

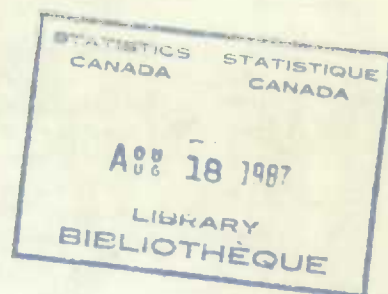
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CANADA



# THE BRIDGE BUILDING AND STRUCTURAL STEEL INDUSTRY, 1955



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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 or provinces 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 of Canada, (7 sections, as follows):
  - Section A. Summary for Canada, 25¢
  - Section B. Atlantic Provinces, 50¢
  - Section C. Quebec, 25¢
  - Section D. Ontario, 25¢
  - Section E. Prairie Provinces, 40¢
  - Section F. British Columbia, 25¢
  - Section G. The Manufacturing Industries of Canada, Regional Distribution, 75¢
- III — Foods and Beverages
- IV — Tobacco and Tobacco Products
- V — Rubber Products
- VI — Leather Products
- VII — Textile Mills
- VIII — Knitting Mills
- IX — Clothing
- X — Wood and Paper Products
- XI — Printing Trades
- 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
- XIX — Miscellaneous Manufactures

The present report belongs in Part 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¢
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- 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 BRIDGE BUILDING AND STRUCTURAL STEEL INDUSTRY, 1955

The value of work done by concerns in the Bridge Building and Structural Steel Industry amounted to \$157,712,340 in 1955, a slight increase over the \$156,102,978 reported in the previous year.

This industry includes all firms which were occupied chiefly in fabricating or erecting steel for bridges, buildings, etc., and in 1955 covered the operations of 49 plants, of which 25 were located in Ontario, 13 in Quebec, 4 in British Columbia, 4 in Alberta, 2 in Manitoba and 1 in Nova Scotia.

These firms gave employment to 11,863 persons who were paid \$46,557,144 in salaries and wages.

Fuel and electricity cost \$1,527,085 and expenditures for materials for use in manufacturing amounted to \$79,731,908.

The principal products were 285,598 tons of structural work for buildings at \$84,551,519; 75,043 tons of other structural work, such as bridges, transmission towers, etc., at \$25,441,024; plate and tank work at \$15,758,056 and mechanical work, including cranes, trolleys, boilers, machinery, etc., at \$6,508,392. Sales of plain materials were worth \$14,799,426.

**TABLE 1. Principal Statistics of the Bridge Building and Structural Steel Industry, Significant Years 1929- 1955, and by Provinces, 1954 and 1955**

Year and province	Estab- lish- ments	Em- ployees <sup>2</sup>	Salaries and wages <sup>2</sup>	Cost of fuel and electricity at works	Cost at plant of materials used	Value added by manufacture <sup>1</sup>	Gross selling value of products
	No.	No.	\$	\$	\$	\$	\$
1929 .....	10	4,977	8,937,427	364,936	14,557,679	19,256,873	34,179,488
1934 .....	18	1,659	2,089,552	170,764	2,765,535	1,763,844	4,700,143
1937 .....	19	3,418	5,004,456	247,801	8,657,728	7,944,795	16,850,324
1939 .....	21	2,949	4,546,648	232,377	6,786,893	8,821,322	15,840,592
1943 .....	22	10,974	23,175,872	1,005,517	24,014,652	47,495,665	72,515,834
1946 .....	25	6,091	15,825,390	639,503	18,896,434	20,586,758	40,122,695
1949 .....	29	7,149	18,576,533	802,391	30,936,308	43,953,532	75,692,231
1951 .....	34	8,608	28,278,426	1,094,789	48,652,449	59,903,113	109,650,351
1952 .....	38	10,824	37,418,880	1,272,630	62,135,893	76,308,313	139,716,836
1953 .....	47	11,243	42,534,324	1,345,930	64,196,383	90,785,457	156,327,770
<b>1954</b>							
Quebec .....	12	3,311	12,860,652	418,542	21,918,092	26,728,895	49,065,529
Ontario .....	21	4,614	17,997,844	582,769	23,990,122	33,294,223	57,867,114
Alberta .....	3	602	2,220,857	33,189	4,256,531	4,518,078	8,807,798
British Columbia .....	4	1,176	5,073,110	218,713	8,951,247	10,272,889	19,442,849
Nova Scotia .....	1	1,178	4,015,519	141,136	8,015,415	12,763,137	20,919,688
Manitoba .....	2						
<b>Canada</b> .....	<b>43</b>	<b>10,881</b>	<b>42,167,982</b>	<b>1,394,349</b>	<b>67,131,407</b>	<b>87,577,222</b>	<b>156,102,978</b>
<b>1955</b>							
Quebec .....	13	3,964	15,116,195	489,701	25,711,349	24,417,119	50,618,169
Ontario .....	25	4,711	18,477,103	584,588	29,021,349	27,347,956	56,953,893
Alberta .....	4	690	2,665,443	46,305	5,114,721	5,830,571	10,991,597
British Columbia .....	4	1,342	5,593,685	245,475	11,213,127	8,288,781	19,747,383
Nova Scotia .....	1	1,156	4,704,718	161,016	8,671,362	10,568,920	19,401,298
Manitoba .....	2						
<b>Canada</b> .....	<b>49</b>	<b>11,863</b>	<b>46,557,144</b>	<b>1,527,085</b>	<b>79,731,908</b>	<b>76,453,347</b>	<b>157,712,340</b>

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

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

2. See footnote to table 8.



TABLE 2. Inventories <sup>1</sup> by Provinces, 1955

	Raw materials and supplies	Goods in process <sup>2</sup>	Finished goods of own manufacture	Total
	\$	\$	\$	\$
Opening:				
Quebec .....	6,518,172	3,656,624	561,810	10,736,606
Ontario .....	11,063,919	3,738,624	1,010,025	15,812,568
Alberta .....	1,362,421	1,111,068	8,943	2,482,432
British Columbia .....	3,365,613	1,661,540	119,625	5,146,778
Nova Scotia and Manitoba .....	2,460,772	2,630,021	206,846	5,297,639
<b>Canada .....</b>	<b>24,770,897</b>	<b>12,797,877</b>	<b>1,907,249</b>	<b>39,476,023</b>
Closing:				
Quebec .....	7,981,831	1,877,271	252,102	10,111,204
Ontario .....	10,165,818	4,286,565	491,531	14,943,914
Alberta .....	1,681,680	381,907	12,482	2,076,069
British Columbia .....	4,183,849	47,517	254,212	4,485,578
Nova Scotia and Manitoba .....	2,647,206	1,177,843	144,699	3,969,748
<b>Canada .....</b>	<b>26,660,384</b>	<b>7,771,103</b>	<b>1,155,026</b>	<b>35,586,513</b>

1. (a) Book value of all manufacturing inventories owned and held at plant and plant warehouses.

(b) 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 Bridge Building and Structural Steel Industry, for the year under review are shown in the above table.

(c) The opening inventory for the current year may not necessarily agree with the closing inventory published the previous year because of changes in the composition of the industry such as: the addition of new establishments, the disappearance of old ones or the transfer of establishments to other industries for statistical purposes.

2. Adjusted to allow for progress payments.

TABLE 3. Products Made in the Bridge Building and Structural Steel Work Industry, 1954 and 1955

Product	1954		1955	
	Quantity	Selling value at works	Quantity	Selling value at works
	Tons	\$	tons	\$
Structural work:				
Buildings .....	276,590	82,003,246	285,598	84,551,519
Bridges .....	23,570	9,860,317	31,276	13,318,448
Transmission towers .....	23,599	6,361,876	14,693	4,079,753
All other .....	18,898	7,980,593	29,174	8,042,823
<b>Total structural work .....</b>	<b>342,657</b>	<b>106,206,032</b>	<b>360,741</b>	<b>109,992,543</b>
Other production:				
Plate and tank work, including tanks, hoppers, digesters, etc. ....	—	12,908,495	—	15,758,056
Mechanical work, including cranes, trolleys, boilers, machinery, etc. ....	—	9,531,749	—	6,508,392
Sales of plain material (channels, etc., unfabricated) .....	84,385	13,742,614	82,057	14,799,426
Custom work and repairs .....	—	2,796,935	—	874,012
Other products <sup>1</sup> .....	—	13,116,901	—	12,852,879
Work done during year on products not completed at year-end .....	—	41,626,800	—	38,542,973
<b>Total value of structural work and other production .....</b>	<b>—</b>	<b>199,929,526</b>	<b>—</b>	<b>199,328,281</b>
Less value of work done in previous years on products completed during the year .....	—	43,826,548	—	41,615,941
<b>Total production for year .....</b>	<b>—</b>	<b>156,102,978</b>	<b>—</b>	<b>157,712,340</b>

1. Includes barges, reinforcing steel, castings, etc.

Note: Plate and tank work and some structural work was done also in other industries, particularly in the Boilers and Platemaking Industry.

TABLE 4. Materials Used in The Bridge Building and Structural Steel Work Industry, 1954 and 1955

Material	Unit of measure	1954		1955	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Steel (except alloy steel):					
Bars .....	ton	62,629	7,561,659	73,710	8,994,033
Plates (3/16 in. and thicker) .....	"	86,172	10,182,590	97,390	12,090,191
Sheets (under 3/16 in.):					
Black .....	ton	8,928	1,083,958	10,334	1,300,892
Galvanized .....	"	241	45,169	302	59,874
Tin plate .....	"	384	72,991	—	—
Strips (less than 14 in. wide) .....	"	1,779	207,799	3,686	479,568
Structural shapes .....	"	292,797	34,372,909	358,301	43,029,323
Wire .....	"	930	153,676	604	106,688
Alloy steel in all forms:					
Alloy steel (other than stainless and tool steel):					
Billets, bars and rods .....	—	—	716,160	—	264,865
Other shapes .....	—	—		—	13,249
Stainless — Billets, bars and rods .....	—	—		—	219,300
Sheets .....	—	—		—	108,302
Other shapes .....	—	—		—	140
Tool steel (all types including high speed):					
Billets, bars and rods .....	—	—		—	21,731
Other shapes .....	—	—		—	—
Other iron and steel .....	—	—	1,881,738	—	1,801,605
Non-ferrous metals in all forms:					
Aluminum — Castings .....	pound	218	90	—	—
Sheet .....	"	11,320	7,950	15,042	6,578
Other forms .....	"	23,248	8,422	25,958	8,366
Brass and bronze .....	"	41,427	12,805	93,359	33,654
Copper — Sheet .....	"	10,420	3,568	—	—
Wire .....	"	—	—	—	—
Other forms .....	"	5,837	4,153	3,793	1,906
Lead .....	"	1,667	636	1,460	199
Zinc .....	"	3,932,804	444,394	2,142,295	257,363
Other non-ferrous metals .....	—	—	10,009	—	16,289
Other materials and supplies:					
Paints, oils and varnishes .....	—	—	567,363	—	693,333
Lumber .....	M. bd. ft.	1,031	116,949	1,447	146,913
All other materials .....	—	—	9,676,419	—	10,077,556
Total materials and supplies .....	—	—	67,131,407	—	79,731,908

TABLE 5. Principal Statistics of the Bridge Building and Structural Steel Industry, Grouped According to Size of Establishment, 1954 and 1955

Establishments reporting a value of production	Estab-lish-ments	Em-ployees	Salaries and wages	Cost of fuel and electricity	Cost at plant of materials used	Gross selling value of products
	No.	No.	\$	\$	\$	\$
1954						
\$50,000 to \$99,999 .....	1	44	143,685	6,367	258,399	463,078
\$100,000 to \$199,999 .....	3					
\$200,000 to \$499,999 .....	7					
\$500,000 to \$999,999 .....	6					
\$1,000,000 to \$4,999,999 .....	18	4,124	15,286,502	475,069	21,240,510	49,380,274
\$5,000,000 and over .....	8	6,062	24,342,551	817,817	42,384,190	99,654,860
Totals .....	43	10,881	42,167,982	1,394,349	67,131,407	156,102,978
1955						
Under \$50,000 .....	1	76	246,360	15,289	422,660	724,492
\$50,000 to \$99,999 .....	1					
\$100,000 to \$199,999 .....	4					
\$200,000 to \$499,999 .....	6					
\$500,000 to \$999,999 .....	9	545	2,105,199	77,406	3,862,562	7,080,817
\$1,000,000 to \$4,999,999 .....	19	3,796	14,759,405	526,657	23,856,472	49,758,557
\$5,000,000 and over .....	9	7,248	28,696,137	871,652	50,458,998	98,061,469
Totals .....	49	11,863	46,557,144	1,527,085	79,731,908	157,712,340

**TABLE 6. Capital and Repair Expenditures in the Bridge Building and Structural Steel Work Industry, 1951-1955**

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		
	\$'000						
1951 .....	885	1,514	2,399	327	1,050	1,377	3,776
1952 .....	1,651	1,778	3,429	770	1,173	1,943	5,372
1953 .....	1,595	2,355	3,950	553	1,201	1,754	5,704
1954 .....	1,310	2,450	3,760	522	1,377	1,899	5,659
1955 <sup>1</sup> .....	1,263	1,923	3,186	290	1,334	1,624	4,810

1. Preliminary.

**TABLE 7. Employees, Salaries and Wages, by Provinces, in the Bridge Building and Structural Steel Work Industry, 1954 and 1955**

Province	Number of employees					Earnings		
	Supervisory and office		Production <sup>1</sup> workers		Total	Supervisory and office	Production <sup>1</sup> workers	Total
	Male	Female	Male	Female				
						\$	\$	\$
<b>1954</b>								
Quebec .....	788	150	2,357	16	3,311	4,975,353	7,885,299	12,860,652
Ontario .....	926	216	3,452	20	4,614	5,474,361	12,522,983	17,997,844
Alberta .....	125	25	449	3	602	527,267	1,693,590	2,220,857
British Columbia .....	235	51	889	1	1,176	1,134,637	3,938,473	5,073,110
Other provinces .....	246	56	876	—	1,178	1,152,125	2,863,394	4,015,519
<b>Canada .....</b>	<b>2,320</b>	<b>498</b>	<b>8,023</b>	<b>40</b>	<b>10,881</b>	<b>13,264,243</b>	<b>28,903,739</b>	<b>42,167,982</b>
<b>1955</b>								
Quebec .....	799	189	2,976	—	3,964	4,810,356	10,305,839	15,116,195
Ontario .....	934	200	3,559	18	4,711	5,445,811	13,031,292	18,477,103
Alberta .....	146	33	509	2	690	725,890	1,939,553	2,665,443
British Columbia .....	235	52	1,055	—	1,342	1,437,069	4,156,616	5,593,685
Other provinces .....	211	60	885	—	1,156	1,142,454	3,562,264	4,704,718
<b>Canada .....</b>	<b>2,325</b>	<b>534</b>	<b>8,984</b>	<b>20</b>	<b>11,863</b>	<b>13,561,580</b>	<b>32,995,564</b>	<b>46,557,144</b>

1. See footnote to Table 8.

**TABLE 8. Production Workers<sup>1</sup> by Months, 1954 and 1955**

Month	1954			1955			
	Male	Female	Total	Male		Female	Total
				In shops	On erection		
	Number						
January .....	8,182	35	8,217	6,863	1,698	21	8,582
February .....	8,236	35	8,271	6,862	1,887	19	8,768
March .....	7,947	35	7,982	6,864	1,874	19	8,757
April .....	7,552	36	7,588	6,955	1,882	19	8,856
May .....	7,811	36	7,847	7,200	1,888	19	9,107
June .....	8,165	37	8,202	7,257	2,031	19	9,307
July .....	8,242	37	8,279	6,982	1,938	19	8,939
August .....	8,194	37	8,231	7,210	1,932	20	9,162
September .....	8,317	37	8,354	7,322	2,066	20	9,408
October .....	8,343	37	8,380	7,330	1,956	20	9,306
November .....	7,931	37	7,968	7,142	1,872	20	9,034
December .....	7,385	37	7,422	7,098	1,685	20	8,803
Average .....	8,023	40	8,063	7,091	1,893	20	9,004

1. Breakdown as between "In shops" and "On erection" was not collected before 1955, accordingly, it is possible that in some cases erection crews were not reported and, therefore, not included under production workers. For this reason data relating to production workers and wages shown for 1955 may not be exactly comparable with previous years.



## List of Firms in the Bridge Building and Structural Steel Work Industry, 1955

Name of firm	Location of plant
<b>Nova Scotia:</b>	
Robb Engineering Works Limited .....	51 La Planche St., Amherst
<b>Quebec:</b>	
B & H Metal Industries Co. Ltd. ....	4650 Notre Dame St. E., Montreal
Canadian Structural Steel Works Co. Ltd. ....	4500-17th Ave., Rosemount (Montreal)
Dominion Structural Steel Limited .....	6894 Clanranald Ave., Montreal
Dominion Bridge Co. Ltd. ....	Lachine
Eastern Canada Steel & Iron Works Ltd. ....	Lesage Ave., Quebec
Leeds' Bridge and Iron Works Ltd. ....	175 Wanklyn St., Ville la Salle
Lemaire & Cie Ltée. ....	5565 Rue Fullam, Montreal
Lord & Company Ltd. ....	4700 Iberville St., Montreal
Mackinnon Structural Steel Company Limited .....	Sherbrooke
Quebec Structure & Metal Inc., ....	Blvd. Henri Bourassa, Quebec
Ross Structural Steel Ltd. ....	4900 Amiens, Montreal N
Standard Structural Steel Ltd. ....	5330 Pare St., Montreal
Steel Structure & Services Ltd. ....	10,000 Rome, Montreal
<b>Ontario:</b>	
Bettcon Limited .....	47 Granger Ave., Scarborough
Brayshaws Welding Limited .....	184 Van Horne St., Port Arthur
Bridge & Tank Co. of Canada .....	Depew St., Hamilton
The Canadian Bridge Company Limited .....	1219 Walker Road, Walkerville
Central Bridge Company Limited .....	300 West St., Trenton
Disher Steel Construction Co. Limited .....	80 Commissioners St., Toronto
Dominion Bridge Company Limited .....	1139 Shaw St., Toronto
Dominion Bridge Company Limited .....	Charlevoix St., Eastview
Dominion Fire Escape & Steel Works .....	502 Dundas St. E., Cooksville
Eansor, T.J., & Sons Limited .....	261 Shepherd St. E., Windsor
Frankel Steel Construction Limited .....	East Don Roadway, Toronto
Hepburn, John T., Limited .....	914-948 Dupont St., Toronto
Leeds Bridge and Iron Works Limited .....	Crosby Road, Gananoque
London Steel Construction Co., Limited .....	48 Burslem St., London
Magee, E. B., Limited .....	Ramsey's Bend, Port Colborne
McDonald Welding Limited .....	Modern Lane, Oakville
Newman Structural Steel Ltd. ....	64 North St., St. Catharines
Niagara Structural Steel Ltd. ....	Smith & Petrie Sts., St. Catharines
Runnymede Steel Construction Ltd. ....	3382 Dundas St. W., Toronto
Sarnia Bridge Co. Limited .....	251 Campbell St., Sarnia
Sault Structural Steel Company Limited .....	150 Conmee Ave., Sault Ste. Marie
Scarboro Steel Works .....	102 Manville Rd., Geco
Standard Iron & Steel Works Limited .....	3430 Dundas St. W., Toronto
Standard Steel Construction Co. Division of United Steel Corporation Ltd. ....	Port Robinson
York Steel Construction Ltd. ....	75 Ingram Drive, Toronto
<b>Manitoba:</b>	
Dominion Bridge Company, Limited .....	Dublin Ave., Winnipeg
Vulcan Iron & Engineering Ltd. ....	Sutherland & Maple, Winnipeg
<b>Alberta:</b>	
Calgary Structural Steel Ltd. ....	205-55th Ave., Calgary
Dominion Bridge Company Limited .....	803-24th Ave. S.E., Calgary
Standard Iron & Engineering Works, Limited .....	120th St. and 107th Ave., Edmonton
Western Metal Fabricators Ltd. ....	2nd Ave. S., Lethbridge
<b>British Columbia:</b>	
Coast Steel Fabricators Ltd. ....	1423 Grant St., Vancouver
Dominion Bridge Co. Ltd. ....	Boundary Road, Burnaby
Gilchrist Engineering Co. Ltd. ....	135 W. 2nd Ave., Vancouver
Western Bridge and Steel Fabricators Ltd. ....	145 W. 1st Ave., Vancouver

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