

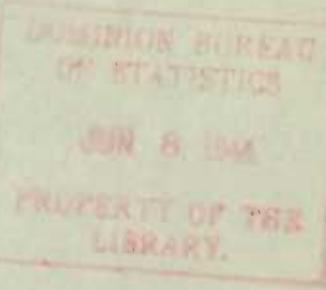
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Minister of Trade and Commerce



**CANADA**

**DEPARTMENT OF TRADE AND COMMERCE**

**DOMINION BUREAU OF STATISTICS**

**CENSUS OF INDUSTRY**

**MINING, METALLURGICAL & CHEMICAL BRANCH**

**THE**

**PRIMARY IRON AND STEEL INDUSTRY**

**IN**

**CANADA**

**1942**

(including pig iron, ferro-alloys, steel ingots  
and steel castings, rolled iron  
and steel products.)



OTTAWA  
1944

Price 25 cents



Dominion Statistician:  
Chief - Mining, Metallurgical and Chemical Branch:  
Statistician - Metal and Chemical Products:

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ANNUAL INDUSTRY REPORTIRON AND STEEL AND THEIR PRODUCTS GROUPTHE PRIMARY IRON AND STEEL INDUSTRY, 1942

Statistics for the Primary Iron and Steel Industry include data for all establishments in Canada which were engaged chiefly in the manufacture of (a) pig iron, (b) ferro-alloys, (c) steel ingots and steel castings, (d) hot rolled iron and steel products, (e) cold rolled or cold drawn steel bars, strips and shapes. Forty-four firms were included in this industry in 1942 and reports were received for 61 different plants or departments, including 4 blast furnace departments, 4 ferro-alloy plants, 35 steel furnace divisions, and 18 rolling or drawing mills. Separate reports were received for blast furnace departments, for steel furnace divisions and for rolling mills even when all three were units of a single works.

Factory sales of pig iron, ferro-alloys, steel ingots and castings and finished rolled products were 41 per cent higher in 1942 than in 1941, the values being \$232,105,755 and \$164,566,392, respectively. Twenty-seven works in Ontario accounted for 69 per cent of the total for Canada or \$159,077,961; 6 plants in Nova Scotia accounted for 13 per cent or \$31,009,632; 16 plants in Quebec for 15 per cent or \$34,976,121, while the remaining \$7,042,041 or 5 per cent was accounted for by 4 plants in Manitoba, 5 in British Columbia and 3 in Alberta.

Fixed and working capital employed in this industry amounted to \$205,804,671, including \$122,624,037 for the value of land, buildings and plant equipment, \$45,440,893 for the value of raw and finished materials on hand and in process, and \$37,759,741 for operating capital, such as cash, bills and accounts receivable. For works in Ontario the capital was \$128,620,497; in Nova Scotia, \$44,723,425; in Quebec, \$28,499,707; in Manitoba, \$2,544,377; and in Alberta and British Columbia, \$1,416,665.

In 1942, an average of 35,245 people were employed in this industry, this being an increase of 40 per cent over the 1941 average of 25,735. About 1,655 persons worked in the blast furnace departments during the year, 11,894 in the steel furnaces, 17,410 in the rolling mills and 2,286 in ferro-alloy plants (exclusive of those producing ferro-alloys as a by-product). Fifty five per cent of the employees or 18,147 worked in plants in Ontario, 6,679 in Quebec, 6,936 in Nova Scotia, 955 in Manitoba and 550 in Alberta and British Columbia.

Payments in salaries and wages during 1942 amounted to \$60,874,818, a gain of 35 per cent over the previous year's total of \$45,037,095. Salaries advanced to \$5,285,722 from \$4,163,580, and wages to \$55,591,096 from \$40,873,515.

Materials used in manufacturing processes cost \$110,551,516 in 1942 compared with \$78,824,566 in 1941, and the cost of fuel and electricity was \$18,734,178 against \$13,888,384, an increased expenditure of 40 per cent for materials and 35 per cent for fuel and power.

PIG IRON - Output of 1,975,014 net tons of pig iron in 1942 was 29 per cent over the 1,528,053 tons reported for the previous year. Production of basic iron amounted to 1,646,001 tons or 85 per cent of the total; foundry iron amounted to 159,724 tons and malleable iron to 169,239 tons.

Producers' sales of pig iron totalled 387,997 tons at \$8,366,936 in 1942 compared with 338,066 tons at \$7,080,242 in 1941, a gain of 15 per cent in quantity and 18 per cent in value.

Charges to iron blast furnaces during the year included 3,383,439 tons of imported iron ore, 229,253 tons of Canadian ore, 1,795,875 tons of coke, 559,650 tons of imported limestone and 301,143 tons of Canadian limestone.

Imports of pig iron during the calendar year declined to 1,536 tons from 4,729 tons in 1941 and exports increased slightly to 427 tons from 380 tons.

Producers' stocks at the end of 1942 totalled 87,955 tons compared with 27,049 tons at the end of the previous year.

The apparent consumption of pig iron in Canada, as calculated by deducting the exports from the sum of the production and imports, and allowing for changes in producers' stocks, amounted to 1,915,217 tons in 1942 or 21 per cent more than in 1941 when the apparent domestic supply was 1,581,913 tons.

Producers of pig iron in Canada had 12 blast furnaces at the end of 1942 which could produce 2.1 million net tons a year if operated at rated capacity. Actual production of 1,975,014 net tons in 1942 showed an operating rate of about 94 per cent. Twelve furnaces were in blast during the year.

FERRO-ALLOYS - Ferro-alloys were made in 1942 by 10 different concerns, 5 of which recovered ferrosilicon as a by-product in the manufacture of abrasives. Output of ferro-alloys in 1942 amounted to 209,017 net tons, a gain of 2 per cent over the 204,354 tons reported for 1941.

Altogether, ferrosilicon was made in nine different plants, spiegeleisen in two and ferrochrome in two. Other alloys produced by one firm only included ferromanganese, silicospiegel, silicomanganese, silicon metal, calcium silicon, calcium manganese silicon, and ferrophosphorus.

STEEL INGOTS AND CASTINGS - Steel production advanced 15 per cent to 3,109,851 tons in 1942 from 2,712,151 tons in 1941, the output of steel ingots going to 2,958,906 tons from 2,593,512 tons and steel castings to 150,945 tons from 118,639 tons. Factory sales of ingots and castings totalled 286,007 tons at \$38,014,454.

Thirty-five steel plants were in operation during the year. At the end of 1942, these plants had 123 furnaces, including 50 basic open hearth with an annual capacity of 2,777,300 net tons, 70 electric furnaces rated at 672,700 tons, and 5 converters at 8,200 tons. There were just 11 makers of steel ingots with capacity of 3,196,000 net tons per annum. The total annual steel capacity of all plants, including ingots and castings, was 3,458,200 tons at the year end.

Operating steel furnaces in 1942 used 1,615,396 net tons of pig iron, 1,826,911 tons of scrap iron or steel, 198,890 tons of ores, 243,608 tons of limestone, 101,641 tons of dolomite, 59,301 tons of lime, 99,584 tons of silica sand, 20,665 tons of magnesite and 22,101 tons of ferro-alloys.

ROLLED AND DRAWN STEEL - In 1942 there were 15 mills occupied chiefly in hot rolling of steel products and 5 mills making only cold drawn and cold rolled shapes. Ten of these mills were in Ontario, 3 in Nova Scotia, 3 in Quebec, 1 in Manitoba and 1 in Alberta.

Rolling mill sales advanced 38 per cent to \$157,973,074 from \$114,056,762 in 1941. The main items sold during the year under review were: 474,312 tons of hot rolled bars at \$37,442,850; 585,514 tons of plates at \$50,095,754; 245,908 tons of sheets, hoops, bands and strips at \$18,398,051; 224,665 tons of rails and rail fastenings at \$10,628,149; 341,068 tons of semi-finished rolled forms, such as blooms, billets, etc., at \$16,543,624; 191,319 tons of structural shapes at \$10,540,658, and 105,475 tons of wire rods at \$4,347,189.

Table 1 - PROVINCIAL DISTRIBUTION OF ACTIVE PLANTS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1942

Province	Number of firms	Pig Iron		Steel Ingots and Castings		Rolling and drawing mills	Ferro- alloys (a)
		Number of plants	Number of blast furnaces	Number of plants	Number of steel furnaces		
Nova Scotia .....	4	1	3	2	17	3	...
Quebec .....	15	...	...	12	27	3	1
Ontario .....	16	3	9	11	63	10	3
Manitoba .....	3	...	...	5	5	1	...
Alberta .....	2	...	...	2	2	1	...
British Columbia ....	5	...	...	5	9	...	...
CANADA (b) ....	44	4	12	35	123	18	4

(a) Not including artificial abrasive plants which made ferrosilicon as a by-product.

(b) Some firms operate in more than one province.

Table 2 - PRINCIPAL STATISTICS OF THE PRIMARY IRON AND STEEL INDUSTRY, 1932-1942

Year	Number of plants	Capital employed	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
1932 .....	52	96,523,629	4,847	6,131,057	2,367,122	6,289,483	16,197,526
1933 .....	50	96,444,846	5,200	6,049,189	2,699,837	7,598,931	18,492,549
1934 .....	51	90,079,004	7,400	9,009,512	3,969,136	12,673,398	29,101,463
1935 .....	53	86,465,490	9,523	12,279,390	4,845,559	18,539,072	38,700,961
1936 .....	55	92,103,774	11,138	13,830,377	5,440,129	21,424,052	46,636,892
1937 .....	55	96,875,377	14,054	19,926,498	6,934,008	33,805,631	74,580,669
1938 .....	55	100,272,104	13,100	18,256,627	5,529,833	24,786,761	59,606,150
1939 .....	54	115,660,251	13,827	20,410,517	6,069,661	29,629,376	75,934,481
1940 .....	54	133,844,814	17,774	29,207,036	9,582,791	54,045,632	114,598,409
1941 .....	60	168,750,344	23,755	45,037,095	13,888,384	78,824,366	164,566,392
<b>1942 -</b>							
Nova Scotia ....	6	44,725,425	6,956	11,425,074	2,737,333	19,036,526	31,009,632
Quebec ....	16	28,499,707	6,679	12,101,635	3,361,715	15,524,075	34,976,121
Ontario ....	27	128,620,497	18,147	35,015,184	12,109,847	74,010,065	159,077,961
Manitoba ....	4	2,544,377	935	1,405,388	390,768	1,324,599	4,321,099
Alberta ....	3	954,842	274	434,276	75,589	393,726	1,411,967
British Columbia	5	461,825	276	493,263	60,926	262,525	1,308,975
<b>CANADA ....</b>	<b>61</b>	<b>205,804,671</b>	<b>35,245</b>	<b>60,874,818</b>	<b>18,734,178</b>	<b>110,551,516</b>	<b>232,105,755</b>
Per cent change 1942 from 1941.	..	+21.9	+40.1	+55.2	+34.9	+40.0	+41.4

**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 5 - CAPITAL EMPLOYED, BY PROVINCES, 1941 and 1942 (On the last day of the year)

Province	Present value of land, buildings machinery, tools and other equipment	Value of Inventories				TOTAL CAPITAL EMPLOYED
		Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand	Cash, bills and accounts receivable, prepaid expenses, etc.)		
<b>1941</b>						
Nova Scotia ....	14,541,094	7,440,720	1,120,788	5,712,899	26,615,501	
Quebec ....	12,218,242	4,288,179	626,503	7,279,081	24,412,005	
Ontario ....	68,126,249	23,483,109	2,805,755	19,872,125	114,287,236	
Manitoba ....	788,341	763,395	36,242	758,027	2,346,005	
Alberta ....	615,805	242,076	28,865	202,853	1,089,597	
British Columbia)						
<b>CANADA ....</b>	<b>96,089,729</b>	<b>36,217,479</b>	<b>4,618,153</b>	<b>31,824,983</b>	<b>168,750,344</b>	
<b>1942</b>						
Nova Scotia ....	31,408,505	7,517,949	1,901,813	5,895,558	44,725,425	
Quebec ....	12,475,712	6,401,726	837,232	8,787,037	28,499,707	
Ontario ....	77,060,877	24,771,982	2,780,556	24,007,082	128,620,497	
Manitoba ....	974,853	917,488	38,019	614,017	2,544,377	
Alberta ....	706,290	224,742	49,386	436,247	1,416,665	
British Columbia)						
<b>CANADA ....</b>	<b>122,624,057</b>	<b>39,853,887</b>	<b>5,607,006</b>	<b>37,739,741</b>	<b>205,804,671</b>	

Table 4 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1941 and 1942

Province	Average Number of Employees				TOTAL EMPLOYEES	Salaries	Wages	TOTAL SALARIES and WAGES
	On Salaries		On Wages					
	Male	Female	Male	Female				
<u>1 9 4 1</u>								
Nova Scotia .....	71	11	3,122	53	3,257	184,523	5,520,019	5,504,542
Quebec .....	310	94	4,486	17	4,307	826,761	6,769,576	7,596,337
Ontario .....	797	348	15,331	70	14,596	2,959,036	27,553,212	30,512,248
Manitoba .....	33	7	620	1	721	144,771	896,812	1,041,583
Alberta and British Columbia .....	25	4	223	..	254	48,489	353,896	382,385
CANADA .....	1,236	464	21,894	141	23,735	4,163,580	40,873,515	45,037,095
<u>1 9 4 2</u>								
Nova Scotia .....	206	108	6,497	125	6,936	602,095	10,822,381	11,425,074
Quebec .....	333	123	6,172	51	6,679	990,689	11,110,544	12,101,633
Ontario .....	882	582	16,400	235	18,147	3,465,802	31,551,382	35,015,184
Manitoba .....	34	8	888	3	933	148,367	1,257,021	1,405,388
Alberta and British Columbia .....	30	5	513	2	550	78,771	848,768	927,539
CANADA .....	1,485	826	30,470	464	35,245	5,285,722	55,591,096	60,874,818

Table 5 - WAGE-EARNERS, BY MONTHS, 1941 and 1942 (On the last work-day of each month)

Month	1 9 4 1			1 9 4 2		
	Male	Female	TOTAL	Male	Female	TOTAL
January .....	18,643	116	18,759	28,445	237	28,682
February .....	19,056	115	19,171	28,962	245	29,205
March .....	19,959	117	20,076	29,654	270	29,924
April .....	20,597	115	20,710	30,119	247	30,566
May .....	20,773	113	20,886	30,834	210	31,044
June .....	21,535	119	21,654	31,136	298	31,434
July .....	22,888	134	23,022	31,445	453	31,898
August .....	23,539	146	23,485	32,085	613	32,698
September .....	23,893	178	24,071	31,212	627	31,839
October .....	23,584	167	23,751	30,122	669	30,791
November .....	23,967	190	24,157	30,767	845	31,612
December .....	24,537	203	24,540	30,820	833	31,655
AVERAGE .....	21,894	141	22,035	30,470	464	30,934

Table 6 - HOURS WORKED BY WAGE-EARNERS, 1941 and 1942 (In one week of month of highest employment; overtime included)

Hours worked per week	Number of Wage-Earners		Hours worked per week	Number of Wage-Earners	
	1941	1942		1941	1942
30 hours or less .....	590	1,304	55 hours .....	699	912
31-43 hours .....	1,784	4,054	56-64 hours .....	6,800	8,003
44 hours .....	618	1,878	65 hours or more .....	1,575	2,578
45-47 hours .....	812	1,299	Total .....	25,901	34,178
48 hours .....	9,768	9,221	Total wages paid in		
49-50 hours .....	1,119	1,651	selected week .... \$	768,087	1,081,796
51-54 hours .....	2,136	3,278			

Table 7 - FUEL AND ELECTRICITY USED, 1941 and 1942

Kind	Unit of measure	Quantity	1 9 4 1	1 9 4 2	Cost at works
			\$	\$	
Bituminous coal—Canadian .....	ton	272,621	1,262,718	291,507	1,917,262
Imported .....	ton	70,288	416,293	115,023	764,463
Anthracite coal .....	ton	15,180	111,758	50,629	241,795
Coke (for fuel only) .....	ton	79,844	204,661	47,655	157,215
Gasoline .....	Imp. gal.	135,482	28,000	166,951	38,765
Kerosene or coal oil .....	Imp. gal.	23,089	4,048	351,417	34,689
Fuel oil .....	Imp. gal.	66,995,445	4,184,303	74,394,890	5,385,097
Wood .....	cord	1,124	5,588	1,196	11,876
Gas—Manufactured (x) .....	M cu. ft.	52,018,807	2,558,576	64,790,543	2,909,108
Natural .....	M cu. ft.	171,675	40,771	409,852	74,950
Other fuel .....	...	...	20,721	...	24,920
Electricity purchased .....	K. W. H.	1,389,935,550	5,251,057	1,655,573,509	7,174,058
TOTAL .....	...	...	13,888,384	...	18,734,178
Electricity generated for own use	K. W. H.	102,621,091	...	112,953,771	...

(x) Includes blast-furnace gas and coke-oven gas which were used in iron and steel departments.

Table 8 - POWER EQUIPMENT, 1941 and 1942

Kind	Ordinarily in Use		In Reserve or Idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
<u>1 9 4 1</u>				
Steam engines and steam turbines .....	66	54,207	29	6,058
Diesel engines .....	1	100	1	115
Gasoline, gas and oil engines .....	11	18,760	4	1,620
Hydraulic turbines or water wheels .....	4	1,300	...	...
Total Primary .....	82	74,367	54	7,775
Electric motors operated by purchased power	4,710	168,701	152	3,905
TOTAL .....	4,792	243,068	186	11,678
Electric motors operated by power generated by above primary units .....	2,050	80,557	7	349
Stationary boilers .....	278	55,878	10	1,570
<u>1 9 4 2</u>				
Steam engines and steam turbines .....	79	59,515	26	5,150
Diesel engines .....	1	165	2	225
Gasoline, gas and oil engines .....	16	19,196	10	2,665
Hydraulic turbines or water wheels .....	4	1,300	...	...
Total Primary .....	100	80,176	58	8,040
Electric motors operated by purchased power (except motor-generator sets) .....	7,001	151,964	342	6,209
TOTAL .....	7,101	212,140	380	14,249
Electric motors operated by power generated by above primary units .....	2,454	99,813	11	391
Stationary boilers .....	127	55,791	20	2,282
Motor generator sets .....	150	68,646	12	615

## (a) PIG IRON

Table 9 - MATERIALS CHARGED TO IRON BLAST FURNACES, 1941 and 1942

Material	1941		1942	
	Quantity Net tons	Cost at furnace \$	Quantity Net tons	Cost at furnace \$
Iron ore--Imported (crude) .....	2,542,826	3,238,799	3,383,439	13,726,346
Canadian (beneficiated) .....	163,890	569,353	229,253	798,974
Canadian (crude) .....	2,373	6,662	...	...
Mill cinder, roll scale, flue dust, etc. ....	136,698	314,248	177,343	386,730
Scrap (net charge) .....	47,271	581,717	64,624	803,172
Limestone -				
From Canadian quarries .....	182,605	237,578	301,145	447,107
From foreign sources .....	485,360	551,773	559,650	799,302
Coke .....	1,362,530	7,203,703	1,795,875	13,402,828
Other materials .....	...	136,245	...	163,675
TOTAL .....	...	18,840,578	...	30,528,134

Table 10 - PRODUCTION OF PIG IRON AND SALE BY THE PRODUCERS, 1941 and 1942

Grade	Delivered in molten condition	Machine cast	Total tonnage made	Sales	
				Quantity Net tons	Income from sales \$
<u>1941</u>					
Basic .....	1,137,389	134,302	1,272,171	70,221	1,389,979
Foundry .....	...	115,791	115,791	119,930	2,508,086
Malleable .....	193	139,902	140,091	147,915	3,182,177
TOTAL .....	1,138,058	389,995	1,528,053	538,066	7,080,242
<u>1942</u>					
Basic .....	1,487,581	153,420	1,646,001	67,242	1,307,715
Foundry .....	...	159,724	159,724	157,391	3,439,405
Malleable .....	...	169,289	169,289	162,784	3,619,816
TOTAL .....	1,487,581	487,433	1,975,014	387,997	8,336,936

NOTE: Silvery pig iron has been included with ferro-alloys.

Table 11 - PRODUCTION OF PIG IRON, BY GRADES, 1932-1942

Year	Basic	Foundry	Malleable	T O T A L
1932 .....	117,665	28,276	15,485	161,426
1933 .....	212,159	25,013	17,423	254,595
1934 .....	347,906	57,034	48,654	453,594
1935 .....	524,433	69,769	77,658	671,860
1936 .....	594,640	95,248	69,731	759,619
1937 .....	808,316	118,059	80,343	1,006,718
1938 .....	624,487	90,818	74,772	790,078
1939 .....	734,227	80,314	51,877	846,418
1940 .....	1,091,594	120,875	96,640	1,309,099
1941 .....	1,272,171	115,791	140,091	1,528,053
1942 .....	1,646,001	159,724	169,289	1,975,014

Table 12 - PRODUCTION OF PIG IRON, BY PROVINCES, 1932-1942

Year	Nova Scotia	Ontario	T O T A L
1932	34,381	127,045	161,426
1933	132,736	121,859	254,595
1934	149,363	304,231	453,594
1935	232,962	438,898	671,860
1936	288,006	471,613	759,619
1937	358,756	647,961	1,006,718
1938	270,879	519,199	790,078
1939	290,232	556,186	846,418
1940	441,741	867,358	1,309,099
1941	422,196	1,106,757	1,528,053
1942	467,951	1,507,063	1,975,014

Table 13 - PRODUCTION OF PIG IRON, BY MONTHS, 1938-1942

Month	1 9 3 8	1 9 3 9	1 9 4 0	1 9 4 1	1 9 4 2
January	83,845	64,579	117,267	115,455	163,156
February	68,821	46,293	97,476	102,105	143,973
March	74,175	45,610	102,785	114,282	167,116
April	73,521	51,804	94,315	115,725	160,408
May	80,194	64,676	104,444	127,259	171,386
June	72,100	59,142	99,295	125,790	167,961
July	57,387	66,737	107,435	114,246	172,153
August	55,414	73,830	99,551	118,490	162,578
September	55,969	73,465	117,622	125,168	155,900
October	56,736	96,048	122,511	153,568	175,424
November	51,762	98,412	122,725	149,783	170,578
December	60,154	105,822	123,673	166,182	164,381
TOTAL	790,078	846,418	1,309,099	1,528,053	1,975,014

Table 14 - SALES OF PIG IRON BY THE PRODUCERS, 1932-1942

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
1932	32,093	1,068,532	1938	145,113	2,961,639
1933	85,038	1,402,903	1939	192,614	3,757,573
1934	109,133	1,856,284	1940	277,311	5,868,769
1935	147,559	2,650,990	1941	338,066	7,080,242
1936	188,220	3,327,716	1942	387,997	8,366,936
1937	252,802	5,146,017			

Table 15 - IRON ORE, FUEL AND FLUX CHARGED TO IRON BLAST FURNACES, 1932-1942

Year	Iron ore	Mill cinder, scale, etc.	Scrap	Coke	Limestone
		Net tons			
1932	283,737	18,253	4,642	155,932	77,086
1933	448,525	20,151	12,184	247,974	132,235
1934	804,425	41,488	13,956	415,462	209,104
1935	1,163,942	61,901	34,400	577,355	278,469
1936	1,365,082	54,982	22,832	672,210	345,622
1937	1,796,562	134,299	18,443	890,384	470,549
1938	1,382,565	74,608	21,418	697,615	345,182
1939	1,476,106	119,654	21,204	775,869	357,377
1940	2,342,717	130,171	28,691	1,223,173	579,451
1941	2,709,089	138,698	47,271	1,362,530	648,565
1942	3,612,692	177,343	64,624	1,795,875	860,793

Table 16 - IMPORTS INTO CANADA AND EXPORTS OF PIG IRON, 1932-1942

Year	Imports		Exports	
	Net tons		Net tons	
1932 .....	5,323	78,845	2,272	58,816
1933 .....	2,754	43,298	13,331	214,195
1934 .....	7,189	108,500	10,327	176,095
1935 .....	9,990	143,726	15,410	287,396
1936 .....	4,435	74,589	15,572	304,682
1937 .....	7,135	144,354	43,138	851,701
1938 .....	2,377	62,494	11,811	224,261
1939 .....	657	15,176	12,015	221,787
1940 .....	29,703	672,489	4,113	101,126
1941 .....	4,729	131,412	380	10,090
1942 .....	1,536	42,718	427	12,175

Table 17 - STOCKS OF PIG IRON HELD BY PRODUCERS IN CANADA, 1932-1942

Year	Net tons	Year	Net tons
1932 .....	127,388	1938 .....	143,258
1933 .....	122,648	1939 .....	69,174
1934 .....	73,401	1940 .....	76,560
1935 .....	97,827	1941 .....	27,049
1936 .....	86,048	1942 .....	87,955
1937 .....	125,761		

Table 18 - APPARENT CONSUMPTION OF PIG IRON IN CANADA, 1932-1942

Year	Production	Add imports	Deduct exports	Add or deduct changes in producers' stocks (xx)	Apparent consumption (x)
1932 .....	161,426	5,323	2,272	+ 16,221	180,698
1933 .....	254,595	2,754	13,331	+ 4,740	248,758
1934 .....	453,594	7,189	10,327	+ 49,134	499,590
1935 .....	671,860	9,990	15,410	- 24,314	642,126
1936 .....	759,619	4,435	15,572	+ 11,779	760,261
1937 .....	1,006,718	7,135	43,138	- 39,715	931,002
1938 .....	790,078	2,377	11,811	- 17,497	763,147
1939 .....	846,418	657	12,015	+ 74,083	909,145
1940 .....	1,309,099	29,703	4,113	- 7,385	1,327,304
1941 .....	1,528,053	4,729	380	+ 49,511	1,581,913
1942 .....	1,975,014	1,536	427	- 60,906	1,915,217

(x) No allowance made for changes in consumers' stocks of which there is no record.

(xx) In this column the + indicates a decline in stocks or that this tonnage was released for consumption; the - sign indicates an increase in stocks or that this amount was withheld from consumption.

Table 19 - CONSUMPTION OF PIG IRON IN CANADA, BY INDUSTRIES AND BY PROVINCES, 1939-1942 (as reported by consumers)

	1939	1940	1941	1942
	(Net tons)			
<b>(a) By Industries</b>				
Steel ingots and castings .....	753,096	1,085,190	1,340,441	1,615,596
Iron castings .....	60,052	83,821	157,884	176,199
Boilers, tanks and platemwork .....	11,445	15,330	18,459	18,867
Agricultural implements .....	9,936	17,836	26,772	21,884
Machinery .....	15,171	22,912	24,927	23,449
Automobiles .....		(not available)		6,545
Automobile parts .....	7,014	12,096	15,640	16,014
Railway rolling stock .....	22,600	32,144	19,228	25,517
Brass and copper products .....	1,941	2,543	3,056	2,247
Shipbuilding .....	101	274	206	743
Hardware and tools .....	3,585	3,219	2,358	2,548
Miscellaneous iron and steel .....	552	1,152	1,005	203
Heating and cooking apparatus .....	18,273	22,593	18,725	18,846
Electrical apparatus and supplies ...	1,662	2,153	2,865	2,148
<b>TOTAL .....</b>	<b>883,428</b>	<b>1,299,063</b>	<b>1,631,566</b>	<b>1,930,642</b>
<b>(b) By Provinces</b>				
Prince Edward Island .....	34	79	35	40
Nova Scotia .....	300,431	435,854	430,028	441,813
New Brunswick .....	2,310	3,177	3,053	3,211
Quebec .....	28,766	39,538	62,461	67,255
Ontario .....	548,125	815,324	1,123,703	1,411,531
Manitoba .....	2,053	3,840	6,264	5,270
Saskatchewan .....	...	...	2	43
Alberta .....	105	116	165	177
British Columbia .....	1,064	1,135	855	1,302
<b>CANADA .....</b>	<b>883,428</b>	<b>1,299,063</b>	<b>1,631,566</b>	<b>1,930,642</b>

Table 20 - BLAST FURNACES IN CANADA, 1940-1942

Name of Company	Location of plants	Number of stacks	Total daily capacity (24 hours)	Number of days in blast		
				1940	1941	1942
Dominion Steel and Coal Corporation, Ltd.	Sidney, N.S.	1	616	357	365	365
		1	392	354	365	365
		1	536	558	298	365
<b>TOTAL .....</b>		<b>3</b>	<b>1,344</b>	...	...	...
Canadian Furnace Company, Limited	Port Colborne, Ont.	1	466	199x	279x	304 <sup>1/2</sup>
		1	147	...	...	289
<b>TOTAL .....</b>		<b>2</b>	<b>613</b>	...	...	...
The Steel Company of Canada, Limited	Hamilton, Ont.	1	564	366	365	365
		1	728	330	365	365
		1	980	...	110	365
<b>TOTAL .....</b>		<b>3</b>	<b>2,072</b>	...	...	...
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.	1	336	181	365	360
		1	536	...	...	184
		1	616	316	262	349
		1	504	366	365	361
<b>TOTAL .....</b>		<b>4</b>	<b>1,792</b>	...	...	...
<b>TOTAL FOR CANADA .....</b>		<b>12</b>	<b>5,821</b>	...	...	...

x For making pig iron; ferro-alloys also made in this furnace.

## (b) FERRO-ALLOYS

Table 21 - PRODUCTION OF FERRO-ALLOYS, 1932-1942

Year	Net tons	Year	Net tons
1932 .....	18,100	1938 .....	62,637
1933 .....	33,749	1939 .....	85,540
1934 .....	35,751	1940 .....	149,394
1935 .....	63,410	1941 .....	204,354
1936 .....	85,438	1942 .....	209,017
1937 .....	91,921		

Table 22 - PRODUCERS OF FERRO-ALLOYS IN CANADA, 1942

Name of Company	Plant locations	Products made
Abrasive Company of Canada, Limited	Hamilton, Ont.	Ferrosilicon (by-product)
Canadian Carborundum Company, Limited	Niagara Falls, Ont.	Ferrosilicon (by-product)
Canadian Furnace, Limited	Port Colborne, Ont.	Spiegeleisen and silvery ferrosilicon
Chromium Mining & Smelting Corp., Limited	Sault Ste. Marie, Ont.	Ferrosilicon, sil-x, chrom-x
Electro Metallurgical Company of Canada, Limited	Welland, Ont.	Ferrosilicon, ferrochrome, ferromanganese, silicomanganese, ferromanganese silicon, spiegeleisen, silicospiegeleisen and calcium manganese silicon
Electric Reduction Company of Canada, Limited	Buckingham, Que.	Ferrophosphorus
Exolon Company	Thorold, Ont.	Ferrosilicon (by-product)
Lionite Abrasives, Limited	Stamford, Ont.	Ferrosilicon (by-product)
Norton Company	Chippawa, Ont.	Ferrosilicon (by-product)
St. Lawrence Alloys and Metals, Limited	Beauharnois, Que.	Ferrosilicon, calcium silicon, silicon metal.

## (c) STEEL INGOTS AND DIRECT STEEL CASTINGS

Table 23 - MATERIALS USED IN STEEL FURNACES, 1941 and 1942

Material	1 9 4 1		1 9 4 2	
	Quantity	Cost of purchased materials	Quantity	Cost of purchased materials
		Net tons		\$
Pig iron--Own make .....	1,261,774	...	1,525,853	...
Purchased .....	73,667	1,843,144	89,543	2,939,095
Scrap iron or steel--Own make .....	698,761	...	864,537	...
Purchased .....	900,363	18,708,469	962,374	21,377,022
Spiegeleisen .....	5,316	365,656	2,911	153,054
Silicospiegeleisen .....	9	2,120	439	51,827
Ferromanganese .....	21,250	1,811,031	19,190	2,494,783
Silicomanganese .....	4,518	445,197	8,065	318,774
Ferrosilicon .....	14,836	616,954	12,150	841,900
Ferrochrome, High carbon .....	1,692	210,621	3,666	724,819
Low carbon .....	1,747	473,979	1,965	723,270
Ferromolybdenum .....	55	78,504	150	225,233
Ferrophosphorus .....	745	63,309	290	25,326
Ferroselenium .....	2	3,063	5	10,323
Ferrotitanium .....	181	52,123	439	66,555
Ferrotungsten .....	482	1,005,314	646	1,440,141
Ferrovanadium .....	182	438,639	203	524,007
Ferrozirconium .....	40	1,647	51	7,337
Calcium silicon .....	380	110,505	411	135,680
Calcium manganese silicon .....	114	40,312	289	93,101

Table 23 - MATERIALS USED IN STEEL FURNACES, 1941 and 1942 (Concluded)

Material	1941			1942		
	Quantity	Cost of purchased materials		Quantity	Cost of purchased materials	
	Net tons	\$	Net tons	\$		
Other ferro-alloys .....	80	162,127	134	238,301		
Aluminium ingot and shot .....	638	261,350	807	285,025		
Copper ingots .....	108	28,855	39	10,190		
Nickel .....	2,348	1,225,715	3,392	2,025,604		
Other metals .....	...	83,023	...	132,736		
Ore, iron, crude .....	148,807	1,792,029	98,986	616,617		
Ore, iron, calcined, roasted or treated .....	5,778	21,833	98,156	1,757,431		
Ore, manganese .....	64	3,316	32	1,600		
Ore, chrome .....	624	30,619	1,232	58,095		
Bentonite .....	1,939	62,105	3,382	101,211		
Coal, anthracite .....	587	5,946	755	8,055		
bituminous .....	574	4,733	219	1,916		
Coke—Own make .....	...	...	706	...		
Purchased .....	5,053	71,074	6,113	74,555		
Charcoal .....	53	2,343	224	10,333		
Dolomite, crude .....	71,087	159,037	79,091	225,393		
calcined .....	21,608	160,602	22,550	179,427		
Fluorspar .....	17,054	366,701	20,133	562,480		
Lime—Own make .....	...	...	36,226	...		
Purchased .....	40,799	370,545	23,075	315,470		
Limestone—Canadian .....	67,837	108,124	120,573	239,838		
Imported .....	134,772	158,218	123,035	128,605		
Magnesite .....	18,127	682,742	20,665	786,321		
Electrodes .....	...	489,593	...	989,222		
Silica sand .....	67,099	469,874	99,384	712,516		
Other foundry sand .....	...	114,026	35,340	105,042		
Firebrick, fireclay and other refractories .....	...	1,862,876	...	2,469,239		
Calcium molybdate and molybdenum oxide briquettes ..	...	525,671	1,145	1,167,579		
All other materials .....	...	1,951,951	...	3,570,856		
TOTAL VALUE OF METALS, ORES AND OTHER MATERIALS USED	...	37,444,624	...	48,611,494		

Table 24 - PRODUCTION OF STEEL INCOTS AND STEEL CASTINGS AND SALES BY THE PRODUCERS, 1941 and 1942

	1941			1942		
	Total tonnage of steel made	Sales		Total tonnage of steel made	Sales	
	(all kinds, including alloys)	Quantity	Income from sales	(all kinds, including alloys)	Quantity	Income from sales
	Net tons	Net tons	\$	Net tons	Net tons	\$
<u>STEEL INGOTS</u> -						
Basic open hearth .....	2,394,098	123,311	4,202,852	2,623,853	70,412	2,323,367
Electric .....	199,414	24,816	2,611,947	335,053	70,087	6,264,711
Total steel ingots .....	2,593,512	148,127	6,814,799	2,958,906	140,499	8,594,679
<u>STEEL CASTINGS</u> -						
Basic open hearth .....	29,401	26,290	4,311,639	26,627	24,547	4,949,407
Converter .....	3,371	112,081	740,461	6,515	6,515	1,394,874
Electric .....	85,867	47,357	10,642,049	117,803	114,446	23,075,495
Total steel castings .....	118,639	185,728	15,694,149	150,945	145,508	29,419,776
TOTAL STEEL INGOTS AND CASTINGS	2,712,151	333,855	22,508,948	3,109,851	286,007	38,014,454
Any other products .....	1,578	1,594	82,310	413	443	23,249
TOTAL ALL PRODUCTS .....	2,713,729	335,449	22,591,258	3,110,264	286,450	38,037,703
Alloy steel included in above:						
Ingots .....	207,631	8,842	1,340,747	374,457	24,288	2,375,711
Castings .....	11,219	10,964	3,836,498	25,879	26,129	2,868,008
TOTAL .....	218,850	19,806	5,177,245	400,336	50,417	11,243,719

Primary Iron and Steel

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Table 25 - PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY GRADES, 1932-1942 (Net tons)

Year	Steel Ingots		Steel Castings			Total steel ingots and castings
	Open hearth	Electric	Open hearth	Con- verter	Electric	
1932 .....	345,744	22,030	2,930	947	8,416	380,067
1933 .....	424,106	17,240	5,619	322	11,889	459,176
1934 .....	798,814	26,758	7,232	568	15,344	848,716
1935 .....	977,137	41,151	10,213	722	25,286	1,054,509
1936 .....	1,162,238	49,096	11,433	644	26,261	1,249,672
1937 .....	1,427,991	68,584	26,686	1,158	46,828	1,571,227
1938 .....	1,172,867	62,598	17,388	850	40,109	1,293,812
1939 .....	1,410,339	79,718	17,473	934	42,590	1,551,054
1940 .....	2,041,947	135,633	21,085	2,268	52,786	2,253,769
1941 .....	2,394,098	199,414	29,401	3,371	85,867	2,712,151
1942 .....	2,623,853	335,053	26,627	6,515	117,803	3,109,851

Table 26 - PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY MONTHS, 1938-1942 (Net tons)

Month	1938	1939	1940	1941	1942
January .....	125,866	87,478	186,476	208,659	257,516
February .....	110,858	86,440	157,184	193,422	241,421
March .....	132,917	107,101	176,205	218,939	264,403
April .....	130,418	111,750	171,865	224,762	263,498
May .....	128,642	136,010	195,347	230,843	270,747
June .....	122,528	120,857	186,159	209,623	252,663
July .....	93,998	124,597	189,926	220,994	256,560
August .....	92,715	136,585	192,875	227,075	248,868
September .....	82,383	139,263	184,257	224,626	244,922
October .....	85,407	167,915	207,302	249,595	271,127
November .....	100,934	164,826	197,246	247,951	270,812
December .....	87,146	168,232	208,927	255,682	267,324
TOTAL .....	1,293,812	1,551,054	2,253,769	2,712,151	3,109,851

Table 27 - ANNUAL PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY PROVINCES, 1932-1942 (Net tons)

Year	Nova Scotia	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
1932 .....	76,865	21,291	272,213	7,181	2,106	411	380,067
1933 .....	139,029	21,187	288,529	9,530	231	670	459,176
1934 .....	292,124	31,073	512,398	11,101	434	1,586	848,716
1935 .....	334,621	39,285	660,305	18,204	414	1,680	1,054,509
1936 .....	424,500	44,567	756,993	21,503	305	1,804	1,249,672
1937 .....	478,556	68,113	994,455	27,480	402	2,421	1,571,227
1938 .....	379,096	54,591	836,585	20,256	419	2,865	1,293,812
1939 .....	451,314	56,702	1,014,003	25,043	445	3,547	1,551,054
1940 .....	623,021	73,631	1,512,495	39,789	381	4,452	2,253,769
1941 .....	633,203	138,721	1,872,345	54,489	7,400	5,993	2,712,151
1942 .....	637,993	180,637	2,207,208	55,067	22,264	6,682	3,109,851

Table 28 - SALES OF STEEL INGOTS AND STEEL CASTINGS BY THE PRODUCERS, 1932-1942

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
	Net tons	\$		Net tons	\$
1932 .....	12,928	1,913,157	1938 .....	48,256	7,780,163
1933 .....	16,726	2,365,171	1939 .....	63,354	9,169,097
1934 .....	22,556	3,228,451	1940 .....	143,927	12,616,483
1935 .....	39,639	4,196,922	1941 .....	533,855	22,508,948
1936 .....	31,394	4,788,296	1942 .....	286,007	38,014,454
1937 .....	72,696	10,616,508			

Primary Iron and Steel

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Table 29 - METAL, ORE AND FLUX CHARGED TO STEEL FURNACES, 1932-1942 (Net tons)

Year	Pig iron	Ferro-manganese and spiegelalisen	Other ferro- alloys	Scrap iron and steel	Ore	Lime- stone	Fluorspar and dolomite
1932 .....	119,785	4,343	2,646	301,506	9,800	27,706	8,978
1933 .....	175,797	4,656	3,564	345,525	20,329	34,532	9,825
1934 .....	394,627	7,583	4,526	558,360	39,025	77,815	19,503
1935 .....	499,824	12,021	4,331	718,658	56,582	91,412	24,253
1936 .....	584,912	15,062	6,525	777,268	75,015	109,200	51,504
1937 .....	747,747	18,003	9,281	1,003,791	97,625	125,922	62,105
1938 .....	634,920	15,935	5,665	747,340	83,523	106,881	47,668
1939 .....	735,096	18,761	8,885	927,018	91,650	121,007	65,422
1940 .....	1,085,190	21,585	14,686	1,327,510	145,658	165,975	96,540
1941 .....	1,340,441	26,566	25,063	1,599,124	155,273	202,609	109,749
1942 .....	1,615,396	22,101	28,632	1,826,911	198,890	243,608	121,774

Table 30 - SUMMARY OF STEEL FURNACE CAPACITY IN CANADA, DECEMBER 31, 1942

Type of furnace	Number of furnaces at end of year	Total rated annual capacity
Basic open hearth .....	50	2,777,500
Electric .....	70	672,700
Converter .....	3	8,200
TOTAL .....	123	3,458,200
Ingots — Basic open hearth .....	...	2,765,000
Electric .....	...	431,000
Total Ingots .....	...	3,196,000
Castings—Basic open hearth .....	...	12,500
Electric .....	...	241,700
Converter .....	...	8,200
Total Castings .....	...	262,200
TOTAL INGOTS AND CASTINGS .....	...	3,458,200

Table 31 - STEEL FURNACES IN CANADA, DECEMBER 31, 1942

Name of company and location of furnaces	Type	F U R N A C E S		
		Number of units	Size of each (in tons per heat)	Total rated annual capacity(x)
		Net tons	Net tons	Net tons
Maritime Steel Foundries Company, Limited, New Glasgow, N.S.	Electric (Heroult)	1	2 $\frac{1}{4}$	3,560
Dominion Steel and Coal Corporation, Limited, Sydney, N.S.	Basic open hearth	10	56	320,000
	Basic open hearth	5	112	402,400
	Electric	1	11	28,000
Canadian Brake Shoe & Foundry Company, Limited, Sherbrooke, P.Q.	Electric (Heroult)	2	2	2,400
Canadian Car & Foundry Company, Limited, Montreal, P.Q.	Basic open hearth	3	28	51,576
	Electric (Volta)	1	5 $\frac{1}{2}$	7,728
	Electric ('Lectromelt')	1	22 $\frac{1}{2}$	40,320
Canadian Tube & Steel Products, Limited, Montreal, P.Q.	Electric (Volta)	3	5	44,600

Table 31 - STEEL FURNACES IN CANADA, DECEMBER 31, 1942 (Continued)

Name of company and location of furnaces	Type	FURNACES		
		Number of units	Size of each (in tons per heat)	Total rated annual capacity(x)
Electric Steels, Limited, Cap de la Madeleine, P.Q.	Electric	1	10	55,000
	Electric	2	6	24,000
Hull Iron and Steel Foundries, Limited, Hull, P.Q.	Electric	1	1	2,680
	Electric (Heroult)	1	7	8,500
	'Lectromelt	1	2	5,300
Joliette Steel, Limited Joliette, P.Q.	Electric ('Lectromelt)	1	1½	4,500
	Electric (Greaves-Etchell)	1	1	2,400
La Cie F. X. Drolet, Quebec, P.Q.	Converter (Baillet)	1	1	300
Lynn MacLeod Engineering Supplies, Limited, Thetford Mines, P.Q.	Electric (Heroult)	1	1½	3,150
Manganese Steel Castings, Limited, Sherbrooke, P.Q.	Electric (Heroult)	1	2	1,848
Shawinigan Chemicals, Limited, Shawinigan Falls, P.Q.	Electric (Volta)	1	1	936
	Electric (Volta)	1	2	1,872
Sorel Industries, Limited, Sorel, P.Q.	Electric	1	20	28,000
	Electric	1	8	11,200
	Electric	1	4	5,600
Sorel Steel Foundries, Limited Sorel, P.Q.	Electric ('Lectromelt)	1	4	8,400
Algoma Steel Corporation, Limited, Sault Ste. Marie, Ont.	Basic open hearth	8	62	384,000
	Basic open hearth	4	112	336,000
Atlas Steels, Limited Welland, Ont.	Electric	4	25	120,000
	Electric (Heroult)	1	10	12,000
	Electric (Heroult)	1	6	7,200
Burlington Steel Company, Limited, Hamilton, Ont.	Electric ('Lectromelt)	1	6	24,000
Canada Electric Castings, Limited, Orillia, Ont.	Electric (Heroult)	2	2	6,000
Dominion Foundries & Steel, Limited, Hamilton, Ont.	Basic open hearth	1	45	44,550
	Basic open hearth	1	50	49,450
	Basic open hearth	2	55	108,900
	Electric	1	2½	9,000
	Electric	2	10	26,400
	Electric	1	25	24,750
	Electric	1	45	44,550
Fahralloy Canada, Limited, Orillia, Ont.	Electric (Volta)	1	1½	1,500
	Electric (Volta)	1	1	360
Federal Foundries and Steel Company, London, Ont.	Electric	2	6	15,140

Table 31 - STEEL FURNACES IN CANADA, DECEMBER 31, 1942 (Concluded)

Name of company and location of furnaces	Type	F U R N A C E S		
		Number of units	Size of each (in tons per heat)	Total rated annual capacity(x)
		Net tons	Net tons	
Ford Motor Company of Canada, Limited, Windsor, Ont.	Electric (Swindell)	1	5	10,500
	Electric	9	4	52,375
	Electric	1	2	750
William Kennedy & Sons, Limited, Owen Sound, Ont.	'Lectromelt	1	3-4	9,000
	Converter (Tropenas)	1	2	4,800
Steel Company of Canada, Limited, Hamilton, Ont.	Basic open hearth	1	45	38,500
	Basic open hearth	4	100	292,000
	Basic open hearth	3	55	139,500
	Basic open hearth	5	180	550,000
Welland Electric Steel Foundry, Welland, Ont.	Electric (Heroult)	1	1½	
	Electric (Heroult)	1	2½	5,400
	Electric (Heroult)	1	4	
Manitoba Rolling Mill Company, Limited, Selkirk, Man.	Electric	1	3	12,000
	Basic open hearth	2	20	40,000
Manitoba Steel Foundries, Limited, Selkirk, Man.	Electric ('Lectromelt)	1	5	4,000
Vulcan Iron Works, Limited, Winnipeg, Man.	Electric (Moore 'Lectromelt)	1	3	3,000
Dominion Bridge Company, Limited Calgary, Alta.	Basic open hearth	1	20	20,400
Riverside Iron Works, Limited, Calgary, Alta.	Electric (Moore 'Lectromelt)	1	2	900
Britannia Mining & Smelting Company, Britannia Beach, B.C.	Electric (Greene)	1	3	4,200
Consolidated Mining & Smelting Company, Ltd., Trail, B.C.	Electric (Greene)	1	5	4,500
Reliance Foundry Company, Limited, Vancouver, B.C.	Electric	1	1½	2,600
	Electric	1	2	1,000
	Electric	1	1	430
Vancouver Engineering Works, Limited, Vancouver, B.C.	Converter	1	2	3,100
	Electric (Greaves-Etchall)	1	2	2,500
	Electric (Arnold)	1	1	1,200
Westland Steel Foundry Ltd., Vancouver, B.C.	Electric	1	1½	1,380
TOTAL .....		123	...	3,458,200

(x) After allowing for necessary shut-downs for repairs.

Table 32 - MATERIALS USED FOR ALL PURPOSES IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1941 and 1942

Material	Companies' own make	PURCHASED	
		Quantity Net tons	Cost at works \$
<u>1 9 4 1</u>			
Steel ingots .....	2,528,762	62,751	2,276,772
Steel billets .....	6,614	99,551	5,785,175
Steel bars .....	688	45,091	2,835,484
Rails, old .....	1,960	46,969	1,043,178
Axles, old .....	...	1,939	42,387
Scrap iron and steel, other .....	2,755	1,164	22,207
Tin .....	...	1,428	1,666,659
Zinc spelter .....	...	4,618	475,690
Ammonium chloride .....	...	270	31,492
Sulphuric acid, 66° Be .....	...	8,076	128,594
All other materials .....	...	...	476,088
<b>TOTAL .....</b>	<b>...</b>	<b>...</b>	<b>12,783,726</b>
<u>1 9 4 2</u>			
Steel ingots .....	2,894,267	55,853	1,988,104
Steel billets .....	39,634	195,744	7,795,518
Steel bars .....	...	50,315	3,381,532
Rails, old .....	925	39,933	785,813
Axles, old .....	...	4,658	95,528
Scrap iron and steel, other .....	3,558	901	17,550
Tin .....	...	869	1,042,159
Zinc spelter .....	...	2,351	242,499
Ammonium chloride .....	...	294,607	17,401
Sulphuric acid, 66° Be .....	...	15,065,781	111,194
All other materials and supplies .....	...	...	965,732
<b>TOTAL .....</b>	<b>...</b>	<b>...</b>	<b>16,443,030</b>

Table 33 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1941 and 1942

Product	Total tonnage made	Factory Sales	
		Tonnage sold in Canada or for export	Income from tonnage sold
	Net tons	Net tons	\$
<u>1 9 4 1</u>			
<u>Semi-finished rolled forms of iron and steel -</u>			
Blooms, billets and slabs, except those for forging, but including sheet and tinplate bars .....	1,604,520	174,463	6,882,562
Muck and scrap bars .....	56	...	...
Blooms, billets and axle blanks, for forging purposes only, excluding all those intended for further rolling.	111,712	102,317	5,796,472
<b>Total semi-finished rolled forms .....</b>	<b>1,716,288</b>	<b>276,780</b>	<b>12,679,034</b>
<u>Rails and rail fastenings -</u>			
Rails .....	157,298	131,128	5,575,492
Splice bars or fish plates .....	12,873	12,566	847,039
Tie plates .....	28,747	28,765	1,492,488
<b>Total rails and rail fastenings .....</b>	<b>178,918</b>	<b>172,459</b>	<b>7,915,019</b>
<u>Wire rods of iron or steel, including chain rods .....</u>	<b>295,476</b>	<b>121,422</b>	<b>5,214,493</b>
<u>Structural steel shapes (including angles over 3 inches by 3 inches; beams, channels, tees, sheet piling, etc., but excluding plates and bars .....</u>	189,783	193,251	9,662,449

Table 33 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1941 and 1942 (Continued)

Product	Total tonnage made	Factory Sales	
	Net tons	Tonnage sold in Canada or for export	Income from tonnage sold
<b>1941 (Con.)</b>			
<u>Bars of iron or steel -</u>			
Bars, hot rolled, of all grades in rounds, squares, flats and angles up to and including 3 inches by 3 inches but omitting all bars reported under the items immediately below .....	514,700	285,332	16,538,902
Bars, rolled from alloy steel .....	86,533	82,467	9,564,277
Bars for concrete reinforcing, including twisted and other deformed bars, except bars rolled from old rails or axles .....	24,951	24,898	1,287,352
Bars, rolled from old rails or axles .....	28,557	21,077	988,363
Long anglesplice bars, tie plate bars and all other long rail joint bars .....	55,340	...	...
All other bars, including spike rods, bolt stock, horseshoe bars, toe calk steel and all other finished rolled forms not elsewhere specified .....	56,364	30,891	1,408,953
Total hot rolled bars .....	546,445	444,665	29,787,847
Cold rolled and cold drawn bars and shapes .....	27,908	28,166	3,536,375
<u>Plates, all kinds (iron or steel flats over 14 inches in width, and thicker than No. 7 U.S. standard gauge) -</u>	194,647	191,620	13,161,884
<u>Sheets, hoops, bands and strips, including plain sheets, hot rolled strips, and galvanized sheets (x) and tinplate (x) -</u>	425,532	278,049	23,121,654
Total plates, sheets, hoops, bands and strips ...	620,179	469,669	36,283,538
<u>Other rolled forms</u> including mine arches, sheet piling, etc.	12,856	12,592	771,032
<u>Miscellaneous products</u> (not rolled) made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc. ....	68,511	66,583	8,268,934
TOTAL VALUE OF PRODUCTION .....	...	...	114,056,762

(x) Includes the tonnages of galvanized sheets and tinplate made in rolling mills only.

**1942**Semi-finished rolled forms of iron and steel -

Blooms, billets and slabs, except those for forging, but including sheet and tinplate bars .....	1,608,401	162,171	5,650,983
Muck and scrap bars .....	114	...	...
Blooms, billets and axle blanks, for forging purposes only, excluding all those intended for further rolling..	222,109	178,897	10,692,911
Total semi-finished rolled forms .....	1,830,624	341,068	16,343,824

Rails and rail fastenings -

Rails .....	183,430	184,016	8,216,123
Splice bars or fish plates .....	14,510	14,963	1,018,651
Tie plates, rail joints, frogs, etc. ....	25,187	25,685	1,393,375
Total rails and rail fastenings .....	223,127	224,664	10,628,149

Wire rods of iron or steel, including chain rods .....

256,457	105,475	4,347,189
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Table 33 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1941 and 1942 (Concluded)

Product	Total tonnage made Net tons	Factory Sales	
		Tonnage sold in Canada or for export Net tons	Income from tonnage sold \$
<u>1942 (Con.)</u>			
<u>Structural steel shapes</u> (including angles of all sizes, beams, channels, tees, etc., but excluding plates and bars) .....	184,701	191,519	10,540,658
<u>Bars of iron or steel</u> -			
Bars, hot rolled, of all grades and of all sections, but omitting all bars reported under the items immediately below .....	512,939	435,963	55,084,070
Bars for concrete reinforcing, including twisted and other deformed bars, except bars rolled from old rails or axles .....	59,911	58,349	2,558,780
Long angle splice bars, tie plate bars and all other long rail joint bars .....	59,166	...	...
Total hot rolled bars .....	592,016	474,512	37,442,850
<u>Cold rolled and cold drawn bars</u> .....	32,153	32,053	4,541,773
<u>Plates</u> , all kinds (iron or steel flats over 14 inches in width, and thicker than No. 7 U.S. standard gauge) .....	591,887	585,514	50,095,754
<u>Sheets, hoops, bands and strips</u> , including plain sheets, hot rolled strips, cold rolled strips, galvanized sheets (x), tinplate (x), terne plate(x) and bonderized plate (x) .....	415,505	245,908	18,398,051
Total plates, sheets, hoops, bands and strips...	807,390	651,222	48,495,805
<u>Other rolled forms</u> including mine arches, sheet piling, etc. .....	13,356	13,507	852,669
<u>Miscellaneous products</u> (not rolled) made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc. .....	115,919	110,834	23,052,357
TOTAL VALUE OF PRODUCTION .....	...	...	157,975,074

(x) Includes the tonnages made in rolling mills only.

Table 34 - ALLOY STEEL PRODUCTS MADE AND SOLD BY ROLLING MILLS, 1942

	Tonnage Made (net tons)	Tonnage Sold	
Rails .....	91		91
Bars .....	108,029		104,250
Other products, including plates, billets for forging, shell steel, gun forgings, sheet piling and wire rods .....	80,136		78,432
TOTAL ALLOY STEEL .....	188,256		182,775

Table 35 - PRODUCTS ROLLED FROM OLD RAILS, AXLES, ETC., 1942

	Tonnage Made (net tons)	Tonnage Sold	
Rails .....	850		850
Bars .....	29,721		24,848
Other products .....	9,442		9,419
TOTAL FROM OLD RAILS, etc. .....	40,013		35,117

Table 36 - PIG IRON, STEEL INGOTS AND CASTINGS, AND SEMI-FINISHED ROLLED FORMS, SHIPPED FOR EXPORT BY PRODUCERS, 1942

	Net tons
Pig iron .....	...
Steel ingots .....	30,745
Steel castings .....	6,889
Semi-finished rolled forms .....	4,078
TOTAL .....	41,712

Table 37 - NET PRODUCTION IN CANADA OF HOT ROLLED IRON AND STEEL PRODUCTS, 1940-1942 (Net tons)

	1940	1941	1942
Hoops, billets and slabs .....	148,405	191,667	187,359
Rails .....	199,998	137,298	183,430
Rail fastenings .....	38,412	41,620	39,697
Wire rods .....	300,785	293,475	256,457
Structural shapes .....	183,729	189,783	184,701
Bars .....	409,476	511,105	552,850
Plates, sheets, hoop bands and strips .....	317,621	478,050	648,495
Other hot rolled forms .....	9,088	11,573	13,356
TOTAL .....	1,607,513	1,254,571	2,066,345

Table 38 - PRODUCTION AND FACTORY SALES OF STEEL RAILS, 1932-1942

Year	Tonnage made	Factory Sales	
		Tonnage sold	Income from sales
1932 .....	Net tons	Net tons	\$
1932 .....	50,501	51,766	2,125,150
1935 .....	75,975	77,538	2,899,750
1934 .....	108,292	98,586	3,660,274
1935 .....	122,302	122,349	4,484,594
1936 .....	130,135	131,212	4,885,388
1937 .....	86,932	86,514	3,422,501
1938 .....	126,479	121,612	5,002,610
1939 .....	125,025	127,094	5,182,146
1940 .....	199,998	197,626	7,839,858
1941 .....	137,298	131,128	5,575,492
1942 .....	183,450	184,016	8,216,123

Table 39 - PRODUCTION OF FINISHED RAIL FASTENINGS, 1932-1942

Year	Tie Plates			Fish Plates and Splice Bars		
	Quantity made	Factory Sales		Quantity made	Factory Sales	
		Quantity	Income from sales		Net tons	\$
Net tons	Net tons			Net tons	Net tons	\$
1932 .....	7,893	...	353,714	2,374	1,765	103,241
1933 .....	4,559	4,563	229,942	5,491	1,215	78,047
1934 .....	17,923	18,460	834,258	3,573	3,919	224,457
1935 .....	20,420	20,650	944,342	6,113	6,014	344,711
1936 .....	28,228	25,571	1,136,175	5,634	5,812	333,712
1937 .....	25,284	24,594	1,123,925	7,125	7,180	430,204
1938 .....	22,190	20,629	1,090,726	5,543	4,978	335,396
1939 .....	24,548	23,183	1,181,086	10,314	10,784	716,985
1940 .....	24,371	26,544	1,388,150	14,040	13,702	907,832
1941 .....	28,747	28,765	1,492,488	12,873	12,566	847,039
1942 .....	25,187	25,685	1,393,375	14,510	14,963	1,018,651

Table 40 - PRODUCTION AND FACTORY SALES OF WIRE RODS, OF IRON OR STEEL, 1932-1942

Year	Total tonnage made	Factory Sales			Year	Total tonnage made	Factory Sales		
		Tonnage sold	Income from sales	Net tons			Net tons	Net tons	Income from sales
1932 .....	85,780	29,868	1,022,315	\$	1938 .....	131,303	77,554	3,075,006	\$
1933 .....	99,335	32,604	1,104,532		1939 .....	240,194	98,070	3,954,970	
1934 .....	196,655	86,231	2,705,167		1940 .....	300,785	131,255	5,305,124	
1935 .....	205,485	76,606	2,412,244		1941 .....	293,476	121,422	5,214,493	
1936 .....	230,927	98,364	3,132,811		1942 .....	256,457	105,475	4,347,189	
1937 .....	242,092	96,518	3,568,873						

Table 41 - PRODUCTION AND FACTORY SALES OF BLOOMS, BILLETS AND SLABS, 1932-1942

Year	Except for Forging (x)			For Forging		
	Total tonnage made	Tonnage sold	Income from sales	Total tonnage made	Tonnage sold	Income from sales
1932 .....	247,045	13,960	412,049	1,392	1,043	56,862
1933 .....	251,393	9,781	260,978	1,677	1,298	69,457
1934 .....	565,940	61,343	1,440,318	3,509	2,270	110,118
1935 .....	747,535	80,316	1,899,030	6,115	3,702	173,298
1936 .....	788,506	123,913	2,902,013	6,980	5,557	249,554
1937 .....	1,401,043	181,711	5,128,779	41,730	27,807	1,171,280
1938 .....	868,083	99,908	3,037,373	26,451	23,752	979,797
1939 .....	1,109,145	147,978	4,702,975	29,203	27,056	1,233,754
1940 .....	1,591,238	175,254	6,821,949	41,232	41,404	1,885,903
1941 .....	1,604,520	174,463	6,982,562	111,712	102,317	5,796,472
1942 .....	1,608,401	162,171	5,650,983	222,109	178,897	10,692,911

(x) Includes sheet and tinplate bars and muck and scrap bars for 1933 to 1937.

Table 42 - PRODUCTION OF HOT ROLLED BARS (x), OF ALL KINDS, 1932-1942

Year	Total tonnage made	Factory Sales	
		Tonnage sold	Income from sales
	Net tons	Net tons	\$
1932 .....	100,662	77,754	3,629,007
1933 .....	94,088	83,474	4,121,813
1934 .....	185,212	133,068	6,642,341
1935 .....	243,574	149,705	9,032,553
1936 .....	283,146	216,441	10,374,417
1937 .....	388,662	321,515	18,066,438
1938 .....	277,783	215,930	12,295,300
1939 .....	314,050	251,040	14,216,981
1940 .....	453,788	365,434	23,078,104
1941 .....	542,575	444,634	29,786,195
1942 .....	592,016	474,312	37,442,850

(x) Includes light angles prior to 1939.

Table 43 - PRODUCTION OF STRUCTURAL STEEL SHAPES(x), OF ALL KINDS, 1932-1942

Year	Total tonnage made	Factory Sales	
		Tonnage sold	Income from sales
	Net tons	Net tons	\$
1932 .....	16,005	14,443	671,702
1933 .....	18,091	16,771	740,200
1934 .....	25,838	26,049	1,104,324
1935 .....	42,529	43,756	1,937,695
1936 .....	41,537	40,797	1,835,257
1937 .....	93,279	94,461	4,605,796
1938 .....	65,633	67,730	3,589,905
1939 .....	90,810	91,921	4,554,201
1940 .....	183,728	180,278	8,667,678
1941 .....	189,783	193,251	9,600,490
1942 .....	184,701	191,519	10,540,658

(x) Includes light angles for 1939 and 1940 only.

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1942

Name of Firm	Location of Plants
<b>(a) PIG IRON</b>	
Dominion Steel & Coal Corporation, Limited	Sydney, N.S.
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.
Canadian Furnace Limited	Port Colborne, Ont.
Steel Company of Canada, Limited	Hamilton, Ont.
<b>(b) FERRO-ALLOYS (x)</b>	
Canadian Furnace, Limited	Port Colborne, Ont.
Chromium Mining & Smelting Corporation, Limited	Sault Ste. Marie, Ont.
Electro Metallurgical Company of Canada, Limited	Welland, Ont.
St. Lawrence Alloys and Metals, Limited	Beauharnois, Que.
(x) Not including the firms which made ferro-alloys as secondary products.	
<b>(c) STEEL INGOTS AND STEEL CASTINGS</b>	
Maritime Steel and Foundries, Limited	379 Glasgow St., New Glasgow, N.S.
Dominion Steel & Coal Corporation, Limited	Sydney, N.S.
Canadian Brake Shoe & Foundry Company, Limited	101 Belvidere St., Sherbrooke, Que.
Canadian Car & Foundry Company, Limited	Longue Pointe, Montreal, Que.
Canadian Tube & Steel Products, Limited	5900 St. Patrick St., Montreal, Que.
Electric Steels, Limited	Cap de la Madeleine, Que.
Hull Iron & Steel Foundries, Limited	207 Montcalm St., Hull, Que.
Joliette Steel, Limited	Leval St., Joliette, Que.
La Compagnie F. X. Drolet	206, rue du Pont, Quebec, Que.
Lynn MacLeod Metallurgy Limited	Notre Dame St., Thetford Mines, Que.
Manganese Steel Castings, Limited	Abenaquis St., Sherbrooke, Que.
Shawinigan Chemicals, Limited (Stainless Steel Division)	Shawinigan Falls, Que.
Soral Industries, Limited	Soral, Que.
Sorel Steel Foundries, Limited	7 Limoges Street, Soral, Que.
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.
Atlas Steels, Limited	East Main Street, Welland, Ont.
Burlington Steel Company, Limited	Sherman Avenue North, Hamilton, Ont.
Canada Electric Castings, Limited	West Street, Orillia, Ont.
Dominion Foundries & Steel, Limited	Depew Street, Hamilton, Ont.
Fahr alloy, Canada, Limited	Barrie Road, Orillia, Ont.
Federal Foundries and Steel, Limited	London, Ont.
Ford Motor Company of Canada, Limited	Windsor, Ont.
Kennedy, & Sons, Limited, The Wm.	Second Avenue West, Owen Sound, Ont.
Steel Company of Canada, Limited	Wilcox Street, Hamilton, Ont.
Welland Electric Steel Foundry Limited	125 Victoria St., Welland, Ont.
Manitoba Rolling Mill Company, Limited	Selkirk, Man.
Manitoba Steel Foundries, Limited	Selkirk, Man.
Vulcan Iron Works, Limited	Pt. Douglas Avenue, Winnipeg, Man.
Dominion Bridge Company, Limited (Calgary Rolling Mill Department)	32nd Ave. and 17th St. E., Winnipeg, Man. 803 .. 24th Avenue S. E., Calgary, Alta. Britannia Beach, B.C. Tadanac, B.C.
Riverside Iron Works, Limited	149 Fourth Avenue West, Vancouver, B.C. 519 Sixth Avenue West, Vancouver, B.C. 1595 Franklin St., Vancouver, B.C.
Britannia Mining and Smelting Company, Limited	
Consolidated Mining & Smelting Company of Canada, Limited	
Reliance Foundry Company, Limited	
Vancouver Engineering Works, Limited	
Westland Steel Foundry Ltd.	

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1942  
 (Concluded)

Name of Firm	Location of Plants
<b>(d) HOT ROLLED IRON AND STEEL</b>	
Canadian Car & Foundry Company, Limited	Amherst, N.S.
Dominion Steel & Coal Corporation, Limited	Sydney, N.S.
Trenton Steel Works, Limited	Trenton, N.S.
Canadian Tube & Steel Products, Limited	5900 St. Patrick St., Montreal, Que.
Peck Rolling Mills, Limited	851 Mill St., Montreal, Que.
Steel Company of Canada, Limited	Notre Dame St. West, Montreal, Que.
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.
Atlas Steels, Limited	Welland, Ont.
Burlington Steel Company, Limited	Sherman Avenue North, Hamilton, Ont.
Dominion Foundries & Steel, Limited	Depew St., Hamilton, Ont.
Federal Foundries & Steel Company Limited	529 Philip St., London, Ont.
Steel Company of Canada, Limited	Queen St. North, Hamilton, Ont.
Steel Company of Canada, Limited	Wilcox St., Hamilton, Ont.
Manitoba Rolling Mill Company, Limited	Selkirk, Man.
Dominion Bridge Company, Limited (Calgary Rolling Mill Dept.)	17th Street East and 52nd Ave., Winnipeg, Man.
<b>(e) COLD ROLLED STEEL</b>	
Stanley Steel Company, Limited	57 Gerrard St., Hamilton, Ont.
<b>(f) COLD DRAWN STEEL</b>	
Canadian Drawn Steel Company, Limited	Gerrard St., Hamilton, Ont.
Union Drawn Steel Company, Limited	Victoria Avenue South, Hamilton, Ont.

**NOTE:** Detailed statistics of imports and exports of iron and steel products are available on application to the Dominion Bureau of Statistics, Ottawa, Canada.



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