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# THE BRIDGE BUILDING AND STRUCTURAL STEEL 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 BRIDGE BUILDING AND STRUCTURAL STEEL INDUSTRY, 1952

The value of work done by concerns in the Bridge Building and Structural Steel Industry amounted to \$139,716,836 in 1952 compared with \$109,650,351 in the previous year, an increase of 27.4 per cent.

This industry includes all concerns which were occupied chiefly in fabricating or erecting steel for bridges, buildings, etc., and in 1952 covered the operations of 38 plants, of which 17 were located in Ontario, 11 in Quebec, 4 in British Columbia, 3 in Alberta, 2 in Manitoba and 1 in Nova Scotia.

These firms gave employment to a total of 10,824 workers, who were paid \$37,418,880 in salaries and wages. Fuel and electricity cost \$1,272,630 and expenditures for use in manufacturing amounted to \$62,135,893.

The principal products were 190,063 tons of structural work for buildings at \$59,521,359; 56,121 tons of other structural work, such as bridges, transmission towers, etc.. at \$17,689,000; plate and tank work at \$8,820,555 and mechanical work, including cranes, trolleys, etc., at \$1,464,665. Sales of plain material were worth \$12,963,676.

TABLE 1. Principal Statistics for The Bridge Building and Structural Steel Work Industry, 1948-1952

Year	Number of plants	Number of employees	Salaries and wages	Cost of fuel and electri- city at works	Cost of materials at works	Gross selling value of prod- ucts at works
			\$	\$	\$	\$
1948 1949 1950 1951 1952 Per cent change 1952 from 1951	27 29 33 34 38	7, 407 7, 149 7, 434 8, 608 10, 824 + 25, 7	19, 165, 403 18, 576, 533 22, 382, 499 28, 278, 426 37, 418, 880 + 32, 3	847, 392 802, 391 968, 742 1,094, 789 1,272, 630 + 16.2	29, 527, 341 30, 936, 308 36, 659, 245 48, 652, 449 62, 135, 893 + 27, 7	66, 229, 635 75, 692, 231 82, 003, 268 109, 650, 351 139, 716, 836 + 27, 4

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.

TABLE 2. Principal Statistics, by Provinces, 1951 and 1952

Province	Number of plants	Number of employees	Salaries and wages	Cost of fuel and electri- city at works	Cost of materials at works	Gross selling value of prod- ucts at works
			\$	\$	\$	\$
1951						
Quebec	10 16	2, 843 3, 836	9, 340, 705 12, 969, 870	358, 637 503, 360	17,094,617 19,753,557	36,048,31 45,039,92
Nova Scotia	3	480	1, 310, 710	31, 146	1,718,409	3, 916, 09
Manitoba British Columbia	2 2	1,449	4,657,141	201,646	10,085,866	24,646,01
Canada	34	8, 608	28, 278, 426	1,094,789	48, 652, 449	109, 650, 35
1952						
Quebec	11	3, 464	12, 431, 761	419,582	22,982,681	47, 373, 78
Ontario	17	4,878 560	16, 173, 941	576, 852	20, 579, 344	57, 883, 91
British Columbia	4	1, 316	1,614,446 5,154,935	35, 329 165, 949	2,669,779 11,339,035	5, 164, 19 19, 009, 63
ova Scotia anitoba	1 2	} 606	2,043,797	74, 918	4, 565, 054	10, 285, 31
Canada	38	10, 824	37,418,880	1, 272, 630	62, 135, 893	139, 716, 83

TABLE 3. Products Made in The Bridge Building and Structural Steel Work Industry, 1951 and 1952

the series and the series are		1951	1952		
Product	Quantity	Selling value at works	Quantity	Selling value at works	
	tons	\$	tons	\$	
Structural work:					
Buildings	194,909	54, 181, 742	190,063	59,521,359	
Bridges	26,232	8, 126, 117	19,679	5,958,419	
Transmission towers	8,805	2,339,923	11, 105	3, 504, 275	
All other	18,900	4,980,263	25, 337	8,226,306	
Plate and tank work, including tanks, hoppers, digesters, etc		7,078,010	dead	8,820,555	
Mechanical work, including cranes, trolleys, etc.	_	1,558,506	-	1,464,665	
Sales of plain material (channels, etc., unfabricated)	82,224	13,480,727	70,839	12,963,676	
Custom work and repairs	-	572,351	_	789,247	
Other products 1	_	17, 332, 712	_	38,468,334	
Total products	_	109, 650, 351	_	139, 716, 836	

<sup>1.</sup> Includes miscellaneous machinery, boilers, barges, reinforcing steel, etc.

TABLE 4. Materials Used in The Bridge Building and Structural Steel Work Industry, 1951 and 1952

	77-16 -6	1	951	1	952
Material	Unit of measure	Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Iron:					
Iron castings of all kinds	ton	2,280	424,785	1	1
Steel (except alloy steel):					
Steel castings	1.6	332	72,912	1	1
Bars	4.4	35,914	4,545,748	53,581	6,664,987
Plates (3/16 in. and thicker)	4.4	77,075	8, 455, 211	78,454	9,765,147
Shafting	4.6	7	1,680	1	1
Sheets (under 3/16 in.):					116.21
Black Galvanized	ton	5,391 80	648,406 16,118	8,434	1, 193, 096 47, 481
Strips (less than 14 in. wide)	ton	524	59,808	2, 411	275, 243
Structural shapes	64	227, 783	24, 146, 644	270,767	31, 148, 918
Alloy steel in all forms: Carbon and alloy tool steel, including high speed:					Louise
Billets, bars, rods	_		16, 260	_	132,778
Other	_	_	45,096		15, 170
Stainless - Billets, bars and rods	mu .	_	1, 260 11, 265	_	219, 318 9, 950
Other alloy - Billets, bars and rods				_	
Other		_	5,412 6,714	-	314 12,617
Dine and fittings from and ato al					
Pipe and fittings, iron and steel	_	_	117, 445	_	19 <b>8,7</b> 87
Other iron and steel		_	1, 693, 809		1.425.160

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

TABLE 4. Materials Used in The Bridge Building and Structural Steel Work Industry, 1951 and 1952 - Concluded

Makada	Unit of	19	951	1952		
Material	measure	Quantity	Cost at works	Quantity	Cost at works	
			\$		\$	
Non-ferrous metals in all forms:						
Aluminum - Castings	_	_	_	_	_	
Sheet	pound	3,260	1,470	12,220	6, 44	
Other forms	4.6	575	230	12,919	6, 45	
Brass and Bronze	pound	39,632	18,448	20, 322	7,99	
Copper	4.6	2, 200	652	3, 290	1,00	
Lead	9.6	2, 200	660	9,000	2, 43	
Zinc	11	2,092,543	373, 579	3, 496, 254	658, 23	
Other non-ferrous metals	-	1	-	_	190, 85	
ther materials and supplies:						
Electrical apparatus and supplies	_	V -	445,945	1	_	
Other complete parts purchased (such as engines,						
boilers, instruments)	_	_	1,836,850	1	-	
Paints, oils and varnishes	-	_	354,962	-	413, 43	
Lumber	M. bd. ft.	1, 282	136,657	1,620	153,49	
Acetylene	Cu. ft.	2, 236, 320	63, 187	1	_	
Oxygen	4.9	10, 483, 201	124,270	1	-	
All other materials	_		5,026,966	-	9, 586, 57	
Total materials and supplies			48, 652, 449	_	62, 135, 89	

<sup>1.</sup> Not available separately.

TABLE 5. Employees, Salaries and Wages, by Provinces, in The Bridge Building and Structural Steel Work Industry, 1951 and 1952

		Numbe	er of emp	loyees	Earnings			
Province	Supervisory and office		Production workers		Total	Supervisory and office	Production workers	Total
	Male	Female	Male	Female		\$	\$	\$
1951								
Quebec	651	146	2.022	24	2, 843	3,211,507	6, 129, 198	9, 340, 705
Ontario	585	148	3,087	16	3,836	3, 165, 100	9, 804, 770	12, 969, 870
Alberta	96	16	366	2	480	368, 171	942,539	1,310,710
Other provinces	289	47	1,103	10	1,449	1,290,249	3, 366, 892	4, 657, 141
Canada	1,621	357	6, 578	52	8, 608	8, 035, 027	20, 243, 399	28, 278, 426
1952								
Quebec	714	160	2, 582	8	3, 464	4,153,612	8, 278, 149	12, 431, 761
Ontario	749	178	3, 930	21	4,878	3, 965, 174	12, 208, 767	16, 173, 941
Alberta	107	16	435	2	560	468,876	1, 145, 570	1,614,446
British Columbia	248	40	1,028	-	1, 316	1,158,112	3,996,823	5, 154, 935
ther provinces	108	16	478	4	606	500,466	1,543,331	2, 043, 797
Canada	1, 926	410	8, 453	35	10, 824	10, 246, 240	27, 172, 640	37, 418, 880

#### IRON AND STEEL PRODUCTS

### TABLE 6. Capital and Repair Expenditures in the Bridge Building and Structural Steel Work Industry, 1948-1952

	Capital exp	oenditures		Repair and maintenance expenditures			Total capital
Year	Construction	Machinery and equipment	Sub-total	Construction	Machinery and equipment	Sub-total	and repair expenditures
				\$'000			
1948 1949 1950 1951 1952 <sup>1</sup>	913 822 245 885 1,445	1, 013 956 1, 504 1, 514 1, 548	1,926 1,778 1,749 2,399 2,993	183 423 249 327 679	747 608 721 1,050 867	930 1,031 970 1,377 1,546	2,856 2,809 2,719 3,776 4,539

#### 1. Preliminary.

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#### List of Firms in The Bridge Building and Structural Steel Work Industry, 1952

Name of firm	Location of plant
Nova Scotia:	
Robb Engineering Works Limited	51 La Planche St., Amherst
Quebec:	
B & H Metal Industries Co, Ltd,	4650 Notre Dame St. E., Montreal
Canrail Utilities Ltd.	4600-17th Ave., Rosemount (Montreal) 64 Décarie Blvd., St Laurent
Dominion Structural Steel Limited	
Dominion Bridge Co. Ltd.	
Eastern Canada Steel & Iron Works Limited	
Leeds' Bridge and Iron Works Ltd.  Lord & Company Ltd.	175 Wanklyn St., Ville la Solte 4700 Iberville St., Montreal
Mackinnon Structural Steel Company Limited	Sherbrooke
Modern Metal Works Reg'd.	390-10th Ave., Sherbrook
Standard Structural Steel Ltd	5330 Paré St., Montreal
Ontario:	
The Canadian Bridge Company Limited	121 Walker Road, Walkerville
Central Bridge Company Limited	300 West St., Trenton
Disher Steel Construction Co. Limited	80 Commissioners St., Toronto 1139 Shaw St., Toronto
Dominion Bridge Company Limited Dominion Bridge Company Limited	Charlevoix St., Eastview
Eansor, T. J., & Sons Limited	261 Shepherd St. E., Windsor
Frankel Corporation Limited	Eastern Ave. & Don Roadway, Toronto
Hamilton Bridge Company Limited	231-233 Bay St. N., Hamilton
Hepburn, John T., Limited Leeds Bridge and Iron Works Limited	914-948 Dupont St., Toronto
Lock, J. H., & Sons, Ltd.	Crosby Road, Gananoque 150 Perth Ave., Toronto
London Steel Construction Co., Limited	48 Burslem St., London
Sarnia Bridge Co. Limited	251 Campbell St., Sarnia
Sault Structural Steel Company Limited	Wilde Ave., Sault Ste. Marie
Scarboro Steel Works	24 Gloucester Grove, Toronto 10
Standard Iron & Steel Works Limited	3402 Dundas St. W., Toronto
Corporation Ltd.	Port Robinson
Manitoba:	
Dominion Bridge Company, Limited	Dublin Ave., Winnipeg
Winnipeg Bridge Company, Limited	153 Aubert St., St. Boniface
Alberta:	
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
British Columbia:	
Coast Steel Fabricators Ltd.	738 Powell St., Vancouver
Dominion Bridge Co. Ltd.	Boundary Road, Burnaby
Northwest Steel Fabricators & Erectors	