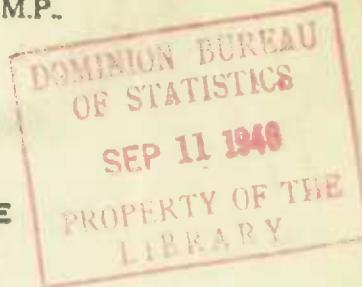


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Minister of Trade and Commerce

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
1944

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



OTTAWA
1946

Price 25 cents

For the first time in history, the world's population has reached

ONE BILLION

Population growth is now at its lowest point in history.

Population growth is now at its lowest point in history.

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Dominion Statistician:

Director - Division of Census of Industry and Merchandising:

Chief - Mining, Metallurgical and Chemical Statistics:

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ANNUAL INDUSTRY REPORTIRON AND STEEL AND THEIR PRODUCTS GROUPTHE PRIMARY IRON AND STEEL INDUSTRY, 1944

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-seven firms were included in this industry in 1944 and reports were received for 64 different plants or departments, including 4 blast furnace departments, 4 ferro-alloy plants, 37 steel furnace divisions, and 19 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 5.1 per cent lower in 1944 than in 1943, the values being \$221,509,681 and \$223,951,059 respectively. Twenty-seven works in Ontario accounted for 70 per cent of the total for Canada or \$148,598,186; 6 plants in Nova Scotia accounted for 11 per cent or \$24,733,729; 17 plants in Quebec for 15 per cent or \$32,959,912; while the remaining \$6,217,854 or 3 per cent was accounted for by 4 plants in Manitoba, 7 in British Columbia and 3 in Alberta.

In 1944 an average of 30,763 people were employed in this industry, this being a decrease of 10.1 per cent from the 1943 average of 34,222. About 1,696 persons worked in the blast furnace departments during the year, 12,161 in the steel furnaces, 15,020 in the rolling mills and 1,886 in ferro-alloy plants (exclusive of those producing ferro-alloys as a by-product). Fifty-seven per cent of the employees, or 17,470, worked in plants in Ontario, 6,137 in Quebec, 5,752 in Nova Scotia, 720 in Manitoba and 684 in Alberta and British Columbia.

Payments in salaries and wages during 1944 amounted to \$60,837,031, a decrease of 7 per cent from the previous year's total of \$65,654,468. Salaries advanced to \$6,408,337 from \$6,263,581 and wages declined to \$54,428,694 from \$59,390,887.

Materials used in manufacturing processes cost \$92,214,866 in 1944 compared with \$101,413,749 in 1943, and the cost of fuel and electricity was \$17,276,424 against \$18,985,135, a decreased expenditure of 9 per cent for materials, fuel and power.

PIG IRON - Output of 1,852,628 net tons of pig iron in 1944 was 5 per cent over the 1,758,269 tons reported for the previous year. Production of basic iron amounted to 1,534,140 tons or 83 per cent of the total; foundry iron amounted to 143,763 tons and malleable iron to 174,725 tons.

Producers' sales of pig iron totalled 400,010 tons at \$8,641,495 in 1944 compared with 387,109 tons at \$8,328,322 in 1943.

Charges to iron blast furnaces during the year included 3,227,039 tons of imported iron ore, 266,150 tons of Canadian ore; 1,687,967 tons of coke; 520,571 tons of imported limestone and 233,621 tons of Canadian limestone.

Imports of pig iron during the calendar year increased to 8,516 tons from 7,118 tons in 1943 and exports increased to 5,698 tons from 438 tons.

Producers' stocks at the end of 1944 totalled 49,615 tons compared with 28,230 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 1,834,061 tons in 1944 or 0.5 per cent more than in 1943 when the apparent domestic supply was 1,824,674 tons.

Producers of pig iron in Canada had 14 blast furnaces at the end of 1944 which could produce 2.7 million net tons a year if operated at rated capacity. Actual production of 1,852,628 net tons in 1944 showed an operating rate of about 69 per cent. Ten furnaces were in blast during the year.

FERRO-ALLOYS - Ferro-alloys were made in 1944 by 10 different concerns, 5 of which recovered ferro-silicon as a by-product in the manufacture of abrasives. Output of ferro-alloys in 1944 amounted to 171,323 net tons, a decrease of 13 per cent from the 197,094 tons reported for 1943.

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 increased 0.6 per cent to 3,034,236 tons in 1944 from 3,005,653 tons in 1943, the output of steel ingots going to 2,873,868 tons from 2,846,736 tons and steel castings to 142,294 tons from 157,388 tons. Factory sales of ingots and castings totalled 178,680 tons at \$35,955,323.

Thirty-seven steel plants were in operation during the year. At the end of 1944 these plants had 138 furnaces, including 51 basic open hearth with an annual capacity of 2,841,400 net tons, 84 electric furnaces rated at 830,800 tons, and 3 converters at 8,000 tons. There were just 12 makers of steel ingots with capacity of 3,324,900 net tons per annum. The total annual steel capacity of all plants, including ingots and castings, was 3,680,200 tons at the year end.

Operating steel furnaces in 1944 used 1,513,586 net tons of pig iron, 1,642,250 tons of scrap iron or steel, 155,768 tons of ores, 237,167 tons of limestone, 85,601 tons of dolomite, 63,721 tons of lime, 89,807 tons of silica sand, 18,665 tons of magnesite and 38,823 tons of ferro-alloys.

ROLLED AND DRAWN STEEL - In 1944 there were 19 mills occupied chiefly in hot rolling of steel products and 3 mills making only cold drawn and cold rolled shapes. Ten of these mills were in Ontario, 3 in Nova Scotia, 4 in Quebec, 1 in Manitoba and 1 in Alberta.

Rolling mill sales declined 9 per cent to \$143,768,145 from \$158,138,483 in 1943. The main items sold during the year under review were: 428,982 tons of hot rolled bars at \$30,099,216; 389,671 tons of plates at \$26,566,575; 201,098 tons of sheets, hoops, bands and strips at \$16,910,375; 376,727 tons of rails and rail fastenings at \$19,042,506; 336,959 tons of semi-finished rolled forms, such as blooms, billets, etc., at \$17,041,753; 159,241 tons of structural shapes at \$9,380,379; and 105,046 tons of wire rods at \$4,300,337.

Table 1 - PROVINCIAL DISTRIBUTION OF ACTIVE PLANTS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1944

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	4	2	17	3	...
Quebec	15	...	...	12	28	4	1
Ontario	16	3	10	11	72	10	3
Manitoba	3	...	...	3	5	1	...
Alberta	2	...	...	2	3	1	...
British Columbia	7	...	...	7	12	...	...
CANADA (b)	47	4	14	37	137	19	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, 1934-1944

Year	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
1934	51	7,400	9,009,512	3,969,136	12,673,398	29,101,463
1935	53	9,523	12,279,390	4,845,559	18,539,072	38,700,961
1936	55	11,138	13,830,377	5,440,129	21,424,052	46,636,892
1937	55	14,054	19,926,498	6,934,008	33,805,631	74,580,669
1938	55	13,100	18,256,627	5,529,833	24,786,761	59,606,150
1939	54	13,827	20,410,517	6,069,661	29,629,376	75,934,481
1940	54	17,774	29,207,036	9,582,791	54,045,692	114,598,409
1941	60	23,735	45,037,095	13,888,384	78,824,366	164,566,392
1942	61	33,245	60,874,818	18,734,178	110,551,516	232,105,755
1943	63	34,222	65,654,468	18,985,135	101,413,749	223,951,059
1944						
Nova Scotia	6	5,752	10,160,736	2,380,179	13,066,103	24,733,729
Quebec	17	6,137	11,950,859	2,781,518	10,422,778	32,959,912
Ontario	27	17,470	36,167,112	11,612,931	67,151,835	148,598,186
Manitoba	4	720	1,208,643	324,537	963,820	3,093,027
Alberta	3	253	428,334	65,729	359,070	1,237,837
British Columbia ..	7	431	921,347	111,530	251,260	1,886,990
CANADA	64	30,763	60,837,031	17,276,424	92,214,866	212,509,681

Per cent change

1944 from 1943 -10.1 -7.3 -9.0 -9.1 -5.1

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 3 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1943 and 1944

Province	Average Number of Employees				TOTAL			TOTAL SALARIES and WAGES \$	
	On Salaries		On Wages		EMPLOYEES	Salaries	Wages		
	Male	Female	Male	Female					
1943									
Nova Scotia	196	120	6,300	283	6,899	587,375	10,588,806	11,176,181	
Quebec	466	156	5,818	42	6,482	1,280,014	11,019,462	12,299,476	
Ontario	989	656	16,316	1,166	19,127	4,099,407	35,165,608	39,265,015	
Manitoba	38	11	906	4	959	149,905	1,349,484	1,499,389	
Alberta and British Columbia ..	45	12	692	6	755	146,880	1,267,527	1,414,407	
CANADA ..	1,734	955	30,032	1,501	34,222	6,263,581	59,390,887	65,654,468	
1944									
Nova Scotia	224	143	5,274	111	5,752	790,544	9,370,192	10,160,736	
Quebec	406	174	5,527	30	6,137	1,290,904	10,659,955	11,950,859	
Ontario	825	658	14,993	994	17,470	3,948,512	32,218,600	36,167,112	
Manitoba	40	15	658	7	720	173,911	1,034,732	1,208,643	
Alberta and British Columbia ..	61	18	603	2	684	204,466	1,145,215	1,349,681	
CANADA ..	1,556	1,008	27,055	1,144	30,763	6,408,337	54,428,694	60,837,031	

Table 4 - WAGE-EARNERS, BY MONTHS, 1943 and 1944 (On the last work-day of each month)

Month	1 9 4 3			1 9 4 4		
	Male	Female	TOTAL	Male	Female	TOTAL
January	31,780	1,262	33,042	27,314	1,060	28,374
February	31,443	1,326	32,769	27,191	1,021	28,212
March	31,094	1,364	32,458	27,024	986	28,010
April	30,507	1,480	31,987	26,702	1,041	27,743
May	30,259	1,608	31,867	26,768	1,121	27,889
June	29,904	1,662	31,566	26,976	1,091	28,067
July	29,713	1,575	31,288	27,023	1,223	28,245
August	29,356	1,614	30,970	26,987	1,253	28,240
September	28,826	1,640	30,466	26,820	1,219	28,039
October	29,455	1,589	31,044	26,853	1,227	28,080
November	29,686	1,518	31,204	27,417	1,240	28,657
December	28,337	1,397	29,734	27,554	1,245	28,799
AVERAGE	30,032	1,501	31,533	27,055	1,144	28,199

Table 5 - HOURS WORKED BY WAGE-EARNERS, 1944 (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	
	Male	Female		Male	Female
30 hours or less	1,113	77	55 hours	1,090	6
31-43 hours	3,589	294	56-64 hours	5,442	58
44 hours	1,345	110	65 hours or more ...	1,219	2
45-47 hours	1,727	105	TOTAL	29,593	1,255
48 hours	10,539	558	Total wages paid in selected week	1,167,378	33,969
49-50 hours	1,210	23			
51-54 hours	2,319	22			

Table 6 - FUEL AND ELECTRICITY USED, 1943 and 1944

Kind	Unit of measure	Quantity	1 9 4 3	1 9 4 4
			Cost at works	Cost at works
Bituminous coal - Canadian	ton	282,076	1,366,138	292,102
Imported	ton	108,295	864,264	80,703
Anthracite coal	ton	50,305	388,445	29,424
Coke (for fuel only)	ton	58,655	178,452	52,565
Gasoline	Imp.gal.	190,950	45,504	194,531
Kerosene or coal oil	Imp.gal.	17,363	3,101	22,882
Fuel oil	Imp.gal.	79,042,867	5,312,271	68,701,733
Wood	cord	1,179	12,272	1,287
Gas - Manufactured (x)	M cu.ft.	58,372,537	3,034,651	71,688,351
Natural	M cu.ft.	417,283	78,024	348,215
Other fuel .....	...	...	30,040	...
Electricity purchased	K. W. H.	1,890,908,198	7,671,973	1,463,309,707
TOTAL .....	...	...	18,985,135	...
Electricity generated for own use	K. W. H.	126,862,452	...	141,285,358

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

Table 7 - POWER EQUIPMENT, 1943 and 1944

Kind	Ordinarily in Use		In Reserve or Idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1 9 4 3				
Steam engines and steam turbines	82	59,998	30	5,525
Diesel engines	6	1,200	5	825
Gasoline, gas and oil engines	16	19,520	8	2,200
Hydraulic turbines or water wheels	4	1,300	...	...
Total Primary	108	82,018	43	8,550
Electric motors operated by purchased power	8,587	204,215	362	8,787
TOTAL	8,695	286,233	405	17,337
Electric motors operated by power generated by above primary units	1,454	52,495	10	315
Stationary boilers	143	58,014	7	2,250
Motor generator sets	134	67,374	5	1,240

1 9 4 4

Steam engines and steam turbines	80	59,198	33	6,101
Diesel engines	7	1,350	2	225
Gasoline, gas and oil engines	18	19,625	5	2,115
Hydraulic turbines or water wheels	3	1,150	1	150
Total Primary	108	81,323	41	8,591
Electric motors operated by purchased power	8,947	208,888	545	11,543
TOTAL	9,055	290,211	586	20,134
Electric motors operated by power generated by above primary units	1,568	54,474	11	515
Stationary power boilers	105	50,015	11	3,400
Motor generator sets	138	68,791	5	1,240

(a) PIG IRON

Table 8 - MATERIALS CHARGED TO IRON BLAST FURNACES, 1943 and 1944

Material	1 9 4 3		1 9 4 4	
	Quantity	Cost at furnace	Quantity	Cost at furnace
	Net tons	Net tons		Net tons
Iron ore - Canadian (crude)	104,536	460,160	...	...
Imported (crude)	2,955,671	12,247,784	2,468,082	10,351,514
Canadian (beneficiated)	198,244	737,276	266,150	1,117,466
Imported (beneficiated) .....	...	...	758,957	3,293,806
Mill cinder, roll scale, flue dust, etc. ..	125,477	315,483	96,243	276,626
Scrap (net charge)	43,032	543,930	27,604	283,290
Limestone -				
From Canadian quarries	464,497	867,146	233,621	330,795
From foreign sources	321,441	362,195	520,571	889,501
Dolomite	32,064	71,945	57,822	96,857
Coke	1,646,191	13,989,052	1,687,967	15,518,097
Other materials .....	...	315,061	...	235,688
TOTAL .....	...	29,910,032	...	32,393,640

Table 9 - PRODUCTION OF PIG IRON AND SALE BY THE PRODUCERS, 1943 and 1944

Grade	Delivered in molten condition	Machine cast	Total tonnage made	Sales	
	Net tons	Net tons	Net tons	Quantity Net tons	Income from sales \$
1943					
Basic	1,338,913	117,636	1,456,549	84,575	1,697,774
Foundry .....	...	148,653	148,653	145,713	3,128,780
Malleable .....	...	153,067	153,067	156,821	3,501,768
TOTAL	1,338,913	419,356	1,758,269	387,109	8,328,322
1944					
Basic	1,375,586	158,554	1,534,140	89,879	1,846,009
Foundry .....	...	143,763	143,763	143,498	3,091,233
Malleable .....	...	174,725	174,725	166,633	3,704,253
TOTAL	1,375,586	447,042	1,852,628	400,010	8,641,495

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

Table 10 - PRODUCTION OF PIG IRON, BY GRADES, 1934-1944

Year	Basic	Foundry	Malleable	T O T A L
1934	247,906	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	31,877	846,418
1940	1,091,584	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
1943	1,456,549	148,653	153,067	1,758,269
1944	1,534,140	143,763	174,725	1,852,628

Table 11 - PRODUCTION OF PIG IRON, BY PROVINCES, 1934-1944

Year	Nova Scotia	Ontario	T O T A L
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	421,296	1,106,757	1,528,053
1942	467,951	1,507,063	1,975,014
1943	345,722	1,412,547	1,758,269
1944	395,802	1,456,826	1,852,628

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Table 12 - PRODUCTION OF PIG IRON, BY MONTHS, 1942-1944 (Net tons)

Month	1 9 4 2	1 9 4 3			TOTAL	1 9 4 4			TOTAL
		For own use	For sale	TOTAL		For own use	For sale	TOTAL	
January	163,156	94,753	21,574	116,327	97,703	34,425	34,425	132,128	
February	143,973	112,294	25,946	138,240	102,961	38,917	38,917	141,878	
March	167,116	122,349	37,752	160,101	127,192	40,855	40,855	168,047	
April	160,408	121,877	28,609	150,486	129,681	40,683	40,683	170,364	
May	171,386	118,415	36,331	154,746	132,597	42,610	42,610	175,207	
June	167,961	108,184	39,705	147,889	123,158	38,741	38,741	161,899	
July	172,153	120,018	31,351	151,369	136,868	29,136	29,136	166,004	
August	162,578	124,434	40,472	164,906	120,079	31,373	31,373	151,452	
September	155,900	115,649	32,253	147,902	112,144	33,262	33,262	145,406	
October	175,424	128,894	17,900	146,794	120,427	33,692	33,692	154,119	
November	170,578	125,570	16,679	142,249	117,678	29,294	29,294	146,972	
December	164,381	101,142	36,120	137,260	111,351	27,801	27,801	139,152	
TOTAL ...	1,975,014	1,393,579	364,690	1,758,269	1,431,839	420,789	420,789	1,852,628	

Table 13 - SALES OF PIG IRON BY THE PRODUCERS, 1934-1944

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
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	188,320	3,327,716	1942	387,997	8,366,936
1937	252,802	5,146,017	1943	387,109	8,328,322
1938	145,113	2,961,639	1944	400,010	8,641,495
1939	192,614	3,757,573			

Table 14 - IRON ORE, FUEL AND FLUX CHARGED TO IRON BLAST FURNACES, 1934-1944

Year	Iron ore	Mill cinder, scale, etc.	Scrap	Coke	Limestone	Dolomite
	Net tons	Net tons	Net tons	Net tons	Net tons	Net tons
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	Not
1937	1,796,562	134,299	18,443	890,384	470,549	
1938	1,382,565	74,608	21,418	697,615	345,182	avail-
1939	1,476,106	119,654	21,204	775,869	357,377	able
1940	2,342,717	130,171	28,691	1,223,173	579,451	
1941	2,709,089	136,698	47,271	1,362,530	648,565	
1942	3,612,692	177,343	64,624	1,795,875	860,793	
1943	3,258,451	125,477	43,032	1,646,191	785,938	32,064
1944	3,493,189	96,243	27,604	1,687,967	754,192	57,822

Table 15 - IMPORTS INTO CANADA AND EXPORTS OF PIG IRON, 1934-1944

	Imports		Exports	
	Net tons	\$	Net tons	\$
1934	7,189	108,300	10,327	176,093
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	131,112	380	10,090
1942	1,536	42,718	427	12,175
1943	7,118	173,598	438	11,163
1944	8,516	235,666	5,698	133,681

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Table 16 - STOCKS OF PIG IRON HELD BY PRODUCERS IN CANADA, 1934-1944

Year	Net tons	Year	Net tons
1934	73,401	1940	76,560
1935	97,827	1941	27,049
1936	86,048	1942	87,955
1937	125,761	1943	28,230
1938	143,258	1944	49,615
1939	69,174		

Table 17 - APPARENT SUPPLY OF PIG IRON IN CANADA, 1934-1944

Year	Production	Add imports	Deduct exports	Add or deduct changes in producers' stocks (xx)	Apparent supply (x)
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	- 39,713	931,002
1938	790,078	2,377	11,811	- 17,497	763,147
1939	846,418	657	12,015	+ 74,083	909,143
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
1943	1,758,269	7,118	438	+ 59,725	1,824,674
1944	1,852,628	8,516	5,698	- 21,385	1,834,061

(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 18 - CONSUMPTION OF PIG IRON IN CANADA, BY INDUSTRIES AND BY PROVINCES, 1941-1944 (as reported by consumers)

	1941	1942	1943	1944
	(Net tons)			
(a) By Industries				
Steel ingots and castings	1,340,441	1,615,396	1,518,548	1,513,586
Iron castings	157,884	176,199	169,272	171,397
Boilers, tanks and platemwork	18,459	18,867	27,593	27,897
Agricultural implements	26,772	21,884	17,483	17,511
Machinery	24,927	23,449	21,011	21,170
Automobiles		6,545		5,197
Automobile parts	15,640	16,014	12,785	35,540
Railway rolling stock	19,228	25,517	24,518	31,638
Brass and copper products	3,056	2,247	1,461	1,104
Shipbuilding	206	743	1,233	1,749
Hardware and tools	2,358	2,548	1,966	2,205
Miscellaneous iron and steel	1,005	203	713	673
Heating and cooking apparatus ...	18,725	18,846	24,601	23,087
Electrical apparatus and supplies	2,865	2,148	2,150	2,954
TOTAL	1,631,566	1,930,642	1,823,334	1,855,708

(b) By Provinces

Prince Edward Island	35	40	65	80
Nova Scotia	430,028	441,813	384,528	393,008
New Brunswick	3,053	3,211	3,723	3,450
Quebec	62,461	67,255	73,992	73,022
Ontario	1,128,703	1,411,531	1,350,304	1,378,233
Manitoba	6,264	5,210	4,948	2,770
Saskatchewan	2	43	...	115
Alberta	165	177	120	76
British Columbia	855	1,302	5,654	4,954
CANADA	1,631,566	1,930,642	1,823,334	1,855,708

Table 19 - BLAST FURNACES IN CANADA, 1942-1944

Name of Company	Location of Plants	Number of stacks	Total daily capacity (24 hours)	Number of days in blast		
				1942	1943	1944
Dominion Steel and Coal Corporation, Ltd.	Sydney, N.S.	1	616	...	180	329
		1	644	365	358	366
		1	370	365	16	128
		1	370	365	326	...
TOTAL		4	2,000	...	...	...
Canadian Furnace Company, Limited	Port Colborne, Ont.	1	466	304½(x)	196½(x)	313(x)
		1	147	289	332	...
TOTAL		2	613	...	...	...
The Steel Company of Canada, Limited	Hamilton, Ont.	1	364	365	347	342
		1	728	365	365	366
		1	980	365	365	363
TOTAL		3	2,072	...	...	...
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.	1	336	360	317	...
		1	336	184	277	...
		1	616	349	346	348
		1	504	361	346	218
		1	1,120	...	32	360
TOTAL		5	2,912	...	...	...
TOTAL FOR CANADA		14	7,597	...	...	...

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

Table 20 - WORLD PIG IRON (3) PRODUCTION (Figures taken from "The Iron Age", published by McGraw-Hill Publishing Co. Ltd., New York, U.S.A.)

	1939	1940	1941	1942	1943	1944	1945(1)
(Thousands of net tons)							
United States	35,396	46,979	56,070	60,115	61,895	62,073	53,200
Germany (2)	20,363	17,136	23,561	24,506	26,718	20,990	4,400
Poland .....	...	...	85	106	118	76	65
Belgium	3,444	2,494	1,569	1,386	1,802	623	650
France	8,625	5,192	1,443	1,746	2,345	1,214	848
Netherlands .....	...	...	196	165	100	72	60
U.S.S.R. (Estimated) ..	20,000	22,000	24,000	25,000	15,000	17,000	19,000
United Kingdom	8,794	9,042	8,145	8,300	7,919	7,421	7,840
Japan (Estimated)	3,250	2,950	4,000	6,000	10,500	7,500	2,100
Canada (4)	846	1,309	1,528	1,975	1,758	1,852	1,793
Sweden	700	672	787	813	872	903	950
Spain	548	550	595	638	659	680	540
Brazil	165	205	229	236	273	320	280
All other countries (5)	3,510	3,727	4,224	4,586	4,320	4,595	4,150
TOTAL	105,641	112,256	126,432	135,572	134,279	125,319	95,876

(1) Last few months estimated.

(2) Includes Austria; from 1941 on, includes Bohemia-Moravia.

(3) Includes charcoal, iron and ferro-alloys made in blast furnaces.

(4) Does not include ferro-alloys.

(5) India, Australia and Union of South Africa account for a large part of the total.

(b) FERRO-ALLOYS

Table 21 - PRODUCTION OF FERRO-ALLOYS, 1934-1944

Year	Net tons	Year	Net tons
1934	35,751	1940	149,394
1935	63,410	1941	204,354
1936	85,438	1942	209,017
1937	91,921	1943	197,094
1938	62,637	1944	171,323
1939	85,540		

Table 22 - PRODUCERS OF FERRO-ALLOYS IN CANADA, 1944

Name of Company	Plant location	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, ferro-manganese, siliconmanganese, ferrosilicon, 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, 1943 and 1944

Material	1943		1944	
	Quantity	Cost of purchased materials	Quantity	Cost of purchased materials
	Net tons	\$	Net tons	\$
Pig iron - Own make	1,435,020	...	1,439,310	...
Purchased	83,528	1,873,372	74,276	1,694,085
Scrap iron or steel - Own make	947,683	...	887,513	...
Purchased	804,096	17,554,265	754,737	15,661,279
Spiegeleisen	367	31,474	1,708	85,728
Silicospiegeleisen .....	...	...	358	28,380
Ferromanganese	19,096	2,356,754	20,224	2,510,354
Silicomanganese	9,568	1,094,239	9,014	1,018,475
Ferrosilicon	11,545	757,911	11,055	692,370
Ferrochrome - High carbon	4,669	702,817	3,154	453,650
Low carbon	1,828	714,398	1,018	404,976
Fermolybdenum .....	...	280,813	303	553,032
Ferrophosphorus	380	33,967	405	35,533
Feroselenium	2	5,793	2	4,406
Ferrotitanium	614	118,416	786	149,527
Ferrotungsten	550	1,721,967	86	287,116
Ferovanadium	204	558,717	67	176,596
Ferozirconium	8	2,153	15	1,613

Table 23 - MATERIALS USED IN STEEL FURNACES, 1943 and 1944 (Concluded)

Material	1943		1944	
	Quantity	Cost of purchased materials	Quantity	Cost of purchased materials
	Net tons	↓	Net tons	↓
Calcium silicon	515	166,923	241	76,374
Calcium manganese silicon	215	70,914	575	188,312
Other ferro-alloys .....	...	35,761	...	401
Aluminium ingot and shot	951	344,785	983	289,021
Copper ingots	37	8,467	95	20,451
Nickel	2,775	1,867,729	1,692	1,124,382
Other metals .....	...	141,285	...	79,024
Ore, iron, crude	107,619	671,079	154,217	1,203,977
Ore, iron, calcined, roasted or treated	62,052	668,843	198	1,004
Ore, manganese .....	...	...	25	592
Ore, chrome	1,369	63,838	1,204	56,831
Bentonite	3,853	97,975	3,745	88,527
Coal, anthracite	1,195	9,475	653	6,993
bituminous	133	1,264	6	236
Coke - Purchased	5,158	60,770	4,685	51,659
Charcoal .....	...	7,457	199	8,034
Dolomite, Crude	78,746	243,793	77,085	199,774
Calcined	10,310	99,740	8,516	125,990
Fluorspar	20,790	715,991	20,024	692,104
Lime - Own make	29,776	...	63,721	450,533
Purchased	36,080	344,488	63,721	450,533
Limestone - Canadian	125,058	242,328	86,216	148,050
Imported	116,974	136,371	150,951	241,183
Magnesite	19,427	744,716	18,665	740,450
Electrodes .....	...	1,075,799	...	952,084
Silica sand	95,605	703,167	89,807	646,841
Other foundry sand .....	...	154,707	...	73,740
Firebrick, fireclay and other refractories .....	...	2,634,711	...	2,358,681
Calcium molybdate and molybdenum oxide briquettes	522	813,861	561	517,456
All other materials .....	...	3,323,942	...	2,701,048
TOTAL VALUE OF METALS, ORES AND OTHER MATERIALS USED	...	43,257,235	...	36,800,822

Table 24 - PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS AND SALES BY THE PRODUCERS, 1943 and 1944

	1943		1944	
	Total tonnage of steel made (all kinds) in- cluding alloys)	Sales Quantity	Total tonnage of steel made (all kinds) in- cluding alloys)	Sales Quantity
	Net tons	\$	Net tons	\$
STEEL INGOTS -				
Basic open hearth	2,484,544	9,605	2,517,894	16,526
Electric	362,192	18,454	355,974	17,081
Total Steel Ingots	2,846,736	28,059	2,873,868	33,607
STEEL CASTINGS -				
Basic open hearth	28,895	27,417	5,389,425	33,607
Converter	4,003	4,172	1,006,767	2,527
Electric	124,490	92,276	21,786,013	101,331
Total Steel Castings	157,388	123,865	28,182,205	137,465
TOTAL STEEL INGOTS AND CASTINGS	3,004,124	151,924	30,057,984	171,072
Any other products	1,529	1,507	215,377	8,074
TOTAL ALL PRODUCTS	3,005,653	153,431	30,273,361	178,680
Alloy steel included in above:				
Ingots	393,491	145	13,336	328,640
Castings	19,992	15,294	5,438,228	19,263
TOTAL	413,483	15,439	5,451,564	347,903

Table 25 - PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY GRADES, 1934-1944 (Net tons)

Year	Steel Ingots		Steel Castings			Total steel ingots and castings
	Open hearth	Electric	Open hearth	Con- verter	Electric	
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	1,138	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
1943	2,484,544	362,192	28,895	4,003	124,490	3,004,124
1944	2,517,894	355,974	35,032	2,470	104,792	3,016,162

Table 26 - PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY MONTHS, 1940-1944 (Net tons)

Month	1940	1941	1942	1943	1944
January	186,476	208,659	257,516	207,008	242,186
February	157,184	193,422	241,421	245,588	229,852
March	176,205	218,939	264,403	270,962	275,539
April	171,865	224,762	263,488	264,357	260,825
May	195,347	230,843	270,747	271,737	263,431
June	186,159	209,623	252,663	240,501	240,750
July	189,926	220,994	256,560	251,508	234,418
August	192,875	227,075	248,868	247,820	246,755
September	184,257	224,626	244,922	242,255	242,725
October	207,302	249,595	271,127	272,976	272,775
November	197,246	247,931	270,812	260,444	266,174
December	208,927	255,682	267,324	228,968	240,732
TOTAL ...	2,253,769	2,712,151	3,109,851	3,004,124	3,016,162

Table 27 - ANNUAL PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY PROVINCES, 1934-1944 (Net tons)

Year	Nova Scotia	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
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	478,356	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
1943	576,578	157,662	2,182,802	55,555	22,217	9,310	3,004,124
1944	578,346	117,638	2,253,685	42,149	18,085	6,259	3,016,162

Table 28 - SALES OF STEEL INGOTS AND STEEL CASTINGS BY THE PRODUCERS, 1934-1944

Year	Tonnage sold	Income from sales	Year	Tonnage sold	Income from sales
	Net tons	\$		Net tons	\$
1934	22,556	3,228,451	1940	143,927	12,616,483
1935	39,639	4,196,922	1941	333,855	22,508,948
1936	31,394	4,788,296	1942	286,007	38,014,454
1937	72,696	10,616,508	1943	151,924	30,057,984
1938	48,256	7,780,163	1944	171,072	34,848,365
1939	63,354	9,169,097			

Table 29 - PRODUCTION OF ALLOY STEEL INGOTS AND CASTINGS, 1939-1944

Year	Ingots	Castings (Net tons)	TOTAL	
1939	51,883	5,700	57,583	
1940	95,150	9,876	105,026	
1941	207,631	11,219	218,850	
1942	374,457	25,879	400,336	
1943	393,491	19,992	413,483	
1944	328,640	19,263	347,903	

Table 30 - METAL, ORE AND FLUX CHARGED TO STEEL FURNACES, 1934-1944 (Net tons)

Year	Pig iron	Ferro-	Other	Scrap	Ore	Limestone	Dolomite	Fluorspar
		manganese and spiegeleisen		ferro- alloys				
1934	394,627	7,583	4,526	538,360	39,025	77,815	14,748	4,555
1935	499,824	12,021	4,331	718,658	56,582	91,412	18,394	5,859
1936	584,912	15,062	6,525	777,268	73,013	109,200	43,562	7,942
1937	747,747	18,003	9,281	1,003,791	97,625	125,922	53,066	9,039
1938	634,920	15,935	5,665	747,340	83,523	106,881	40,540	7,128
1939	733,096	18,761	8,885	927,018	91,650	121,007	55,450	7,972
1940	1,083,190	21,385	14,686	1,327,510	145,658	165,975	81,233	15,307
1941	1,340,441	26,566	25,063	1,599,124	155,273	202,609	92,695	17,054
1942	1,615,396	22,101	28,632	1,826,911	198,890	243,608	101,641	20,133
1943	1,518,548	19,463	19,800	1,751,779	171,040	242,032	89,056	20,790
1944	1,513,586	21,932	16,891	1,642,250	155,768	237,167	85,601	20,024

Table 31 - STEEL FURNACES IN CANADA, DECEMBER 31, 1944

	Type	Number of units	Size (net tons)	Total annual capacity
				net tons
Steel Company of Canada, Hamilton, Ont.	O.H.	1	45	38,500
	O.H.	3	55	139,500
	O.H.	4	100	292,000
	O.H.	5	180	550,000
	Elec.	1	70	85,500
Total .....	...	14	...	1,105,500
Canadian Car & Foundry Co. Ltd., Montreal, Que.	O.H.	3	28	51,576
	Elec.	1	3 ¹	7,728
	Elec.	1	22 ¹	40,320
Total .....	...	5	...	99,624
Dominion Steel & Coal Corp. Ltd., Sydney, N.S.	O.H.	10	56	320,000
	O.H.	5	112	402,400
	Elec.	1	11	28,000
Total .....	...	16	...	750,400
Atlas Steels Limited, Welland, Ont.	Elec.	1	0	7,200
	Elec.	1	10	12,000
	Elec.	4	25	120,000
Total .....	...	6	...	139,200
Manitoba Rolling Mill Co. Ltd., Selkirk, Man.	O.H.	2	18 ¹	40,000
	Elec.	1	3	15,000
Total .....	...	3	...	55,000

Table 31 - STEEL FURNACES IN CANADA, DECEMBER 31, 1944 (Continued)

	Type	Number of units	Size (net tons)	Total annual capacity net tons
Dominion Bridge Co. Ltd., Calgary, Alta. ...	O.H.	1	20	20,400
	O.H.	1	20	20,400
Total .....	...	2	...	40,800
Dominion Foundries & Steel Ltd., Hamilton Ont.	O.H.	2	55	108,900
	O.H.	1	50	49,450
	O.H.	1	45	44,550
	Elec.	2	10	26,400
	Elec.	1	25	24,750
	Elec.	1	45	44,550
	Elec.	1	2 $\frac{1}{2}$	9,000
Total .....	...	9	...	307,600
Algoma Steel Corp. Ltd., Sault Ste. Marie, Ont.	O.H.	8	66	400,000
	O.H.	4	112	336,000
Total .....	...	12	...	736,000
Canadian Tube & Steel Products Ltd., Montreal, Que.	Elec.	1	5	13,400
	Elec.	2	5	31,200
Total .....	...	3	...	44,600
Burlington Steel Company Ltd., Hamilton, Ont.	Elec.	1	6	24,000
Federal Foundries & Steel Co., London, Ont. .	Elec.	2	6	13,140
Sorel Industries Limited, Sorel, Que.	Elec.	1	8	11,200
	Elec.	1	4	5,600
	Elec.	1	20	28,000
Total .....	...	3	...	44,800
Sorel Steel Foundries Ltd., Sorel, Que.	Elec.	1	4	5,000
Fahr alloy Canada Ltd., Orillia, Ont.	Elec.	1	1	360
	Elec.	1	1 $\frac{1}{2}$	1,500
Total .....	...	2	...	1,860
Maritime Steel Foundries Ltd., New Glasgow, N.S.	Elec.	1	4 $\frac{1}{2}$	3,360
Lynn MacLeod Metallurgy Ltd., Thetford Mines, Que.	Elec.	1	1 $\frac{1}{2}$	2,400
Shawinigan Chemicals Ltd., Shawinigan Falls, Que.	Elec.	1	2	1,872
	Elec.	1	1	936
Total .....	...	2	...	2,808
William Kennedy & Sons Ltd., Owen Sound, Ont.	Conv.	1	2	4,800
	Elec.	1	4	9,000
Total .....	...	2	...	13,800
Electric Steels Limited, Cap de la Madeleine, Que.....	Elec.	1	10	17,500
	Elec.	3	6	59,000
Total .....	...	4	...	76,500
Canada Electric Castings Ltd., Orillia, Ont.	Elec.	2	2	6,000
Manganese Steel Castings Ltd., Sherbrooke, Que.....	Elec.	1	2	1,848
Canadian Brake Shoe & Foundry Co. Ltd., Montreal, Que.	Elec.	2	2	2,264

Table 31 - STEEL FURNACES IN CANADA, DECEMBER 31, 1944 (Concluded)

	Type	Number of units	Size (net tons)	Total annual capacity net tons
Joliette Steel Limited, Joliette, Que.	Elec.	1	1	2,000
	Elec.	1	1½	4,000
Total .....	...	2	...	6,000
Riverside Iron Works Ltd., Calgary, Alta. ..	Elec.	1	1	900
Vulcan Iron Works Ltd., Winnipeg, Man.	Elec.	1	3	2,664
Reliance Foundry Co. Ltd., Vancouver, B.C. .	Elec.	1	1	430
	Elec.	1	1	1,000
	Elec.	1	1½	2,600
Total .....	...	3	...	4,030
Ford Motor Co. of Canada Ltd., Windsor, Ont.	Elec.	1	5	10,500
	Elec.	17	4	99,875
	Elec.	1	1½	750
Total .....	...	19	...	111,125
La Compagnie F. X. Drolet Ltd., Quebec, Que.	Conv.	1	1	300
Manitoba Steel Foundries Ltd., Selkirk, Man.	Elec.	1	5	4,000
Consolidated Mining & Smelting Co. of Canada, Trail, B.C.	Elec.	2	5	4,500
Vancouver Engineering Works Ltd., Vancouver, B.C.	Elec.	1	2	2,500
	Elec.	1	1	1,200
	Conv.	1	2	3,100
Total .....	...	3	...	6,800
Hull Iron & Steel Foundries Ltd., Hull, Que.	Elec.	1	7	8,500
	Elec.	1	1	2,680
	Elec.	1	2	3,300
Total .....	...	3	...	14,480
Welland Electric Steel Foundry Ltd., Welland, Ont.	Elec.	1	1½	5,400
	Elec.	1	1½	5,400
	Elec.	1	1½	5,400
Total .....	...	3	...	5,400
Britannia Mining & Smelting Co. Ltd., Britannia Beach, B.C.	Elec.	1	5	4,200
Victoria Machinery Depot Co. Ltd., Victoria, B.C.	Elec.	1	1½	2,000
A-I Steel and Iron Foundry, Vancouver, B.C..	Elec.	1	1½	800
Westland Iron & Steel Foundries Ltd., Vancouver, B.C.	Elec.	1	5	3,000
	Elec.	1	1½	2,700

Table 32 - SUMMARY OF STEEL FURNACE CAPACITY, DECEMBER 31, 1944

	Number of furnaces	Total annual capacity (net tons)
Basic open hearth	51	2,841,400
Electric	84	830,800
Converter	3	8,000
Total	138	3,680,200
Steel ingots - Basic open hearth		2,829,400
Electric		495,500
Total		3,324,900
Steel castings		355,300
TOTAL INGOTS AND CASTINGS		3,680,200

Table 33 - WORLD INGOT AND CASTINGS PRODUCTION (Figures taken from "The Iron Age", Published by The McGraw-Hill Publishing Co. Ltd., New York, U.S.A.)

	1939	1940	1941	1942	1943	1944	1945 (1)
(Thousands of net tons)							
United States	52,799	66,983	82,839	86,032	88,836	89,642	80,100
Germany (2)	26,152	23,732	25,804	31,684	33,706	28,481	5,500
Poland	1,345	...	240	262	284	184	150
Belgium	3,200	2,520	1,835	1,578	1,862	622	550
France	9,260	6,160	1,658	2,429	2,662	1,407	1,280
Netherlands .....	...	...	210	176	177	100	60
U.S.S.R. (Estimated) ..	32,000	31,500	31,000	30,000	14,000	15,500	20,000
United Kingdom	14,571	14,300	13,568	14,263	14,361	13,422	13,160
Japan (Estimated).....	6,230	6,350	7,000	8,700	13,000	15,000	5,000
Canada	1,326	2,255	2,701	3,121	2,995	3,024	2,868
Sweden	1,300	1,280	1,283	1,360	1,337	1,322	1,350
Spain	537	540	609	602	660	706	600
Brazil	145	155	171	175	202	218	200
All other countries (3)	3,250	3,388	3,423	3,458	3,322	3,274	3,065
TOTAL ..	152,115	159,163	172,341	183,840	177,404	172,902	133,883

(1) Last few months estimated.

(2) Includes Austria; from 1942 on, includes Alsace Lorraine, Luxemburg, Bohemia-Moravia and Bavaria.

(3) India, Union of South Africa, Italy and Australia account for a large part of the total.

Table 34 - MATERIALS USED FOR ALL PURPOSES IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1943 and 1944

Material	Companies' own make	PURCHASED	
		Quantity Net tons	Cost at works \$
<u>1943</u>			
Steel ingots	2,787,412	59,682	1,926,356
Steel blooms	78,122	3,932	170,629
Steel slabs .....	...	26,624	1,123,895
Steel billets	48,171	130,813	4,914,506
Steel bars .....	...	52,055	3,547,078
Rails, old	101	29,680	505,138
Axles, old .....	...	774	16,411
Scrap iron and steel, other	4,051	289	5,818
Tin .....	...	464	770,398
Zinc spelter .....	...	2,108	220,819
Ammonium chloride .....	...	121	13,916
Sulphuric acid, 66° Be .....	...	3,640	93,818
All other materials and supplies .....	...	...	1,047,235
TOTAL .....	...	...	14,356,017

1944

Steel ingots	2,812,793	16,795	565,265
Steel blooms	78,236	39,050	1,518,126
Steel slabs .....	...	69,418	2,779,121
Steel billets	44,431	29,419	1,101,727
Steel bars .....	...	62,362	4,237,637
Rails, old	163	36,277	715,536
Axles, Old .....	...	1,497	31,725
Scrap iron and steel, other	4,992	374	4,917
Tin .....	...	626	1,037,518
Zinc spelter .....	...	3,209	331,414
Ammonium chloride .....	...	173	20,057
Sulphuric acid, 66° Be .....	...	6,910	113,094
All other materials and supplies .....	...	...	678,305
TOTAL .....	...	...	13,134,442

Table 35 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1943 and 1944

Product	Total tonnage made	Factory Sales		
		Tonnage sold in Canada or made	Income from for export	tonnage sold
	Net tons	Net tons	\$	
1 9 4 3				
<u>Semi-finished rolled forms of iron and steel -</u>				
Blooms, billets and slabs, except those for forging, but including sheet and tinplate bars	1,694,930	134,000	6,320,193	
Muck and scrap bars	59	...	...
Blooms, billets and axle blanks, for forging purposes only, excluding all those intended for further rolling .	165,999	145,492	7,586,292	
Total Semi-finished Rolled Forms	1,860,988	279,492	13,906,485	
<u>Rails and rail fastenings -</u>				
Rails	263,920	261,483	12,309,676	
Splice bars or fish plates	14,376	14,554	1,002,902	
Tie plates, rail joints, frogs, etc.	27,214	27,057	1,486,184	
Total Rails and Rail Fastenings	305,510	303,094	14,798,762	
<u>Wire rods of iron or steel, including chain rods</u>				
Structural steel shapes (including angles over 3 inches by 3 inches; beams, channels, tees, sheet piling, etc., but excluding plates and bars)	235,583	88,848	3,621,772	
	146,965	151,674	8,802,273	
<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	537,413	470,556	42,081,805	
Bars for concrete reinforcing, including twisted and other deformed bars, except bars rolled from old rails or axles	18,947	19,323	1,151,991	
Long angle splice bars, tie plate bars and all other long rail joint bars	41,753	...	...
Total Hot Rolled Bars	598,113	489,879	43,233,796	
<u>Cold rolled and cold drawn bars and shapes</u>				
Plates, all kinds (iron or steel flats over 14 inches in width, and thicker than No. 7 U.S. standard gauge)	52,214	49,394	7,104,974	
	395,298	391,202	27,919,833	
<u>Sheets, hoops, bands and strips, including plain sheets, hot rolled strips, and galvanized sheets (x) and tinplate (x)</u>				
	215,785	213,908	17,257,901	
Total Plates, Sheets, Hoops, Bands and Strips	611,083	605,110	45,177,734	
<u>Other rolled forms, including mine arches, sheet piling, etc.</u>				
	21,787	19,793	1,245,151	
<u>Miscellaneous products (not rolled) made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc.</u>				
	79,771	72,227	20,247,536	
TOTAL VALUE OF PRODUCTION .....	...	...	158,138,483	

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

Table 35 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1943 and 1944 (Concluded)

Product	Total tonnage made	Factory Sales	
		Tonnage sold in Canada or for export	Income from tonnage sold
	Net tons	Net tons	\$
1 9 4 4			
<u>Semi-finished rolled forms of iron and steel -</u>			
Blooms, billets and slabs, except those for forging, but including sheet and tinplate bars	1,643,679	125,159	4,849,949
Muck and scrap bars .....	...	...	...
Blooms, billets and axle blanks, for forging purposes only, excluding all those intended for further rolling .	226,114	211,800	12,191,804
Total Semi-finished Rolled Forms	1,869,793	336,959	17,041,753
<u>Rails and rail fastenings -</u>			
Rails	325,486	324,052	15,921,873
Splice bars or fish plates	14,583	14,324	997,004
Tie plates, rail joints, frogs, etc.	41,826	38,351	2,123,629
Total Rails and Rail Fastenings	381,895	376,727	19,042,506
<u>Wire rods of iron or steel, including chain rods</u>			
<u>Structural steel shapes (including angles of all sizes, beams, channels, tees, etc., but excluding plates and bars</u>			
	155,908	159,241	9,380,379
<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	452,652	400,111	28,486,322
Bars for concrete reinforcing, including twisted and other deformed bars, except bars rolled from old rails or axles	27,719	28,868	1,612,693
Long angle splice bars, tie plate bars and all other long rail joint bars	53,825	3	201
Total Hot Rolled Bars	534,196	428,982	30,099,216
<u>Cold rolled and cold drawn bars</u>			
	45,374	45,050	6,164,707
<u>Plates, all kinds (iron or steel flats over 14 inches in width, and thicker than No. 7 U.S. standard gauge)</u>			
	390,343	389,671	26,566,575
<u>Sheets, hoops, bands and strips, including plain sheets, hot rolled strips, cold rolled strips, galvanized sheets (x), tinplate (x), terne plate (x) and bonderized plate (x)</u>			
	210,812	201,098	16,910,375
Total Plates, Sheets, Hoops, Bands and Strips	601,155	590,769	43,476,950
<u>Other rolled forms, including mine arches, sheet piling, etc.</u>			
	29,379	28,686	1,875,211
<u>Miscellaneous products (not rolled) made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc.</u>			
	70,211	67,564	12,587,086
TOTAL VALUE OF PRODUCTION .....	...	...	143,768,145

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

Primary Iron and Steel

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Table 36 - ALLOY STEEL PRODUCTS MADE AND SOLD BY ROLLING MILLS, 1943 and 1944

	1 9 4 3	Tonnage Made	Tonnage Sold	1 9 4 4	Tonnage Made	Tonnage Sold
	(net tons)			(net tons)		
Rails .....	...	...	...	100	100	100
Bars	139,271	135,243	109,756	109,984		
Other products, including plates, billets for forging, shell steel, gun forgings, sheet piling and wire rods	73,514	67,565	137,406	102,437		
TOTAL ALLOY STEEL	212,785	202,808	247,262	212,521		

Table 37 - PRODUCTS ROLLED FROM OLD RAILS, AALES, ETC., 1943 and 1944

	1 9 4 3	Tonnage Made	Tonnage Sold	1 9 4 4	Tonnage Made	Tonnage Sold
	(net tons)			(net tons)		
Rails	90	90	...	...	...	...
Bars	2,852	990	12,338	11,962		
Other products	18,512	...	18,732	15,291		
TOTAL FROM OLD RAILS, ETC.	21,454	1,080	31,070	27,253		

Table 38 - PIG IRON, STEEL INGOTS AND CASTINGS, AND SEMI-FINISHED ROLLED FORMS SHIPPED FOR EXPORT BY PRODUCERS, 1943 and 1944

	1 9 4 3	Tonnage Made	Tonnage Sold	1 9 4 4	Tonnage Made	Tonnage Sold
	(net tons)			(net tons)		
Pig iron	101	101	4,954	4,954		
Steel ingots .....	...	...	10,098	10,098		
Steel castings	3,165	3,165	2,473	2,473		
Semi-finished rolled forms	7,027	7,027	721	721		
TOTAL	10,293	10,293	18,246	18,246		

Table 39 - NET PRODUCTION IN CANADA OF HOT ROLLED IRON AND STEEL PRODUCTS, 1942 to 1944 (Net tons)

	1 9 4 2	1 9 4 3	1 9 4 4
Blooms, billets and slabs	230,470	178,296	231,737
Rails	183,430	263,920	325,486
Rail fastenings	39,697	41,590	56,409
Wire rods	256,457	235,583	244,270
Structural shapes	184,701	146,965	155,908
Bars	552,850	556,360	480,371
Plates, sheets, hoops, bands and strips	648,495	619,067	617,408
Other hot rolled forms	13,356	21,846	29,379
TOTAL	2,109,456	2,063,630	2,140,968

Table 40 - PRODUCTION AND FACTORY SALES OF STEEL RAILS, 1934 - 1944

Year	Tonnage made	Factory Sales	
		Tonnage sold	Income from sales
	Net tons	Net tons	\$
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	123,023	127,694	5,182,146
1940	199,998	197,626	7,839,858
1941	137,298	131,128	5,575,492
1942	183,430	184,016	8,216,123
1943	263,920	261,483	12,309,676
1944	325,486	324,052	15,921,873

Table 41 - PRODUCTION AND FACTORY SALES OF FINISHED RAIL FASTENINGS, 1934-1944

Year	Tie Plates			Fish Plates and Splice Bars		
	Quantity made	Factory Sales		Quantity made	Factory Sales	
		Net tons	Quantity	Income from sales	Net tons	Net tons \$
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	26,228	25,571		1,136,175	5,634	5,812 333,712
1937	23,284	24,394		1,123,923	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
1943	27,214	27,057		1,486,184	14,376	14,554 1,002,902
1944	41,826	38,351		2,123,629	14,583	14,324 997,004

Table 42 - PRODUCTION AND FACTORY SALES OF WIRE RODS OF IRON OR STEEL, 1934-1944

Year	Total tonnage made	Factory Sales			Year	Factory Sales				
		Tonnage sold	Income from sales			Total tonnage made	Tonnage sold	Income from sales		
			Net tons	\$				Net tons \$		
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		1943	235,583	88,848	3,621,772		
1938	191,803	77,554	3,075,006		1944	244,270	105,046	4,300,337		
1939	240,194	98,070	3,954,970							

Table 43 - PRODUCTION AND FACTORY SALES OF BLOOMS, BILLETS AND SLABS, 1934-1944

Year	Except for Forging (x)			For Forging		
	Total tonnage made	Factory Sales		Total tonnage made	Factory Sales	
		Tonnage sold	Income from sales		Tonnage sold	Income from sales
	Net tons	Net tons	\$	Net tons	Net tons	\$
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	23,732	979,797
1939	1,109,145	147,978	4,702,975	29,203	27,036	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	6,882,562	111,712	102,317	5,796,472
1942	1,608,969	162,171	5,650,983	226,541	178,897	10,692,911
1943	1,694,930	134,000	6,320,193	165,999	145,492	7,586,292
1944	1,643,679	125,159	4,849,949	226,114	211,800	12,191,804

(x) Includes sheet and tinplate bars and muck and scrap bars for 1934 to 1937. Shipments to other Canadian rolling mills are included.

Table 44 - PRODUCTION AND FACTORY SALES OF HOT ROLLED BARS (x), OF ALL KINDS, 1934-1944

Year	Total tonnage made	Factory Sales	
		Tonnage sold	Income from sales
	Net tons	Net tons	\$
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	215,830	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
1943	598,113	489,879	43,233,796
1944	534,196	428,982	30,099,216

(x) Includes light angles prior to 1939.

Table 45 - PRODUCTION OF STRUCTURAL STEEL SHAPES (x), OF ALL KINDS, 1934-1944

Year	Total tonnage made	Factory Sales	
		Tonnage sold	Income from sales
	Net tons	Net tons	\$
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	191,319	10,540,658
1943	146,965	151,674	8,802,273
1944	155,908	159,241	9,380,379

(x) Includes light angles since 1939.

Table 46 - PRODUCTION AND FACTORY SALES OF STEEL PLATES, 1939-1944

Year	Total tonnage made	Factory Sales	
		Tonnage sold	Income from sales
	Net tons	Net tons	\$
1939	75,655	76,189	3,770,927
1940	82,481	83,392	4,338,799
1941	194,647	191,620	13,161,884
1942	391,887	385,314	30,095,754
1943	395,298	391,202	27,919,833
1944	390,343	389,671	26,566,575

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1944

Name of Firm	Location of Plants
<u>(a) PIG IRON</u>	
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.
<u>(b) FERRO-ALLOYS (x)</u>	
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.
<u>(c) STEEL INGOTS AND STEEL CASTINGS</u>	
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	Laval St., Joliette, Que.
La Compagnie F. X. Drolet	206 rue du Pont, Quebec, Que.

(x) Not including the firms which made ferro-alloys as secondary products.

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1944 - (Concluded)

Name of Firm	Location of Plants
(c) STEEL INGOTS AND STEEL CASTINGS (Concluded)	
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
Sorel Industries, Limited	Sorel, Que.
Sorel Steel Foundries, Limited	7 Limoges St., Sorel, Que.
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.
Atlas Steels, Limited	East Main St., Welland, Ont.
Burlington Steel Company, Limited	Sherman Avenue North, Hamilton, Ont.
Canada Electric Castings, Limited	West St., Orillia, Ont.
Dominion Foundries & Steel, Limited	Depew St., Hamilton, Ont.
Fahr alloy, Canada, Limited	Barrie Road, Orillia, Ont.
Federal Foundries and Steel Co., 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 St., Hamilton, Ont.
Welland Electric Steel Foundry Limited	123 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 Dept.)	32nd Ave. and 17th St. E., Winnipeg, Man.
Riverside Iron Works, Limited	803 - 24th Avenue S. E., Calgary, Alta.
Britannia Mining and Smelting Company, Limited	Britannia Beach, B.C.
Consolidated Mining & Smelting Company of Canada, Limited	Tadanac, B.C.
Reliance Foundry Company, Limited	149 Fourth Avenue West, Vancouver, B.C.
Vancouver Engineering Works, Limited	519 Sixth Avenue West, Vancouver, B.C.
Westland Iron and Steel Foundries, Limited	1395 Franklin St., Vancouver, B.C.
A-1 Steel & Iron Foundry Ltd.	29 West 3rd Ave., Vancouver, B.C.
Victoria Machinery Depot Co. Ltd.	33 Dallas Road, Victoria, B.C.
(d) HOT ROLLED IRON AND STEEL	
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.
Pack Rolling Mills, Limited	851 Mill St., Montreal, Que.
Sorel Industries Limited	Sorel, 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 32nd Ave., Winnipeg, Man.
(e) COLD ROLLED STEEL	
Stanley Steel Company, Limited	57 Gerrard St., Hamilton, Ont.
(f) COLD DRAWN STEEL	
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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