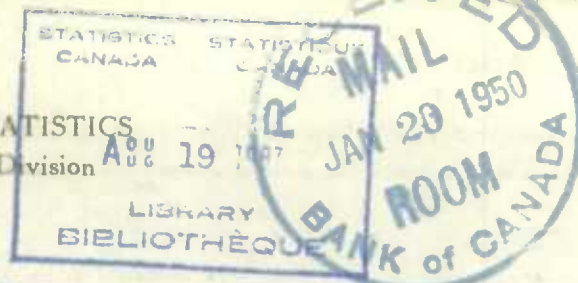


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Annual Industry Report

Iron and Steel and Their Products Group

THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1948

Production by the 50 establishments included in the Boilers, Tanks and Plate Work Industry in 1948 was valued at \$44,802,285. Twenty-seven of these works were located in Ontario; 12 in Quebec; 6 in British Columbia; 2 in Saskatchewan and 1 in each of Nova Scotia, Manitoba and Alberta. These concerns gave employment to an average of 5,764 people who were paid \$14,925,568 in salaries and wages. Materials used in manufacturing processes cost \$17,406,493 and expenditures for fuel and electricity amounted to \$722,212.

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 1948 for heating and power boilers was \$13,553,046 and for heating radiators \$6,359,917.

Table 1 - PRINCIPAL STATISTICS OF THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1944-1948

Year	Number of plants	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
			\$	\$	\$	\$
1944	37	4,807	9,588,477	538,193	13,205,452	32,267,172
1945	37	4,670	9,685,220	506,984	8,958,003	23,883,210
1946	44	5,042	9,974,544	511,512	9,791,684	26,710,902
1947	49	5,598	12,535,963	613,297	14,637,411	35,775,822
1948	50	5,764	14,925,568	722,212	17,406,493	44,802,285
Per cent change, 1948 from 1947		+ 3.0	+19.0	+ 17.8	+ 18.9	+25.2

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, 1947 and 1948

Province	Number of plants	Average number of em- ployees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross sell- ing value of products at works
			\$	\$	\$	\$
1947						
Quebec	13	1,192	2,800,191	116,578	3,507,989	7,927,190
Ontario	25	3,999	8,816,540	421,369	9,125,572	24,408,479
British Columbia	6	181	477,829	25,502	1,316,260	2,054,068
Nova Scotia	1)					
Manitoba	1)					
Saskatchewan ...	2)	226	441,403	49,848	687,590	1,386,085
Alberta	1)					
CANADA	49	5,598	12,535,963	613,297	14,637,411	35,775,822

Prepared in the Mining, Metallurgical and Chemical Section.

Table 2 - PRINCIPAL STATISTICS OF THE BOILERS, TANKS AND PLATE WORK INDUSTRY, BY PROVINCES, 1947 and 1948
(Concluded)

Province	Number of plants	Average 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						
Quebec	12	1,157	3,195,061	144,535	3,795,055	9,037,075
Ontario	27	4,158	10,641,826	489,442	10,778,906	30,999,441
British Columbia	6	199	557,382	34,341	1,889,927	3,076,208
Nova Scotia	1)					
Manitoba	1)					
Saskatchewan ...	2)	250	531,299	53,894	942,605	1,689,561
Alberta	1)					
CANADA	50	5,764	14,925,568	722,212	17,406,493	44,802,285

Table 3 - PRODUCTS MADE IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1947 and 1948

Note: Data in this table are for the Boilers, Tanks and Plate Work Industry, which include only the manufacturers that 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)

Product	Unit of measure	1947		1948	
		Quantity	Selling value at works	Quantity	Selling value at works
			\$		\$
Heating boilers -					
Cast iron sectional heating boilers -					
(a) 240-775 sq.ft.	No.)			12,055	1,611,205
(b) 776-1,499 sq.ft.	No.)	16,986	3,121,250	3,130	828,067
(c) 1,500 sq. ft. and over	No.)			2,976	1,851,311
Steel heating boilers -					
(a) 240-775 sq.ft. .	No.)			382	418,403
(b) 776-1,499 sq.ft. No.)		608	659,243	57	105,784
(c) 1,500 sq.ft. ...	No.)			136	235,439
	and over				
Boilers, power -					
Water tube - Horizontal type					
	No.	(★)	(★)	(★)	(★)
Vertical type					
	No.	...	...	(★)	(★)
Bent tube type					
	No.	45	566,602	87	1,877,468
Return tubular power, horizontal					
	No.	110	691,137	92	299,598
Marine type					
	No.	(★)	(★)	(★)	(★)
Steel firebox, locomotive type					
	No.	66	176,357	69	285,269
Fire tube, vertical type					
	No.	272	124,205	261	107,415
All other power boilers, including items marked (★)					
	No.	250	272,503	124	1,140,842
Boiler parts					
	...	...	1,313,818	...	1,067,298
Radiators, heating -					
Cast iron, standing					
	sq.ft.)	8,726,693	3,571,129	8,644,853	4,115,098
Cast iron, concealed					
	sq.ft.)				
Miscellaneous plate work -					
Bins and hoppers					
	No.	87	13,160	...	98,677
Smokestacks					
	...	...	65,208	...	115,303
Smoke breeching					
	...	...	36,851	...	41,427
Riveted and welded steel pipe					
	...	...	1,197,892	...	1,003,216
Other plate work					
	...	...	5,550,315	...	7,599,310
Structural work, including fabricated and erected shapes					
	...	...	1,382,822	...	1,380,947
Tanks -					
Steel storage for water and fuel oil					
	...	...	1,153,884	...	1,238,869
Steel, septic					
	42,197	...	79,564
Steel, pneumatic					
	33,458	...	57,084
All other tanks					
	1,667,386	...	1,139,660

Boilers

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Table 3 - PRODUCTS MADE IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1947 and 1948 (Concluded)

Product	Unit of measure	1947		1948	
		Quantity	Selling value at works	Quantity	Selling value at works
			\$		\$
Tank heaters for domestic water supply ...	No.	6,852	424,818	8,747	599,605
Pumps, all kinds, and parts .....	...	...	492,431	...	546,373
Engines and parts .....	...	...	880,097	...	1,281,215
Stokers, mechanical, and parts .....	...	...	267,683	...	475,932
Furnaces, warm air .....	...	9,495	980,251	10,112	1,115,489
Receipts from custom work and repairs ....	...	...	1,748,266	...	3,026,118
All other products (x) .....	...	...	9,342,859	...	11,060,299
TOTAL .....	...	...	35,775,822	...	44,802,285

(*) Reported by less than 3 firms.

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

Table 4 - MATERIALS USED IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1947 and 1948

Material	Unit of measure	1947		1948	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Iron -					
Pig iron	ton	45,238	1,515,175	44,046	1,704,895
Iron castings	ton	3,071	671,316	2,046	504,158
Steel -					
Steel castings	ton	760	290,263	446	167,345
Bars and rods	ton	2,079	217,130	2,296	276,348
Forgings	ton	...	92,433	...	69,711
Shafting	ton	175	21,001	237	27,814
Sheets, black	ton	7,657	676,256	6,302	736,121
Sheets, galvanized	ton	182	20,803	125	14,848
Plates, boiler	ton	23,647	1,930,778	23,240	2,374,678
Plates, other	ton	21,754	1,623,770	14,422	1,235,904
Stampings	ton	1	100	42	16,286
Structural shapes	ton	9,407	756,483	8,922	833,289
Boiler tubes	ton	5,385	937,249	...	1,052,521
Sheets, tin plate	base box	32	674	57	907
Wire	ton	42	8,919	26	5,847
Alloy steels .....	...	...	154,195	...	422,073
Scrap iron and steel -					
Purchased	ton	20,164	577,118	25,734	1,071,823
Own make	ton	14,613	452,069	15,369	583,658
Other iron and steel .....	...	...	7,318	...	60,344
Ferro-alloys .....	...	...	51,941	...	51,277
Non-ferrous Metals, Including Scrap -					
Aluminum	pound	73,304	34,169	117,534	51,558
Brass and bronze	pound	186,143	54,907	260,266	89,351
Copper	pound	19,707	6,197	26,402	12,648
Nickel	pound	15,920	5,097	860	309
Nickel-copper shot	pound	713	230	1,519	547
Lead	pound	1,695	130	838	179
Tin	pound	121	103	220	221
Zinc	pound	280	27	6,892	4,252
Babbitt metals and solders	pound	35,399	19,143	32,978	16,049
Other non-ferrous metals .....	...	...	80	...	246

Table 4 - MATERIALS USED IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1947 and 1948 (Concluded)

Table 4 - MATERIALS USED IN THE BOILERS, PUMPS AND PIPES WORKS, INDIAN, 1947 and 1948 (continued)					
Material	Unit of measure	1947		1948	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Other Materials -					
Parts for engines, boilers, etc. . .	...	...	722,643	...	811,989
Iron and steel pipe and fittings ..	...	...	248,080	...	369,735
Paints, oils and varnishes .....	...	...	48,803	...	61,095
Asbestos linings and coverings ....	...	...	21,873	...	23,077
Foundry coke	ton	15,707	280,403	19,807	429,758
Moulding sands	ton	12,415	62,445	10,674	85,068
Silica sand for sandblasting	ton	65	516	416	3,536
Core sands	ton	17,736	61,269	19,521	72,499
Other foundry sands	ton	72	275	262	3,041
Plumbago and graphite	pound	22,635	1,805	14,332	1,097
Other foundry facings	pound	1,581,280	15,792	776,722	10,969
Patterns and models .....	...	...	89,504	...	61,478
Lumber	M ft. b.m.	3,538	317,165	5,177	486,757
Firebrick	number	599,592	77,875	...	36,391
Fireclay	ton	2,651	35,736	2,470	32,410
Cupola blocks .....	...	...	7,128	...	6,236
Core oil	Imp.gal.	65,942	74,484	65,463	98,051
Core compounds	pound	14,808	974	11,923	1,022
Sulphuric acid, 66° Be	pound	350	9	45,525	1,160
Acetylene	cu.ft.	1,483,001	40,697	1,829,243	45,136
Oxygen	cu.ft.	5,481,710	65,455	5,515,437	63,824
Shipping containers .....	...	...	43,269	...	54,559
All other materials .....	...	...	2,294,137	...	3,262,398
TOTAL .....	...	...	14,637,411	...	17,406,493

Table 5 - TOTAL PRODUCTION IN CANADA OF HEATING AND POWER BOILERS, 1947 and 1948 (From all industries)

Type	1947		1948	
	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.....)			12,061	1,612,705
(b) 776-1,499 sq.ft.)	18,119	3,450,761	3,158	837,867
(c) 1,500 sq.ft. and over			2,981	1,853,661
Steel heating boilers	1,926	1,635,869	1,529	1,884,382
Other heating boilers	279	91,668	...	196,658
Power boilers -				
Water tube, horizontal type	28	158,325	44	213,744
Water tube, vertical type	23	97,657	3	198,000
Water tube, bent tube type	78	2,249,662	...	3,634,427
Horizontal return tubular	165	978,217	...	496,925
Marine type	123	1,040,284	...	1,873,101
Steel firebox, locomotive type	81	194,578	...	325,192
Firetube, vertical type	462	434,964	309	227,748
Boilers, type not specified .....	...	584,715	...	198,636
TOTAL .....	...	10,916,700	...	13,553,046

Table 6 - TOTAL PRODUCTION IN CANADA OF HEATING RADIATORS, 1947 and 1948

Type	1947		1948	
	Quantity sq.ft.	Selling value at works \$	Quantity sq.ft.	Selling value at works \$
Direct or standing type, cast iron	8,224,506	3,404,456	8,040,421	3,848,071
Concealed type: Cast iron	3,951,108	1,260,750	5,472,553	2,511,846
Sheet metal				
TOTAL	12,175,614	4,665,206	13,512,974	6,359,917

Table 7 - EMPLOYEES, SALARIES AND WAGES IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, BY PROVINCES, 1947 and 1948

Province	Average Number of Employees					Salaries	Wages	TOTAL SALARIES and WAGES
	On Salaries		On Wages		Total			
	Male	Female	Male	Female				
<hr/>								
1947								
Quebec	146	42	1,004	...	1,192	410,295	2,389,896	2,800,191
Ontario	662	282	2,966	89	3,999	2,530,831	6,285,709	8,816,540
British Columbia	28	5	148	...	181	116,768	361,061	477,829
Other provinces.	30	7	189	...	226	103,171	338,232	441,403
TOTAL	866	336	4,307	89	5,598	3,161,065	9,374,898	12,535,963
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1948								
Quebec	163	32	960	2	1,157	537,197	2,657,864	3,195,061
Ontario	713	243	3,135	67	4,158	3,004,568	7,637,258	10,641,826
British Columbia	37	8	154	...	199	159,350	398,032	557,382
Other provinces.	29	6	215	...	250	118,193	413,106	531,299
TOTAL	942	289	4,464	69	5,764	3,819,308	11,106,260	14,925,568

LIST OF CONCERNS IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1948

Name of Firm	Location of Plant
<u>Nova Scotia -</u>	
Robb Engineering Works Limited	LaPlanche St., Amherst
<u>Quebec -</u>	
B & H Metal Industries Co. Ltd.	4650 Notre Dame St. E., Montreal
Canadian Welding & Machine Works, Reg'd.	574 Desjardins St., Montreal
Decarie Boiler & Incinerator, Ltd.	7592 St. Hubert St., Montreal
Farand & Delorme	433 St. Martin St., Montreal
Latulippe, Michel Enrg.	303 Dorchester St., Quebec
N.F.L. Welding & Manufacturing	1929 Grant Ave., Longueuil Annex
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
<u>Ontario -</u>	
Anthes Imperial Limited	Berryman Ave., St. Catharines
Babcock-Wilcox & Goldie-McCulloch, Limited	64-68 Grand Ave. S., Galt
Bell, Robert, Engine & Thresher Co. Limited	Seaforth
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
Gurney Foundry Company, Limited	4 Junction Road, Toronto
Hamilton Boiler Works	645-649 Main St. W., Hamilton
Hassan Steel Fabrications Limited	70 Fairview 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
MacPherson, C. A.	468 Rideau St., Kingston
Napanee Iron Works, Limited	Ann St., Napanee



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Boilers

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LIST OF CONCERNS IN THE BOILERS, TANKS AND PLATE WORK INDUSTRY, 1948
(Concluded)

Name of Firm	Location of Plant
<u>Ontario</u> (Concluded) -	
National Weld Company	1 Glen Scarlett Road, Toronto
Norsman Products Limited	410 Hopewell Ave., Toronto
Pendell Boiler, Limited	50 Bartlett Ave., Toronto
Port Arthur Boiler Works	361 Algoma St. S., Port Arthur
Port Colborne Iron Works, Limited	Fraser St., Port Colborne
Standard Sanitary & Dominion Radiator, Ltd.	1251 Dupont St., Toronto
Steel Fabricating & Welding, Limited	Brock & Hatt Sts., Dundas
Taylor-Forbes, Limited	5 Queen St., Guelph
Toronto Iron Works, Limited	629 Eastern Ave., Toronto
Woodstock Boiler Works	217 Russell St., Woodstock
<u>Manitoba</u> -	
Canadian Brown Steel Tank Co. Ltd.	Brandon
<u>Saskatchewan</u> -	
Northwestern Iron Works, Ltd.	1419 Scarth St., Regina
Acme Tank & Steel Works, Ltd.	146 Avenue A. North, Saskatoon
<u>Alberta</u> -	
Liberty Welding & Boiler Works	1402 - 2nd Ave. S., Lethbridge
<u>British Columbia</u> -	
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
Westminster Boiler & Tank Company	114 - 11th St., New Westminster