
	Quantity (tonne)	93 012	101 608	109 317	88 358	-2	United States
	Quantity (TON)	102 528	112 604	120 501	97 398	-2	
	Value (\$000)	28 873	33 181	42 898	42 823	14	36 268
<hr/>							
TOTAL							
	Quantity (tonne)	102 916	112 131	124 968	111 978	3	United States
	Quantity (TON)	113 445	123 603	137 753	123 434	3	
	Value (\$000)	33 256	38 395	50 927	52 439	14	42 515

Within the "Not Elsewhere Specified" class of fire bricks, some additional breakdown into Super Duty, Insulating and Stopper Heads does exist. Both of the first two classes have been increasing rapidly in imports, originating primarily in the United States. Full details by foreign country of export on each of these classes are provided in Appendices B1 to B4.

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT AND PROVINCE OF CLEARANCE

1985

<u>Foreign Country Of Export</u>	<u>Canada</u>	<u>Nfld.</u>	<u>N.S.</u>	<u>P.E.I.</u>	<u>N.B.</u>	<u>Qué.</u>	<u>Ont.</u>	<u>Man.</u>	<u>Sask.</u>	<u>Alta.</u>	<u>B.C.</u>
UNITED STATES.											
Quantity (tonne)	91 621	19	709	0	296	9 479	75 600	579	2 261	1 121	1 598
Quantity (TON)	100 995	21	781	0	326	10 449	83 290	638	2 492	1 236	1 762
Value (\$000)	42 516	21	271	0	178	4 296	33 852	617	1 915	659	707
FEDERAL REPUBLIC OF GERMANY											
Quantity (tonne)	11 551	0	0	0	0	9 155	1 970	19	1	406	0
Quantity (TON)	12 733	0	0	0	0	10 092	2 171	21	1	448	0
Value (\$000)	4 447	0	0	0	0	3 035	1 177	12	1	222	0
FRANCE											
Quantity (tonne)	5 742	0	0	0	0	5 742	0	0	0	0	0
Quantity (TON)	6 329	0	0	0	0	6 329	0	0	0	0	0
Value (\$000)	3 006	0	0	0	0	3 006	0	0	0	0	0
UNITED KINGDOM											
Quantity (tonne)	1 163	0	0	0	0	145	720	58	0	26	212
Quantity (TON)	1 282	1	0	0	0	160	794	64	0	29	234
Value (\$000)	1 299	4	0	0	0	168	827	49	0	43	209
DENMARK											
Quantity (tonne)	1 591	0	0	0	0	1 591	0	0	0	0	0
Quantity (TON)	1 754	0	0	0	0	1 754	0	0	0	0	0
Value (\$000)	754	0	0	0	0	754	0	0	0	0	0
OTHER											
Quantity (tonne)	310	0	0	0	0	231	75	0	0	2	0
Quantity (TON)	341	0	0	0	0	255	83	0	0	2	0
Value (\$000)	418	0	0	0	0	77	335	0	0	4	0
TOTAL											
Quantity (tonne)	111 978	20	709	0	296	26 344	78 325	656	2 262	1 556	1 812
Quantity (TON)	123 434	22	781	0	326	29 039	86 338	723	2 493	1 715	1 997
Value (\$000)	52 439	24	271	0	178	11 336	36 191	676	1 917	928	917

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT

FIRE BRICKS AND SIMILAR SHAPES

SUPER DUTY

472-62-20

Foreign Country of Export	1982	1983	1984	1985	Unit Price 1985 \$	Average Annual Growth Rate 1982-1985 %	Per cent Change 1984-1985	10-Month Imports Jan. to Oct.	
								1984-1985	1985
UNITED STATES									
Quantity (tonne)	3 738	4 027	6 813	6 827	370	22	0	5 952	3 522
Quantity (TON)	4 120	4 439	7 510	7 526	336	22	0	6 561	3 882
Value (\$000)	1 407	1 263	2 419	2 528		22	5	2 222	1 480
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	0	0	0	5 742	231	N/A	N/A	5 742	0
Quantity (TON)	0	0	0	6 330	209	N/A	N/A	6 330	0
Value (\$000)	0	0	0	1 326		N/A	N/A	1 326	0
OTHER									
Quantity (tonne)	0	29	2	68	500	N/A	3 300	2	92
Quantity (TON)	0	32	2	74	459	N/A	3 300	2	101
Value (\$000)	0	3	11	340		N/A	2 991	10	14
TOTAL									
Quantity (tonne)	3 738	4 057	6 815	12 637	308	50	85	11 696	3 613
Quantity (TON)	4 120	4 472	7 512	13 930	279	50	85	12 893	3 983
Value (\$000)	1 407	1 268	2 429	3 888		40	60	3 558	1 493

N/A - Not Applicable

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT

FIRE BRICKS AND SIMILAR SHAPES

INSULATING

472-62-30

Foreign Country of Export	1982	1983	1984	1985	Unit	Average	Per cent Change 1984-1985	10-Month Imports	
					Price 1985	Annual Growth Rate 1982-1985		Jan. to	Oct.
					\$	%		1985	1986
UNITED STATES									
Quantity (tonne)	4 403	4 463	6 242	6 380	568	13	2	5 453	6 216
Quantity (TON)	4 853	4 920	6 881	7 033	515	13	2	6 011	6 852
Value (\$000)	3 582	2 162	3 533	3 621		0	2	3 084	3 344
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	756	142	170	2 906	369	57	1 609	2 906	772
Quantity (TON)	833	156	187	3 203	335	57	1 609	3 203	851
Value (\$000)	411	86	137	1 073		38	683	1 073	716
DENMARK									
Quantity (tonne)	506	644	1 429	993	538	25	-31	993	19
Quantity (TON)	558	710	1 575	1 095	488	25	-31	1 095	21
Value (\$000)	260	418	734	534		27	-27	534	11
UNITED KINGDOM									
Quantity (tonne)	19	212	751	131	1 130	90	-83	131	6
Quantity (TON)	21	234	828	144	1 028	90	-83	144	7
Value (\$000)	31	81	658	148		68	-78	148	16
FRANCE									
Quantity (tonne)	0	0	60	101	673	N/A	68	101	0
Quantity (TON)	0	0	66	111	613	N/A	68	111	0
Value (\$000)	0	0	26	68		N/A	162	68	0
OTHER									
Quantity (tonne)	228	27	361	14	3 357	-61	-96	14	0
Quantity (TON)	252	30	398	16	2 938	-61	-96	16	0
Value (\$000)	135	23	335	47		-30	-86	47	0
TOTAL									
Quantity (tonne)	5 912	5 488	9 013	10 525	522	21	17	9 598	7 013
Quantity (TON)	6 517	6 050	9 935	11 602	473	21	17	10 580	7 731
Value (\$000)	4 419	2 770	5 423	5 491		8	1	4 954	4 087

N/A - Not Applicable

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT

FIRE BRICKS AND SIMILAR SHAPES

STOPPER HEADS

472-62-50

Foreign Country of Export	1982	1983	1984	1985	Unit	Average	Per cent Change 1984-1985	10-Month Imports	
					Price 1985	Annual Growth Rate 1982-1985		Jan. to 1985	Oct. 1986
					\$	%			
UNITED KINGDOM									
Quantity (tonne)	124	108	45	315	429	36	600	300	18
Quantity (TON)	137	119	50	347	389	36	600	331	20
Value (\$000)	301	267	142	135		-23	-5	89	62
UNITED STATES									
Quantity (tonne)	130	183	131	141	695	3	8	138	135
Quantity (TON)	143	202	144	155	632	3	8	152	149
Value (\$000)	240	316	176	98		-26	-44	88	50
OTHER									
Quantity (tonne)	0	0	7	2	1 500	N/A	-71	2	0
Quantity (TON)	0	0	8	2	1 500	N/A	-71	2	0
Value (\$000)	0	0	52	3		N/A	-477	3	0
<hr/>									
TOTAL									
Quantity (tonne)	254	291	183	457	516	22	150	440	153
Quantity (TON)	280	321	202	504	468	22	150	485	169
Value (\$000)	540	583	370	236		-24	-36	180	112

N/A - Not Applicable

PART E: FIRE BRICKS AND SIMILAR SHAPES, N.E.S.

IMPORTS BY MAJOR FOREIGN COUNTRY OF EXPORT

FIRE BRICKS AND SIMILAR SHAPES,

NOT ELSEWHERE SPECIFIED

472-62-90

Foreign Country of Export	1982	1983	1984	1985	Unit	Average	Per cent Change 1984-1985	10-Month Imports	
					Price 1985	Annual Growth Rate 1982-1985		Jan. to 1985	Oct. 1986
					\$	%			
UNITED STATES									
Quantity (tonne)	92 193	96 633	106 574	78 272	463	-5	-27	66 151	77 695
Quantity (TON)	101 626	106 520	117 479	86 281	420	-5	-27	72 919	85 645
Value (\$000)	27 959	29 587	40 018	36 268		9	-9	30 724	35 051
FRANCE									
Quantity (tonne)	27	1	66	5 641	521	493	8 447	5 468	425
Quantity (TON)	30	1	73	6 218	473	493	8 447	6 027	468
Value (\$000)	29	5	42	2 938		366	6 895	2 824	243
FEDERAL REPUBLIC OF GERMANY									
Quantity (tonne)	171	600	773	2 901	705	157	275	2 796	3 109
Quantity (TON)	188	661	852	3 198	639	157	275	3 082	3 427
Value (\$000)	305	800	1 030	2 045		89	99	2 038	3 485
UNITED KINGDOM									
Quantity (tonne)	337	4 129	1 142	717	1 413	29	-37	647	1 495
Quantity (TON)	372	4 551	1 259	790	1 282	29	-37	713	1 648
Value (\$000)	315	2 516	1 030	1 013		48	-2	876	746
JAPAN									
Quantity (tonne)	51	51	304	40	6 750	-8	-87	33	10
Quantity (TON)	56	56	335	44	6 136	-8	-87	36	11
Value (\$000)	108	149	577	270		36	-53	229	33
OTHER									
Quantity (tonne)	232	194	457	787	367	50	72	542	1 020
Quantity (TON)	256	815	503	868	333	50	72	599	1 125
Value (\$000)	157	124	201	289		23	44	186	584
TOTAL									
Quantity (tonne)	93 011	101 608	109 316	88 358	485	-2	-19	75 637	83 754
Quantity (TON)	102 528	112 604	120 501	97 399	440	-2	-19	83 376	92 324
Value (\$000)	28 873	33 181	42 898	42 823		14	0	36 877	40 142

DRIE REGIONAL OFFICES

Newfoundland
P.O. Box 8950
Parsons Building
90 O'Leary Avenue
St. John's, Newfoundland
A1B 3R9
Tel: (709) 772-4884

Prince Edward Island
P.O. Box 1115
Confederation Court Mall
134 Kent Street, Suite 400
Charlottetown, Prince Edward Island
C1A 7M8
Tel: (902) 566-7400

Nova Scotia
P.O. Box 940, Station M
1496 Lower Water Street
Halifax, Nova Scotia
B3J 2V9
Tel: (902) 426-2018

New Brunswick
P.O. Box 1210
Assumption Place
770 Main Street
Moncton, New Brunswick
E1C 8P9
Tel: (506) 857-6400

Québec
P.O. Box 247
Tour de la Bourse
800, Place Victoria, Suite 3800
Montréal, Québec
H4Z 1E8
Tel: (514) 283-8185

Ontario
P.O. Box 98
1 First Canadian Place, Suite 4840
Toronto, Ontario
M5X 1B1
Tel: (416) 365-3737

Manitoba
P.O. Box 981
330 Portage Avenue
Room 608
Winnipeg, Manitoba
R3C 2V2
Tel: (204) 983-4090

Saskatchewan
Canada Building
6th Floor, 105-21st Street East
Saskatoon, Saskatchewan
S7K 0B3
Tel: (306) 975-4400

Alberta
Cornerpoint Building
10179 - 105th Street, Suite 505
Edmonton, Alberta
T5J 3S3
Tel: (403) 420-2944

British Columbia
P.O. Box 49178
Bentall Postal Station
Bentall Tower IV
1101 - 1055 Dunsmuir Street
Vancouver, British Columbia
V7X 1K8
Tel: (604) 666-0434

Yukon
Suite 301
108 Lambert Street
Whitehorse, Yukon
Y1A 1Z2
Tel: (403) 668-4655

Northwest Territories
P.O. Bag 6100
Precambrian Building
Yellowknife, Northwest Territories
X1A 1C0
Tel: (403) 920-8571

