Madrite

41-205

ANNUAL

aug 2.3 1960





# THE BOILERS AND PLATE WORK INDUSTRY 1958



Published by Authority of
The Honourable Gordon Churchill, Minister of Trade and Commerce

#### DOMINION BUREAU OF STATISTICS

Industry and Merchandising Division

August, 1960 6523-512

Price 50 cents

#### **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 42 - 202 41 - 205 41 - 207	Iron and Steel Products — General Review (A).  The Agricultural Implements Industry (A).  The Boilers and Plate Work Industry (A).  The Bridge Building and Structural Steel Industry (A).	.50
41 - 208 41 - 209 42 - 208 42 - 207 41 - 210	The Hardware, Tools and Cutlery Industry (A).  The Heating and Cooking Apparatus Industry (A)  The Machinery Industry (A).  The Machine Shops Industry (A).  The Iron Castings Industry (A)	.50
41 - 203 41 - 213 41 - 216 41 - 217	The Primary Iron and Steel Industry (A)  The Sheet Metal Products Industry (A)  The Wire and Wire Goods Industry (A)  The Miscellaneous Iron and Steel Products Industry (A)	.75 .50
41 - 001 41 - 002 41 - 003	Primary Iron and Steel (M) per year Steel Ingots and Pig Iron (Preliminary) (M) per year Production of Pig Iron and Steel (M) per year	3.00 1.00 1.00
41 - 004 41 - 005 41 - 006 41 - 212	Iron Castings and Cast Iron Pipes and Fittings (M)     per year       Stoves and Furnaces (M)     per year       Steel Wire and Specified Wire Products (M)     per year	1.00 1.00 1.00
63 - 203 64 - 202 43 - 006	Scrap Iron and Steel (A)  Farm Implement and Equipment Sales (A)  Household Facilities and Equipment (A)  Air Conditioning and Refrigeration Equipment (M)  per year	. 25 . 50 . 50
(S.C.) (S.C.) (S.C.) (S.C.)	Sanitaryware (M) per year Scrap Iron and Steel (M) per year Domestic Water Tank Heaters (M) per year	1.00 1.00 1.00
(S.C.) (S.C.) (S.C.)	Domestic and Farm Water Systems (M). per year Builders' Hardware (M). per year Heating Boilers and Radiators (M) per year Domestic Range Boilers (M) per year	1.00 1.00 1.00 1.00
(S.C.) (S.C.) (S.C.) (S.C.)	Cemented Tungsten Carbide (M) per year Welding Electrodes (M) per year Grinding Balls (A). Fans, Unit Heaters and Ventilators (A)	1.00 1.00 .25
31 - 201 31 - 001 65 - 004	General Review of the Manufacturing Industries (A)  Inventories, Shipments and Orders in Manufacturing Industries (M)	.25 2.00 4.00 7.50
65 - 007	Trade of Canada - Imports (M) per year	7.50

Remittances should be in the form of cheque or money order, made payable to the Receiver General of Canada and forwarded to the Information Services Division, Dominion Bureau of Statistics, or to the Queen's Printer, Ottawa, Canada.

#### EXPLANATORY NOTES

This report is one in a series of about 130 publications which present the results of the 1958 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 1958, 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**

Prior to 1949 all manufacturing firms, regardless of size, were required to complete a standard form annually covering all census details, but for later years an effort was made to ease the reporting burden for smaller firms which usually do not maintain regular records in the required detail. A modified or short form was introduced in 1949 asking for the total value of shipments only, or in industries with a large number of small firms, for total value of shipments and quantities and values of a few principal products. Using the ratio of value of shipments in the current year to value of shipments in the base year, 1948, estimates of other census data were made for each plant for inclusion in the regular compilations. In general, the cut-off point for short forms was set at \$50,000 gross value of shipments annually, but there were lower cut-offs for a number of industries in which the small firms accounted for a larger share of total shipments. About 40 per cent of the total number of establishments reported on the modified or short form. They accounted for less than 3 per cent of the total value. In 1958, to establish a new base year, the small firms were again asked to report data on employees, salaries and wages, and other principal statistics together with some detail on material and products.

#### 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.

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.

# THE BOILERS AND PLATE WORK INDUSTRY 1958

Factory shipments by the 103 establishments in the Boilers and Plate Work Industry were valued at \$108,888,919 in 1958. Forty-nine of these works were in Ontario, 22 in Quebec, 15 in British Columbia, 12 in Alberta, 3 in Manitoba and 1 each in Saskatchewan and Nova Scotia. These concerns give employment to 7,949 people who were paid \$34,535,930 in salaries and wages. Materials used in manufacturing processes cost \$53,265,040 and expenditures for fuel and electricity amounted to \$1,451,727.

Tables 1 to 4 and Tables 7 to 13 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 1958 for heating and power boilers was \$27,518,710 and for heating radiators \$12,223,348.

TABLE 1. Principal Statistics of the Boilers and Plate Work Industry, Significant Years 1929-58 and by Provinces, 1957 and 1958

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>
	num	ber	1,11		dollars		0= 101
1929 1933 1937 1939 1943	37 50 54 41 38	2, 157 1, 572 2, 936 2, 491 5, 469	3,043,768 1,742,257 3,694,393 3,150,560 11,086,571	163, 137 168, 784 226, 991 217, 111 547, 891	5,091,406 1,553,690 4,872,296 3,673,208 16,270,970	4,751,735 2,722,782 6,112,214 4,909,487 20,547,071	10,006,278 4,445,256 11,211,501 8,799,806 37,365,932
1946 1949 1954 1955 1956	44 56 89 101 103	5,042 6,642 8,127 8,378 9,004	9, 974, 544 17, 980, 051 30, 547, 703 31, 218, 918 34, 384, 694	511, 512 803, 646 1, 160, 741 1, 203, 833 1, 451, 024	9,791,684 20,156,193 35,858,003 41,388,579 56,998,458	16, 407, 706 33, 602, 254 50, 441, 898 51, 813, 530 53, 533, 046	26, 710, 90; 54, 562, 093 87, 623, 77; 93, 486, 69; 110, 697, 040
1957							
Nova Scotia Quebec Ontario Alberta British Columbia Manitoba Saskatchewan Canada	1 21 48 12 16 3 1	} 2,211 5,745 384 737 } 149 9,226	8, 490, 585 24, 193, 029 1, 513, 011 3, 575, 040 476, 208 38, 247, 873	336, 553 886, 793 149, 941 116, 451 41, 535	16, 609, 080 35, 905, 387 3, 337, 721 5, 420, 045 1, 375, 060 62, 647, 293	13, 822, 939 35, 298, 868 2, 540, 782 4, 974, 277 689, 231 57, 326, 097	30, 793, 293 72, 120, 140 6, 908, 20 9, 971, 150 2, 166, 310 121, 959, 10
1958							
Nova Scotia	1 22 49 12 15 3	} 2,109 4,888 351 497 } 104	8, 239, 548 22, 145, 644 1, 445, 329 2, 373, 457 331, 952	322, 592 889, 328 131, 286 90, 503 18, 018	14, 843, 119 30, 629, 256 3, 195, 890 3, 925, 105 671, 670	14,367,010 33,354,912 3,043,600 1,734,253 486,282	29, 082, 053 66, 086, 449 6, 247, 931 6, 285, 204 1, 187, 282
Canada	103	7,949	34, 535, 930	1, 451, 727	53, 265, 040	52, 986, 057	108, 888, 91

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, 1958

Berleville and a section of the	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total
		dolla	ars	
			225 6 2001	474   St. MI
Opening:				
Quebec and Nova Scotia	3, 477, 720	1, 224, 724	1,804,772	6, 507, 216
Ontario	8,956,264	8, 236, 830	1,807,347	19, 000, 441
Manitoba and Saskatchewan	305, 130	55,377	58, 819	419,326
Alberta	2, 639, 806	241,327	230,656	3, 111, 789
British Columbia	1, 210, 099	1, 880, 493	60, 122	3, 150, 715
Canada	16, 589, 019	11,638,751	3,961,716	32, 189, 486
Closing:	THE PARTY		LATERA DE DE	OF STREET
Quebec and Nova Scotia	3,002,910	1,798,876	1,681,288	6, 483, 074
Ontario	7, 826, 955	7,064,365	1,766,859	16, 658, 179
Manitoba and Saskatchewan	293,302	70, 199	32, 685	396, 186
Alberta	2, 179, 586	358, 846	235, 982	2,774,414
British Columbia	980, 493	1, 288, 865	116, 407	2,385,765
Canada	14,283,246	10, 581, 151	3, 833, 221	28, 697, 618

<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 1958 may not necessarily agree with the closing inventory for 1957 because of the

The opening inventory for 1958 may not necessarily agree with the closing inventory for 1957 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, 1957 and 1958

	195	7	1958			
Product	Quantity	Value of factory shipments	Quantity	Value of factory shipments		
THE COLUMN THE PARTY OF THE PAR		\$	пред 1	\$		
Heating boilers:			-			
Cast iron sectional heating boilers:		-	-			
(a) Under 775 sq. ft	6,101	941,685	5, 473	1,115,010		
(b) 776-1,499 sq. ft	1,887	812,057	1,875	727, 844		
(c) 1,500 sq. ft. and over	1,056	1,031,852	1,027	1,085,961		
Steel heating boilers:						
(a) Under 112 sq. ft. (heating surface)	2, 903	510, 207	3,664	722,719		
(b) 112-522 sq. ft. (" " ) "	393	756, 926	331	689,522		
(c) 573-1,245 sq. ft. (" " ) "	185	650, 738	169	580, 076		
(d) 1,362 sq. ft. & over (" ")	18	110,729	31	393,139		

TABLE 3. Products Made in the Boilers and Plate Work Industry, 1957 and 1958 - Concluded

	19	957		958
Product	Quantity	Value of factory shipments	Quantity	Value of factory shipments
Ad alto-family shaped a fill date		\$		\$
				Paylantik
Power boilers and equipment:	440	0.010.010		. 0.10
Water tube package boiler units	116	3, 616, 242	66	4, 243, 178
Fire tube package boiler units	24	97, 123	33	251, 033
Marine type boilers, fire tube and water tube	46	304, 065	136	505, 942
Fire tube boilers, other	12	56, 617	5	28, 815
All other power boilers	116	7, 636, 603	43	8, 630, 751
Boiler parts, including drums, water walls, repairs, etc.		1,569,052	***	1, 988, 731
Radiators, heating:				
Steel and cast iron, standing sq. ft.	4, 206, 307	3, 095, 496	4, 249, 176	3, 277, 961
Steel and cast iron, concealed	4, 200, 301	3,033,430	4, 245, 110	3, 211, 301
Fabricated products:				The state of
Steel plate (cut, punched, shaped or other wise fabricated for assembly on job)	toral	26, 453, 467	= =	15, 320, 20
Structural shapes (cut, punched, shaped or otherwise fabricated for assembly on job)		1,925,822		1,669,72
liscellaneous plate work:				
Bins and hoppers		953, 214		468, 329
Smokestack	1 - 1	382,919		230, 15
Smoke Breeching		333, 507		464, 816
Rivetted and welded steel pipe - Stainless ton	993	2, 503, 132	740	1, 232, 45
Other steel "	2, 480	873,015	2,951	944, 40
Other plate work		7, 093, 694		5, 499, 25
anks (complete at factory) and cylinders:				, - 14EZ
Gas cylinder, metal (L.P. gas, etc.)		526, 634		705, 630
Boiler drums		10,000		23, 44
Pressure and vacuum tanks		6,025,432		3, 319, 39
Steel septic		442, 432		606,629
Storage and processing tanks		13, 566, 292		10, 353, 55
Tanks, other		1, 511, 681		2, 417, 000
umps, all kinds, and parts		1, 239, 116		1, 127, 65
tokers, mechanical, and parts	* •	1, 026, 777		696, 383
				100.00
Turnaces, warm air	701	64, 307	572	128, 920
ecceipts from custom work and repairs		6, 933, 548	20111	6, 160, 517
All other products <sup>1</sup>		28, 880, 520	4 + 0	33, 079, 762
100	100			Curry Section
Totals		121, 959, 107		108, 888, 919

<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, 1957 and 1958

		19	57	1958		
Material		Quantity	Cost at works	Quantity	Cost at works	
			\$		6	
Castings (rough and semi-finished) received from foundry:	7 Y 1					
Iron (gray and malleable)	ton	2,717	688,932	1, 352	434, 93	
Steel	4.6	4, 067	1,587,941	2, 461	1, 352, 75	
Pig iron	4.6	16, 322	1, 034, 567	15, 490	949, 55	
teel (except alloy):				1 10 10 1		
Bars and rods	44	7, 251	1, 392, 998	4, 973	866, 96	
Sheets:		1,201	1,002,000	2,010	000,00	
Black	64	21,032	3, 146, 543	21,048	3, 062, 67	
Galvanized	44	1, 261	210,853	632	137, 74	
Tin plate	44	6	1, 430	4	55	
Plates		119, 170	19, 737, 212	94, 864	16, 072, 71	
Structural shapes	**	20, 973	3, 369, 125	12, 474	2, 178, 54	
Boiler tubes			3, 439, 471	• •		
Wire			9, 344		45, 20	
lloy steel:						
Stainless:						
Billets, bars and rods			159, 747		31, 57	
Other		• •	2, 695, 122	* 1	1, 509, 80	
Other alloy steel	Del Laber		729, 570	• •	385, 15	
crap iron and steel:						
Purchased	ton	13, 664	607, 556	14,911	531, 92	
Own make	14	677	26, 574	1,056	39, 26	
ther iron and steel		÷ =	2, 354, 525		2, 809, 12	
erro-alloys			51, 265		33, 89	
on-ferrous metals, including scrap:						
Aluminum:		_				
Castings	pound	20, 141	13,016	15, 205	9, 53	
Sheet	44	254, 528	133, 359	157, 588	78, 9:	
Other forms	14	104, 931	53, 176	153, 131	69, 88	
Brass and bronze		220, 129	124, 576	181, 577	104, 75	
Copper: Sheet	4.0	93, 194	49,747	103, 730	77, 19	
Other forms	44	24, 763	14,519	152, 052	80, 33	
Nickel	4.6	9, 765	6, 256	10,803	7,83	
Lead	6.6	77, 489	17, 433	94, 440	21, 25	
Tin	6.6	4.0		52	5	
Zine	44	500	150	1, 300	42	
Babbitt metals and solders	4.0	26, 329	18, 566	17, 593	10,30	
Other non-ferrous metals			43,961		63, 25	
ther materials: Iron and steel pipe and fittings			2, 210, 551		2, 830, 78	
Paints, oils and varnishes	A		189, 404		184, 04	
Foundry coke Foundry sands	ton	7, 647 14, 586	251, 189 88, 870	7, 046 13, 385	231, 64 72, 57	
Plumbago and graphite	pound	12,064	1, 764	13, 707	1,61	
Lumber		2, 185 1, 264	243, 415	1,317	172, 57	
Cupola blocks and firebrick	ton	1, 204	35, 760 15, 881	1, 522	36, 66 18, 50	
Core oil	Imp. gal.	27, 439	33,828	25, 335	31, 84	
Shipping containers All other materials		* * *	151, 071 17, 708, 026		111, 71	
Totals		141	62, 647, 293		53, 265, 94	

TABLE 5. Factory Shipments of Heating and Power Boilers, 1957 and 1958 (from All Industries)

	195	57	195	8
Type	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.  (b) 776-1,499 sq. ft.  (c) 1,500 sq. ft. and over	6,727 2,285 1,261	1,066,634 956,154 1,154,502	6,437 2,309 1,237	1,329,900 887,968 1,212,918
Steel heating boilers: (a) Under 112 sq. ft, (b) 112-522 sq. ft. (c) 573-1,245 sq. ft. (d) 1,362 sq. ft. and over	6,672 1,003 718 99	1,404,500 1,867,853 2,099,967 929,204	7,019 1,646 396 53	1,941,847 3,019,173 1,620,906 665,763
Power boilers:	5.1	04.0 4.05	200	1 140 000
Marine type	51	313,465	283	1,149,205
Water tube package boiler units	129	3,805,586	102	4,519,790
Fire tube package boiler units	201	964,876	60	531, 229
Fire tube boilers	31	207,082	42	290,694
Boilers, type not specified	9.0	9,103,086	• •	10, 350, 217
Totals	1 = 1	23, 872, 909		27,518,710

TABLE 6. Total Production of Heating Radiators, 1957 and 1958 (from All Industries)

PM DE PLOS PLOS PLOS _ PL	195	57	1958		
Kind	Equivalent direct radiation	Value of factory shipments	Equivalent direct radiation	Value of factory shipments	
	sq. ft.	\$	sq. ft.	\$	
Standing type, cast iron and pressed steel (excluding tube and fin type)	3,692,980	2,791,111	3,209,793	2,319,521	
Baseboard type, cast iron, pressed steel and other fabricated metal	4,340,047	3,317,150	6,480,608	4,572,077	
Concealed type, cast iron, pressed steel and other fab- ricated metal	7,115,868	4,779,040	6,497,917	5,331,750	
Totals	15, 148, 895	10,887,301	16,188,318	12, 223, 348	

TABLE 7. Principal Statistics of the Boilers and Plate Work Industry, classified according to Type of Ownership, 1957 and 1958

	0. 0	i ce mirel	2001 8114 20	0.0		
Туре	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	nur	nber		de	ollars	
Individual ownership	10 6 86	80 81 9,065	248, 471 282, 178 37, 717, 224	17,707 15,634 1,497,932	304,038 547,817 61,795,438	714, 546 995, 786 120, 248, 775
Totals	102	9, 226	38, 247, 873	1,531,273	62, 647, 293	121,959,107
Individual ownership Partnerships Incorporated companies	10 6 87	68 98 7,783	235,215 294,338 34,006,377	16,386 19,202 1,416,139	275,018 558,222 52,431,800	612,230 1,020,149 107,256,540
Totals	103	7,949	34, 535, 930	1, 451, 727	53, 265, 040	108,888,919

TABLE 8. Principal Statistics of the Boilers and Plate Work Industry, grouped according to Value of Factory Shipments, 1957 and 1958

Establishments reporting a 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	nur	nber		do	ollars	
Inder \$10,000	4	)		a pro-	COURSE NO.	
\$10,000 to \$24,999 \$25,000 ' \$49,999	1	21	67,065	4,530	37,593	89,342
\$50,000 '' \$99,999	10	80	267, 703	18, 590	318,642	770,391
\$100,000 ' \$199,999 \$200,000 ' \$499,999	16 28	224 779	811.527	65,468	1,241,775	2,445,133
\$500,000 '' \$999,999	18	937	2,957,587 4,291,540	152,263 190,105	4,531,376 6,530,531	9, 125, 075 12, 723, 919
1,000,000 '' \$4,999,999	15	1,876	7,459,220	345, 287	11,497,451	26, 272, 002
5,000,000 and over	9	5, 155 154	21,631,016 762,213	755, 030	38,489,925	70, 533, 245
Totals	102	9,226	38, 247, 873	1,531,273	62, 647, 293	121,959,107
1958	111				all divisions	
1330	9.					
nder \$10,000\$10,000 to \$24,999	4 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 \$100,000 '' \$199,999	13 18	111 231	394,898 874,633	33, 568 65, 543	440,118 1,342,932	984, 186 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	11,860,23
,000,000 ' \$4,999,999	15	2,336	10,332,776	399, 013	13,579,425	30,124,154
5,000,000 and overead offices	6	3,590 159	16, 084, 817 846, 301	647,887	28, 534, 548	55,263,403
Totals	103	7,949	34, 535, 930	1, 451, 727	53, 265, 040	108, 888, 919

TABLE 9. Employees and their Earnings in the Boilers and Plate Work Industry, by Provinces, 1957 and 1958

	eu fei e	I	Employee	s	Earnings			
Province		visory office	Production workers		Total	Supervisory	Production	Total
	Male	Female	Male	Female		office	workers	
1957	Helt -	4 - 44	number				dollars	Ballin.
Quebec	379	102	1,547	3	2,031	2, 218, 757	5,766,576	7,985,333
Ontario	1,370	452	3,902	21	5.745	8, 113, 971	16,079,058	24, 193, 029
Alberta	61	22	300	1	384	343,345	1,169,666	1,513,011
British Columbia	118	34	582	3	737	751,580	2,823,460	3,575,040
Other provinces	36	15	278		329	200,270	781,190	981,460
Totals	1,964	625	6,609	28	9, 226	11,627,923	26, 619, 950	38, 247, 873
1958			S vit					
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
Totals	1,826	526	5,562	35	7,949	11,831,770	22, 704, 160	34, 535, 930

TABLE 10. Production Workers by Months, 1958

THE PERSON NAMED IN	Establishmen monthly	ts reporting detail <sup>1</sup>	Establishments monthly	All establishments							
Barrell Control	Male	Female	Male	Female	Male	Female	Total				
The state of the s	number										
January	5, 701	33	_ prema	a veg ke		NATAN.					
Pebruary	5,442	34									
Aarch	5, 274	35	AND THE AND			# = 9					
April	5, 584	37	- Lines	James Ca		The T					
lay	5,708	37	64	1 1 1 1 1 1 1 1 1	5,772	37	5,809				
une	5,614	34		1 ==== 11		WHILE CO.					
uly	5, 527	33				-					
ugust	5,526	32									
eptember	5, 579	33									
October	5, 548	37	11/2-			8 20					
lovember	5,347	35									
December	5, 142	36	E								
Average <sup>2</sup>					5,562	35	5, 597				

¹ The number of production workers by months was generally collected only for establishments reporting value of shipments of \$100,000 and over. For smaller establishments, only the number employed during the last pay period of May, 1958, was collected.
¹ The average for establishments generally reporting shipments of less than \$100,000 was estimated by using average annual earnings data from the large establishments in conjunction with reported payrolls for the small establishments.

TABLE 11. Capital and Repair Expenditures in the Boilers and Plate Work Industry, 1954-58

<b>B</b>		Capital expenditures		Repair and maintenance expenditures			Total capital
Year	Con- struction	Machinery and equipment	The state of the s	Con- struction	Machinery and equipment	Sub-total	and repair expenditures
	565,750,00 622		the	ousands of dol	lars		_ state
1954	990	2,116	3,106	354	1,624	1,978	5,084
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 <sup>p</sup>	1,171	3,093	4, 264	305	1,836	2,140	6,405

TABLE 12. Fuel and Electricity used in Boilers, and Plate Work Industry, 1958

Kind	Quantity	Cost at plant
		\$
1. Establishments reporting commodity detail:1		A Company
Bituminous coal (a) From Canadian mines ton	4,380	54,018
(b) Imported	6,000	71,071
Sub-bituminous coal (from Alberta mines only)	_	
Anthracite coal ton	8,637	94, 235
Coke (for fuel only)	211	4, 949
Gasoline (including gasoline used in cars and trucks) Imp. gal.	693, 988	261,023
Fuel oil including kerosene or coal oil	1,995,452	260,837
Wood (cords of 128 cubic feet of piled wood) cord	26	292
Gas (a) Liquefied petroleum gases (propane, etc.) Imp. gal.	119, 485	30,062
(b) Other manufactured gas M cu. ft.	121	205
(c) Natural gas	82,390	49,737
Other fuel	_	7,814
Electricity purchased kwh.	38, 752, 506	591,946
Steam purchased	• •	6,102
Total		1,432,291
2. Establishments not reporting commodity detail:		
Total cost of fuel		10,350
Electricity purchased		9,086
220002010 page 2002		
3. All establishments:		
Total cost of fuel		850,695
Total cost of electricity		601,032
Total cost of fuel and electricity		1,451,727

<sup>&</sup>lt;sup>1</sup> Data on the quantity and value of the different kinds of fuel, and on the quantity of electricity purchased were generally not collected for establishments reporting value of shipments of less than \$100,000. Only the total cost of fuel and the total cost of electricity were collected for these establishments.

TABLE 13. Total Horsepower Rating of Power Equipment in Use or Available for Use in the Boilers and Plate Work Industry at the End of 1958

Type of equipment	Driving generators	Not driving generators	
	horsepower		
A. Prime movers:		1	
Steam engines	750	190	
Steam turbines	- 10	100	
Diesel engines	2,121	165	
Gasoline, gas and oil engines, other than diesel engines	7,605	1,377	
Totals	10,476	1, 832	
3. Electric motors (one-quarter horsepower and over)	-1-1-10	50,676	

### List of Firms in the Boilers and Plate Work Industry, 1958

Name of firm	Location of plant	
Nova Scotia:	The second secon	
	7 (	
Steel and Engine Products Ltd.	Liverpool	
Quebec:	and the same and a series of the series of t	
Acme Welding and Service Co. Ltd.	840 Lafleur, Ville La Salle	
Argon Electric Welding Co. Ltd.	65 St. Joseph St., Lachine, P.Q.	
Berwill Boiler and Steel Works Ltd.	8651-9th Ave., Ville St. Michel	
Boilers Incorporated	932 St. George St., Montreal	
Brock Steel Corp. Ltd. C.D.N. Tank Erectors Limited	4305 Iberville St., Montreal 5441 Notre Dame St., W., Montreal, P.Q.	
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.	4090 Namur St., Montreal	
Drummond Welding & Steel Works Ltd. Ferro Metal Ltd.	2270 Joliette, Ville Jaques Cartier 9500 St. Lawrence Blvd., Montreal	
Latulippe, Michel, Enrg.	124 Dorchester St., Quebec	
Les Entreprises Raoul Auger Ltée	8456 9th Ave., Montreal	
Machineries Mercier Ltd.	12, rue St. Laurent, Lévis	
McRob Industries Co. Reg'd.  Northern Steel Industries Limited	5203 — 8th. Ave., Rosemount, Montreal, P.G 5337 York St., Montreal	
Radiateur Plessis, Limitée	Plessisville	
St. Maurice Industries Co.	Cap-de-la-Madeleine	
Vidal, H.C., Enrg.	515 Carillon St., Montreal	
Warden King, Limited	2104 Bennett Ave., Montreal 33 Nazareth St., Montreal	
Weir, J. & R., Limited	33 Nazaretii Ste, Montreal	
ontario:		
Aerofin Corp. (Canada) Limited	Bath Road & Day St., Kingston	
Aga Steel Radiators of Canada Ltd.	Ajax	
Allen Tank & Welding Co. Ltd	750 Little Simcoe St., London 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.  Brantford Welding & Boiler Limited.	40 William St., Cornwall 25 Henry St., Brantford	
Campbell Steel & Iron Works, Limited		
Cockram, W., Co., Ltd.	Paris	
Courtland Welding Service Limited		
Diamalloy Manufacturing Limited	2316-18 Gerrard St. E., Toronto 13 6898 Notre Dame St. E., Montreal 5	
Dominion Welding Engineering Company Limited Domestic Tank & Equipment Ltd.		
Elgee Products Ltd.		
Embro Welding & Steel Fabrication	Embro	
Essex Boiler & Heating Engineering Co	1319 Mc Dougall, Windsor	
Feiertag, Eddy, Welding Ferro-metal (Ottawa) Limited	27 Hibbard St., Ridgeway, 100 Hymas Road, Scarborough	
Foster Wheeler, Limited		
Glitsch, Fritz W., & Sons (Canada) Ltd.	18 Dallas Uxbridge	
Hamilton Boiler Works		
Hassan Steel Fabricators Limited		
Ideal Welding Co. Limited		
Imperial Steel Construction Limited	Trunk Road, Sault Ste. Marie	
Inglis, John, Co., Limited		
John Thompson Leonard Ltd.		
Lloyd & Westwood Machinery Company Lock, J.H., & Sons Ltd.		
MacDonald, John, & Co.		
MacPherson, C.E.	468 Rideau St., Kingston	
Meaford Tank Company		
M. and L. Welding and Steel		
Oakwood Iron Works Limited		
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		
THE THE OWN OF CHICAGO LIMITADE	268 Church St., Mimico, Toronto 14	

# List of Firms in the Boilers and Plate Work Industry, 1958 - Concluded

Name of firm	Location of plant		
Ontario - Concluded:			
Steel Fabricating & Welding, Limited Toronto Iron Works, Limited Warden Welding & Fabricating Limited West Machinery Limited Wilson Engineering & Fabricating, Ltd, Woodstock Boiler Works	Brock & Hatt Sts., Dundas 629 Eastern Ave., Toronto 8 65 Hymus Road, Scarboro Wellington St., Simcoe Beach Road, Hamilton 217 Russell St., Woodstock		
Manitoba:	to Allert Hill		
Canadian Brown Steel Tank Co. Ltd.			
Metals Industry Ltd. Stephenson, J.R., Ltd.	20th. St. & Pacific Ave., Brandon Old Flying Club, North Hill, Brandon 555 Madison St., St. James		
Saskatchewan:	and the second creek to pass or the second		
The Saskatoon Boiler Manufacturing Co. Limited	115 Ave. A, North, Saskatoon		
Alberta:			
Black-Sivalls & Bryson, Ltd. Calgary Steel Tank, Limited Cumming's Welding Shop Horton Steel works, Ltd. Johnson Welding & Machine Shop Ltd. Liberty Boilers (Lethbridge) Ltd. Premier Steel Products Limited Refinery Vessels & Maintenance Ltd. Reliance Welding Works Steel Crafts, Alberta Ltd. T.I.w. Western Limited Universal Industries Ltd.	6203-104th St., Edmonton 70th Ave. & MacLeod Trail, Calgary 9548-102nd Ave., Edmonton 2902-5th. St., Lethbridge Lloydminster 1402-2nd Ave. S., Lethbridge Highway 14 East Edmonton 3635 Blackburn Rd., Calgary 9566 Jaspar Ave., Edmonton 4202 MacLeod Trail, Calgary 12542-101st. St., Edmonton 5010-49th St., Lloydminster		
The state of the s	DESCRIPTION OF THE PARTY OF THE		
British Columbia:	Akiptivin May 1-10 - Patrick and		
Bobbie Equipment & Welding Co. Limited Industrial Coatings Ltd. Lockheed-Haggarty Eng. & Mfg. Co. Ltd. M. & M. Tanks Ltd. Main Metal & Welding Ltd. Mainland Boiler Works Pacific Steel Erectors Limited Patterson Boiler Works, Limited Royal City Welding & Iron Works, Ltd. Steelweld Limited Vancouver Iron Works, Ltd. Welding Shop & Engineering Co. Ltd. Western Corrosion Engineering Ltd. Western Welding Works Ltd. Westminster Boiler & Tank Company	1915 Fir St., Vancouver 1920 Main St., Vancouver 3904 Grant St., Burnaby 2 8836 Selkirk St., Vancouver 8194 Ontario St., Vancouver 15 496 Alexander St., Vancouver 4 400 Ewen Ave., New Westminster 730 Alexander St., Vancouver 1027 Royal Ave., New Westminster 1571 Main St., Vancouver 4 1155 W. 6th Ave., Vancouver 9 1600 Main St., Vancouver 4 882 East Cordova, Vancouver 878 Powell St., Vancouver 4 114-11th St., New Westminster		

TO A STATE OF THE PARTY OF THE

BIATISTICS CANADA LIBRARIO BIELLO MEQUE STATISTICUE CANADA 1100 CA