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CANADA



THE BOILERS AND PLATE WORK INDUSTRY 1952

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NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I**—The Primary Industries, including mining, forestry and fisheries; **Volume II** — Manufacturing; **Volume III**—Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume II consists of the following parts, the first two of which deal with manufacturing as a whole and the balance with the major manufacturing groups.

- I—General Review of the Manufacturing Industries, \$1.50
- II—The Manufacturing Industries, by Provinces
 - Section 1. Principal Statistics of Major Industrial Groups and Leading Industries, 50¢
 - Section 2. Principal Statistics of Individual Industries, 75¢
 - Section 3. Principal Statistics by Regional Distribution, 75¢
- III—Foods and Beverages
- IV—Tobacco and Tobacco Products
- V—Rubber Products
- VI—Leather Products
- VII—Textiles
- VIII—Wood and Paper Products
- IX—Printing Trades
- X—Iron and Steel Products
- XI—Transportation Equipment
- XII—Non-ferrous Metal Products
- XIII—Electrical Apparatus and Supplies
- XIV—Non-metallic Mineral Products
- XV—Products of Petroleum and Coal
- XVI—Chemicals and Allied Products
- XVII—Miscellaneous Manufactures

The present report belongs in Part X, Iron and Steel Products. It is punched to permit of filing in a ring binder along with others of the group. The reports in this group are:

- A—General Review, 25¢
- B—The Agricultural Implements Industry, 25¢
- C—The Boilers and Plate Work Industry, 25¢
- D—The Bridge Building and Structural Steel Industry, 25¢
- E—The Hardware, Tools and Cutlery Industry, 25¢
- F—The Heating and Cooking Apparatus Industry, 25¢
- G—The Machinery Industry, 25¢
- H—The Machine Shops Industry, 25¢
- I—The Iron Castings Industry, 25¢
- J—The Primary Iron and Steel Industry, 25¢
- K—The Sheet Metal Products Industry, 25¢
- L—The Wire and Wire Goods Industry, 25¢
- M—The Miscellaneous Iron and Steel Products Industry, 25¢

THE BOILERS AND PLATE WORK INDUSTRY

1952

Factory shipments by the 74 establishments in the Boilers and Plate Work Industry in 1952 were valued at \$90,428,315. Forty-two of these works were located in Ontario, 16 in Quebec, 9 in British Columbia, 4 in Alberta, 2 in Manitoba and 1 in Saskatchewan. These concerns gave employment to 8,159 people who were paid \$28,269,151 in salaries and wages. Materials used in manufacturing processes cost \$36,028,035 and expenditures for fuel and electricity amounted to \$944,589.

Tables 1 to 4 and Tables 7 and 8 of this report deal with the Boilers and Plate Work Industry which covers the operations of the establishments that make 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 1952 for heating and power boilers was \$18,942,207 and for heating radiators \$8,015,332.

Note: Data presented in this bulletin for 1952 under the heading of "Production" actually represent "Factory Shipments" and therefore, are not exactly comparable with previous years.

TABLE 1. Principal Statistics of the Boilers and Plate Work Industry, 1948-1952

Year	Number of plants	Number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
1948	50	5,764	\$ 14,925,568	\$ 722,212	\$ 17,406,493	\$ 44,802,285
1949	56	6,642	17,980,051	803,646	20,156,193	54,562,093
1950	56	6,223	17,904,443	791,745	20,982,184	60,089,965
1951	64	7,490	24,268,698	912,743	27,339,236	75,081,142
1952	74	8,159	28,269,151	944,589	36,028,035	90,428,315 ¹
Per cent change 1952 from 1951	-	+ 8.9	+ 16.5	+ 3.5	+ 31.8	+ 20.4

¹. The 1952 total represents the value of factory shipments. The inventory value of finished products at plant at end of 1951 amounted to \$4,312,000 and at end of 1952 to \$3,405,000.

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. Principal Statistics of the Boilers and Plate Work Industry, by Provinces, 1951 and 1952

Province	Number of plants	Number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
1951			\$	\$	\$	\$
Quebec	15	1,669	5,381,015	213,017	5,021,501	16,307,945
Ontario	36	5,387	17,457,835	632,665	20,064,083	54,378,729
British Columbia	8	262	973,594	42,741	1,325,511	2,845,832
Manitoba	1					
Saskatchewan	1					
Alberta	3					
Canada	64	7,490	24,268,698	912,743	27,339,236	75,081,142
1952			\$	\$	\$	\$
Quebec	16	1,482	4,769,256	184,394	4,258,553	14,995,341
Ontario	42	6,087	21,348,758	669,423	27,888,379	68,275,113
Alberta	4	76	250,286	11,432	320,168	573,261
British Columbia	9	359	1,399,058	59,035	2,551,844	4,703,549
Manitoba	2					
Saskatchewan	1					
Canada	74	8,159	28,269,151	944,589	36,028,035	90,428,315

IRON AND STEEL PRODUCTS

TABLE 3. Products Made in the Boilers and Plate Work Industry, 1951 and 1952

Product	1951		1952		
	Quantity	Selling value at works	Quantity	Selling value at works	
Heating boilers:		\$		\$	
Cast iron sectional heating boilers:					
(a) 240-775 sq. ft.	No.	12,454	2,235,976	6,987	1,411,551
(b) 776-1,499 sq. ft.	"	3,581	1,032,569	2,032	725,853
(c) 1,500 sq. ft. and over	"	2,082	1,479,004	1,700	916,284
Steel heating boilers:					
(a) 240-775 sq. ft.	"	626	829,527	935	1,404,822
(b) 776-1,499 sq. ft.	"	288	273,168	179	353,701
(c) 1,500 sq. ft. and over	"	668	1,669,571	110	1,807,429
Power boilers:					
Water tube:					
Horizontal type	—	—	—	—	
Vertical type	No.	1	43,929	—	—
Bent tube type	"	203	5,018,151	243	6,536,043
Return tubular power, horizontal	"	195	751,234	194	712,847
Marine type	"	16	335,835	16	265,514
Steel firebox, locomotive type	"	34	195,267	15	135,452
Fire tube, vertical type	"	37	40,921	22	29,856
All other power boilers	"	—	338,867	50	122,138
Boiler parts	—	—	994,989	—	2,117,789
Radiators, heating:					
Steel and cast iron, standing	sq. ft.	7,472,430	4,462,320	5,231,440	3,596,901
Steel and cast iron, concealed	"				
Fabricated products:					
Steel plate (cut, punched, shaped or otherwise fabricated for assembly on job) tons	tons	23,057	5,169,370	26,174	7,099,312
Structural shapes (cut, punched, shaped or otherwise fabricated for assembly on job) tons	tons	4,372	901,154	7,621	1,750,204
Miscellaneous plate work:					
Bins and hoppers	—	—	357,817	—	531,594
Smokestacks	—	—	139,076	—	218,411
Smoke breeching	—	—	168,562	—	204,053
Riveted and welded steel pipe	—	—	941,391	—	1,325,834
Other plate work	—	—	4,511,351	—	4,426,804
Tanks:					
Steel, storage, for water and fuel oil	—	—	6,149,419	—	10,148,894
Steel, septic	—	—	182,237	—	331,822
All other tanks	—	—	2,760,839	—	3,332,581
Tank heaters for domestic water supply	No.	12,107	1,054,173	14,564	1,198,505
Pumps, all kinds, and parts	—	—	846,202	—	937,254
Engines and parts	—	—	635,133	—	1,095,946
Stokers, mechanical, and parts	—	—	492,287	—	598,215
Furnaces, warm air	No.	16,021	2,419,515	15,575	2,338,253
Receipts from custom work and repairs	—	—	6,362,394	—	7,027,017
All other products ¹	—	—	22,288,894	—	27,727,436
Total	—	—	75,081,142	—	90,428,315

1. Includes data for items made by less than 3 firms, such as cast iron soil pipe, air compressors, pulverizers, washing machines, 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).

TABLE 4. Materials Used in the Boilers and Plate Work Industry, 1951 and 1952

Material		1951		1952	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Iron:					
Pig iron	tons	36,262	1,959,662	25,577	1,458,880
Iron castings	"	1,861	639,555	1	
Steel:					
Steel castings	tons	625	382,791	1	
Bars and rods	"	3,516	455,542	5,079	688,490
Forgings	"	—	439,943	1	
Shafting	tons	68	12,487	1	
Sheets:					
Black	"	14,276	2,463,546	14,839	2,552,263
Galvanized	"	1,214	198,011	1,204	216,501
Tin plate	"	86	15,693	222	40,792
Plates	"	60,169	6,946,606	77,404	10,066,714
Stampings	"	—	32,347	1	
Structural shapes	tons	4,142	563,960	9,705	1,501,303
Boiler tubes	"	—	2,020,395	—	3,283,631
Wire	tons	20	5,549	22	8,130
Alloy steels	"	—	628,424	—	1,304,273
Scrap iron and steel:					
Purchased	tons	32,267	1,624,296	20,738	960,576
Own make	"	3,559	180,220	2,894	130,511
Other iron and steel	"	—	314,266	—	1,857,495
Ferro-alloys	"	—	136,495	—	222,126
Non-ferrous metals, including scrap:					
Aluminum:					
Castings	pounds	60,270	52,349	227,407	213,723
Sheet	"	17,790	6,113	27,237	10,368
Other forms	"	134,403	56,186	85,687	34,161
Brass and bronze	"	300,054	154,876	748,239	356,945
Copper:					
Sheet	"	—	81,585	40,451	
Wire	"	133,239	74,400	—	—
Other forms	"	—	—	113,383	43,648
Nickel	"	10,647	5,838	6,092	3,706
Lead	"	130,318	32,742	126,885	31,698
Tin	"	160	250	344	435
Zinc	"	565	133	—	—
Babbitt metals and solders	"	22,458	20,490	26,787	25,135
Other non-ferrous metals	"	—	133,919	—	5,337
Other materials:					
Parts for engines, boilers, etc.	"	—	1,879,335	1	
Iron and steel pipe and fittings	"	—	564,934	—	635,488
Paints, oils and varnishes	"	—	171,213	—	230,354
Asbestos linings and coverings	"	—	36,478	1	
Foundry coke	tons	19,074	516,651	12,233	344,233
Moulding sands	tons	13,680	107,702	8,111	68,422
Silica sand for sandblasting	"	113	1,347	1	
Cofe sands	"	19,473	35,605	15,167	65,301
Other foundry sands	"	396	9,644	1,020	21,021
Plumbago and graphite	pounds	15,825	1,815	11,130	1,235
Other foundry facings	"	—	26,135	1	
Patterns and models	"	—	59,716	1	
Lumber	M ft. b.m.	1,594	162,631	1,832	185,848
Firebrick	"	—	47,289	—	63,954
Fireclay	tons	1,529	18,228	1,549	33,166
Cupola blocks	"	—	10,020	—	9,080
Core oil	Imp. gals	57,390	32,887	33,346	46,609
Core compounds	pounds	263,163	18,222	1	
Sulphuric acid, 100%	"	350	18	6,350	121
Acetylene	cu. ft.	4,941,770	115,586	1	
Oxygen	"	3,807,894	109,092	1	
Shipping containers	"	—	214,474	—	217,705
All other materials	"	—	3,543,130	—	9,043,206
Total	"	—	27,339,236	—	36,028,035

1. Not classified separately in 1952.

TABLE 5. Total Production of Heating and Power Boilers, 1951 and 1952 (From all industries)

Type	1951		1952	
	Number of boilers	Total selling value at plant	Number of boilers	Total selling value at plant
Heating boilers:		\$		\$
Cast iron sectional heating boilers:				
(a) 240-775 sq. ft.	13,294	2,443,914	8,205	1,696,073
(b) 776-1,499 sq. ft.	3,783	1,085,326	2,290	795,561
(c) 1,500 sq. ft. and over	2,032	1,479,004	1,816	949,577
Steel heating boilers:				
(a) 240-775 sq. ft.	2,837	1,885,544	3,197	2,442,763
(b) 776-1,499 sq. ft.	506	626,815	504	711,431
(c) 1,500 sq. ft. and over	799	1,835,576	167	1,923,197
Power boilers:				
Water tube, horizontal type	12	866,806	11	339,106
Water tube, vertical type	1	43,329	—	—
Water tube, bent tube type	—	5,807,499	—	7,863,469
Horizontal return tubular	223	902,828	208	846,606
Marine type	50	497,605	26	322,798
Steel firebox, locomotive type	35	196,967	23	169,182
Firetube, vertical type	60	118,718	47	143,165
Boilers, type not specified	—	797,504	—	734,279
Total	—	18,588,035	—	18,942,207

TABLE 6. Total Production of Heating Radiators, 1943-1952

Year	Cast iron standing type		Cast iron concealed type		Convector (steel and non-ferrous types)		Total	
	Sq. ft.	Value	Sq. ft.	Value	Sq. ft.	Value	Sq. ft.	Value
		\$		\$		\$		\$
1943	6,728,740	2,094,375	12,139	3,022	376,010	154,911	7,116,889	2,252,308
1944	6,845,653	2,018,723	138,236	47,812	576,518	190,891	7,560,407	2,257,426
1945	7,179,133	2,211,187			1,126,593	424,872	8,305,726	2,636,059
1946	8,006,871	2,786,500			1,641,127	649,034	9,647,998	3,435,534
1947	8,726,693	3,571,129	Included with cast iron standing type		3,448,921	1,094,077	12,175,614	4,665,206
1948	8,644,853	4,115,098			4,868,121	2,244,819	13,512,974	6,359,917
1949	7,163,072	3,617,605			5,444,115	2,543,305	12,697,187	6,160,910
1950	7,250,054	3,761,761			6,922,053	3,180,440	14,172,107	6,942,201
1951	7,489,125	4,474,647			9,503,702	5,117,269	16,992,827	9,591,916
1952	4,499,524	3,231,335			8,753,989	4,783,997	13,253,513	8,015,333

TABLE 7. Employees and Their Earnings in the Boilers and Plate Work Industry, by Provinces, 1951 and 1952

Province	Number of employees						Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total	
	Male	Female	Male	Female				\$	
1951									
Quebec	272	57	1,332	8	1,669	1,163,851	4,217,164	5,381,015	
Ontario	1,156	387	3,775	69	5,387	5,556,986	11,900,849	17,457,835	
British Columbia	41	12	208	1	262	232,480	741,114	973,594	
Other provinces	17	4	149	2	172	80,312	375,942	456,254	
Total	1,486	460	5,464	80	7,490	7,033,629	17,235,069	24,268,698	
1952									
Quebec	260	47	1,165	10	1,482	1,216,453	3,552,803	4,769,256	
Ontario	1,294	431	4,245	117	6,087	6,965,305	14,383,453	21,348,758	
British Columbia	62	15	280	2	359	371,621	1,027,437	1,399,058	
Other provinces	30	7	194	—	231	159,916	592,163	752,079	
Total	1,646	500	5,884	129	8,159	8,713,295	19,555,856	28,269,151	

TABLE 8. Capital and Repair Expenditures in the Boilers and Plate Work Industry, 1948-1952

Year	Capital expenditures		Sub-total	Repair and maintenance expenditures		Sub-total	Total capital and repair expenditures
	Construction	Machinery and equipment		Construction	Machinery and equipment		
\$'000							
1948	296	1,294	1,590	228	1,423	1,651	3,241
1949	220	1,329	1,549	264	1,449	1,713	3,262
1950	1,172	1,362	2,534	207	1,641	1,848	4,382
1951	896	2,301	3,197	264	2,190	2,454	5,651
1952 ¹	657	2,326	2,983	351	2,104	2,455	5,438

1. Preliminary.

List of Firms in the Boilers and Plate Work Industry, 1952

Name of firm	Location of plant
Quebec:	
Boilers Incorporated	932 St. George St., Montreal
Dominion Welding Engineering Co. Ltd.	6898 Notre Dame St. E., Montreal
Douglas Bros. Ltd.	4090 Namur St., Montreal
Drummond Welding & Steel Works Ltd.	5370 York St., Montreal
Ferro Metal Ltd.	9500 St. Lawrence Blvd., Montreal
Latulippe, Michel, Enrg.	305 Dorchester St., Quebec
Les Entreprises Raoul Auger Ltée	8456 Heney St., Ville St. Michel, Montreal
National Welding Co. Ltd.	2965 Notre Dame St. E., Montreal
N.F.L. Welding and Manufacturing	1929 Grant Ave., Longueuil Annex, Montreal
Northern Steel Industries Limited	5337 York St., Montreal
Radiateur Plessis, Limitée	Plessisville
St. Maurice Industries Co. Ltd.	Cap-de-la-Madeleine
Superheater Co. Ltd., The	14 Drummond Road, Sherbrooke
Vidal, H.C., Enrg.	515 Carillon St., Montreal
Warden King, Limited	2104 Bennett Ave., Montreal
Weir, J. & R., Limited	33 Nazareth St., Montreal

IRON AND STEEL PRODUCTS

List of Firms in the Boilers and Plate Work Industry, 1952 - Concluded

Name of firm	Location of plant
Ontario:	
Aga Steel Radiators of Canada Ltd.	Ajax
Allen Tank & Welding Co. Ltd.	271 Hamilton Road, London
Anthes Imperial Co., Limited	Berryman Ave., St. Catharines
Babcock-Wilcox & Goldie-McCulloch, Limited	64-68 Grand Ave. S., Galt
Bell, Robert, Industries Ltd.	Seaforth
Campbell Steel & Iron Works, Limited	855 Carling Ave., Ottawa
Charlton's Steel Products	P.O. Box 64, Townsroad, New Toronto
Chatham Erecting Co., Limited	Colborne at Adelaide St., Chatham
Cockram, W., & Co.	Paris
Collingwood Steel Products	Collingwood
Deomalloy Manufacturing Ltd.	2316-18 Gerrard St. E., Toronto 13
Dominion Welding Engineering Company Limited	2805 Dufferin St., Toronto
Eastern Welding Co. Ltd.	Box 156, Postal Station "H", Toronto 13
Elgee Distributors Ltd.	410 Hopewell Ave., Toronto
Foster Wheeler, Limited	81 Eastchester Ave., St. Catharines
Glitsch, Fritz W., & Sons (Canada) Ltd.	Brock St., Uxbridge
Gurney Dominion Furnaces Ltd.	1201 Dupont St., Toronto
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	195 Duchess St., Toronto
Imperial Welding Co.	370 Bay St., Sault Ste. Marie
Inglis, John, Co., Limited	14 Strachan Ave., Toronto
Leonard, E., & Sons, Ltd.	381 York St., London
Lloyd & Westwood Machinery Company	342-346 Dufferin St., Toronto
MacDonald, John, & Co.	900 Dawes Road, Regent's Park
MacPherson, C.E.	468 Rideau St., Kingston
Napanee Iron Works, Limited	Ann St., Napanee
National Weld Steel Products Ltd.	1 Glen Scarlett Road, Toronto 9
Oakwood Iron Works Limited	644 Rogers Road, Toronto
O'Connor Fuel Tanks Ltd.	15 Bermondsey Rd., Toronto
Pendell Boiler, Limited	50 Bartlett Ave., Toronto
Plate & Structural Steel Ltd.	48 Abell St., Toronto
Port Colborne Iron Works, Limited	Fraser St., Port Colborne
Ridge Welding & Steel Limited	Ridgeway
Standard Sanitary & Dominion Radiator, Ltd.	1251 Dupont St., Toronto
Steel Fabricating & Welding, Limited	Brock & Hatt Sts., Dundas
Taylor-Forbes, Limited	2 Queen St. E., Guelph
Toronto Iron Works, Limited	629 Eastern Ave., Toronto
West Machinery Limited	Wellington St., Simcoe
Wilson Engineering & Fabricating Ltd.	Beach Road, Hamilton
Woodstock Boiler Works	217 Russell St., Woodstock
Manitoba:	
Canadian Brown Steel Tank Co. Ltd.	Brandon
Greens Stove & Furnace Ltd.	975 Logan Ave., Winnipeg
Saskatchewan:	
Northwestern Iron Works, Ltd.	1419 Scarth St., Regina
Alberta:	
Black, Sivalls & Bryson, Ltd.	6219-104th St., Edmonton
Cobb, A.J.	Black Diamond
Cumming's Welding Shop	9548-102nd Ave., Edmonton
Liberty Welding & Boiler Works	1402-2nd Ave. S., Lethbridge
British Columbia:	
Blain Boiler Works, Ltd.	494 Railway St., Vancouver
Industrial Coatings Ltd.	237 East 4th Ave., Vancouver
Mainland Boiler Works	496 Alexander St., Vancouver
Patterson Boiler Works, Limited	736 Alexander St., Vancouver
Royal City Welding & Iron Works	1027 Royal Ave., New Westminster
Vancouver Iron Works, Ltd.	1155 W. 6th Ave., Vancouver
Welding Shop & Engineering Co. Ltd.	1600 Main St., Vancouver
Western Welding Works Ltd.	878 Powell St., Vancouver 4
Westminster Boiler & Tank Company	114-11th St., New Westminster