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# IMPORT ANALYSIS

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LOAD CELLS  
(FOR WEIGHING SCALES)  
JANUARY TO DECEMBER 1984



Government  
of Canada

Regional Industrial  
Expansion

Gouvernement  
du Canada

Expansion industrielle  
régionale

Canada 

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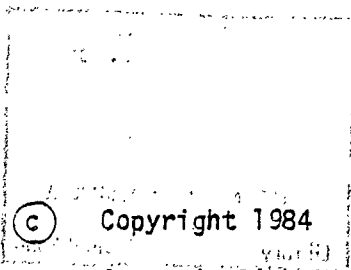
LOAD CELLS  
(FOR WEIGHING SCALES)

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## SECTION I - INTRODUCTION

### Product Description

A load cell for weighing scales is a device consisting of a strain gauge and recording mechanism. It measures weight by sensing the difference in electrical characteristics in the gauge caused by a change in pressure. The study excludes load cells for purposes other than weighing scales.

### Scope of Analysis

This analysis of imports of load cells is based on a detailed examination of Revenue Canada Customs import documents for the period January to December 1984. Load cells are classified to Canadian International Trade Classification import commodity code 709-49-87 "Physical Properties Test/Inspection Equipment Accessories".

### 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 and exporters, quantities, dollar values, unit prices, countries of origin, provinces of entry, tariff applications and rates of exchange.

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: Item 44532-1
- (2) Canadian International Trade Classification  
(Cat. #65-502E, Statistics Canada)
- (3) Imports by Commodities  
(Cat. #65-007, Statistics Canada)  
Commodity Code(s) 709-49-87

SECTION II - ANALYSIS AND OBSERVATIONS

Analysis of Imports

Imports of load cells as reported on documents examined for the period January to December 1984, totalled 8,757 units valued at \$3,426,457.

Imports totalling \$970,643, or 28 per cent of the analyzed value, could not be identified as to capacity due to inadequate document description (see Table 1).

SUMMARY OF IMPORTS BY CAPACITY RANGE

Capacity Range (000) Lb.	Quantity		Value	
	(No.)	(%)	(\$000)	(%)
.02 to .75	1,271	14	312	9
1 to 2.5	3,295	37	700	20
3 to 7.5	861	10	329	10
10 to 25	770	9	377	11
30 to 45	32	(*)	24	(*)
50 to 75	768	9	512	15
100 to 500	237	3	201	6
NOT KNOWN	<u>1,523</u>	<u>17</u>	<u>971</u>	<u>28</u>
TOTAL	8,757	100	3,426	100

The analysis shows load cells up to 7,500 pound capacity accounted for 62 per cent by quantity and 39 per cent of value of total imports.

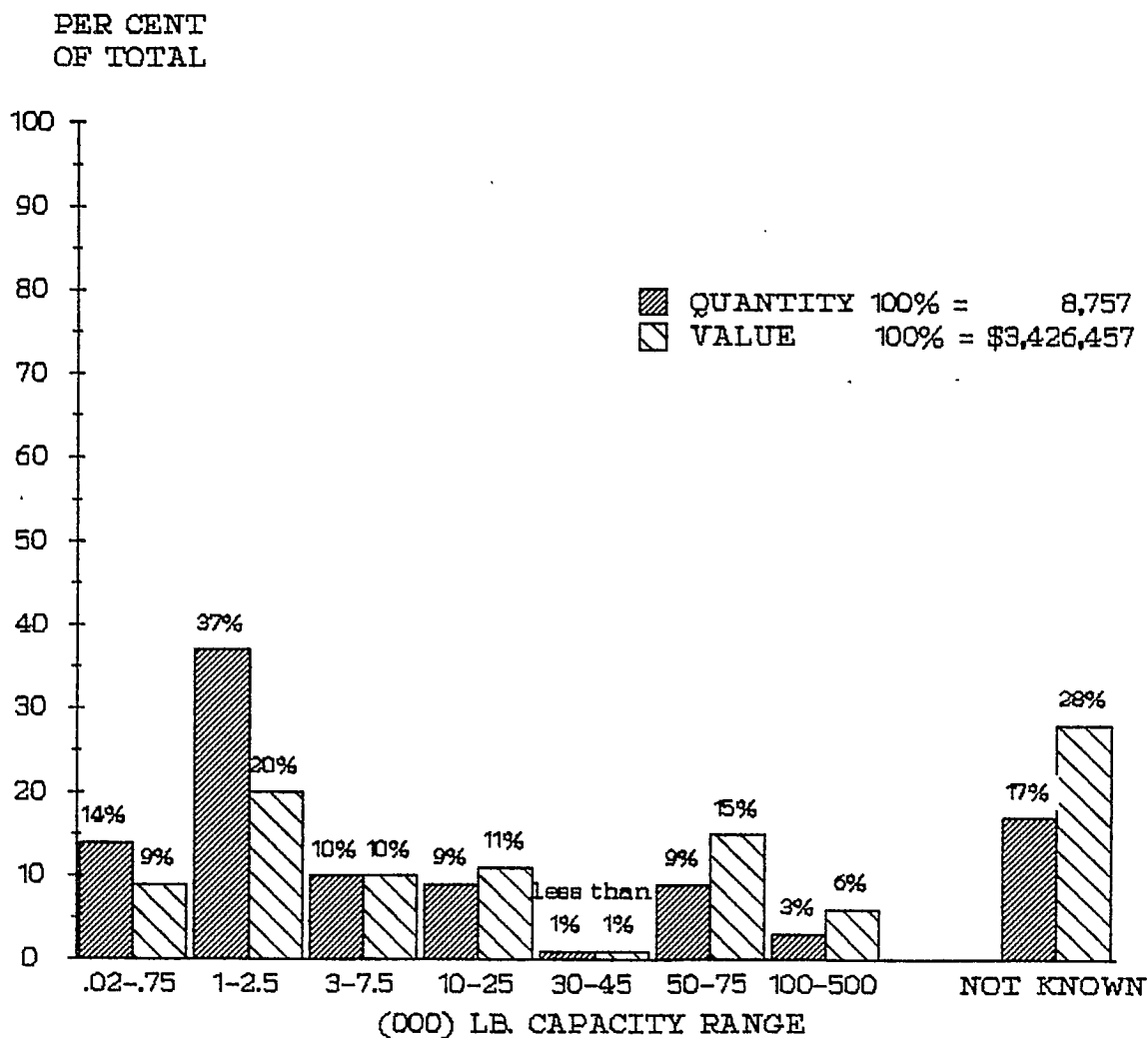
Fig. 1 shows the largest proportion of imports of load cells by quantity (37 per cent) and by value (20 per cent) belong to the one to 2.5 thousand capacity range. This is particularly true of the one thousand and two thousand capacity scales, as detailed in Table 1.

Particularly noteworthy is that the average unit prices fluctuate widely according to capacity of the scales (See Table 1).

The top 13 importers accounted for 8,070 units or 92 per cent of the total quantity (8,757) and \$3,070,775 or 90 per cent of the total value (\$3,426,457). Imports were particularly concentrated amongst the top six importers who accounted for 74 per cent and 66 per cent by quantity and value, respectively, of total imports. For details, see Table 2.

NOTE: (\*) Less than one per cent  
All figures are rounded

**FIGURE I**  
**LOAD CELLS**  
**IMPORT DISTRIBUTION BY CAPACITY RANGE**  
**JANUARY TO DECEMBER 1984**

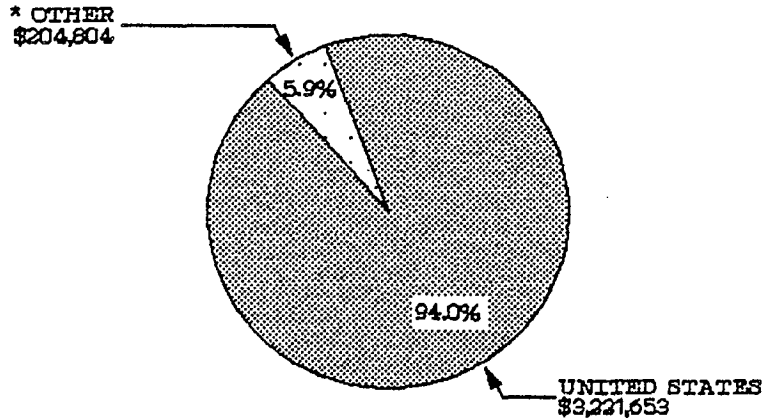


ALL PERCENTAGE FIGURES ARE ROUNDED

SOURCE: TABLE 1

FIG.2 - COUNTRY OF ORIGIN

Of the total import market value, shipments originating from the United States accounted for 94 per cent. The remaining countries in descending order of value were Sweden, West Germany, United Kingdom, Japan and Switzerland.



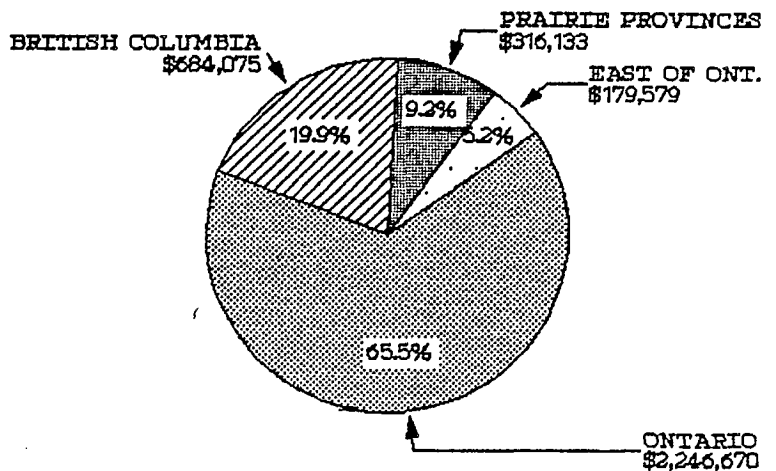
PERCENTAGE OF VALUE 100% = \$3,426,457

\* OTHER: INCLUDES SWEDEN, WEST GERMANY, UNITED KINGDOM, JAPAN & SWITZERLAND

SOURCE: OWN SURVEY

FIG.3 - PROVINCE OF ENTRY

Ontario was the major province of entry accounting for 66 per cent of the total value, followed by British Columbia: 20 per cent, Prairie Provinces: nine per cent and provinces East of Ontario: five per cent.



PERCENTAGE OF VALUE 100% = \$3,426,457

PROVINCES EAST OF ONTARIO INCLUDES: QUEBEC, NOVA SCOTIA, PRINCE EDWARD ISLAND & NEWFOUNDLAND

PRAIRIE PROVINCES INCLUDES: MANITOBA, SASKATCHEWAN & ALBERTA

SOURCE: OWN SURVEY



SECTION III - RESULTS

Canadian Importers

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

<u>Name</u>	<u>Address</u>
Accurate & Automatic Scale Co. Ltd.	Scarborough, Ontario
Ametron Ltd.	Mississauga, Ontario
Atomic Energy of Canada Ltd.	Pinawa, Manitoba
Aurora Scale Mfg. Ltd.	Aurora, Ontario
Balances Leduc Thibeault Inc.	Mercier, Québec
Barnes Wallace Co. Ltd.	Burlington, Ontario
Brian Engineering Ltd.	Rexdale, Ontario
Calibration Canada Ltd.	Hamilton, Ontario
Canadian Scale Co. Ltd.	Toronto, Ontario
Canrep Inc.	Montréal, Québec
Canron Inc.	Vancouver, British Columbia
Carinal Scale Co.	Essex, Ontario
Centoco Manufacturing Ltd.	Tilbury, Ontario
City Wide Scale Co. Ltd.	Rexdale, Ontario
Community and Cultural Affairs Island	Charlottetown, Prince Edward
Compuweight Ltd.	Montréal, Québec
Dominion Bridge (see Amca International Ltd.)	Winnipeg, Manitoba
Dow Chemical Canada Ltd.	Sarnia, Ontario
Durham Instruments (Division of Buchan Instruments Inc.)	Pickering, Ontario
Eastern Scale Manufacturing Fabricated Steel Prod. (see Indal Ltd.)	Toronto, Ontario
Forest Engineering Research	Windsor, Ontario
Genstar-Costain Conc Tie Co.	Vancouver, British Columbia
Griffiths DM Scales Ltd.	Edmonton, Alberta
Howe Richardson Inc.	Burnaby, British Columbia
Industrial Scales Ltd.	Pointe Claire, Québec
Industries GLM Inc.	Vancouver, British Columbia
Intertechnology Ltd.	Baie Comeau, Québec
Interweigh System Inc.	Don Mills, Ontario
Instron Canada Ltd.	Scarborough, Ontario
Kanawha Valley Scale Service C/o SNC	Burlington, Ontario
Kingsbury Machine Tool Canada	Hinton, Alberta
Ludwig Engel Canada Ltd.	Burlington, Ontario
MTS Testing Systems (Canada) Ltd.	Guelph, Ontario
	Brampton, Ontario

Canadian Importers (Cont'd)

<u>Name</u>	<u>Address</u>
M&L Testing Equipment Co. Ltd.	Hamilton, Ontario
Macro Point Ltd.	Cambridge, Ontario
Mantle Ind. Ltd.	Delta, British Columbia
Masstron Scale Ltd.	Burlington, Ontario
Master-Dyne Ltd.	Mississauga, Ontario
Matrix Scale Systems Inc.	Mississauga, Ontario
Maxwell Morton and Associates	Richmond, British Columbia
McGregor BH	Toronto, Ontario
Merrick Canada Ltd.	Peterborough, Ontario
Metro Equipment Canada Ltd.	Richmond, British Columbia
Microdata Canada Inc.	Willowdale, Ontario
Milltronics Ltd.	Peterborough, Ontario
Mott Scale Systems Inc.	Brantford, Ontario
Newfoundland Scale Co. Ltd.	Paradise, Newfoundland
Oneida Canada Ltd.	Niagara Falls, Ontario
Ontario Hydro Corporation	Toronto, Ontario
Pacific Industrial Scale Co.	Richmond, British Columbia
Peacock Inc.	Ville La Salle, Québec
Peerless Page (Division of Lear Siegler Industries Ltd.)	Penticton, British Columbia
Philips Electronics Ltd.	Scarborough, Ontario
Pioneer Grain	Moosomin, Saskatchewan
Prairie Systems and Equipment	Saskatoon, Saskatchewan
Pratt & Whitney Canada Inc.	Longueuil, Québec
Precision Scale Co. Edmonton Ltd.	Edmonton, Alberta
Precision Spring of Canada Ltd.	Kingsville, Ontario
Procor Ltd.	Calgary, Alberta
Protech Scale Ltd.	Winnipeg, Manitoba
Quadra Control & Weight Systems Ltd.	Surrey, British Columbia
Québec Cartier Mining Co.	Port Cartier, Québec
Reliance Electric Ltd. (Division of Toledo Scale	Mississauga, Ontario
Revere Corp. of America	Toronto, Ontario
Smart Alexander D Ltd.	Markham, Ontario
Stel-Tek Ltd.	Stoney Creek, Ontario
Stelco Inc.	Edmonton, Alberta
Structural Instrumentation Inc.	Kelowna, British Columbia
Sullivan Strong Scott Ltd.	St. Marys, Ontario
Superior Scale Co. Ltd.	Winnipeg, Manitoba
Tahsis Company Ltd.	Vancouver, British Columbia
Triton Inc.	Lachine, Québec
United Testing Systems Ltd.	Concord, Ontario
University of Calgary The	Calgary, Alberta
Valiant Machine & Tool Inc.	Windsor, Ontario
Weightech Maritime Ltd.	Dartmouth, Nova Scotia
Weldwood of Canada Ltd.	Vancouver, British Columbia
Western Scale Co. Ltd.	Port Coquitlam, British Columbia
Willer Engineering Ltd.	Willowdale, Ontario

Foreign Exporters to Canada

Major exporters to Canada of load cells shown in this report are listed in descending order of dollar value. These exporters accounted for 89 per cent of the total analyzed value of \$3,426,457.

<u>Name</u>	<u>Address</u>
Toledo Scale (Division of Reliance Electric Co.)	Columbus, OH United States
Transducers Inc.	Cerritos, CA United States
Sensortronics, Inc.	Covina, CA United States
Revere Corp. of America	Wallingford, CT United States
Structural Instrumentation Inc.	Tuckwila, WA United States
Daytronic Corp.	Miamisburg, OH United States
AB Bofors Elektronik	Bofors Sweden
Hottinger Baldwin Measurements Inc.	Framingham, MA United States
Lodec Inc.	Lynnwood WA United States

Canadian Production

According to Statistics Canada, load cells are made in Canada. However, for reasons of confidentiality, separate data on production or shipments by Canadian manufacturers are not available.

TABLE 1

IMPORTS OF LOAD CELLS - BY CAPACITY

JANUARY TO DECEMBER 1984

<u>Capacity</u> (000) Lb.	<u>Quantity</u> (No.)	<u>Value</u> (\$)	<u>Average</u> <u>Unit Price</u> (\$)
.02	26	6,488	250
.05	100	25,770	258
.075 and .1	192	51,314	267
.2	161	45,624	283
.3 and .4	34	19,445	572
.5 and .75	758	163,619	216
1	1,061	253,607	239
1.5	58	15,605	269
2	1,961	358,385	183
2.5	215	72,916	339
3	30	16,527	551
4	51	31,798	623
5 and 7.5	780	280,255	359
10	485	183,531	378
11, 15 and 20	183	108,944	595
22 and 25	102	84,082	824
30	21	15,499	738
40 and 45	11	8,948	813
50	353	207,500	588
60 and 75	415	305,001	735
100	113	95,616	846
200	99	82,380	832
300 and 500	25	22,960	918
Not Known	1,523	970,643	637
<b>TOTAL</b>	<b>8,757</b>	<b>3,426,457</b>	

TABLE 2

IMPORT MARKET CONCENTRATION

<u>Importers</u>	<u>Cumulative</u> <u>Quantity</u> (No.)	<u>% of Total</u> <u>Quantity</u>	<u>Cumulative</u> <u>Value</u> (\$)	<u>% of Total</u> <u>Value</u>
Top 3	5,480	63	1,532,736	45
Top 6	6,496	74	2,276,916	66
Top 13	8,070	92	3,070,775	90

Top importers are importers with the largest imports by dollar value.

NOTE: Percentage figures are rounded

Canadian and Foreign Tariffs

Canada

Load cells included in this analysis were dutiable under the following most commonly applied tariff item.

<u>Tariff Item</u>	<u>Description</u>	<u>British Preferential Tariff</u>	<u>U.K. &amp; Ireland</u>	<u>Most Favoured Nation Tariff</u>	<u>General Tariff</u>	<u>General Preferential Tariff</u>
44532-1	Electrical instruments and apparatus of precision of a class or kind not made in Canada, viz.:--Meters or gauges for indicating and/or recording altitude, amperes, comparisons, capacity, density, depth, distance, electrolysis, flux, force, frequency, humidity, inductance, liquid levels, ohms, operation, power factor, pressure, space, speed, stress, thrust, synchronism, temperature, time, volts, volume, watts, weight; complete parts thereof.....1984	Free	Free	2.8%	30%	Free

Tariff Arrangements and Foreign Countries of Exports:

Most favoured nation: Japan, Sweden, Switzerland, United Kingdom, United States, and West Germany

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) 996-9474

Foreign Countries

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

Info Export  
Export Programs and Services Bureau  
External Affairs Canada  
Ottawa, Ontario  
K1A 0G2  
Tel: (613) 993-6435

