



ALUMINUM ROLLING, CASTING AND EXTRUDING

1960

Formerly The Aluminum Products Industry. Certain statistics have been transferred to the Metal Stamping, Pressing and Coating Industry (Catalogue No. 41-227, new title). See introductory text for details.

ANNUAL CENSUS OF MANUFACTURES

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SYMBOLS

The interpretation of the symbols used in the tables throughout this publication is as follows:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.

EXPLANATORY NOTES

This report is one in a series of about 140 publications which present the results of the 1960 Census of Manufactures. Most reports in this series refer to specific industries, but there are summary reports for Canada and the provinces and for major industry groups. Adoption of the revised Standard Industrial Classification for 1960 compilations has necessitated changes in titles of many reports in this annual series. The content of many industries has also been affected (see following note on Industrial Classification).

Industry statistics given in these reports refer to number of establishments, employees, salaries and wages, cost of materials, supplies, fuel and electricity, gross value of shipments, inventories and value added by manufacturing. Details of materials used and products shipped are also given. Descriptions of the principal industry statistics, with special reference to 1960 are as follows:

Period Covered

Firms are asked to submit figures for the calendar year, if at all possible, and most reports are on this basis. Financial year reports for periods differing from the calendar year are accepted in instances where the firms find it impossible to supply calendar year data from accounting records. However the data on employees, salaries and wages are requested on a calendar year basis in all cases.

Establishment

Data for the annual census is collected on an establishment basis. A firm with more than one plant is required to file a report for each plant. In most cases an establishment is a complete factory; sometimes, however, a plant is divided into two or more establishments when it carries out operations classifiable to different industries and when separate accounting records are available. Usually the statistics for an establishment relate only to the manufacturing activities. Other activities such as construction at the plant by its own employees, wholesale or retail activities carried on at the plant location, etc., are not included. Plants engaged solely in **repair work** (except in the case of furniture, shipbuilding, boat building, aircraft and railway rolling stock industries) are not included but plants occupied in assembling parts into complete units are included.

Employees

Administrative and office employees include all executives and supervisory officials such as presidents, vice-presidents, secretaries, treasurers, etc., together with managers, professional and technical employees, superintendents and factory supervisors above the working foremen level, and clerical employees. Working owners and partners are also included in this category.

Production and related workers include all other factory workmen whether paid on a monthly, weekly, hourly or piece-work basis. Working foremen doing work similar to that of the employees they supervise are included, as are maintenance, ware-

housing and delivery staffs. Employees on new construction work, in retail or wholesale operations, on outside piece work etc. are not included.

Production workers are reported by months, an average for the year being obtained by summing the monthly figures and dividing by twelve. This procedure is followed even though the plant did not operate in all months. Figures on employment refer to calendar years whether or not some establishments reported other data on a financial year basis.

Salaries and Wages

Salaries and wages refer to gross earnings of the employees described above, including salaries, wages, commissions, bonuses, the value of room and board where provided, deductions for income tax and social services such as sickness and unemployment insurance, pensions, etc., as well as any other allowances forming part of the employees' wages. Payments for overtime are included.

Salaries refer to amounts paid to administrative and office employees. Withdrawals by working owners or partners for normal living expenses for self and family are included but not their withdrawals for income tax. Wages refer to the amounts paid to production and related workers as defined above. Data on earnings refer to the calendar year whether or not some establishments reported other data on a financial year basis.

Cost of Fuel and Electricity

Figures for fuel refer to amounts actually used, (including fuel used in cars and trucks), not to purchases unless the quantities are the same. Values refer to the laid-down cost at the works, including freight, duty, etc.

Materials and Supplies Used

Figures represent quantities and laid-down cost values, at the works, of materials and supplies actually used during the year whether purchased from others or received as transfers from other plants of the reporting company. Amounts paid to other manufacturers for work done on materials owned by the reporting company are included. Returnable containers or any other items charged to capital account are not included. Fuels are not included. Goods bought from others or received as transfers from other plants or reporting companies for resale without further processing are not included. Maintenance and repair supplies not chargeable to capital account are included.

Factory Shipments

Factory shipments refer to shipments of goods made from own materials either in the reporting plant or by other manufacturers on the basis of a charge to the reporting plant for work done. All products and by-products shipped from the establishment are included whether for domestic use, export, or for government departments. Transfer shipments to sales outlets, distributing warehouses or to other manufacturing units of the reporting firm are included. Goods bought or received as transfers

and resold without further processing are not included. Values are computed on f.o.b. plant or plant warehouse basis, and do not include sales tax or excise duties. Values of containers not returnable are included. Amounts received in payment for work done on materials owned by others are included.

In a few industries such as shipbuilding, aircraft, etc., where work on principal products extend over a relatively long period, the value of production is recorded rather than the value of shipments. For those industries production is computed from the value of deliveries of complete units during the year plus the value of work done during the year on unfinished units less the value of work done in previous years on finished units delivered in the year under review.

Inventories

Values represent the book values of manufacturing inventories owned and held at the reporting plant. Figures include inventories held in warehouses or selling outlets which have been included with plant operations for purposes of reporting shipments.

Value added by Manufacturing

Figures are computed from value of shipments plus or minus changes in inventories of finished goods and goods in process less cost of materials, fuel and electricity. This figure is sometimes referred to as net production.¹

Standard Industrial Classification

The revised Standard Industrial Classification which has been introduced with the 1960 Census of Manufactures provides for a breakdown of the universe into 140 industries arranged in 20 major groups compared with 135 industries in 17 major groups in the old classification which was used in the compilations for the years 1949 to 1959 inclusive. It incorporates changes considered desirable on the basis of experience in using the earlier classification as well as those which take account of changes in the structure of Canadian industries associated with the rapid developments of the past decade. Full details are contained in the Standard Industrial Classification Manual, Catalogue No. 12-501, which is available from either the Queen's Printer or the Dominion Bureau of Statistics. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

Many industries remain unchanged in the new classification but in many instances there have been substantial changes in content because of the shifting of establishments from one industry to another or in re-grouping of establishments. Where

changes have occurred the principal statistics for 1957, 1958 and 1959 have been re-compiled to provide data on a basis comparable with those for 1960.

Short Forms

Between 1949 and 1957, in an effort to ease the reporting burden for smaller firms, a short form was used asking for the total value of shipments only or, in a few cases where losses of detail were significant, for quantities and values of principal products. For purposes of publication, missing data were estimated on the basis of appropriate ratios. In general the cut-off point for these short forms was set at \$50,000 value of shipments. About 40% of the total number of establishments reported on the short form and accounted for less than 3 per cent of the total value of shipments.

In 1958, in order to establish a new base year, the small firms were asked to report all items of principal statistics together with some detail on materials and products.

For the 1959 Census, the short form was used again, but further steps were taken to ease the respondents' burden. First, the general limit for short forms was raised to \$100,000 value of shipments. In addition, a new intermediate form was developed. This form is a shortened version of the long form in that most of the general questions were pared down and the detailed lists of materials and products were limited to the more important items. The general limits for firms in this category were set at between \$100,000-\$500,000 value of shipments, but in the case of both the short and intermediate forms there were lower cut-offs for a number of industries in which the smaller firms accounted for a larger share of total shipments. On the other hand, limits were raised where this could be done without a significant loss of coverage. On most of the short forms for 1959, in addition to total value of shipments, data on principal products were requested. In a few industries, where loss of employment and earnings data were considered too large because of higher cut-offs, a question on total payroll was placed on the short form. This practice was followed again in 1960.

The intermediate and long forms provide complete data for the compilation of all elements of principal industry statistics and the details of materials and products. The one-page short form, although containing data on principal products and total value of shipments, does not request information on other elements of principal statistics such as value of inventories, materials, fuel and electricity and, in most cases, employment and salaries and wages, nor does it contain detailed data on volume and value of materials used. For purposes of compiling aggregates of principal statistics by industry and by geographic location, the missing data for each establishment were estimated for 1959 by using, in general, ratios based on the change in the value of shipments between 1958 and 1959. The proportion of the estimated data was generally less than 5 per cent of the total in each category of principal statistics.

¹ To arrive at the National Accounts concept of "gross domestic product at factor cost", it would be necessary to subtract also the cost of office supplies used, advertising, insurance and other goods and services obtained from other businesses. Data on these inputs are not collected on the annual Census of Manufactures. Value added figures for "The primary industries and construction" are published in D.B.S. publication 61-202, *Survey of Production*.

ALUMINUM ROLLING, CASTING AND EXTRUDING

1960

Data presented in this report under the heading of Aluminum Rolling, Casting and Extruding reflect implementation of the revised Standard Industrial Classification (S.I.C.) which is being used by the Dominion Bureau of Statistics in its compilation of 1960 industry statistics—see item "Standard Industrial Classification" in the Explanatory Notes section of this report. For statistical purposes the industry titled Aluminum Rolling, Casting and Extruding in the revised Standard Industrial Classification covers the operations of establishments primarily engaged in manufacturing aluminum shapes such as bars, rods, plates, sheets and castings. Pressure die casting of aluminum is included in the Metal Rolling, Casting and Extruding, N.E.S. industry and the extraction of aluminum from the ore is classified in the Smelting and Refining industry.

In many instances, adoption of the new Standard Industrial Classification effected a radical shifting of manufacturing establishments as between industry groupings. A significant element in the shift in the case of the industry reviewed in this report was the transfer of establishments producing aluminum kitchenware and sundry aluminum products to a new and separate industry titled Metal Stamping, Pressing and Coating Industry. The revised series of statis-

tics in accordance with the new S.I.C. is presented in Table 1.

There were 44 establishments classified to Aluminum Rolling, Casting and Extruding in 1960; there being 11 in Quebec, 24 in Ontario, 4 in Alberta and 5 in British Columbia. Employees in this industry numbered 5,916; salaries and wages totalled \$27,441,118; materials used in the manufacturing process cost \$63,889,589; and factory shipments were valued at \$96,379,717.

Note: Due to lack of inventory data, figures for value added by manufacture prior to 1954 were obtained by subtracting the cost of materials used, including fuel and electricity from the total value of factory shipments. In 1954 and 1955 the "Value added" adjustment incorporated the increase or decrease to shipments values resulting from changes in the value of inventories over the period. For these two years, the adjustments that were made used only the change in finished product inventory owned by manufacturers. Beginning with 1956 the calculation of the "Value added" figure was further adjusted to take into account the "Goods in process" as well as the finished goods held at plant or plant warehouse.

TABLE 1. Principal Statistics: Aluminum Rolling, Casting and Extruding, By Provinces, 1957-60
(Basis: Standard Industrial Classification revised 1960)

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost at plant of materials used	Value added by manufacture ¹	Selling value of factory shipments
	number		dollars				
1957							
Quebec	8	2,095	9,499,345	370,151	20,597,896		27,701,108
Ontario	24	3,405	13,172,010	1,218,073	30,359,870		49,798,730
Alberta	2	61	254,372	19,485	240,152	2	798,305
British Columbia	5						
Canada	39	5,561	22,925,727	1,607,709	51,197,918		78,298,143
1958							
Quebec	6	1,851	9,514,403	375,453	27,186,216		33,742,373
Ontario	24	3,231	13,354,046	1,253,632	25,662,912		47,403,720
Alberta	2	116	510,155	52,863	1,232,931	2	2,136,997
British Columbia	7						
Canada	39	5,198	23,378,604	1,681,948	54,082,059		83,283,090
1959							
Quebec	7	1,915	9,745,288	431,071	26,180,608		35,919,940
Ontario	26	3,352	14,398,422	1,279,675	28,202,900		51,313,101
Alberta	2	158	709,651	107,551	3,051,310	2	3,792,603
British Columbia	6						
Canada	41	5,425	24,853,361	1,818,297	57,434,818		91,025,644
1960							
Quebec	11	2,046	10,238,024	456,609	27,069,701	7,511,623	34,937,079
Ontario	24	3,705	16,460,628	1,370,612	33,771,871	19,473,418	57,269,036
Alberta	4	165	742,466	91,814	3,048,017	425,990	4,173,602
British Columbia	5						
Canada	44	5,916	27,441,118	1,919,035	63,889,589	27,411,031	96,379,717

¹ See note to text.

² The changeover to the new classification has delayed the recompilation of "value added" figures for these years and same will not be available until the next issue of this report.

TABLE 2. Inventories:¹ Aluminum Rolling, Casting and Extruding, 1960

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
dollars				
Opening:				
Quebec	955,026	1,607,808	853,199	3,416,033
Ontario	2,085,854	7,411,776	969,443	10,467,073
Alberta	11,079	..	1,718	12,797
British Columbia	135,831	659,012	482,220	1,277,063
Canada	3,187,790	9,678,596	2,306,580	15,172,966
Closing:				
Quebec	1,751,521	1,161,707	1,400,154	4,313,382
Ontario	12,166,528	2,805,561	2,922,523	17,894,612
Alberta	12,058	97	3,697	15,852
British Columbia	732,367	196,749	334,626	1,263,742
Canada	14,662,474	4,164,114	4,661,000	23,487,588

¹ Book value of all manufacturing inventories owned and held at plant and plant warehouses.

TABLE 3. Factory Shipments: Aluminum Rolling, Casting and Extruding, 1960

Product	Quantity	Value of factory shipments
		\$
Castings, aluminum, (except die castings)	lb. 6,338,470	4,671,257
Castings, other (brass, bronze, magnesium, etc.) (except die castings)	" 638,152	734,425
Die castings, aluminum base	" 1,485,358	788,919
All other products ¹ .....	...	90,185,116
Total .....	...	96,379,717

¹ Includes aluminum ingots, bars and rods, foil, forgings, powder, rivets, sheets, tubing, boot and shoe lasts, bottle caps and seals, hair curlers, hat dies, etc. Figures for these commodities cannot be shown separately as in most cases there were only one or two producers in this industry.

TABLE 4. Materials Used: Aluminum Rolling, Casting and Extruding, 1960

Material	Pounds	Cost at plant
		\$
Aluminum:		
Ingots	219,510,710	50,666,367
Scrap	5,007,475	1,091,178
Sheets and strip	271,365	129,614
Other .....	...	5,788,653
Brass and bronze .....	...	8,067
Copper .....	...	96,475
Magnesium	590,389	186,723
Zinc	196,075	26,727
Other non-ferrous metals .....	...	55,227
Stainless steel:		
Plates, sheets and strip .....	...	16,502
Other forms .....	...	47
Steel (except alloy steel):		
Plates, sheets and strip .....	...	2,534
Other forms .....	...	235,821
Shipping containers and packing materials .....	..	881,504
All other materials and process supplies ¹ .....	..	4,704,150
Total .....	...	63,889,589

¹ No detailed information on materials used was collected from firms generally reporting value of shipments of less than \$300,000. The total value of materials used by these firms was \$599,919 and this amount is included in "All other materials and process supplies".

TABLE 5. Factory Shipments of Specified Aluminum Products (from All Industries) 1957 - 60

Year	Extruded shapes		Aluminum foil
	Pounds	Selling value of factory shipments	Selling value of factory shipments
		\$	\$
1957	25,653,777	13,406,790	10,379,154
1958	31,239,362	17,576,995	10,763,671
1959	41,857,477	21,871,624	11,277,800
1960	35,668,877	18,847,186	13,226,486

TABLE 6. Principal Statistics classified according to Type of Ownership: Aluminum Rolling, Casting and Extruding, 1957 and 1960

Type	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Selling value of factory shipments
1957	number		dollars			
Individual ownership.....	9	64	197,123	18,546	206,678	476,307
Partnerships	2					
Incorporated companies	28	5,497	22,728,604	1,589,163	50,991,240	77,821,836
Totals	39	5,561	22,925,727	1,607,709	51,197,918	78,298,143
1960	number		dollars			
Individual ownership.....	7	35	100,584	6,089	117,676	290,577
Partnerships	2					
Incorporated companies	35	5,881	27,340,534	1,912,946	63,771,913	96,089,140
Totals	44	5,916	27,441,118	1,919,035	63,889,589	96,379,717

TABLE 7. Principal Statistics grouped according to Selling Value of Factory Shipments: Aluminum Rolling, Casting and Extruding, 1957 and 1960

Establishments reporting value of factory shipments	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Selling value of factory shipments
1957	number		dollars			
Under \$10,000	3	3	4,780	230	4,340	10,393
\$ 10,000 to \$ 24,999	5	16	35,550	2,560	22,700	74,727
25,000 " 49,999	3	21	61,775	8,385	60,633	127,301
50,000 " 99,999	4	38	111,805	6,347	74,051	240,483
100,000 " 199,999	8	138	436,795	30,944	432,385	1,167,522
200,000 " 499,999	5	233	883,112	86,894	1,120,707	2,576,693
500,000 " 999,999	1					
1,000,000 " 4,999,999	6	964	3,689,251	308,308	8,562,423	13,225,883
5,000,000 and over	4	3,094	11,491,885	1,164,041	40,920,679	60,875,141
Head offices.....	...	1,054	6,210,774	...	...	...
Totals	39	5,561	22,925,727	1,607,709	51,197,918	78,298,143
1960	number		dollars			
Under \$10,000	6	15	26,927	3,910	15,671	60,021
\$ 10,000 to \$ 24,999	2					
25,000 " 49,999	7	33	106,428	6,055	90,130	272,632
50,000 " 99,999	3	33	84,203	5,763	76,563	188,874
100,000 " 199,999	10	159	563,248	26,157	558,140	1,468,980
200,000 " 499,999	2	203	847,695	59,245	1,136,761	2,711,950
500,000 " 999,999	3					
1,000,000 " 4,999,999	7	1,110	4,698,278	427,888	13,673,581	20,603,532
5,000,000 and over	4	3,563	16,114,339	1,390,017	48,338,743	71,073,728
Head offices.....	...	800	5,000,000	...	...	...
Totals	44	5,916	27,441,118	1,919,035	63,889,589	96,379,717

**TABLE 8. Employees and their Earnings: Aluminum Rolling, Casting and Extruding,
1959 and 1960**

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
	number					dollars		
1959								
Quebec	683	487	728	17	1,915	6,898,252	2,847,036	9,745,288
Ontario	568	192	2,514	78	3,352	3,934,852	10,463,570	14,398,422
Alberta	44	10	102	2	158	264,942	444,709	709,651
British Columbia								
Canada	1,293	689	3,344	97	5,245	11,098,046	13,755,315	24,853,361
1960								
Quebec	750	508	768	20	2,046	7,205,687	3,032,337	10,238,024
Ontario	672	222	2,722	89	3,705	4,624,369	11,836,259	16,460,628
Alberta	46	13	104	2	165	271,773	470,693	742,466
British Columbia								
Canada	1,468	743	3,594	111	5,916	12,101,829	15,339,289	27,441,118

TABLE 9. Production Workers, by Months: Aluminum Rolling, Casting and Extruding, 1960

Month	Establishments reporting monthly detail ¹	
	Male	Female
January	3,188	90
February	3,237	89
March	3,308	93
April	3,352	99
May	3,514	111
June	3,618	101
July	3,569	101
August	3,547	105
September	3,478	102
October	3,531	99
November	3,544	100
December	3,377	104
Average for establishments reporting monthly detail	3,438	100
Average estimated for small establishments ²	156	11
Average for all establishments	3,594	111

¹ The number of production workers, by months, was collected only for establishments generally reporting value of shipments of \$300,000 and over.

² For establishments generally reporting value of shipments of less than \$300,000, no data on number of workers were collected. Average was estimated by using change in value of shipments to arrive at value of payroll which was then used in conjunction with estimated average earnings to arrive at number of workers.

TABLE 10. Fuel and Electricity Used: Aluminum Rolling, Casting and Extruding, 1960

Kind	Quantity	Cost at plant
		\$
1. Establishments reporting commodity detail: ¹		
Bituminous coal—Imported	ton 8,020	89,475
Anthracite coal	" 27	691
Gasoline (including gasoline used in cars and trucks)	Imp. gal. 64,390	18,871
Fuel oil including kerosene or coal oil	" 4,661,220	490,694
Gas: (a) Liquefied petroleum gases	" 236,222	36,852
(b) Natural gas	Mcf. 239,756	209,695
Other fuel .....	... 340	340
Electricity purchased	kwh 186,465,443	1,037,087
2. Estimate for establishments for which no data were collected: ²		
Cost of fuel and electricity .....	...	35,330
3. All establishments:		
Total cost of fuel and electricity .....	...	1,919,035

¹ Establishments generally reporting value of shipments of \$300,000 and over.² Establishments generally reporting value of shipments of less than \$300,000.

TABLE 11. Imports of Aluminum and Specified Aluminum Products, 1959 and 1960

Item	1959		1960	
	Pounds	Value	Pounds	Value
		\$		\$
Aluminum in pigs, ingots, blocks, notch bars, slabs, billets and blooms	1,704,500	468,294	1,001,400	431,025
Aluminum scrap	1,236,400	159,494	2,004,800	213,940
Aluminum angles, channels, beams, tees and other rolled or drawn sections or shapes	1,161,700	806,611	699,800	440,560
Aluminum in bars, rods and wire	824,400	399,713	1,346,000	641,482
Aluminum leaf or foil .....	..	902,847	...	1,219,924
Aluminum pipes and tubes	1,014,400	594,699	714,800	427,752
Aluminum in plates, sheets, strips and circles	12,675,000	5,738,123	11,637,400	5,556,006
Aluminum powder	327,448	152,337	299,517	127,147
Aluminum wire and cable, twisted or stranded, reinforced with steel or not	746,800	330,418	354,900	165,668
Aluminum kitchen or household hollow-ware .....	...	1,501,440	...	1,513,829
Other manufactures of aluminum .....	...	14,311,528	...	14,948,213
Totals .....	...	25,365,504	...	25,685,546

TABLE 12. Exports of Aluminum and Specified Aluminum Products, 1959 and 1960

Item	1959		1960	
	Tons	Value	Tons	Value
		\$		\$
Aluminum scrap	16,178	4,880,265	27,570	9,049,402
Aluminum in primary forms	505,342	212,287,703	552,155	243,034,000
Aluminum, semi-fabricated	25,158	13,515,512	30,123	16,070,731
Aluminum foil	148	167,777	131	144,826
Aluminum kitchen utensils and hollow-ware .....	...	29,286	...	38,519
Aluminum manufactures, n.o.p. ....	...	1,544,966	...	1,082,024
Totals .....	...	232,425,509	...	269,419,502

Directory of Firms: Aluminum Rolling, Casting and Extruding, 1960

Name of firm	Address
Quebec:	
Aluminum Co. of Canada, Limited	Arvida; Shawinigan Falls
Aluminum Extruders Ltd.	Ste-Thérèse de Blainville
Aluminum Foundry and Pattern Works, Limited	1345 Miron St., St. Laurent
Century Aluminum Works Corp.	Ville St. Rémi
Cercast Inc.	83 St. Agathe Lane, Montreal
Eastern Aluminum Reduction Co., Ltd.	11445 Rivet St., Montreal East
Giard, Leonard	Waterloo
Modern Aluminum Products Co.	1520 Notre Dame St. W., Montreal
Primco Ltd.	15 Fournier Blvd., Hull
Reynolds Aluminum Co. of Canada Ltd.	Cap-de-la-Madeleine
Supreme Precision Castings Ltd.	550 Montée de Liesse, St. Laurent
Ontario:	
Alumaloy Castings, Limited	483 Eastern Ave., Toronto
Aluminum Co. of Canada Limited	15 Brown's Line, Etobicoke
Aluminum Co. of Canada Limited	Kingston
Aluminum Match Plates	888 Roselawn Ave., Toronto
Aluminum Star Products	175 College St., Belleville
Canada Foils Limited	1891 Eglinton Ave. E., Toronto
Canadian Mouldings Ltd.	675 Richmond, Chatham
Chromedge (Canada) Ltd.	5 Crockford Blvd., Scarborough
City Foundry Co.	Grand Marais Road, Windsor
Coles, J., Aluminum Foundry	114 Sinnoth Rd., Scarborough
Dunbar Aluminum Foundry Ltd.	315 Breithaupt St., Kitchener
Harrington Aluminum Foundry	145 Main St., Woodstock
Industrial Fine Castings Ltd.	272 Geary Ave., Toronto
Monarch Aluminum Mfg. Ltd.	2486 Dufferin St., Toronto
National Pattern Works	332 Horner Ave., Etobicoke Twp.
Precision Dies and Castings Division of Frybrook Ltd.	156 St. Helens Ave., Toronto
Prime Castings and Machine Shop Ltd.	48 Prospect Ave., Newmarket
Queen East Foundry	96 Gould St. (Rear), Toronto
Ramsden Manufacturing Ltd.	130 Oakland Ave., London
Regal Die Casting Co., Ltd.	Research Rd., Brampton
Robertson, Joseph, Foundries Ltd.	4 Mansion Ave., Toronto
Supreme Castings and Mfg. Co.	3317 Dufferin St., Toronto
Werner, R.D., Co. (Canada) Ltd.	1155 Simcoe St. S., Oshawa
Wikobroda, Wm.	79 Fulton Ave., Brantford
Alberta:	
Albronz Foundry Works	5325 - 1A St. SW., Calgary
American Brass and Aluminum Foundry Ltd.	12520 - 123 St., Edmonton
D.K. Orna-Metal Co.	7201 - 104 St., Edmonton
Kopulos Mfg.	3802 - 15 St. SE., Calgary
British Columbia:	
Acme Aluminum Foundry Ltd.	210 Salsbury Dr., Vancouver
Acme Metal Moulding Co., Ltd.	1421 E. Pender St., Vancouver
Aluminum Co. of Canada	1260 Vulcan Way, Richmond
Bird Aluminum Foundry Ltd.	396 East 1st Ave., Vancouver
Pacific Aluminum Foundry Ltd.	1236 Pender St., Vancouver



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