

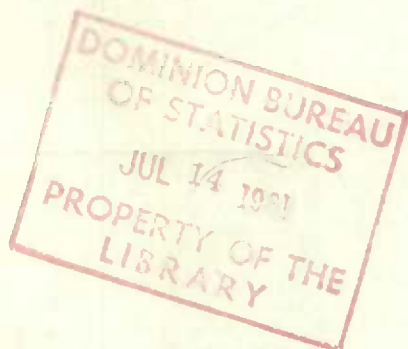
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# THE BOILERS AND PLATE WORK INDUSTRY 1959



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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
41- 201	Iron and Steel Products — General Review (A).....			.50
42- 202	The Agricultural Implements Industry (A).....			.50
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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.
- <sup>P</sup> 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.<sup>1</sup>

### **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.

<sup>1</sup> 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 BOILERS AND PLATE WORK INDUSTRY

1959

Factory shipments by the 99 establishments in the Boilers and Plate Work Industry were valued at \$107,881,063 in 1959. Forty-nine of these works were in Ontario, 20 in Quebec, 14 in British Columbia, 11 in Alberta, 3 in Manitoba and 1 each in Saskatchewan and Nova Scotia. These concerns gave employment to 7,666 people who were paid \$33,403,400 in salaries and wages. Materials used in manufacturing processes cost \$54,463,002 and expenditures for fuel and electricity amounted to \$1,462,128.

Tables 1 to 4 and Tables 7 to 12 of this report deal with the Boilers and Plate Work Industry which covers the operations of the establishments that made as their chief products such articles as heating and power boilers, heating radiators, tanks and miscellaneous products from steel plate, such as bins, hoppers, smokestacks, etc. Tables 5 and 6 give the totals for Canada, from all industries, covering the production of boilers and radiators. The total output value in 1959 for heating and power boilers was \$34,414,475 and for heating radiators \$12,144,211.

**TABLE 1. Principal Statistics of the Boilers and Plate Work Industry, Significant Years 1929 - 59 and by Provinces, 1958 and 1959**

Year	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 <sup>1</sup>	Gross selling value of products <sup>1</sup>
	number				dollars		
1929.....	37	2,157	3,043,768	163,137	5,091,406	4,751,735	10,006,278
1933.....	50	1,572	1,742,257	168,784	1,553,690	2,722,782	4,445,256
1937.....	54	2,936	3,694,393	226,991	4,872,296	6,112,214	11,211,501
1939.....	41	2,491	3,150,560	217,111	3,673,208	4,909,487	8,799,806
1943.....	38	5,469	11,086,571	547,891	16,270,970	20,547,071	37,365,932
1946.....	44	5,042	9,974,544	511,512	9,791,684	16,407,706	26,710,902
1949.....	56	6,642	17,980,051	803,646	20,156,193	33,602,254	54,562,093
1955.....	101	8,378	31,218,918	1,203,833	41,388,579	51,813,530	93,486,695
1956.....	103	9,004	34,384,694	1,451,024	56,998,458	53,533,046	110,697,040
1957.....	102	9,226	38,274,873	1,531,273	62,647,293	57,326,097	121,959,107
<b>1958</b>							
Nova Scotia .....	1	2,109	8,239,548	322,592	14,843,119	14,367,010	29,082,053
Quebec .....	22						
Ontario .....	49	4,888	22,145,644	889,328	30,629,256	33,354,912	66,086,449
Alberta .....	12	351	1,445,329	131,286	3,195,890	3,043,600	6,247,931
British Columbia .....	15	497	2,373,457	90,503	3,925,105	1,734,253	6,285,204
Manitoba .....	3	104	331,952	18,018	671,670	486,282	1,187,282
Saskatchewan .....	1						
<b>Canada .....</b>	<b>103</b>	<b>7,949</b>	<b>34,535,930</b>	<b>1,451,727</b>	<b>53,265,040</b>	<b>52,986,057</b>	<b>108,888,919</b>
<b>1959</b>							
Nova Scotia .....	1	2,077	8,564,735	298,224	17,215,185	12,672,566	31,024,391
Quebec .....	20						
Ontario .....	49	4,622	20,605,289	904,868	27,822,184	34,650,730	60,547,850
Alberta .....	11	443	1,840,828	152,078	4,667,107	3,271,465	7,831,277
British Columbia .....	14	409	2,051,111	88,068	3,870,150	2,359,615	6,973,726
Manitoba .....	3	115	341,437	18,890	888,376	599,148	1,503,819
Saskatchewan .....	1						
<b>Canada .....</b>	<b>99</b>	<b>7,666</b>	<b>33,403,400</b>	<b>1,462,128</b>	<b>54,463,002</b>	<b>53,553,524</b>	<b>107,881,063</b>

<sup>1</sup> 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 manufacturer. 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.

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



TABLE 2. Inventories,<sup>1</sup> 1959

	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
	dollars			
Opening:				
Quebec and Nova Scotia .....	3, 279, 927	1, 807, 260	1, 366, 102	6, 453, 289
Ontario .....	7, 766, 126	7, 061, 980	1, 766, 859	16, 594, 965
Manitoba and Saskatchewan .....	293, 302	70, 199	32, 685	396, 186
Alberta .....	2, 242, 009	398, 046	535, 525	3, 175, 580
British Columbia .....	966, 912	1, 268, 426	95, 968	2, 331, 306
<b>Canada .....</b>	<b>14, 548, 276</b>	<b>10, 605, 911</b>	<b>3, 797, 139</b>	<b>28, 951, 326</b>
Closing:				
Quebec and Nova Scotia .....	3, 231, 284	1, 277, 072	1, 057, 874	5, 566, 230
Ontario .....	6, 894, 707	10, 262, 356	1, 396, 415	18, 553, 478
Manitoba and Saskatchewan .....	260, 911	65, 445	40, 034	366, 390
Alberta .....	2, 303, 385	479, 918	713, 026	3, 496, 329
British Columbia .....	827, 006	594, 404	114, 097	1, 535, 507
<b>Canada .....</b>	<b>13, 517, 293</b>	<b>12, 679, 195</b>	<b>3, 321, 446</b>	<b>29, 517, 934</b>

<sup>1</sup> Book value of all manufacturing inventories owned and held at plant and plant warehouses.

**Note:** 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 results for the Boilers and Plate Work Industry for the year under review are shown in the above table.

The opening inventory for 1959 may 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. Products Made in the Boilers and Plate Work Industry, 1958 and 1959

Product	1958		1959	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
		\$		\$
Heating boilers:				
Cast iron sectional heating boilers:				
(a) Under 775 sq. ft. .... No.	5, 473	1, 115, 010	5, 283	1, 177, 371
(b) 776-1,499 sq. ft. .... "	1, 875	727, 844	1, 880	742, 805
(c) 1,500 sq. ft. and over .... "	1, 027	1, 085, 961	1, 059	1, 058, 884
Steel heating boilers:				
(a) Under 112 sq. ft. (heating surface) .... "	3, 664	722, 719	3, 979	832, 494
(b) 112-522 sq. ft. (" " ) .... "	331	689, 522	441	650, 465
(c) 573-1,245 sq. ft. (" " ) .... "	169	580, 076	212	730, 271
(d) 1,362 sq. ft. & over (" " ) .... "	31	393, 139	26	141, 318

TABLE 3. Products Made in the Boilers and Plate Work Industry, 1958 and 1959 — Concluded

Product	1958		1959	
	Quantity	Value of factory shipments	Quantity	Value of factory shipments
		\$		\$
Power boilers and equipment:				
Water tube package boiler units .....	86	4, 243, 178	92	7, 902, 434
Fire tube package boiler units .....	33	251, 033	17	139, 656
Marine type boilers, fire tube and water tube .....	136	505, 942	70	503, 762
Fire tube boilers, other .....	5	28, 815	18	344, 568
All other power boilers .....	43	8, 630, 751	84	10, 154, 578
Boiler parts, including drums, water walls, repairs, etc. ....	...	1, 988, 731	...	3, 765, 532
Radiators, heating:				
Steel and cast iron, standing ..... sq. ft.	4, 249, 178	3, 277, 961	4, 277, 328	3, 315, 922
Fabricated products:				
Steel plate (cut, punched, shaped or otherwise fabricated for assembly on job) .....	..	15, 320, 207	..	12, 445, 749
Structural shapes (cut, punched, shaped or otherwise fabricated for assembly on job) .....	..	1, 669, 726	..	1, 371, 842
Miscellaneous plate work:				
Bins and hoppers .....	...	468, 329	...	672, 161
Smokestack .....	...	230, 152	...	260, 469
Smoke breeching .....	...	464, 816	...	604, 230
Rivetted and welded steel pipe — Stainless ..... ton	740	1, 232, 451	616	1, 085, 236
Other steel, ..... "	2, 951	944, 405	2, 338	591, 778
Other plate work .....	..	5, 499, 259	..	5, 815, 065
Tanks (complete at factory) and cylinders:				
Gas cylinder, metal (L.P. gas, etc.) .....	..	705, 630	..	902, 003
Boiler drums .....	..	23, 444	..	28, 267
Pressure and vacuum tanks .....	..	3, 319, 392	..	3, 546, 325
Steel septic .....	..	606, 629	..	520, 895
Storage and processing tanks .....	..	10, 353, 557	..	13, 432, 241
Tanks, other .....	..	2, 417, 006	..	2, 349, 259
Pumps, all kinds, and parts .....	..	1, 127, 652	..	655, 039
Stokers, mechanical, and parts .....	..	896, 383	..	662, 787
Furnaces, warm air .....	No. 572	128, 920	187	49, 485
Receipts from custom work and repairs .....	...	6, 160, 517	...	5, 993, 631
All other products <sup>1</sup> .....	...	33, 079, 762	...	25, 434, 541
<b>Totals</b> .....	...	<b>108, 888, 919</b>	...	<b>107, 881, 063</b>

<sup>1</sup> Includes data for items made by less than 3 firms, such as cast iron soil pipe, air compressors, pulverizers, etc.

Note: Data in this table are for the Boilers and Plate work Industry, which includes only the manufacturers who made boilers, tanks, etc., as their main products. Figures for the individual commodities may not represent the total output in Canada as these articles may have been made also in other industries. (See Tables 5 and 6 for totals from all industries).

TABLE 4. Materials Used in the Boilers and Plate Work 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	1,352	434,930	1,061	324,685
Steel .....	"	2,461	1,352,754	1,448	951,985
Pig iron .....	"	15,490	949,553	12,636	745,508
Steel (except alloy):					
Bars and rods .....	"	4,973	866,968	4,360	757,428
Sheets:					
Black .....	"	21,048	3,062,676	24,350	3,472,797
Galvanized .....	"	632	137,747	691	155,813
Tin plate .....	"	4	550	..	..
Plates .....	"	94,864	16,072,716	95,191	15,532,808
Structural shapes .....	"	12,474	2,178,544	12,190	2,151,430
Wire .....	..	..	45,209	..	3,684
Alloy steel:					
Stainless:					
Billets, bars and rods .....	..	..	31,574	..	50,018
Other .....	..	..	1,509,805	..	2,192,180
Other alloy steel .....	..	..	385,155	..	106,104
Scrap iron and steel:					
Purchased .....	ton	14,911	531,928	14,309	585,523
Own make .....	"	1,056	39,260	324	13,079
Other iron and steel .....	..	..	2,809,124	..	4,069,907
Ferro-alloys .....	..	..	33,898	..	56,796
Non-ferrous metals, including scrap:					
Aluminum:					
Castings .....	pound	15,205	9,531	23,647	16,095
Sheet .....	"	157,588	78,920	242,252	120,261
Other forms .....	"	153,131	69,881	183,710	92,497
Brass and bronze .....	"	181,577	104,754	122,764	70,921
Copper:					
Sheet .....	"	103,730	77,195	146,406	95,103
Other forms .....	"	152,052	80,338	10,999	7,304
Nickel .....	"	10,803	7,836	16,136	17,857
Lead .....	"	94,440	21,250	2,632	626
Tin .....	"	52	52	47	47
Zinc .....	"	1,300	424	954	381
Babbitt metals and solders .....	"	17,593	10,300	19,791	14,325
Other non-ferrous metals .....	...	...	63,256	...	66,019
Other materials:					
Iron and steel pipe and fittings .....	..	..	2,830,788	..	2,390,280
Paints, oils and varnishes .....	..	..	184,047	..	174,673
Foundry coke .....	ton	7,046	231,646	6,434	220,151
Foundry sands .....	"	13,385	72,575	12,781	72,796
Plumbago and graphite .....	pound	13,707	1,618	17,023	2,017
Lumber .....	M ft. b.m.	1,317	172,577	1,064	141,357
Fireclay .....	ton	1,522	36,666	1,147	32,622
Cupola blocks and firebrick .....	..	..	18,507	..	11,184
Core oil .....	Imp. gal.	25,335	31,848	23,286	29,314
Shipping containers .....	..	..	111,710	..	96,735
All other materials <sup>1</sup> .....	..	..	18,608,930	..	19,620,692
Totals .....	...	...	53,265,040	...	54,463,002

<sup>1</sup> No detailed information on materials used was collected from firms generally reporting value of shipments of less than \$200,000. The total value of materials used by these firms was \$1,867,614 and this amount is included in "All other materials".



**TABLE 5. Factory Shipments of Heating and Power Boilers, 1958 and 1959 (from All Industries)**

Type	1958		1959	
	Number of boilers	Value of factory shipments \$	Number of boilers	Value of factory shipments \$
Heating boilers:				
Cast iron sectional heating boilers:				
(a) Under 775 sq. ft. ....	6,437	1,329,900	6,150	1,389,192
(b) 776-1,499 sq. ft. ....	2,309	887,968	2,316	935,910
(c) 1,500 sq. ft. and over ..	1,237	1,212,918	1,241	1,183,812
Steel heating boilers:				
(a) Under 112 sq. ft. ....	7,019	1,941,847	7,804	2,346,463
(b) 112-522 sq. ft. ....	1,646	3,019,173	1,584	3,479,813
(c) 523-1,245 sq. ft. ....	396	1,620,906	535	1,972,660
(d) 1,246 sq. ft. and over ..	53	665,763	42	314,318
Power boilers:				
Marine type .....	283	1,149,205	76	541,504
Water tube package boiler units .....	102	4,519,790	112	8,264,443
Fire tube package boiler units .....	60	531,229	217	970,199
Fire tube boilers .....	42	290,694	51	614,037
Boilers, type not specified .....	..	10,350,217	226	12,402,124
<b>Totals .....</b>	<b>...</b>	<b>27,518,710</b>	<b>20,354</b>	<b>34,414,475</b>

**TABLE 6. Total Production of Heating Radiators, 1958 and 1959 (from All Industries)**

Kind	1958		1959	
	Equivalent direct radiation sq. ft.	Value of factory shipments \$	Equivalent direct radiation sq. ft.	Value of factory shipments \$
Standing type, cast iron and pressed steel (excluding tube and fin type) .....	3,209,793	2,319,521	2,680,619	1,910,298
Baseboard type, cast iron, pressed steel and other fabricated metal .....	6,480,608	4,572,077	6,604,953	5,064,206
Concealed type, cast iron, pressed steel and other fabricated metal .....	6,497,917	5,331,750	6,302,300	5,169,707
<b>Totals .....</b>	<b>16,188,318</b>	<b>12,223,348</b>	<b>15,587,772</b>	<b>12,144,211</b>

**TABLE 7. Principal Statistics of the Boilers and Plate Work Industry, classified according to Type of Ownership, 1958 and 1959**

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
<b>1958</b>	number		dollars			
Individual ownership .....	10	68	235,215	16,386	275,018	612,230
Partnerships .....	6	98	294,338	19,202	558,222	1,020,149
Incorporated companies .....	87	7,783	34,006,377	1,416,139	52,431,800	107,256,540
<b>Totals .....</b>	<b>103</b>	<b>7,949</b>	<b>34,535,930</b>	<b>1,451,727</b>	<b>53,265,040</b>	<b>108,888,919</b>
<b>1959</b>						
Individual ownership .....	11	76	285,272	19,707	360,779	810,072
Partnerships .....	4	69	297,705	10,188	436,427	883,301
Incorporated companies .....	84	7,521	32,820,423	1,432,233	53,665,796	106,187,690
<b>Totals .....</b>	<b>99</b>	<b>7,666</b>	<b>33,403,400</b>	<b>1,462,128</b>	<b>54,463,002</b>	<b>107,881,063</b>

**TABLE 8. Principal Statistics of the Boilers and Plate Work Industry, grouped according to Value of Factory Shipments, 1958 and 1959**

Establishments reporting a value of factory shipments	Establishments	Employees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Selling value of factory shipments
	number			dollars		
<b>1958</b>						
Under \$10,000 .....	4	7				
\$ 10,000 to \$ 24,999 .....	1		21,176	3,740	9,183	41,101
25,000 " 49,999 .....	4	32	115,434	7,803	60,776	165,497
50,000 " 99,999 .....	13	111	394,898	33,568	440,118	984,186
100,000 " 199,999 .....	18	231	874,633	65,543	1,342,932	2,625,821
200,000 " 499,999 .....	26	635	2,697,896	124,369	3,635,080	7,824,520
500,000 " 999,999 .....	16	848	3,167,999	169,804	5,662,978	11,860,237
1,000,000 " 4,999,999 .....	15	2,336	10,332,776	399,013	13,579,425	30,124,154
5,000,000 and over .....	6	3,590	16,084,817	647,887	28,534,548	55,263,403
Head offices .....	—	159	846,301	—	—	—
<b>Totals .....</b>	<b>103</b>	<b>7,949</b>	<b>34,535,930</b>	<b>1,451,727</b>	<b>53,265,040</b>	<b>108,888,919</b>
<b>1959</b>						
Under \$10,000 .....	4	6	13,236	2,240	4,974	21,109
\$ 10,000 to \$ 24,999 .....	4	25				
25,000 " 49,999 .....	3		91,862	6,040	73,833	180,455
50,000 " 99,999 .....	10	84	316,434	28,743	261,795	824,461
100,000 " 199,999 .....	13	163	685,208	44,963	944,976	1,915,514
200,000 " 499,999 .....	27	755	3,137,985	148,360	4,689,748	9,266,482
500,000 " 999,999 .....	15	732	3,027,208	116,687	5,939,753	11,014,781
1,000,000 " 4,999,999 .....	16	2,029	9,108,955	426,356	15,819,417	32,693,749
5,000,000 and over .....	7	3,714	16,175,689	688,739	26,728,506	51,964,512
Head offices .....	—	158	846,823	—	—	—
<b>Totals .....</b>	<b>99</b>	<b>7,666</b>	<b>33,403,400</b>	<b>1,462,128</b>	<b>54,463,002</b>	<b>107,881,063</b>

**TABLE 9. Employees and their Earnings in the Boilers and Plate Work Industry, by Provinces, 1958 and 1959**

Province	Employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
<b>1958</b>								
Quebec .....	405	99	1,438	16	1,958	2,335,704	5,413,483	7,749,187
Ontario .....	1,210	361	3,302	15	4,888	8,190,996	13,954,648	22,145,644
Alberta .....	84	22	245	—	351	502,595	942,734	1,445,329
British Columbia .....	97	32	364	4	497	636,787	1,736,670	2,373,457
Other provinces .....	30	12	213	—	255	165,688	656,625	822,313
<b>Totals .....</b>	<b>1,826</b>	<b>526</b>	<b>5,562</b>	<b>35</b>	<b>7,949</b>	<b>11,831,770</b>	<b>22,704,160</b>	<b>34,535,930</b>
<b>1959</b>								
Quebec .....	402	96	1,387	13	1,898	2,410,513	5,618,461	8,028,974
Ontario .....	1,164	342	3,101	15	4,622	7,474,762	13,130,527	20,605,289
Alberta .....	101	24	318	—	443	634,737	1,206,091	1,840,828
British Columbia .....	87	23	297	2	409	586,538	1,464,573	2,051,111
Other provinces .....	35	12	247	—	294	208,580	668,618	877,198
<b>Totals .....</b>	<b>1,789</b>	<b>497</b>	<b>5,350</b>	<b>30</b>	<b>7,666</b>	<b>11,315,130</b>	<b>22,088,270</b>	<b>33,403,400</b>



TABLE 10. Capital and Repair Expenditures in the Boilers and Plate Work 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, 774	2, 321	4, 095	272	1, 897	2, 169	6, 264
1956 .....	2, 117	3, 021	5, 138	322	1, 810	2, 132	7, 270
1957 .....	3, 222	3, 908	7, 130	539	2, 421	2, 960	10, 090
1958 .....	1, 011	2, 768	3, 779	294	1, 781	2, 075	5, 854
1959 <sup>P</sup> .....	291	1, 646	1, 937	261	1, 643	1, 904	3, 841

TABLE 11. Production Workers, by months, 1959

Month	Establishments reporting monthly detail <sup>1</sup>		Establishments reporting quarterly detail <sup>2</sup>	
	Male	Female	Male	Female
January .....	4,592	27		
February .....	4,590	27		
March .....	4,650	27	476	5
April .....	4,591	27		
May .....	4,624	25		
June .....	4,820	25	487	5
July .....	4,570	25		
August .....	4,537	24		
September .....	4,595	24	537	4
October .....	4,693	24		
November .....	4,625	23		
December .....	4,374	23	487	4
Average for establishments reporting monthly detail .....			4,625	25
Average for establishments reporting quarterly detail .....			498	4
Average estimated for small establishments <sup>3</sup> .....			227	1
Average for all establishments .....			5,350	30

<sup>1</sup> The number of production workers, by months, was collected only for establishments generally reporting value of shipments of \$500,000 and over.

<sup>2</sup> The number of production workers, by quarters, was collected only for establishments generally reporting value of shipments between \$200,000 and \$500,000.

<sup>3</sup> For establishments generally reporting value of shipments of less than \$200,000, 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 12. Fuel and Electricity Used in the Boilers and Plate Work Industry, 1959

Kind		Quantity	Cost at plant
			\$
1. Establishments reporting commodity detail: <sup>1</sup>			
Bituminous coal (a) From Canadian mines .....	ton	1,683	23,904
(b) Imported .....	"	7,882	88,964
Anthracite coal .....	"	8,219	89,230
Coke .....	"	105	3,330
Gasoline (including gasoline used in cars and trucks) .....	Imp. gal.	486,402	187,094
Fuel oil including kerosene or coal oil .....	"	1,781,591	215,591
Wood .....	cord	25	282
Gas (a) Liquefied petroleum gases .....	Imp. gal.	48,265	12,864
(b) Natural gas .....	M cu. ft.	136,532	60,944
Other fuel .....	..	..	632
Electricity purchased .....	kwh.	41,270,387	528,247
Steam purchased .....	..	..	30,755
2. Establishments reporting group detail: <sup>2</sup>			
Cost of fuel .....	...	...	54,210
Cost of electricity .....	...	...	60,012
3. Estimate for establishments for which no data were collected: <sup>3</sup>			
Cost of fuel and electricity .....	...	...	106,069
4. All establishments:			
Total cost of fuel and electricity .....	...	...	1,462,128

<sup>1</sup> Establishments generally reporting value of shipments of \$500,000 and over.<sup>2</sup> Establishments generally reporting value of shipments between \$200,000 and \$500,000.<sup>3</sup> Establishments generally reporting value of shipments of less than \$200,000.

## List of Firms in the Boilers and Plate Work Industry, 1959

Name of firm	Location of plant
<b>Nova Scotia:</b>	
Steel and Engine Products Ltd. ....	Liverpool
<b>Quebec:</b>	
Acme Welding and Service Co. Ltd. ....	840 Lafleur, Ville La Salle
Argon Electric Welding Co. Ltd. ....	65 St. Joseph St., Lachine, P.Q.
Boilers Incorporated .....	932 St. George St., Montreal
Brock Steel Corp. Ltd. ....	4305 Iberville St., Montreal
Canadian Erectors Mfg. Ltd. ....	5441 Notre Dame St. W., Montreal
Combustion Engineering-Superheater Ltd. ....	540 Dominion Square Bldg., Montreal
Dominion Welding Engineering Co. Ltd. ....	6898 Notre Dame St. E., Montreal
Douglas Bros. Ltd. ....	350 Decarie Blvd., St. Laurent
Drummond Welding & Steel Works Ltd. ....	2270 Joliette, Ville Jacques Cartier
Ferro Metal Ltd. ....	9500 St. Lawrence Blvd., Montreal
Latulippe, Michel, Enrg. ....	124 Dorchester St., Quebec



## List of Firms in the Boilers and Plate Work Industry, 1959 - Continued

Name of firm	Location of plant
<b>Quebec - Concluded:</b>	
Machineries Mercier Ltd. ....	12, rue St. Laurent, Lévis
McRob Industries Co. Reg'd. ....	5203-8th Ave., Rosemount, Montreal, P.Q.
Northern Steel Industries Limited .....	5337 York St., Montreal
Radiateur Plessis, Limitée .....	Plessisville
St. Maurice Industries Co. ....	Cap-de-la-Madeleine
Stemac Ltd. ....	110 Pacific, Lachine
Vidal, H.C., Enrg. ....	515 Carillon St., Montreal
Warden King, Limited .....	2104 Bennett Ave., Montreal
Weir, J. & R., Limited .....	33 Nazareth St., Montreal
<b>Ontario:</b>	
Aerofin Corp. (Canada) Limited .....	Bath Road & Day St., Kingston
Aga Steel Radiators of Canada Ltd. ....	Ajax
Agincourt Steel Fabricators Ltd. ....	Midland Ave. N., Agincourt
Allen Tank & Welding Co. Ltd. ....	750 Little Simcoe St., London
American Standard Products (Canada) Limited .....	1201 Dupont St., Toronto 4
Aurora Tank & Welding .....	47 Temperance St., Aurora
Babcock-Wilcox & Goldie-McCulloch, Ltd. ....	Cornation Blvd., Galt
Bell, Robert, Industries Ltd. ....	Seaforth
Bingley Steel Works Ltd. ....	40 William St., Cornwall
Brantford Welding & Boiler Limited .....	25 Henry St., Brantford
Campbell Steel & Iron Works, Limited .....	855 Carling Ave., Ottawa
Chemical Equipment Fabricators .....	Rear 752 Warden Ave., Scarborough
Cochran, W., Co., Ltd. ....	Paris
Courtland Welding Service Limited .....	Courtland
Diamalloy Manufacturing Limited .....	2316-18 Gerrard St. E., Toronto 13
Dominion Welding Engineering Company Limited .....	2805 Dufferin St., Toronto
Domestic Tank & Equipment Ltd. ....	69 Comstock Rd., Scarborough
Elgee Products Ltd. ....	410 Hopewell Ave., Toronto 10, Ont.
Embro Welding & Steel Fabrication .....	Embro
Essex Boiler & Heating Engineering Co. ....	1319 Mc Dougall, Windsor
Feiertag, Eddy, Welding .....	27 Hibbard St., Ridgeway
Ferro-metal (Ottawa) Limited .....	100 Hymas Road, Scarborough
Foster Wheeler, Limited .....	81 Eastchester Ave., St. Catharines
Giltsch, Fritz W., & Sons (Canada) Ltd. ....	18 Dallas Uxbridge
Hamilton Boiler Works .....	645-649 Main St. W., Hamilton
Hassan Steel Fabricators Limited .....	223 Ashland Ave., London
Horton Steel Works, Limited .....	Jennet St., Fort Erie
Ideal Welding Co. Limited .....	206 Duchess St., Toronto 2
Imperial Steel Construction Limited .....	Trunk Road, Sault Ste. Marie
Inglis, John, Co., Limited .....	14 Strachan Ave., Toronto 3
John Thompson Leonard Ltd. ....	381 York St., London
Lloyd & Westwood Machinery Company .....	492 Gilbert Ave., Toronto
Lock, J.H., & Sons Ltd. ....	150 Perth Ave., Toronto 9
MacPherson, C.E. Limited .....	468 Rideau St., Kingston
Meaford Tank Company .....	Meaford, Ontario
M. and L. Welding and Steel .....	The Kingsway, Peterborough
Natweld Steel Products Ltd. ....	42 Tabor Road, Rexdale, Ont.
Oakwood Iron Works Limited .....	644 Rogers Road, Toronto 9

## List of Firms in the Boilers and Plate Work Industry, 1959 - Concluded

Name of firm	Location of plant
<b>Ontario - Concluded:</b>	
O'Connor Fuel Tanks Ltd. ....	15 Bermondsey Rd., Toronto 13
Pendell Boiler, Limited .....	50 Bartlett Ave., Toronto 4
Plate & Structural Steel Ltd. ....	48 Abell St., Toronto 3
Port Colborne Iron Works, Limited .....	Fraser St., Port Colborne
Ric-Wil Co. of Canada Limited .....	Wellington St., St. Thomas
Sparling Tank & Manufacturing Co. ....	866 Lakeshore Rd., Toronto
Steel Fabricating & Welding, Limited .....	Brock & Hatt Sts., Dundas
Toronto Iron Works, Limited .....	629 Eastern Ave., Toronto 8
West Machinery Limited .....	Wellington St., Simcoe
Wilson Engineering & Fabricating, Ltd. ....	Fifty Rd., Winona
Woodstock Boiler Works .....	217 Russell St., Woodstock
<b>Manitoba:</b>	
Canadian Brown Steel Tank Co. Ltd. ....	20th. St. & Pacific Ave., Brandon
Metals Industry Ltd. ....	Old Flying Club, North Hill, Brandon
Stephenson, J.R., Ltd. ....	555 Madison St., St. James
<b>Saskatchewan:</b>	
The Saskatoon Boiler Manufacturing Co. Limited .....	115 Ave. A, North, Saskatoon
<b>Alberta:</b>	
Black-Sivalls & Bryson, Ltd. ....	6203-104th St., Edmonton
Calgary Steel Tank, Limited .....	70th Ave. & MacLeod Trail, Calgary
Cumming's Welding Shop .....	9548-102nd Ave., Edmonton
Horton Steel Works, Ltd. ....	2902-5th St., Lethbridge
Johnson Welding & Machine Shop Ltd. ....	Lloydminster
Liberty Boilers (Lethbridge) Ltd. ....	1402-2nd Ave. S., Lethbridge
Premier Steel Products Limited .....	Highway 14 East Edmonton
Reliance Welding Works .....	9566 Jasper Ave., Edmonton
Steel Crafts, Alberta Ltd. ....	4202 MacLeod Trail, Calgary
T.I.W. Western Limited .....	12542-101st. St., Edmonton
Universal Industries Ltd. ....	5010-49th St., Lloydminster
<b>British Columbia:</b>	
Bobbie Equipment & Welding Co. Limited .....	1915 Fir St., Vancouver
Industrial Coatings Ltd. ....	1920 Main St., Vancouver
Lochead-Haggarty Eng. & Mfg. Co. Ltd. ....	3904 Grant St., Burnaby 2
Mainland Boiler Works .....	496 Alexander St., Vancouver 4
Pacific Steel Erectors Limited .....	400 Ewen Ave., New Westminster
Patterson Boiler Works, Limited .....	730 Alexander St., Vancouver
Royal City Welding & Iron Works, Ltd. ....	1027 Royal Ave., New Westminster
Steelweld Limited .....	1571 Main St., Vancouver 4
Vancouver Iron Works, Ltd. ....	1155 W. 6th Ave., Vancouver 9
Welding Shop & Engineering Co. Ltd. ....	1600 Main St., Vancouver 4
Western Coastwise Service Ltd. ....	8194 Ontario St., Vancouver
Western Corrosion Engineering Ltd. ....	882 East Cordova, Vancouver
Western Welding Works Ltd. ....	878 Powell St., Vancouver 4
Westminster Boiler & Tank Company .....	114-11th St., New Westminster



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