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PUBLICATIONS

The results of the annual Census of Industry are published by the Dominion Bureau of Statistics in a series of industry reports which are released each year as the compilations are completed. Reports for industries classified to the **Iron and Steel Products** Major Group are listed below, along with current and annual publications of related interest. Similar reports are issued for other industries. A complete catalogue of publications of the Bureau is available on request from the Information Services Division, Dominion Bureau of Statistics, Ottawa, or from the Queen's Printer, Ottawa.

	A — Annual	M — Monthly	S.C. — Special Compilation	
Catalogue number	Title			Price
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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.
- ^P preliminary figures.

EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1959 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. An annual Census of Manufactures has been carried out by the Dominion Bureau of Statistics since 1916.

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 1959 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, warehousing 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 of 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 Standard Industrial Classification Manual, prepared by the Dominion Bureau of Statistics, provides for 135 three-digit industries in the manufacturing sector, arranged in 17 major groups. Reporting establishments are classified or allotted to specific industries on the basis of the value of principal products made or shipped.

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.

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*.

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.

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.

The general request for the principal items of products on the short form for 1959 permitted a fairly complete compilation of the detailed quantities and values of commodity shipments. In the case of the detailed quantities and values of materials, fuel and electricity, however, and the monthly distribution of production workers, only the totals of data actually reported on the intermediate and long forms are contained in published reports and no attempt was made as in past years to estimate the generally small proportion of individual totals represented by detailed items omitted from the short forms.

The new approach has relieved an additional 12,000 establishments from filling out the regular long form. Establishments now receiving the short form number in excess of 20,000 and account for more than 54 per cent of the total number of establishments and a little more than 3 per cent of the total value of shipments.

THE IRON CASTINGS INDUSTRY

1959

This industry covers the operations of iron and steel works which were occupied chiefly in making commercial iron castings or iron and steel pipe and tubing. Some machinery, boilers, engines, stoves and furnaces, etc., were made as secondary or minor products.

Some iron foundries have not been included in the Iron Castings Industry but have been classified to other special groups. For example, some makers of agricultural implements operated iron foundries to make castings for their own use and these concerns have, of course, been included in the Agricultural Implements Industry which is reviewed in a separate bulletin. Similarly, some stove manufacturers operated iron foundries but they have been classified to the Heating and Cooking Apparatus Industry which is covered in a separate report.

In 1959 there were 184 establishments in the Iron Castings Industry, distributed by provinces as follows: Ontario, 85; Quebec, 51; British Columbia, 15; Alberta, 10; Manitoba, 7; Saskatchewan, 6; Nova Scotia, 5; New Brunswick, 2; Newfoundland, 2 and Prince Edward Island, 1.

Factory shipments from these works were valued at \$254,948,289 and they employed 15,771 persons, paid out \$67,876,410 for salaries and wages, \$4,895,044 for fuel and electricity and \$137,379,005 for manufacturing materials.

Tables 1 to 4 and 9 to 14 of this report are for the Iron Castings Industry only. Tables 5 to 8 give the total output in Canada, from all industries, of iron and steel pipe and tubing, miscellaneous iron castings, hydrants and valves.

TABLE 1. Principal Statistics of the Iron Castings Industry¹, Significant Years, 1929-59 and by Provinces, 1958 and 1959

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost of materials at plant	Value added by manufacture ²	Gross selling value of products ²
	number		dollars				
1929.....	336	23,443	30,854,654	2,581,003	35,994,441	52,999,702	91,575,146
1933.....	327	11,111	9,816,895	1,130,725	8,053,094	15,013,528	24,197,347
1937.....	231	12,164	14,333,923	1,505,625	17,091,230	23,316,989	41,913,753
1939.....	194	9,635	11,190,871	1,115,615	12,273,647	18,956,569	32,345,831
1942.....	201	16,867	28,671,888	2,289,356	30,330,276	48,721,977	81,341,609
1946.....	219	16,925	31,381,935	2,346,480	27,546,850	52,384,740	82,278,070
1949.....	231	18,339	46,165,355	3,117,227	55,315,454	74,880,824	133,313,505
1955.....	201	15,266	55,273,998	3,109,453	84,452,041	97,595,101	182,906,534
1956.....	199	17,361	66,815,656	4,184,022	123,391,722	122,732,230	244,028,587
1957.....	201	16,777	67,255,724	4,482,447	142,250,365	133,477,902	276,048,007
1958							
Newfoundland.....	2	165	507,679	31,057	389,264	722,753	1,146,310
Prince Edward Island.....	1						
Nova Scotia.....	5						
New Brunswick.....	3						
Quebec.....	51						
Ontario.....	86	9,515	39,284,749	3,173,570	94,033,885	74,831,392	173,635,775
Manitoba.....	7	398	1,477,247	51,209	1,270,526	2,740,389	4,047,513
Saskatchewan.....	6	266	1,024,481	73,787	5,983,958	3,731,156	9,639,231
Alberta.....	11	528	2,177,627	137,234	7,527,907	5,718,502	12,560,221
British Columbia.....	17	506	2,394,907	122,082	3,338,518	4,057,604	7,292,738
Canada.....	189	15,081	61,177,434	4,471,283	132,575,064	114,962,422	253,444,707

See footnotes at end of table.

**TABLE 1. Principal Statistics of the Iron Castings Industry,¹ Significant Years, 1929-59
and by Provinces, 1958 and 1959 - Concluded**

Year and province	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity at plant	Cost of materials at plant	Value added by manufacture ²	Gross selling value of products ²
	number				dollars		
1959							
Newfoundland	2	88	244,705	21,061	153,229	335,233	512,639
Prince Edward Island	1						
New Brunswick	2						
Nova Scotia	5	112	383,224	17,318	339,897	608,859	939,810
Quebec	51	3,380	13,530,747	859,781	21,376,006	21,243,302	43,078,721
Ontario	85	10,295	45,827,617	3,590,771	97,090,644	78,780,694	176,501,436
Manitoba	7	431	1,633,728	60,176	1,300,586	2,805,494	4,160,800
Saskatchewan	6	244	1,121,055	75,638	3,968,731	2,849,170	6,344,870
Alberta	10	583	2,353,567	130,466	8,051,601	6,123,338	13,740,801
British Columbia	15	578	2,781,767	139,833	5,098,311	4,544,546	9,669,212
Canada	184	15,711	67,876,410	4,895,044	137,379,005	117,290,636	254,948,289

¹ Included Heating and Cooking Apparatus prior to 1935.

² 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 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 warehouses.

Note: Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

TABLE 2. Inventories,¹ 1959

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
Opening:				
Newfoundland	88,651	480	16,993	106,124
Prince Edward Island				
New Brunswick				
Nova Scotia	152,021	15,896	34,938	202,855
Quebec	4,596,552	3,224,749	5,543,589	13,364,890
Ontario	16,838,165	4,223,741	12,610,360	33,672,266
Manitoba	236,191	1,035	447,620	684,846
Saskatchewan	854,399	50,734	1,273,030	2,178,163
Alberta	1,351,569	75,005	2,038,617	3,465,191
British Columbia	735,987	259,960	1,644,325	2,640,272
Canada	24,853,535	7,851,600	23,609,472	56,314,607
Closing:				
Newfoundland	59,628	321	14,036	73,985
Prince Edward Island				
New Brunswick				
Nova Scotia	172,419	27,628	49,470	249,517
Quebec	4,127,029	3,786,317	5,382,389	13,295,735
Ontario	19,120,627	5,246,672	14,548,102	38,915,401
Manitoba	462,346	1,926	452,185	916,457
Saskatchewan	159,267	14,323	1,858,110	2,031,700
Alberta	914,760	66,472	2,611,754	3,592,986
British Columbia	1,199,449	284,358	1,733,405	3,217,212
Canada	26,215,525	9,428,017	26,649,451	62,292,993

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

(b) Beginning with 1954, information on the value of year-end inventory holdings at plant and plant warehouses is being collected as part of the annual Census of Industry. These data were formerly collected by a separate survey. The summarized result for the Iron Castings Industry for the year under review are shown in the above table.

(c) The opening inventory for 1959 does not necessarily agree with the closing inventory for 1958 because of the addition of new plants, the transfer of plants to other industries, and plants going out of business, etc. However, the value added figures for the previous year have not been recalculated to allow for the changes mentioned above.

TABLE 3. Factory Shipments by Firms in the Iron Castings Industry, 1958 and 1959

Product	1958		1959	
	Quantity shipped	Value of shipments	Quantity shipped	Value of shipments
	tons	\$	tons	\$
Commercial castings (sold as such):				
Aluminum	294	385,956	290	382,365
Grey iron	104,671	26,396,666	147,070	36,124,487
Malleable iron	19,463	7,544,052	22,923	9,077,918
Brass and bronze	427	589,363	475	633,877
Pipe, tubing and fittings, iron and steel	755,647	166,340,179	709,477	154,298,715
Pipe fittings (except iron and steel) and other plumbers' goods (other than valves) .....	..	3,890,134	—	3,712,400
Heating and cooking apparatus (stoves, furnaces, etc.) .....	..	3,412,679	—	3,296,309
Machinery and parts .....	..	4,286,083	—	5,195,330
Valves (iron, steel, brass and bronze), including radiator valves .....	..	9,994,220	—	7,886,791
All other products .....	...	29,682,184	—	33,170,442
Receipts from custom work and repairs .....	...	923,191	—	1,169,655
Totals .....	...	253,444,707	—	254,948,289

Note: Data given in this table cover only the output of firms which were engaged chiefly in making commercial iron castings, iron and steel pipe and fittings, and which have been classified to the Iron Castings Industry. Figures for the individual items do not represent the total output for Canada as in each case there was also a production in other industrial groups. Supplementary tables have been added to show total production in Canada of iron castings, iron and steel pipe and tubing, hydrants and valves.

TABLE 4. Materials Used in the Iron Castings Industry, 1958 and 1959

Material	1958		1959	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Castings (rough and semi-finished received from foundry):				
Iron (gray and malleable)	ton 2,943	1,014,843	3,317	1,241,684
Steel	" 656	484,659	1,051	598,248
Pig iron, all grades	" 136,865	8,521,063	171,795	10,590,054
Steel (except alloy steel):				
Billets and bars	" 96,768	10,836,368	146,982	17,080,132
Plates (3/16 in. and thicker) (excluding plate for pipes and tubes)	" 1,997	366,440	2,796	599,453
Sheets (under 3/16 in.):				
Plain (other than for pipes and tubes)	" 3,022	470,369	2,173	335,857
Galvanized	" 141	29,835	77	16,687
Tinplate	" 4	1,100	4	1,100
Plate, sheet and strip, hot or cold rolled for pipes and tubes	" 491,129	63,565,911	422,741	52,610,133
Strip (other than for pipes and tubes)	" 333	61,032	189	29,449
Structural shapes, unfabricated (channels, angles, etc.)	" 1,616	309,740	764	149,509
Wire	" 3,302	474,155	151	31,985
Alloy steel in all forms:				
Alloy steel (other than stainless and tool steel) .....	..	641,644	—	503,885
Stainless .....	..	271,674	—	185,142
Tool steel .....	..	139,879	—	144,519
Scrap iron and steel:				
Purchased	ton 317,444	11,725,970	333,408	13,366,338
Own make	" 14,634	457,891	12,735	341,942
Pipe and fittings, iron and steel .....	..	4,329,890	—	3,620,747
Other iron and steel .....	..	725,580	—	332,836
Ferro-alloys .....	..	1,292,450	—	1,875,108
Non-ferrous metals in all forms:				
Aluminum:				
Castings	pound 58,223	29,585	15,452	10,310
Sheet	" 17,970	9,430	48,251	27,348
Other forms	" 765,763	241,792	639,352	206,143
Brass and bronze	" 5,390,865	1,674,245	4,700,630	1,825,128
Copper:				
Sheet	" 4,874	3,090	3,816	2,988
Wire	" 2,700	490	—	—
Other forms	" 136,358	45,542	64,628	26,461

TABLE 4. Materials used in the Iron Castings Industry, 1958 and 1959 - Concluded

Material		1958		1959	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Lead	pound	60,261	8,164	88,353	11,863
Nickel	"	944,799	687,137	1,142,764	824,373
Tin	"	4,035	4,154	4,297	4,952
Zinc	"	8,016,116	830,355	7,355,155	828,161
Babbitt metal and solders	"	35,178	17,239	37,339	18,278
Other non-ferrous metals .....	..	..	189,670	-	228,139
Other materials and supplies:					
Paints and varnishes .....	..	..	212,650	-	273,628
Foundry coke (used in cupola)	ton	77,424	2,600,936	86,497	2,912,525
Foundry sands (including core and moulding sands)	"	109,359	907,705	142,841	1,028,853
Plumbago and graphite	pound	660,948	58,562	762,320	90,996
Lumber	M ft. b.m.	2,562	254,275	2,229	224,963
Firebrick and cupola blocks .....	..	..	395,913	-	427,159
Fireclay	ton	6,665	125,611	8,190	161,872
Core oil	Imp. gal.	127,518	160,636	197,015	219,762
Sulphuric acid, 100%	pound	6,349,430	100,982	2,674,760	40,021
Shipping containers .....	..	..	870,412	-	727,265
All other materials ¹ .....	..	..	17,425,996	-	23,603,009
Totals .....		...	132,575,064		137,379,005

¹ In 1959, 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 \$3,597,086 and this amount is included in "All other materials".

TABLE 5. Factory Sales of Iron and Steel Pipe and Tubing, 1958 and 1959 (from All Industries)

	1958	1959
Cast iron soil pipe and fittings	71,000	68,000
..... \$	13,632,000	13,420,000
Cast iron water pipe and fittings	130,000	132,000
..... \$	19,113,000	18,717,000
Cast iron pipe fittings, all other, including flanges and flange fittings	10,400	12,000
..... \$	4,149,000	4,854,000
Malleable iron pipe fittings of all kinds, including railing fittings	7,800	8,600
..... \$	5,851,000	6,042,000
Steel pipe and tubing	537,900	488,900
..... \$	117,805,000	106,004,000
Steel pipe fittings, all kinds	13,300	12,400
..... \$	8,924,000	8,314,000
Steel pipe, riveted or welded:		
Stainless steel	700	600
..... \$	1,232,000	1,085,000
Other steel	12,200	7,400
..... \$	3,577,000	2,194,000
Culvert pipe formed from steel sheets	59,600	66,300
..... \$	19,634,000	21,296,000
Total value	\$ 193,917,000	181,926,000

APPENDIX

As mentioned in the opening paragraphs of this report, the Iron Castings Industry includes only the foundries which were engaged chiefly in making miscellaneous castings and forgings to their customers' orders, or in making such specific products as cast iron or malleable iron pipe and fittings. Some other concerns operated customs foundries as a secondary part of their business, and others maintained foundries to cast their own parts for agricultural implements, machinery, stoves, etc., which were the final products of their works. These

latter foundries have been classified to other industrial groups.

A special study of all reports submitted to the Bureau indicates that in 1959 there were about 400 operating foundries distributed across Canada. In 1959 these foundries used 300,000 net tons of pig iron, 661,000 net tons of scrap iron and 162,000 net tons of cupola coke. Production of iron castings totalled 856,000 tons.

TABLE 6. Total Production of Iron Castings and Materials charged to Cupolas, 1957-59

	1957	1958	1959
Pig iron used net ton	309,000	252,000	300,000
\$	18,567,000	15,410,000	17,789,000
Scrap iron and steel used net ton	598,000	605,000	661,000
\$	24,875,000	23,058,000	26,096,000
Coke used in cupolas or melting furnaces net ton	170,000	142,000	162,000
\$	5,404,000	4,713,000	5,392,000
Iron castings made (whether for sale or for own use):			
Grey and white iron castings ¹ (except pipe and fittings) net ton	561,000	468,000	605,000
Malleable iron (except fittings) "	45,000	36,000	36,000
Cast iron pipe and fittings "	175,000 ²	212,000 ²	206,000 ²
Malleable iron pipe fittings "	9,000 ²	8,000 ²	9,000 ²
Total castings "	790,000	724,000	856,000

¹ Compiled from data submitted by the 200 iron foundries which report monthly and which, it is estimated, account for about 95 per cent of the total production. These figures have been expanded to 100 per cent.

² Factory shipments.

TABLE 7. Factory Shipments of Hydrants, 1955-59 (from All Industries)

Year	Number	Selling value of factory shipments
		\$
1955	12,494	1,933,000
1956	11,863	2,051,000
1957	10,193	1,814,000
1958	12,095	2,163,000
1959	13,949	2,427,000

TABLE 8. Factory Shipments of Valves, 1958 and 1959 (from All Industries)

Kind	Selling value of factory shipments	
	1958	1959
	dollars	
Iron body (gate, globe, check, etc.)	8,715,000	7,886,000
Steel, including alloy steel (gate, globe, check, etc.)	5,826,000	7,819,000
Brass or bronze (gate, globe, check, etc.)	6,405,000	6,338,000
Radiator valves (all types)	667,000	591,000
Corporation brass (main and curb stops, etc.)	1,953,000	1,996,000
Valves, other	2,234,000	1,819,000

TABLE 9. Principal Statistics of the Iron Castings Industry in Canada, classified according to Type of Ownership, 1958 and 1959

Type	Establish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number		dollars		
1958					
Individual ownership	30	200	480,456	461,313	1,143,448
Partnerships	14	139	472,610	326,557	836,311
Incorporated companies	145	14,742	60,224,368	131,787,194	251,464,948
Totals	189	15,081	61,177,434	132,575,064	253,444,707
1959					
Individual ownership	28	199	467,077	400,945	1,031,527
Partnerships	12	132	480,909	293,289	910,688
Incorporated companies	144	15,380	66,928,424	136,684,771	253,006,074
Totals	184	15,711	67,876,410	137,379,005	254,948,289

TABLE 10. Principal Statistics of the Iron Castings Industry in Canada, grouped according to Selling Value of Factory Shipments 1958 and 1959

Establishments reporting factory shipments	Establish- ments	Em- ployees	Salaries and wages	Cost at plant of materials used	Selling value of factory shipments
	number			dollars	
1958					
Under \$10,000	7	16	32,580	16,615	47,592
\$ 10,000 to \$ 24,999	16	54	124,450	93,785	259,174
25,000 " 49,999	14	95	220,758	156,539	501,383
50,000 " 99,999	28	317	977,176	707,560	1,959,834
100,000 " 199,999	21	455	1,497,389	964,039	2,977,491
200,000 " 499,999	43	1,625	5,660,334	4,947,343	13,559,710
500,000 " 999,999	20	1,252	4,750,853	5,980,824	13,846,280
1,000,000 " 4,999,999	28	5,156	20,544,180	26,507,579	61,036,956
5,000,000 and over	12	6,101	27,308,626	93,200,780	159,256,287
Head offices	—	10	61,088	—	—
Totals	189	15,081	61,177,434	132,575,064	253,444,707
1959					
Under \$10,000	9	14	24,620	15,358	48,427
\$ 10,000 to \$ 24,999	15	58	122,292	98,500	256,095
25,000 " 49,999	13	93	224,372	171,870	483,492
50,000 " 99,999	25	286	841,022	596,243	1,707,706
100,000 " 199,999	19	392	1,401,353	843,264	2,665,168
200,000 " 499,999	38	1,577	5,773,801	4,382,523	12,669,488
500,000 " 999,999	20	1,344	5,314,683	5,363,343	13,458,376
1,000,000 " 4,999,999	33	5,475	23,313,142	35,638,907	73,842,937
5,000,000 and over	12	6,472	30,861,125	90,268,997	149,816,600
Totals	184	15,711	67,876,410	137,379,005	254,948,289

TABLE 11. Employees and their Earnings in the Iron Castings Industry, 1958 and 1959

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
	number					dollars		
1958								
Newfoundland	18	9	145	4	176	105,280	354,824	460,104
Prince Edward Island								
New Brunswick								
Nova Scotia	9	8	80	—	97	84,128	243,509	327,637
Quebec	528	162	2,812	93	3,595	3,225,891	10,804,791	14,030,682
Ontario	1,231	446	7,698	140	9,515	8,460,879	30,823,870	39,284,749
Manitoba	56	16	326	—	398	293,453	1,183,794	1,477,247
Saskatchewan	42	11	208	5	266	345,250	679,231	1,024,481
Alberta	107	24	395	2	528	641,055	1,536,572	2,177,627
British Columbia	80	28	398	—	506	674,509	1,720,398	2,394,907
Canada	2,071	704	12,062	244	15,081	13,830,445	47,346,989	61,177,434
1959								
Newfoundland	9	4	75	—	88	49,144	195,561	244,705
Prince Edward Island								
New Brunswick								
Nova Scotia	12	8	92	—	112	93,516	289,708	383,224
Quebec	492	139	2,695	54	3,380	3,112,006	10,418,741	13,530,747
Ontario	1,300	451	8,383	161	10,295	9,123,417	36,704,200	45,827,617
Manitoba	61	17	352	1	431	337,140	1,296,588	1,633,728
Saskatchewan	50	11	183	—	244	380,267	740,788	1,121,055
Alberta	127	22	433	1	583	729,591	1,623,976	2,353,567
British Columbia	92	32	454	—	578	753,784	2,027,983	2,781,767
Canada	2,143	684	12,667	217	15,711	14,578,865	53,297,545	67,876,410

TABLE 12. Production Workers, by Months, 1959

Month	Establishments reporting monthly detail ¹	
	Male	Female
January	10,753	215
February	11,229	216
March	11,279	214
April	11,178	217
May	11,237	211
June	11,781	207
July	11,463	206
August	11,490	203
September	11,657	205
October	11,553	213
November	11,054	211
December	10,808	207
Average for establishments reporting monthly detail	11,316	210
Average estimated for small establishments ²	1,351	7
Average for all establishments	12,667	217

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 13. Capital and Repair Expenditures in the Iron Castings Industry, 1955-59

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Con-struction	Machinery and equipment		Con-struction	Machinery and equipment		
	thousands of dollars						
1955.....	1,590	5,236	6,826	720	5,525	6,245	13,071
1956.....	8,292	20,292	28,584	981	7,312	8,293	36,877
1957.....	5,158	16,116	21,274	1,031	7,375	8,406	29,680
1958.....	3,310	9,828	13,138	753	7,195	7,948	21,086
1959 ^P	4,723	14,754	19,477	1,007	8,010	9,017	28,494

TABLE 14. Fuel and Electricity Used in the Iron Castings Industry, 1959

Kind		Quantity	Cost at plant
			\$
1. Establishments reporting commodity detail: ¹			
Bituminous coal (a) From Canadian mines	ton	7,038	83,950
(b) Imported	"	32,747	480,695
Anthracite coal	"	2,496	30,965
Coke	"	3,466	93,103
Gasoline (including gasoline used in cars and trucks).....	Imp. gal.	517,985	189,183
Fuel oil including kerosene or coal oil.....	"	11,920,630	1,338,090
Wood	cord	727	6,578
Gas (a) Liquefied petroleum gases	Imp. gal.	56,396	15,636
(b) Other manufactured gas	M cu. ft.	701,033	189,733
(c) Natural gas	"	532,043	323,053
Other fuel.....		..	6,121
Electricity purchased.....	kwh.	167,906,978	1,780,421
2. Estimate for establishments for which no data were collected: ²			
Cost of fuel and electricity.....		...	357,516
3. All establishments:			
Total cost of fuel and electricity.....		...	4,895,044

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

Directory of Firms Included in the Iron Castings Industry, 1959

Note: The following list includes only names of the concerns which have been classified to this particular industry. It is not intended to be a complete list of iron foundries in Canada.

Name of firm	Location of plant
Newfoundland:	
Corner Brook Foundry & Machine Co. Ltd.	Corner Brook
United Nail & Foundry Co. Ltd.	Hamilton Ave., St. John's
Prince Edward Island:	
Parker, H.W. & Sons	Georgetown
Nova Scotia:	
Dartmouth Iron Foundry	44 Maple St., Dartmouth
Hanright Foundry Co.	10 Highfield St., Amherst
Hillis and Sons, Ltd.	160 Kempt Rd., Halifax
Matheson, I. & Co. Limited	North Provost St., New Glasgow
New Glasgow Foundry	391 Glasgow St., New Glasgow
New Brunswick:	
Courtenay Iron and Brass Foundry	169 Rothesay Ave., Saint John
McLennan Engineering Works Ltd.	Water St. W., Campbellton
Quebec:	
Acton Nipple Inc.	Actonville
Bergeron M. Lucien A.	St. Julie Station
Canada Iron Foundries, Limited	227 St. Maurice St., Three Rivers
Crane, Limited	3800 St. Patrick St., Montreal
Diversified Metallurgical Ind. Ltd.	Dunham
Dominion Steel & Coal Corp. Ltd.	5870 St. Patrick St., Montreal
Fonderie Binette Inc.	Laurierville
Fonderie Fortin Enr.	Waterloo
Fonderie Larocche Enrg.	St-Jérôme
Fonderie Napierville Enrg.	Napierville
Fonderie Savoie	Ste-Marie de Beauce
Fonderie St. Hyacinthe Ltd.	2925 Nelson St., St. Hyacinthe
Fonderie St. Louis	St. Louis de Bonsecours
General Foundry Co.	95A Main St. Windsor Mills
Grand'Mère Foundry Ltd.	800 C.N.R. Ave., Grand'Mère
La Compagnie Dussault et Lamoureux	350 - 18th Ave., De L'Hotel Dieu, St. Hyacinthe
La Fonderie Beloeil, Ltée	Beloeil Station
La Fonderie Canadienne Enrg.	374 St. Jacques St., St. Jean
La Fonderie Ste. Croix Ltée	Ste. Croix
La Fonderie de Thetford	700 - A. Notre-Dame Nord, Thetford Mines
La Fonderie Després	Montmagny Station
La Fonderie Magog, Ltd.	601 Champlain St., Magog
La Fonderie Ouellet Enrg.	St. Léonard D'Aston
La Fonderie Paquette Inc.	325 St. Ignace St., Laprairie
La Fonderie St. Maurice Ltd.	Cap-de-la-Madeleine
La Fonderie St. Romuald, Enrg.	58, rue Saxe, St. Romuald
La Fonderie de Sully	Sully
Larocche, Zepherin, & Frères Ltée	Pont Rouge
Lauzon Brass & Alum. Foundry Reg'd, The	50 rue Carrier, Lauzon
Lavoie, Euchariste, Fils Enrg.	8 rue Racine, Baie St. Paul
Lefebvre, Jean Charles, (Fonderie St-Placide)	St-Placide
Légaré Foundry Limited	172 Short St., Sherbrooke
Les Industries Roy Ltée	Montmagny Station
Mace Foundry Co.	1450 Gladstone Ave., Montreal
Montreal Foundry Limited	1249 Condé St., Montreal
Monsarrat Machinery and Foundries Ltd.	Rivière-du-Loop
Paul Bros. Foundry, Limited	660 rue Poupard, Laprairie
Pont Viau Foundry Ltd.	60 St. Hubert St., Pont Viau
Quebec Iron Foundries Ltd.	88 Foundry Ave., Mont. Joli
Quebec Iron Foundries Ltd.	Noranda
Rapid Foundry	Ste. Philomène
Rigaud Foundry	2 St-Anselme, Rigaud
St. Jerome Industries Ltd.	St. Jérôme
Shawinigan Foundries, Limited	Shawinigan Falls
Steel Company of Canada, Limited	4110 St. Ambroise St., Montreal
Steel Company of Canada, Limited	Contrecoeur
Trottier Incorporée	Ste-Anne-de-la-Pérade
Union Foundry Limited	431 St. Luke St., Granby
Viau, M.L., et Fils, Ltée	St. Joseph St., St. Jérôme
Vulcan Foundry Inc.	14 rue Napoléon, Victoriaville
Warren Automatic Controls Corp. (Canada) Ltd.	5203 8th Ave., Rosemont, Montreal

Directory of Firms included in the Iron Castings Industry, 1959 - Continued

Name of firm	Location of plant
Ontario:	
Alloy Foundry Co. Ltd.	Merrickville
Anthes-Imperial Co. Ltd.	Berryman Ave., St. Catharines
Auto Specialties Mfg. Co. (Canada) Ltd.	614 Tecumseh Rd. E., Windsor
Barco Mfg. Co. of Canada, Ltd.	3500 W. Ontario St., Windsor
Barton Tubes Limited	2170 Queensway Dr., Burlington
Bell City Foundry (Brantford) Ltd.	411 West St., Brantford
Benn Iron Foundry	Mason St., Wallaceburg
Bibby Foundry Ltd.	Beverley St., Galt
Bock, A.E., Foundry Co.	Sawan St., Ayr
Bowmanville Foundry Company Limited	Scugog St., Bowmanville
Brown Foundry Ltd.	Morrisburg
Canada Iron Foundries Limited	Burlington St. & Kenilworth Ave., Hamilton Stuart & Carline Sts., Hamilton 171 Eastern Ave., Toronto
Canada Iron Foundries Ltd. (National Iron Division)	324 Cherry St., Toronto
Canada Valve & Hydrant Co., Limited	44 Holme St., Brantford
Canadian Coupling & Fittings Ltd.	Simcoe
Canadian General Electric Co. Ltd.	940 Lansdowne Ave., Toronto
Central Foundry	Hespeler
Cobalt Foundry Limited	Ferland Ave., Cobalt
Crawford Fittings (Canada) Ltd.	1238 St. Paul Ave., Niagara Falls
Crawford Machine & Foundry Limited	100 Wilson St., Woodstock
Crowe Foundry Limited	Sheffield St., Hespeler
Cunningham Foundry & Machine Co. Ltd.	Berryman Ave., St. Catharines
Dart Union Co. of Canada Ltd.	11 Charlotte St., Toronto
Davidson Foundry	16 Hamilton Ave., Ottawa
Domestic Foundry	1595 Crawford Ave., Windsor
Eureka Foundry & Manufacturing Co. Limited	Tecumseh St., Woodstock
Fairbank Foundry	52 Clarkson Ave., Toronto
Fergusson, J.R., Company	Dundas
Ferrous Products Ltd.	21 Buckingham St., Toronto 18
Fittings Limited	135 Bruce St., Oshawa
Fortune Valve Co. Ltd.	42 James St. N., Hamilton
Galt Malleable Iron Limited	60 Kerr St., Galt
General Casting Company	315 Grey St., Brantford
Gies, Philip, Foundry Ltd.	36 Water St. S., Kitchener
Grinnell Company of Canada, Limited	2440 Dundas St. W., Toronto 9
Guelph Engineering Co. Limited, The	10 Kingsmill Ave., Guelph
Hamilton Foundry Co. Ltd.	33 Clinton St., Hamilton
Hastings & Sons Foundry Ltd.	10 Pine St., Stratford
Holmes Foundry Company Limited	Exmouth St., Sarnia
Hopper Foundry Limited	Washington St., Forest
Imbleau, H., & Son	11 Bridge St., Renfrew
International Malleable Iron Co. Ltd.	200 Beverley St., Guelph
James Bros. Hardware Ltd.	Beckwith St., Perth
Keleher Foundry Co.	Victoria Road, Guelph
Kent Foundry Ltd.	Richmond St., Chatham
Ladish Co. of Canada Ltd.	Park Rd. N., Brantford
Lawson, Thos., and Sons, Ltd.	160 Fleet St., Ottawa
Lincoln Foundry Ltd.	65 St. Paul Crescent, St. Catharines
Link-Belt Limited	13 Church St., Elmira
London Concrete Machinery Co. (Hartley Foundry Division)	247 Colborne St. W., Brantford
Mannesmann Tube Co. Ltd.	Sault Ste. Marie
Manning, Maxwell & Moore of Canada Ltd.	200 Avenue Road, Galt
McCoy Foundry Co. Ltd.	67 Bay St. N., Hamilton
McIntyre & Taylor, Limited	505 Queen St. W., Toronto
McLean Underfeed Stoker Co. Limited	West Hill, Toronto
Marshall, A., Foundry	940 Assumption St., Windsor
Massey-Ferguson Ltd.	Greenwich St., Brantford
Muskoka Foundry Limited	Shier St., Bracebridge
New England Valve Corp. of Can. Ltd.	Seneca Ave., Port Credit
Niagara Foundry Company Ltd., The	747 Buttery Ave., Niagara Falls
Oakton Products Ltd.	102 Crockford Blvd., Scarboro
Ontario Malleable Iron Co. Ltd.	Prospect St., Oshawa
Page-Hersey Tubes, Ltd.	Dain Ave., Welland
Powr Box Mfg. Co. Ltd.	101 Brian Dr., Agincourt
Shantz, P.E., Foundry	278 Fountain St., Preston
Smiths Falls Malleable Castings Limited	22 Bay St., Smiths Falls
Sonco Steel Products Ltd.	233 Sterling Rd., Toronto
Standard Foundry and Supply Co. Ltd.	840 Walker Road, Windsor
Standard Tube & T.I. Ltd.	Drew & Given Sts., Woodstock
Taylor Forge & Pipe Works of Canada Ltd.	777 Beach Rd., Hamilton
Tomlinson, T., Foundry Co. Limited	352 Front St. E., Toronto
Toronto Foundry Co. Limited	1884 Davenport Rd., Toronto

Directory of Firms included in the Iron Castings Industry, 1959 - Concluded

Name of firm	Location of plant
Ontario - Concluded:	
Tube Turns of Canada Ltd.	21 York St., Ridgetown
Tubular Steel Products Ltd.	97 Manville Rd., Toronto
Victoria Foundry Co. Ltd.	44 Booth St., Ottawa
Wabi Iron Works, Limited.	New Liskeard
Walker Metal Products Limited	1511 Kildare Road, Windsor
Walkerton Foundry	Walkerton
Welland Iron and Brass Ltd.	130 Niagara St., Welland
Welland Tubes Ltd.	100 Church St., Toronto
Wells Foundry Limited	1250 Florence St., London
Woodside Machinist & Foundry Co.	173 Manitou St., Port Arthur
Wotherspoon, J.A., & Son Ltd.	Cross Ave., Oakville
Manitoba:	
Anthes-Imperial Co. Limited	Saskatchewan Ave., Winnipeg
Bell Foundry Co. Ltd.	Sargent & King Edward Sts., St. James
Dominion Foundry Co.	Union & Watt St., Winnipeg
Eastern Machinery & Tool Mfg. Ltd.	493 Madison St., Winnipeg
Osborne Foundries Ltd.	580 Ebby St., Winnipeg
Peterson Foundry & Machine Works	120 Aberdeen Ave., Winnipeg
Thor Foundry Limited	794 Archibald St., St. Boniface
Saskatchewan:	
Acme Industries Ltd.	182 Wall St., Saskatoon
Blanchard Foundry Co. Ltd.	104 - 22nd Street W., Saskatoon
East, John, Iron Works Ltd.	125 Avenue C North, Saskatoon
Moose Jaw Foundry	High St. & 6th Ave., Moose Jaw
Prairie Pipe Mfg. Co. Ltd.	Armour Siding Regina
Prince Albert Foundry Company	17th and Central Sts., Prince Albert
Alberta:	
Alberta Bend Ltd.	12230 - 66 St., Edmonton
Alberta Phoenix Tube & Pipe Ltd.	75 St. & 68 Ave., Edmonton
Anthes-Imperial Co. Ltd.	Ogden Road, Calgary
Anthes-Imperial Co. Ltd.	9520 - 125th Avenue, Edmonton
Calgary Iron & Engineering Ltd.	410 - 9th Avenue E. Calgary
Lethbridge Iron Works Co. Ltd.	120 - 1st Avenue S., Lethbridge
McAvity, T., & Sons (Western) Ltd.	801 Smelter Ave., Medicine Hat
Nichols Bros. Limited	10103 - 95th Street, Edmonton
Norwood Foundry Co. Ltd.	9111 - 111th Avenue, Edmonton
St. Paul Foundry Ltd.	St. Paul
British Columbia:	
Associated Foundry Ltd.	4080 Nanaimo St., Vancouver
Canadian Western Pipe Mills Ltd.	Murray St. Port Moody
Cranbrook Foundry Company Limited	26 Cranbrook St., Cranbrook
Dobney Foundry Co. Ltd.	312 - 13th St., New Westminster
McLean and Powell Iron Works	398 W. 2nd Avenue, Vancouver
Mainland Foundry Company Ltd.	1707 Pandora St., Vancouver
Milbourne Foundry	852 Lulu Island, Vancouver
Nye's Foundry Ltd.	503 Powell Street, Vancouver
Peach City Foundry	176 Estabrook St., Penticton
Ross and Howard Iron Works Co. Ltd.	Ft. Woodland Drive, Vancouver
S.P. & F. Foundry Ltd.	3780 Napier St., North Burnaby
Singer Valve Co. Ltd.	1924 Franklin St., Vancouver
Terminal City Iron Works, Ltd.	1909 Franklin St., Vancouver
Union Bay Foundry	Union Bay
Victoria Foundries Ltd.	622 Pembroke St., Victoria

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