

41-205

63

DOMINION BUREAU OF STATISTICS — DEPARTMENT OF TRADE AND COMMERCE
CANADA

THE BOILERS, TANKS AND PLATE WORK
INDUSTRY, 1950

Published by Authority of the Rt. Hon. C. D. Howe
Minister of Trade and Commerce

Prepared in the Mining, Metallurgical and Chemical Section
Industry and Merchandising Division
Dominion Bureau of Statistics
Ottawa

NOTICE

The Industry and Merchandising Division of the Bureau of Statistics collects and compiles figures on (a) the primary industries in Canada—mining, forestry and fishing; (b) manufacturing; (c) construction, and (d) merchandising and services.

For the purpose of annual compilation and publication, the manufacturing industries have been classified into major groups, prefaced by two reports of a general nature, as follows:

- I Summary Report on Manufacturing Industries
- II Manufacturing Industries by Geographical Distribution
- III Foods and Beverages
- IV Tobacco and Tobacco Products
- V Rubber Products
- VI Leather Products
- VII Miscellaneous Manufactures
- VIII Textiles
- IX Wood and Paper Products
- X Printing Trades
- XI Operations in the Woods
- XII Iron and Steel Products
- XIII Transportation Equipment
- XIV Non-ferrous Metal Products
- XV Electrical Apparatus and Supplies
- XVI Non-metallic Mineral Products
- XVII Products of Petroleum and Coal
- XVIII Chemicals and Allied Products

The present report belongs in Group XII, 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, 35¢.
- 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, TANKS AND PLATE WORK INDUSTRY, 1950

Production by the 56 establishments in the Boilers, Tanks and Plate Work Industry, in 1950 was valued at \$60,089,965. Thirty-two of these works were located in Ontario; 13 in Quebec; 7 in British Columbia; 2 in Saskatchewan and 1 each in Manitoba and Alberta. These concerns gave employment to a total of 6,223 people who were paid \$17,904,443 in salaries and wages. Materials used in manufacturing processes cost \$20,982,184 and expenditures for fuel and electricity amounted to \$791,745.

Tables 1 to 4 and Table 7 of this report deal with the Boilers, Tanks 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 1950 for heating and power boilers was \$15,469,080 and for heating radiators \$6,942,201.

TABLE 1. Principal Statistics of the Boilers, Tanks and Plate Work Industry, 1946-1950

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	Net ¹ value of production
1946	44	5,042	9,974,544	511,512	9,791,684	26,710,902	16,407,706
1947	49	5,598	12,535,963	613,297	14,637,411	35,775,822	20,525,114
1948	50	5,764	14,925,568	722,212	17,406,493	44,802,285	26,673,580
1949	56	6,642	17,980,051	803,646	20,156,193	54,562,093	33,602,254
1950	56	6,223	17,904,443	791,745	20,982,184	60,089,965	38,316,036
Per cent change 1950 from 1949		-6.3	-0.4	-1.5	+4.1	+10.1	+14.0

1. Gross value less cost of materials, fuel and electricity.

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, Tanks and Plate Work Industry, by Provinces, 1949 and 1950

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
1949			\$	\$	\$	\$
Quebec	13	1,111	3,021,723	146,556	3,434,166	8,048,501
Ontario	30	4,827	13,155,000	535,283	14,744,100	41,703,682
British Columbia	7	222	675,338	40,867	878,349	2,121,884
Newfoundland	1					
Manitoba	2					
Saskatchewan	2					
Alberta	1					
Canada	56	6,642	17,980,051	803,646	20,156,193	54,562,093
1950			\$	\$	\$	\$
Quebec	13	1,058	2,971,851	148,358	3,153,492	8,349,175
Ontario	32	4,819	13,904,928	595,207	16,532,235	48,831,225
British Columbia	7	202	689,766	27,910	679,407	1,693,339
Manitoba	1					
Saskatchewan	2					
Alberta	1					
Canada	56	6,223	17,904,443	791,745	20,982,184	60,089,965

TABLE 3. Products Made in the Boilers, Tanks and Plate Work Industry, 1948 and 1950

Product	1949		1950		
	Quantity	Selling value at works	Quantity	Selling value at works	
Heating boilers:		\$		\$	
Cast iron sectional heating boilers:					
(a) 240-775 sq. ft.	No.	9,477	1,359,054	11,889	1,941,180
(b) 776-1,499 sq. ft.	"	3,740	988,675	4,387	1,125,951
(c) 1,500 sq. ft. and over	"	2,173	2,098,224	2,613	1,625,052
Steel heating boilers:					
(a) 240-775 sq. ft.	"	824	1,255,313	790	640,425
(b) 776-1,499 sq. ft.	"	61	93,922	252	323,155
(c) 1,500 sq. ft. and over	"	109	256,469	1,105	1,189,183
Power boilers:					
Water tube:					
Horizontal type	"	2	225,018	3	370,293
Vertical type	"	3	10,679	6	151,444
Bent tube type	"	107	3,661,659	127	3,460,314
Return tubular power, horizontal....	"	52	196,702	45	127,565
Marine type....	"	78	390,067	173	728,897
Steel firebox, locomotive type....	"	31	155,948	39	233,720
Fire tube, vertical type	"	105	49,043	73	95,532
All other power boilers....	"	40	50,362	57	102,652
Boiler parts	—	—	523,237	—	531,707
Radiators, heating:					
Cast iron, standing	sq. ft.	6,435,247	3,246,607	7,250,054	3,751,761
Cast iron, concealed....					
Miscellaneous plate work:					
Bins and hoppers.....	—	—	104,700	—	124,937
Smokestacks.....	—	—	81,394	—	79,474
Smoke breeching	—	—	57,143	—	147,966
Riveted and welded steel pipe.....	—	—	1,159,826	—	224,676
Other plate work	—	—	11,031,000	—	12,617,979
Structural work, including fabricated and erected shapes.....	—	—	964,540	—	865,136
Tanks:					
Steel, storage for water and fuel oil	—	—	1,373,727	—	1,791,178
Steel, septic.....	—	—	63,813	—	102,387
Steel, pneumatic	—	—	77,798	—	145,140
All other tanks	—	—	1,650,642	—	1,456,395
Tank heaters for domestic water supply	No.	16,335	1,115,103	15,390	1,115,072
Pumps, all kinds, and parts	—	—	700,958	—	451,949
Engines and parts	—	—	447,213	—	794,874
Stokers, mechanical, and parts	—	—	1,194,279	—	857,489
Furnaces, warm air	—	15,845	1,917,151	22,356	2,440,536
Receipts from custom work and repairs	—	—	3,294,634	—	2,856,030
All other products ¹	—	—	14,767,193	—	17,589,856
Total	—	—	54,562,093	—	60,089,963

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, Tanks 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, Tanks and Plate Work Industry, 1949 and 1950

Material	1949		1950	
	Quantity	Cost at works	Quantity	Cost at works
		\$		\$
Iron:				
Pig iron.....	tons	33, 126	1, 432, 296	33, 882
Iron castings.....	"	2, 608	713, 373	2, 447
Steel:				
Steel castings.....	tons	720	283, 870	633
Bars and rods.....	"	4, 189	449, 029	2, 669
Forgings.....	"	—	110, 093	—
Shafting.....	"	908	78, 895	85
Sheets, black.....	"	8, 413	883, 169	14, 393
Sheets, galvanized.....	"	288	24, 258	303
Plates.....	"	49, 082	4, 866, 479	52, 305
Stampings.....	"	—	15, 322	—
Structural shapes.....	"	8, 441	793, 741	5, 734
Boiler tubes.....	"	6, 694	1, 312, 628	—
Sheets, tin plate.....	base boxes	14	377	1, 788
Wire.....	tons	43	10, 853	58
Alloy steels.....	"	—	249, 393	—
Scrap iron and steel:				
Purchased.....	tons	31, 171	1, 196, 194	31, 183
Own make.....	"	12, 869	550, 529	13, 786
Other iron and steel.....	"	—	56, 465	—
Ferro-alloys.....	"	—	77, 949	—
Non-ferrous metals, including scrap:				
Aluminum.....	pounds	154, 697	109, 430	193, 898
Brass and bronze.....	"	313, 686	104, 232	207, 183
Copper.....	"	137, 545	47, 961	96, 629
Nickel.....	"	20, 174	8, 215	2, 481
Nickel-copper shot.....	"	1, 057	439	3, 330
Lead.....	"	6, 904	1, 474	92, 236
Tin.....	"	3, 849	4, 248	280
Zinc.....	"	278, 813	36, 245	44, 241
Babbitt metals and solders.....	"	37, 494	27, 461	35, 619
Other non-ferrous metals.....	"	—	—	519
Other materials:				
Parts for engines, boilers, etc.....	"	—	947, 669	—
Iron and steel pipe and fittings.....	"	—	1, 060, 615	—
Paints, oils and varnishes.....	"	—	82, 196	—
Asbestos linings and coverings.....	"	—	12, 798	—
Foundry coke.....	tons	23, 226	406, 391	16, 655
Moulding sands.....	"	12, 625	88, 684	16, 732
Silica sand for sandblasting.....	"	170	1, 516	222
Core sands.....	"	16, 106	65, 009	14, 748
Other foundry sands.....	"	463	4, 681	58
Plumbago and graphite.....	pounds	11, 547	1, 408	10, 435
Other foundry facings.....	"	916, 355	16, 589	—
Patterns and models.....	"	—	45, 565	—
Lumber.....	M ft. b.m.	4, 293	377, 204	2, 035
Firebrick.....	number	337, 319	44, 326	—
Fireclay.....	tons	2, 417	27, 826	2, 859
Cupola blocks.....	"	—	9, 014	—
Core oil.....	Imp. gals	50, 659	69, 063	49, 498
Core compounds.....	pounds	43, 250	2, 365	34, 512
Sulphuric acid, 100%.....	"	350	13	350
Acetylene.....	cu. ft.	2, 363, 075	56, 057	2, 968, 341
Oxygen.....	"	6, 425, 249	74, 794	7, 149, 849
Shipping containers.....	"	—	113, 398	—
All other materials.....	"	—	3, 195, 394	—
Total.....	"	—	20, 156, 193	—
				20, 982, 184

IRON AND STEEL PRODUCTS

TABLE 5. Total Production of Heating and Power Boilers, 1949 and 1950 (From all industries)

Type	1949		1950	
	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.....	9,593	1,547,722	12,678	2,076,517
(b) 776-1499 sq. ft.....	3,751	1,016,497	4,652	1,170,105
(c) 1,500 sq. ft. and over.....	2,178	2,135,427	2,902	1,754,114
Steel heating boilers:				
(a) 240-775 sq. ft.....	1,765	1,697,650	2,394	1,423,433
(b) 776-1499 sq. ft.....	309	303,399	579	490,174
(c) 1,500 sq. ft. and over.....	126	307,603	1,125	1,232,937
Power boilers:				
Water tube, horizontal type	—	485,626	30	496,818
Water tube, vertical type	11	29,679	6	151,444
Water tube, bent tube type	118	4,238,214	139	4,214,967
Horizontal return tubular	91	442,465	117	625,220
Marine type	—	803,668	177	742,519
Steel firebox, locomotive type	41	208,850	40	240,810
Firetube, vertical type	123	71,409	87	120,157
Boilers, type not specified	—	866,593	—	729,865
Total	—	14,154,802	—	15,469,080

TABLE 6. Total Production of Heating Radiators, 1941 - 1950

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
1941	5,962,025	1,772,357	455,108	208,697	1,487,590	505,748	7,904,723	2,486,802
1942	6,519,640	1,819,755	49,266	12,546	937,525	347,770	7,506,431	2,180,071
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	Included		1,126,593	424,872	8,305,726	2,636,059
1946	8,006,871	2,786,500	with		1,641,127	649,034	9,647,998	3,435,534
1947	8,726,693	3,571,129	cast iron		3,448,921	1,094,077	12,175,614	4,665,206
1948	8,644,853	4,115,098	standing		4,868,121	2,244,819	13,512,974	6,359,917
1949	7,163,072	3,617,605	type		5,444,115	2,543,305	12,607,187	6,160,910
1950	7,250,054	3,761,761			6,922,053	3,180,440	14,172,107	6,942,201

TABLE 7. Employees and their Earnings in the Boilers, Tanks and Plate Work Industry, by Provinces, 1949 and 1950

Province	Number of employees					Earnings		
	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female				
1949								
Quebec	162	37	910	2	1,111	585,520	2,436,203	3,021,723
Ontario	879	314	3,535	99	4,827	3,754,444	9,400,556	13,155,000
British Columbia	39	7	176	—	222	190,237	485,101	675,338
Other provinces	88	21	360	13	482	329,172	798,818	1,127,990
Total	1,168	379	4,981	114	6,842	4,859,373	13,120,678	17,980,051
1950								
Quebec	156	29	871	2	1,058	536,699	2,435,152	2,971,851
Ontario	913	327	3,489	90	4,819	4,281,416	9,623,512	13,904,928
British Columbia	41	8	153	—	202	222,266	467,500	689,766
Other provinces	15	3	124	2	144	93,770	244,128	337,898
Total	1,125	367	4,637	94	6,223	5,134,151	12,770,292	17,904,443

List of Concerns in the Boilers, Tanks and Plate Work Industry, 1950

Name of Firm	Location of Plant
Quebec:	
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 Enrg.	8456 Heney St., Ville St. Michel, Montreal
Mongeau, S., & Co. Ltd.	8400 Boyer St., Montreal
National Welding Co. Ltd.	2955 Notre Dame St. E., Montreal
N.F.L. Welding & 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
Vidal, H.C., Enrg.	515 Carillon St., Montreal
Warden King, Limited	2104 Bennett Ave., Montreal
Weir, J. & R., Limited	33 Nazareth St., Montreal
Ontario:	
Anthes Imperial Co. Limited	Berryman Ave., St. Catharines
Babcock-Wilcox & Goldie-McCulloch, Limited	64-68 Grand Ave. S., Galt
Bell, Robert, Industries	Seaforth
Blenkhorn & Sawle Limited	Grantham Ave., St. Catharines
Campbell Steel & Iron Works, Limited	855 Carling Ave., Ottawa
Chatham Erecting Co. Limited	Colborne at Adelaide St., Chatham
Collingwood Steel Products	Collingwood
Dominion Welding Engineering Company Limited	2805 Dufferin St., Toronto
Foster Wheeler, Limited	81 Eastchester Ave., St. Catharines
Gurney Dominion Furnaces Ltd.	4 Junction Road, 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
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 Company	1 Glen Scarlett Road, Toronto
Oakwood Iron Works Limited	644 Rogers Road, 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 & Watt Sts., Dundas
Taylor-Forbes, Limited	2 Queen St., Guelph
Toronto Iron Works, Limited	629 Eastern Ave., Toronto
Wilson Engineering & Fabricating Ltd.	Beach Road, Hamilton
Woodstock Boiler Works	217 Russell St., Woodstock
Manitoba:	
Canadian Brown Steel Tank Co. Ltd.	Brandon
Saskatchewan:	
Northwestern Iron Works, Ltd.	1419 Scarth St., Regina
Acme Iron Works Ltd.	182 Wall St., Saskatoon
Alberta:	
Liberty Welding & Boiler Works	1402-2nd Ave. S., Lethbridge
British Columbia:	
Blain Boiler Works, Ltd.	494 Railway St., 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
Westminster Boiler & Tank Company	114-11th St., New Westminster

STATISTICS CANADA LIBRARY
BIBLIOTHÈQUE STATISTIQUE CANADA



1010655525