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IMPORT ANALYSIS

POWER TRANSFORMERS

JANUARY TO DECEMBER 1984



Government
of Canada

Regional Industrial
Expansion

Gouvernement
du Canada

Expansion industrielle
régionale

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POWER TRANSFORMERS

JANUARY TO DECEMBER 1984



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SECTION I - INTRODUCTION

Scope of Analysis

This analysis of imports of power transformers from 500 to 2,500 kilovolt-ampere (KVA) is based on a detailed examination of Revenue Canada, Customs and Excise, import documents for the period January to December 1984. Power transformers are classified to Canadian International Trade Classification import commodity code 683-77-49 "Transformers, Power, 500 to 2,500 KVA, not elsewhere specified".

Method

The data shown in this analysis were extracted from Revenue Canada Customs documents. These documents provide a description of the products, names of importers, exporters, quantities, dollar values, unit prices, countries of origin, provinces of entry, tariff applications and rates of exchange.

The value in this analysis does not correspond to official Statistics Canada figures for various reasons. Reconciliation of the two total figures is explained as follows:

	<u>Dollar Values (\$,000)</u>	
	<u>Analyzed by Market Information & Analysis Division</u>	<u>Published by Statistics Canada</u>
Reported Values	1,266	2,700
Documents not available for analysis	93	
Values reported by Statistics Canada but not included in this report (e.g. used transformers, Canadian goods returned)	501	
Documents referring to products which should have been classified elsewhere	<u>840</u>	<u> </u>
	2,700	2,700

Statistics Canada's figures are subject to revision. Changes will be reflected in the normal way; i.e., "pink sheets," which are located in the front section of Catalogue #65-007.

Please note that dollar values shown 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.

References

- (1) Customs Tariff: Items 44514-1 and 44514-2
- (2) Canadian International Trade Classification
(Cat. #65-502E, Statistics Canada)
- (3) Imports by Commodities
(Cat. #65-007, Statistics Canada)
Commodity Code 683-77-49

SECTION II - ANALYSIS AND OBSERVATIONS

Analysis of Imports

Imports of power transformers as reported on documents examined for the period January to December 1984, totalled 81 units valued at \$1,266,129.

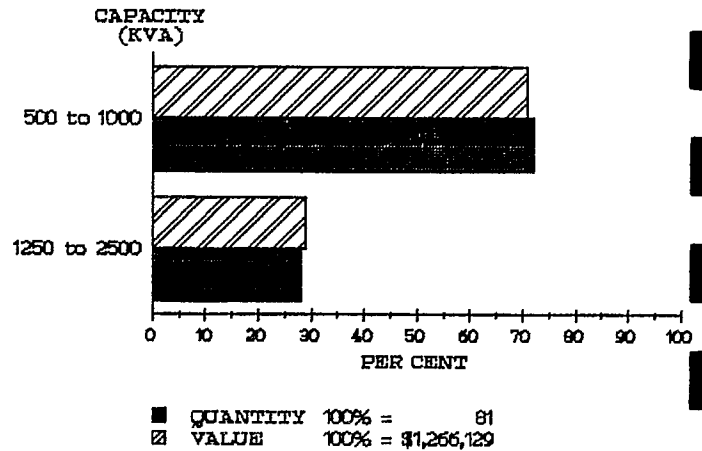
Summary of Imports

A. Capacity KVA (see Table 1)

	<u>500-765</u>	<u>800-1500</u>	<u>2000-2500</u>	<u>Total</u>
Number	46	21	14	81
Total Value (\$000)	734	297	235	1,266
% of Total Value	58	23	19	100

FIG.1 - IMPORT DISTRIBUTION BY CAPACITY

Power transformers with a capacity of 500 to 1,000 KVA account for 72 per cent by quantity and 71 per cent by value of the import market. Units with capacities of 1,250 to 2,500 KVA accounted for the remainder.

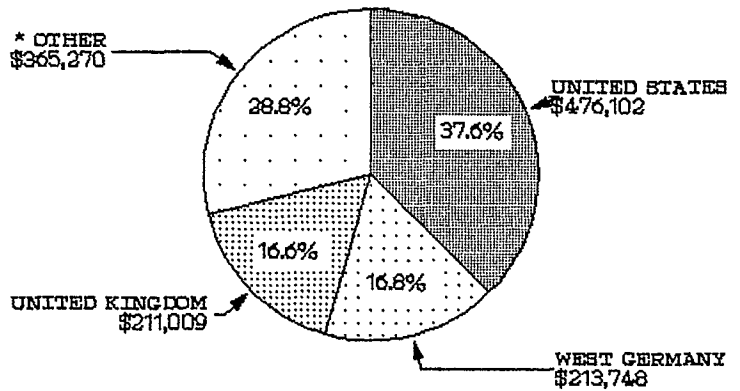


8. Unit Price Range (see Table 2)

	<u>\$ 10,000 or under</u>	<u>\$10,001 to \$20,000</u>	<u>Over \$20,000</u>	<u>Total</u>
Number	28	27	26	81
Total Value (\$000)	144	384	738	1,266
% of Total Value	11	30	59	100

FIG.2 - COUNTRY OF ORIGIN

Of the total import market value, shipments from the United States accounted for 38 per cent followed by West Germany and the United Kingdom each with 17 per cent. The remaining countries in descending order of value were Belgium, Switzerland and Italy. Their values were aggregated for reasons of confidentiality.



PERCENTAGE OF VALUE 100% = \$1,266,129

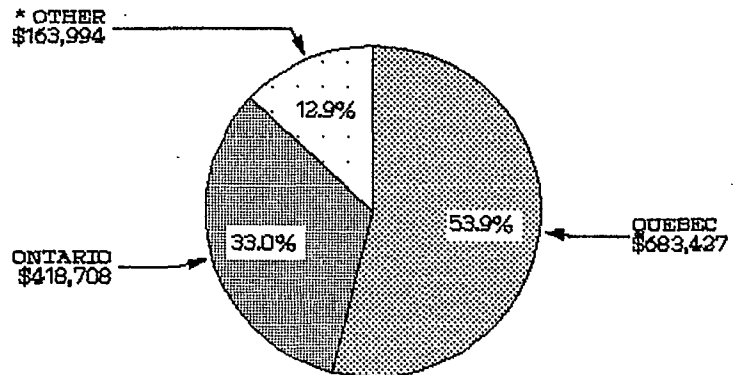
* OTHER: Includes Belgium, Switzerland & Italy

SOURCE: Own Survey

Of the \$1,266,129 of imports, the top three importers accounted for \$663,519 or 52 per cent of the total value (see table 3).

FIG.3 - PROVINCE OF ENTRY

Quebec was the major region of entry accounting for 54 per cent of the total value, followed by Ontario with 33 per cent. The remaining provinces accounted for 13 per cent.



PERCENTAGE OF VALUE 100% = \$1,266,129

*OTHER: Includes British Columbia, Alberta, Manitoba, New Brunswick & Nova Scotia

SOURCE: Own Survey

Market Overview

The domestic market for small power transformers (500 to 2,500 KVA) is placed at \$35 - 40 million per year. It closely follows industrial and commercial construction activity. Because of the general recession (1982 and 1983) Canadian production fell to some \$23 million in 1983 but is now recovering well.

Imports are relatively small, about 5 per cent of production, and exports are mainly of specialized units or as part of larger equipment packages. International competition is keen as small power transformers are of relatively low technology and are produced in several low-cost labour countries.

Many applications for small power transformers are indoors. In the past these were frequently filled with polychlorobiphenols (PCB) because of fire hazard. Current environmental considerations preclude the use of PCB and there is discussion of a possible accelerated phase-out of units containing it. The moratorium on the use of PCB in electrical apparatus has brought about both the use of alternate transformer fluids and an increase in the specification of dry-type units. If the accelerated phase-out of PCB-filled units progresses, sales should increase by an estimated \$20 million per year for about 5 years.

Source: Machinery and Electrical Equipment Branch
Department of Regional Industrial Expansion

SECTION III - RESULTS

Canadian Importers

Importers of power transformers during the period January to December 1984, as indicated in this report, are listed below in alphabetical order.

<u>Name</u>	<u>Address</u>
Asea Inc.	St-Laurent, Québec Montréal, Québec Winnipeg, Manitoba
Boundary Electric Ltd.	Grand Forks, British Columbia
Brown Boveri Canada Inc.	Pointe-Claire, Québec
Cam Tran Co., Div. of Ontario Inc.	Grafton, Ontario
Campbell Sales	Cobourg, Ontario
Cantec Electric Enterprises Inc.	Brampton, Ontario
Carborundum Abrasives Inc.	Plattsville, Ontario
Electric Power Equip.	Vancouver, British Columbia
Fag Bearing Ltd.	Stratford, Ontario
Ferranti Packard Transformers Ltd.	St. Catharines, Ontario
GEC Canada Ltd.	Mississauga, Ontario
Hydro Quebec	Montréal, Québec
Industrial Power Controls	Mississauga, Ontario
Interprovincial Steel & Pipe Corp.	Port Moody, British Columbia
Lovat Tunnel Equip. Inc.	Rexdale, Ontario
Potash Co. of America	Sussex, New Brunswick
Selkirk Tunnel Constructors	Golden, British Columbia
Vac-Aero International Inc.	Oakville, Ontario
Wabush Mines	Sept-Iles, Québec
Westinghouse Canada	Bridgetown, Nova Scotia
XYZ Dynamo	Winnipeg, Manitoba

Foreign Exporters to Canada

Major exporters to Canada of power transformers shown in this report are listed in descending order of dollar value. These exporters accounted for 81 per cent of the total analyzed value of \$1,266,129. Shipments by European countries accounted for 52 per cent of the value of imports from the major exporters or 41 per cent of all imports.

Foreign Exporters to Canada (cont'd)

<u>Name</u>	<u>Address</u>	
Woden Transformers Co. Ltd.	West Midlands, WV	United States
Balteau SA	Beyne Heusay	Belgium
Asea HV Apparatus	Vasteras	Sweden
Ferranti Packard Transformers Inc.	Dunkirk, NY	United States
BBC Brown Boveri & Co. Ltd.	Baden	Switzerland
Minings Controls Inc.	Beckley, WV	United States

Canadian Production

Statistics Canada reports shipments of transformers by Canadian manufacturers as follows:

	<u>1981</u>	<u>1982</u>	<u>1983(1)</u>	<u>Average Annual Growth Rate 1981-83</u>
Power transformers: 500 to 2,500 KVA	(thousands of dollars)			
	37,960	37,526	22,925	-22%

(1) latest year available

Source: Statistics Canada
Catalogue 43-207

The Canadian Trade Index (1985), issued by the Canadian Manufacturers' Association, indicates that there are at least 17 manufacturers of power transformers, although not necessarily in the 500 to 2,500 KVA range. They are listed below in alphabetical order.

ATC Manufacturing Ltd.	Waterloo, Ontario
ASEA Inc.	Montréal, Québec
CDN-Controlled Power Ltd.	Windsor, Ontario
* Carte Electric Ltd.	Winnipeg, Manitoba
Electronic Craftsmen Ltd.	Waterloo, Ontario
* Federal Pioneer Ltd.	Toronto, Ontario
* Ferranti-Packard Transformers Ltd.	Toronto, Ontario
* Filtron Ltd.	Nepean, Ontario

* Hammond Mfg. Co. Ltd.	Guelph, Ontario
M.C.I. Ltd.	Waterloo, Ontario
Magnetic Consultants Inc.	Waterloo, Ontario
Markham Electric Ltd.	Markham, Ontario
Moloney Electric Corp.	Toronto, Ontario
Polygon Industries Ltd.	Toronto, Ontario
Trans-Tec Ltd.	Markham, Ontario
Vardic Ltd.	Pickering, Ontario
* Westinghouse Canada Inc.	Hamilton, Ontario

* Indicates firms engaged in export trade.

TABLE 1
IMPORTS OF POWER TRANSFORMERS - BY CAPACITY
JANUARY TO DECEMBER 1984

<u>Capacity</u> (KVA)(1)	<u>Quantity</u> (No.)	<u>Value</u> (\$)	<u>% of Total Value</u>
500	19	110,150	9
750	6	50,789	4
765	21	573,489	45
*800 & 1,000	12	165,540	13
*1,250 & 1,500	9	131,161	10
*2,000 & 2,500	<u>14</u>	<u>235,000</u>	<u>19</u>
	81	1,266,129	100

(1) KVA = kilovolt-ampere

(*) Aggregated to preserve confidentiality

TABLE 2

IMPORTS OF POWER TRANSFORMERS - BY PRICE RANGE

JANUARY TO DECEMBER 1984

<u>Price Range</u> (<u>\$</u>)	<u>Quantity</u> (<u>No.</u>)	<u>Value</u> (<u>\$</u>)	<u>Average</u> <u>Unit Price</u> (<u>\$</u>)
Up to 5,000	15	45,482	3,032
5,001 to 10,000	13	98,397	7,569
10,001 to 15,000	18	229,538	12,752
15,001 to 20,000	9	154,842	17,205
20,001 to 25,000	13	324,572	24,967
Over 25,000	<u>13</u>	<u>413,298</u>	<u>31,792</u>
	81	1,266,129	15,631

TABLE 3

IMPORT MARKET CONCENTRATION

<u>Importers</u>	<u>Cumulative</u> <u>Quantity</u> (<u>No.</u>)	<u>Cumulative</u> <u>Value</u> (<u>\$</u>)	<u>% of Total</u> <u>Value</u>
Top 3	34	663,519	52
Top 6	46	938,016	74
Top 10	58	1,087,396	86

Canadian and Foreign Tariffs

Canada

Power transformers included in this analysis were dutiable under the following most commonly applied tariff items.

<u>Tariff Item</u>	<u>Description</u>	<u>British Preferential Tariff</u>	<u>U.K. & Ireland</u>	<u>Most Favoured Nation Tariff</u>	<u>General Tariff</u>	<u>General Preferential Tariff</u>
44514-1	Electric dynamos or generators and transformers, and complete parts thereof, n.o.p.....1984	11.4%	11.4%	37.5%	7.5%	11.4%
1985	10.7%	10.7%	37.5%	7%	10.7%
44514-2	Electric dynamos or generators 150 KW and over; electric transformers 500 KVA and over; electric distribution transformers; complete parts thereof, n.o.p.....1984	15%	15%	37.5%	10%	15%
1985	15%	15%	37.5%	10%	15%

N.O.P. - Not otherwise provided for

Tariff Arrangements and Foreign Countries of Export:

Most favoured nation: United States, West Germany, Belgium, Italy and Switzerland

Most favoured nation or U.K. and Ireland: United Kingdom

Tariff items and rates of duty are subject to change and need to be verified by direct reference to:

Tariff Programs
 Revenue Canada
 Customs and Excise
 Ottawa, Ontario
 K1A 0L5
 Tel: (613) 992-2623

Foreign Countries

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

Trade Information Centre
 International Bureaux
 External Affairs Canada
 Ottawa, Ontario
 K1A 0G2
 Tel: (613) 993-6435

