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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 1936

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

OTTAWA
1937

Price 15 cents

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ANNUAL INDUSTRY REPORT

IRON AND STEEL AND THEIR PRODUCTS GROUP

THE PRIMARY IRON AND STEEL INDUSTRY, 1936

Statistics for the primary iron and steel industry cover the operations of plants engaged chiefly in the manufacture of (a) pig iron, (b) ferro-alloys, (c) steel ingots and direct steel castings, (d) rolled and drawn iron and steel products such as bars, plates, sheets, strips, rails, wire rods, structural shapes, etc. Forty firms were included in this industry in 1936 and reports were received for 55 different plants or departments including 4 blast furnace departments, 4 ferro-alloy plants, 31 steel furnace divisions and 16 rolling or drawing mills. Separate reports were received for blast furnace departments, steel furnace divisions and rolling mills even when they were really units of a single plant.

Factory sales of pig iron, steel and ferro-alloys and rolled products were nearly 20 per cent higher in 1936 than in 1935, the values being $46,636,892 and $38,700,961, respectively. The 25 works in Ontario reported sales at $30,019,258 or 64 per cent of the total for Canada; 6 divisions in Nova Scotia accounted for $10,108,447 or 21 per cent, and 15 works in Quebec had total sales worth $5,074,845 or almost 11 per cent of the total. There were also 4 operating plants in Manitoba, 1 in Alberta and 3 in British Columbia.

Capital employed in 1936 was reported at $92,103,774 of which $65,178,028 represented the value of land, buildings and plant equipment, $16,863,296 was the value placed on the raw or finished materials on hand and in process, and $10,062,450 was the total of operating capital such as cash, bills receivable, etc. As at the end of the year the total capital for Ontario was reported at $57,527,056, for Nova Scotia $20,112,270, for Quebec $12,665,789, for Manitoba $1,465,671 and for Alberta and British Columbia, $332,988.

Employees in this industry numbered 11,138 in 1936 as against 9,523 in the previous year. About 782 persons worked in the blast furnace departments, 391 in ferro-alloy plants, 3,852 in the steel furnace divisions and 6,113 in the rolling mills. About 60 per cent of the total, or 6,686, were employed in Ontario, 2,015 in Quebec, 1,996 in Nova Scotia, 327 in Manitoba and 114 in Alberta and British Columbia.

Payments in salaries and wages amounted to $13,830,377, an increase of 13 per cent over the total of $12,279,390 in 1935.

Expenditures for fuel and electricity totalled $5,440,129 in 1936 against $4,845,559 a year ago. Included in the 1936 total was electricity at $1,714,873, gas at $1,498,203, coal at $1,275,377, fuel oil at $682,776, coke at $163,288, tar at $82,879 and other fuel at $22,733.

PIG IRON - Production of pig iron increased 13 per cent to 678,231 long tons in 1936 compared with 599,875 tons in 1935 and 404,995 tons in 1934. Output of basic iron was given at 530,929 tons or 78 per cent of the total; malleable iron amounted to 62,259 tons and the foundry grade to 85,043 tons.

Sales of pig iron by the producers totalled 168,054 tons at $3,327,716 in 1936 as against 131,749 tons at $2,650,990 in 1935. Transfers of pig iron to other departments of the producing companies amounted to 517,872 tons, or 16 per cent more than last year.

Imports of pig iron during the calendar year declined to 3,960 tons from 8,920 tons in 1935 and exports advanced to 13,904 tons from 13,759 tons. Stocks held by the producers at the end of the year dropped to 76,829 tons from 87,346 tons. The apparent consumption of pig iron in Canada during 1936, as computed by deducting the exports from the sum of the production and the imports and allowing for the change in stocks, amounted to 678,804 tons, compared with 573,327 tons in 1935.

Charges to iron blast furnaces in 1936 included 1,218,823 long tons of iron ore, 672,210 short tons of coke, 345,622 short tons of limestone, 49,091 long tons of mill cinder etc., and 20,386 long tons of scrap.

The four producers of pig iron in Canada have 10 blast furnaces available for use which, if operated at capacity, could produce 1.45 million tons of pig iron per year. Actual production in 1936 at 678,231 tons was about 48 per cent of the rated capacity.

Only 7 of the 10 furnaces were used during the year.

Iron furnaces in blast in January represented 47 per cent of the rated capacity; this percentage declined to 39 for February and March, then improved to 43 and 45 during April, May and June. The low point of the year at 36 per cent occurred during July and August after which September showed 49 per cent and the high rate of 60 per cent was attained during October and November. The year closed with 51 per cent of the furnace capacity in blast.

FERRO-ALLOYS - Production of ferro-alloys during 1936 amounted to 76,284 long tons compared with 56,616 tons in 1935 and 31,921 tons in 1934.

Nine different plants produced ferrosilicon during 1936; five of these recovered comparatively small tonnages as a by-product from the manufacture of fused alumina, two other companies made ferrosilicon only, one made ferrosilicon in its steel furnace and the other company made ferrosilicon, ferromanganese, spiegeleisen and ferrochrome. Another company made spiegeleisen in an iron blast furnace and a chemical company made some ferrophosphorus.

Imports of ferro-alloys in 1936 totalled 1,000 long tons appraised at $199,551 as against 2,155 tons at $273,146 in the previous year while exports advanced to 51,574 tons at $1,531,964 from 38,812 tons at $1,147,754.

STEEL INGOTS AND CASTINGS - Steel production advanced 18 per cent in 1936 to 1,115,779 long tons from 941,527 tons in 1935. This year's output included 1,081,549 tons of ingots and 34,230 tons of castings. Practically all of the ingots were transferred to the producers' rolling mills, while the most of the castings were made for sale. The sales of ingots and direct castings were reported at 28,030 tons worth $4,788,296, compared with sales of 35,392 tons worth $4,196,922 in the

previous year. Transfers to producers' own works amounted to 1,081,741 tons as against 912,075 tons.

Inventories of steel on December 31, 1936 amounted to 23,628 tons of ingots and 1,668 tons of castings, a total of 25,296 tons.

Thirty-one steel plants operated during this year. Four of these works operated basic open hearth furnaces only, 25 used electric furnaces only, 2 used both basic open hearth and electric furnaces and 2 used converters only. Six plants made basic open hearth steel ingots, 4 made electric ingots, 22 made electric steel castings, 3 made basic open hearth castings and 2 made converter castings. These plants reported steel furnace equipment as follows:- 42 basic open hearth furnaces with a capacity of 5,090 tons a day, 4 converters rated at 949 tons per day (only 2 of these converters with a capacity of 17 tons per day were operated), and 39 electric furnaces with a capacity of 618 tons.

ROLLED AND DRAWN STEEL - In 1936 there were 13 hot rolling mills in operation, 1 cold rolling plant and 2 works for making cold drawn shapes. Nine of these works were in Ontario, 3 in Quebec, 3 in Nova Scotia and 1 in Manitoba.

Sales from these rolling mills were reported at $36,054,165 an increase of 20 per cent over the corresponding total of $29,980,003 in 1935. Merchant bar sales were worth $8,317,545; plates and sheets $8,026,825; rails $4,885,388; wire rods $3,132,811; blooms, billets and slabs $2,902,013; structural shapes $1,835,257; bars for reinforcing concrete $1,811,779 and rail fastenings $1,469,887. Horseshoes, forgings, cold rolled and cold drawn steel and miscellaneous rolled products made up the balance of the output.

About 1,215,000 long tons of iron and steel passed through the mills in 1936 and 1,135,000 tons of this came from the producers' own works.

Imports of rolling mill products were valued at $27,867,397 in the calendar year 1936 as against $24,573,577 in 1935. Shipments from the United Kingdom during this period fell off slightly to $11,944,306 from $12,102,715 while purchases from the United States advanced to $14,694,428 from $11,538,552.

PRICES - During the first eleven months of 1936, the index for prices of iron and its products advanced only 1.1 to 88.3, but a sharp rise in December for nearly all specifications brought the index up to 91.4. Yearly figures for 1935 and 1936 were 87.2 and 88.0 respectively. Throughout the year orders from the auto manufacturing and the mining industries were the chief sustaining force but increased demand from other sources was also apparent. Pig iron, No. 1 foundry, rose from $20.50 in 1935 to $20.58 per long ton carlots f.o.b. sellers' works. Hot rolled and annealed steel sheets No. 10 W.S.G. moved up from $3.23 to $3.28 per 100 pounds carlots f.o.b. Montreal, during this period.

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Table 1 - PROVINCIAL DISTRIBUTION OF ACTIVE PLANTS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1936.

Provinces	No. of firms	PIG IRON		STEEL INGOTS AND CASTINGS		Rolling mills	Ferro-alloys (a)
		No. of plants	No. of blast furnaces	No. of plants	No. of steel furnaces		
Nova Scotia	4	1	3	2	13	3	...
Quebec	13	...	...	10	17	3	1
Ontario	16	3	7	10	41	9	3
Manitoba	3	...	...	3	4	1	...
Alberta	1	...	...	1	1	...	...
British Columbia	5	...	...	5	9	...	...
CANADA	40	4	10	31	85	16	4

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

Table 2 - PRINCIPAL STATISTICS OF THE PRIMARY IRON AND STEEL INDUSTRY, 1929 - 1936.

Years	No. of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Selling value of products at works
		$		$	$	$	$
1929	45	109,446,529	11,218	18,534,681	6,691,961	32,514,596	72,231,995
1930	49	112,079,926	9,723	14,934,325	5,182,136	22,765,648	52,588,935
1931	53	104,512,104	8,026	11,072,054	3,757,243	15,291,414	36,911,245
1932	52	96,323,629	4,647	6,131,057	2,367,122	6,289,483	16,197,328
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	88,465,490	9,523	12,279,390	4,845,559	18,539,072	38,700,961
1936 -							
Nova Scotia .	6	20,112,270	1,996	2,553,168	1,383,934	5,154,383	10,108,447
Quebec	14	12,665,789	2,015	2,012,951	592,524	1,989,062	5,074,845
Ontario	25	57,527,056	6,686	8,720,512	3,277,151	13,854,120	30,019,258
Manitoba	4	1,465,671	327	409,900	157,724	363,138	1,160,667
Alberta	1)						
Br. Columbia	5)	332,988	114	133,846	28,796	63,349	273,675
CANADA .	55	92,103,774	11,138	13,830,377	5,440,129	21,424,052	46,636,892

Table 3 - CAPITAL EMPLOYED, BY PROVINCES, 1935 and 1936.

Provinces	No. of plants	Present value of lands, buildings, machinery, tools and other equipment	Inventory value of materials on hand, stocks in process, fuel and finished products on hand	Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	TOTAL CAPITAL EMPLOYED
		$	$	$	$
1 9 3 5					
Nova Scotia ..	6	13,700,847	4,262,884	1,270,238	19,233,969
Quebec	13	8,665,343	1,690,299	907,281	11,262,923
Ontario	24	39,619,932	9,608,569	4,660,672	53,889,173
Manitoba	4	825,116	505,653	392,946	1,723,715
Alberta ..... Br. Columbia .	1) 5)	200,557	74,102	81,051	355,710
CANADA	53	63,011,795	16,141,507	7,312,188	86,465,290
1 9 3 6					
Nova Scotia ..	6	13,722,967	4,305,861	2,083,442	20,112,270
Quebec	14	9,819,846	1,699,682	1,146,261	12,665,789
Ontario	25	40,466,999	10,342,786	6,517,271	57,527,056
Manitoba	4	788,548	436,580	240,543	1,465,671
Alberta ..... Br. Columbia .	1) 5)	179,668	78,387	74,933	332,988
CANADA	55	65,178,028	16,863,296	10,062,450	92,103,774

Table 4 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1935 and 1936.

Provinces	On Salaries		On Wages		TOTAL EMPLOYEES	Salaries	Wages	TOTAL SALARIES AND WAGES
	Male	Female	Male	Female				
	No.	No.	No.	No.	No.	$	$	$
1 9 3 5								
Nova Scotia ..	43	4	1,565	18	1,630	90,289	2,070,754	2,161,043
Quebec	166	32	1,588	5	1,791	379,923	1,293,831	1,673,754
Ontario	451	85	5,140	6	5,682	860,019	7,088,306	7,948,325
Manitoba	26	3	274	1	304	81,478	294,153	375,631
Alberta and Br. Columbia	20	1	95	...	116	29,684	90,953	120,637
CANADA	706	125	8,662	30	9,523	1,441,393	10,837,997	12,279,390
1 9 3 6								
Nova Scotia ..	46	4	1,926	20	1,996	103,719	2,449,449	2,553,168
Quebec	184	42	1,782	7	2,015	457,549	1,555,402	2,012,951
Ontario	507	124	6,044	11	6,686	1,504,632	7,215,880	8,720,512
Manitoba	27	3	296	1	327	80,925	328,975	409,900
Alberta and Br. Columbia	18	2	94	...	114	33,266	100,580	133,846
CANADA	782	175	10,142	39	11,138	2,180,091	11,650,286	13,830,377

Table 5 - WAGE-EARNERS BY MONTHS, 1935 and 1936.

	1935			1936		
	Male	Female	Total	Male	Female	Total
	No.	No.	No.	No.	No.	No.
January	6,775	28	6,803	10,154	37	10,191
February	7,157	29	7,186	10,394	37	10,431
March	7,590	29	7,619	10,112	37	10,149
April	8,238	29	8,267	10,306	37	10,343
May	8,422	29	8,451	9,954	37	9,991
June	8,726	29	8,755	9,763	36	9,799
July	8,610	28	8,638	9,816	37	9,853
August	8,541	28	8,569	9,620	37	9,657
September	9,287	28	9,315	9,879	39	9,918
October	10,135	29	10,164	10,266	39	10,305
November	10,397	31	10,428	10,475	40	10,515
December	10,076	31	10,107	10,966	40	11,006
AVERAGE	8,662	30	8,692	10,142	39	10,181

Table 6 - NUMBER OF WAGE-EARNERS IN MONTH OF HIGHEST EMPLOYMENT DISTRIBUTED ACCORDING TO REGULAR HOURS WORKED PER WEEK, 1936.

Regular hours worked per week	Number of wage-earners
40 hours or less	588
41 - 43 hours	291
44 hours	282
45 - 47 hours	959
48 hours	6,036
49 - 50 hours	309
51 - 53 hours	257
54 hours	204
55 hours	309
56 - 59 hours	1,228
60 hours and over	1,092
TOTAL	11,555

Table 7 - FUEL AND ELECTRICITY USED, 1935 and 1936.

Kinds	Unit of measure	1935 Quantity	1935 Cost at works	1936 Quantity	1936 Cost at works
			$		$
Bituminous coal - Canadian	short ton	178,575	736,966	199,179	841,460
Imported	short ton	90,794	442,773	88,313	433,561
Anthracite coal	short ton	17	199	41	356
Coke (for fuel only)	short ton	70,214	165,707	67,357	163,288
Gasoline	Imp. gal.	68,649	10,699	67,494	12,458
Kerosene or coal oil	Imp. gal.	5,996	957	21,192	2,044
Fuel oil	Imp. gal.	8,395,446	503,172	11,910,728	682,776
Wood	cord	139	757	409	2,387
Gas - Manufactured (x)	M cu. ft.	28,977,699	1,364,700	30,728,410	1,491,399
Natural	M cu. ft.	10,472	5,773	12,841	6,804
Tar	Imp. gal.	1,374,150	65,582	1,535,954	82,879
Other fuel	xxx	...	5,875	...	5,844
Electricity purchased	K. W. H.	318,650,030	1,542,399	352,225,845	1,714,873
TOTAL	xxx	...	4,845,559	...	5,440,129
Electricity generated for own use	K. W. H.	1,573,000	...	3,270,000	...

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

Table 8 - POWER EQUIPMENT, 1936.

Kinds	Ordinarily in Use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines	86	55,809	2	1,900
Gasoline, gas and oil engines	11	18,760	2	850
Hydraulic turbines or water wheels	4	1,300	...	...
Total Primary	101	75,869	4	2,750
Electric motors operated by purchased power	3,058	130,622	50	3,161
TOTAL	3,159	206,491	54	5,911
Electric motors operated by power generated by above primary units	1,139	32,749	27	902
TOTAL ELECTRIC MOTORS	4,197	163,371	77	4,063
Boilers	168	48,132	5	1,800

(a) PIG IRON

Table 9 - MATERIALS CHARGED TO IRON BLAST FURNACES, 1935 and 1936.

Materials		1935		1936	
		Quantity	Cost at furnace	Quantity	Cost at furnace
			$		$
Foreign iron ore	long tons	1,039,234	3,528,011	1,218,823	4,010,500
Mill cinder, scale, etc.	long tons	55,269	107,687	49,091	144,725
Scrap (net charge)	long tons	30,714	300,131	20,386	177,923
Limestone -					
From Canadian quarries	short tons	94,818	117,771	120,275	148,323
From foreign sources	short tons	183,651	179,853	225,347	212,333
Coke made in Canada -					
From Canadian coal	short tons	239,312	1,352,244	296,712	1,518,054
From imported coal	short tons	281,359	1,420,234	305,571	1,569,985
Imported coke	short tons	56,684	364,003	69,927	500,264
Other materials	xxx	...	110,684	...	49,610
TOTAL	xxx	...	7,480,618	...	8,331,717

Table 10 - PRODUCTION OF PIG IRON AND SALES BY THE PRODUCERS, 1935 and 1936.

Grades	Total tonnage made	Tonnage shipped to producers' own plants	SALES	
			Quantity	Selling value at works
	Long tons	Long tons	Long tons	$
1935				
Basic	468,244	431,435	15,968	332,658
Foundry	62,294	4,016	60,414	1,212,396
Malleable	69,337	9,714	55,367	1,105,936
TOTAL	599,875	445,165	131,749	2,650,990
1936				
Basic	530,929	511,375	22,161	495,911
Foundry	85,043	2,107	83,552	1,622,190
Malleable	62,259	4,390	62,341	1,209,615
TOTAL	678,231	517,872	168,054	3,327,716

Table 11 - PRODUCTION OF PIG IRON, BY GRADES, 1927 - 1936 (Long tons)

Years	Basic	Foundry	Malleable	TOTAL
1927	523,701	145,787	40,209	709,697
1928	724,559	233,386	79,782	1,037,727
1929	770,478	221,644	88,038	1,080,160
1930	494,231	193,074	59,873	747,178
1931	311,850	80,892	27,296	420,038
1932	105,058	25,246	13,826	144,130
1933	189,428	22,333	15,556	227,317
1934	310,631	50,923	43,441	404,995
1935	468,244	62,294	69,337	599,875
1936	530,929	85,043	62,259	678,231

Table 12 - PRODUCTION OF PIG IRON, BY PROVINCES, 1927 - 1936. (Long tons)

Years	Nova Scotia	Ontario	TOTAL
1927	249,549	460,148	709,697
1928	302,756	734,971	1,037,727
1929	310,801	769,359	1,080,160
1930	212,636	534,542	747,178
1931	101,393	318,645	420,038
1932	30,697	113,433	144,130
1933	118,514	108,803	227,317
1934	133,360	271,635	404,995
1935	208,002	391,873	599,875
1936	257,148	421,083	678,231

Table 13 - PRODUCTION OF PIG IRON, BY MONTHS, 1929 - 1936. (Long tons)

Months	1930	1931	1932	1933	1934	1935	1936
January	87,079	35,592	10,305	20,209	30,677	44,416	61,338
February	70,600	46,395	10,507	6,144	12,199	37,259	55,751
March	74,582	57,110	17,989	...	12,101	44,727	54,009
April	72,339	53,792	16,898	...	27,355	43,388	54,045
May	80,505	50,511	13,339	...	38,189	45,432	58,832
June	66,081	55,822	8,163	857	37,306	44,555	56,362
July	64,676	40,303	7,317	31,689	36,759	50,513	34,988
August	57,459	23,212	5,992	35,233	41,485	54,414	38,570
September	49,395	17,585	5,709	30,738	43,019	54,360	51,892
October	40,079	11,562	6,731	27,002	46,573	45,521	70,051
November	46,360	14,292	14,149	29,592	38,968	64,562	74,337
December (x) ...	38,023	13,862	27,031	36,853	40,364	70,728	68,058
TOTAL	747,178	420,038	144,130	227,317	404,995	599,875	678,231

(x) Monthly errors are compensated in December entries.

Table 14 - PRODUCTION OF PIG IRON, BY GRADES AND BY METHOD OF CASTING OR DELIVERY, 1935 and 1936. (Long tons)

Grades	Delivered in molten condition	Machine cast	TOTAL
1935			
Basic	352,722	115,522	468,244
Foundry	2,025	60,269	62,294
Malleable	3,194	66,143	69,337
TOTAL	357,941	241,934	599,875
1936			
Basic	317,200	213,729	530,929
Foundry	800	84,243	85,043
Malleable	608	61,651	62,259
TOTAL	318,608	359,623	678,231

Table 15 - SALES OF PIG IRON BY THE PRODUCERS AND SHIPMENTS TO OWN WORKS, 1927 - 1936. (Long tons)

Years	Tonnage shipped to producers' own plants	SALES	
		Tonnage sold	Income from sales
			$
1927	521,638	202,848	4,250,792
1928	706,700	258,479	5,085,091
1929	753,889	324,759	6,544,645
1930	510,604	215,304	4,123,562
1931	316,447	139,620	2,613,511
1932	89,256	55,440	1,088,532
1933	154,239	76,507	1,402,903
1934	350,906	97,440	1,856,284
1935	445,165	131,749	2,650,990
1936	517,872	168,054	3,327,716

Table 16 - IRON ORE, FUEL AND FLUX CHARGED TO IRON BLAST FURNACES, 1927 - 1936.

Years	Imported iron ore	Mill cinder, scale, etc.	Scrap	Coke	Limestone
	Long tons	Long tons	Long tons	Short tons	Short tons
1927	1,263,990	77,826	43,120	798,803	407,403
1928	1,801,687	127,353	55,588	1,121,864	566,170
1929	1,924,579	120,779	61,955	1,171,171	559,032
1930	1,328,929	94,766	35,909	796,040	401,688
1931	745,951	56,525	16,272	448,845	224,786
1932	253,337	16,297	7,071	155,932	77,086
1933	400,290	17,992	10,879	247,974	132,235
1934	718,237	37,043	12,461	415,462	209,104
1935	1,039,234	55,269	30,714	577,355	278,469
1936	1,218,823	49,091	20,386	672,210	345,622

Table 17 - IMPORTS INTO CANADA AND EXPORTS OF PIG IRON, 1927 - 1936.

Years	IMPORTS		EXPORTS	
	Long tons	$	Long tons	$
1927	40,922	781,832	344	7,752
1928	43,307	791,733	1,043	20,642
1929	32,548	624,891	7,478	151,967
1930	13,643	270,157	593	12,653
1931	7,912	148,951	2,787	55,183
1932	4,753	78,845	2,029	38,816
1933	2,459	43,298	11,903	214,195
1934	6,419	108,300	9,221	176,093
1935	8,920	143,726	13,759	287,396
1936	3,960	74,589	13,904	304,682

Table 18 - STOCKS OF PIG IRON HELD BY PRODUCERS IN CANADA, 1931 - 1936.

Years	Long tons
1931	128,222
1932	113,739
1933	109,507
1934	65,637
1935	87,346
1936	76,829

Table 19 - APPARENT CONSUMPTION OF PIG IRON IN CANADA, 1927 - 1936.

Years	Production	Add Imports	Deduct Exports	Add or deduct changes in stock	Apparent Consumption
	(Long tons)				
1927	709,697	40,922	344	Not	750,275
1928	1,037,727	43,307	1,043		1,079,991
1929	1,080,160	32,548	7,478	avail-	1,105,230
1930	747,178	13,643	593		760,228
1931	420,038	7,912	2,787	able	425,163
1932	144,130	4,753	2,029	+ 14,483	161,337
1933	227,317	2,459	11,903	+ 4,232	213,641
1934	404,995	6,419	9,221	+ 43,870	446,063
1935	599,875	8,920	13,759	- 21,709	573,327
1936	678,231	3,960	13,904	+ 10,517	678,804

Table 20 - CONSUMPTION OF PIG IRON IN CANADA, BY INDUSTRIES AND BY PROVINCES, 1930 - 1935.

	1930	1931	1932	1933	1934	1935
			(Long tons)			
(a) By Industries						
Steel ingots and castings	520,562	328,063	106,951	156,962	352,346	446,271
Castings and forgings	149,012	114,670	55,429	37,300	52,938	50,670
Boilers, tanks and engines	1,404	657	744	3,156	6,579	8,947
Agricultural implements	26,589	11,704	4,427	4,974	6,750	13,705
Machinery	24,836	8,837	4,913	4,091	6,608	8,070
Automobiles			Not available.			
Automobile parts	2,718	35	1,823	2,000	4,105	5,634
Railway rolling stock	23,601	14,433	6,855	7,653	13,530	12,772
Brass and copper products	...	...	...	...	917	1,498
Sheet metal products	272	6	...	...	...	...
Hardware and tools	1,713	1,130	908	872	1,418	1,491
Miscellaneous iron and steel	737	168	272	220	242	314
Heating and cooking apparatus	(a)	(a)	(a)	(a)	(a)	14,596
Electrical apparatus and supplies	2,862	1,585	546	427	876	1,921
TOTAL	754,306	481,288	182,868	217,655	446,309	565,889
(b) By Provinces						
Prince Edward Island	60	50	42	30	30	32
Nova Scotia	213,011	122,152	28,569	85,854	171,680	206,717
New Brunswick	1,677	1,287	689	971	1,926	1,953
Quebec	56,291	39,661	19,336	11,356	17,733	19,897
Ontario	478,284	315,221	132,181	117,934	253,255	335,182
Manitoba	2,761	1,415	1,274	822	880	1,192
Saskatchewan	...	...	...	...	...	...
Alberta	187	120	108	73	100	123
British Columbia	2,035	1,382	669	615	705	793
CANADA	754,306	481,288	182,868	217,655	446,309	565,889

(a) Included with castings & forgings.

Table 21 - BLAST FURNACES IN CANADA, 1936.

Names of companies	Location of plants	Number of stacks	Total daily capacity (24 hours)	Number of days in blast 1935	1936
			(Long tons)		
Dominion Steel and Coal Corporation Ltd.	Sydney, N.S.	1	350	62	366
		1	300	...	92
		1	550	365	228
TOTAL		3	1,200	...	...
Canadian Furnace Co. Ltd.	Port Colborne, Ont.	1	350	238	224
The Steel Co. of Canada, Ltd.	Hamilton, Ont.	1	275	...	165
		1	550	365	366
TOTAL		2	825	...	...
Algoma Steel Corp. Ltd.	Sault Ste. Marie, Ont.	1	300	...	...
		1	300	...	...
		1	450	326	230
		1	550	...	...
TOTAL		4	1,600	...	...
TOTAL FOR CANADA		10	3,975	...	...

(b) FERRO-ALLOYS

Table 22 - PRODUCTION OF FERRO-ALLOYS, 1927 - 1936.

Years	Long tons	Years	Long tons
1927	56,230	1932	16,161
1928	44,842	1933	30,133
1929	89,116	1934	31,921
1930	65,223	1935	56,616
1931	46,764	1936	76,284

Table 23 - PRODUCERS OF FERRO-ALLOYS IN CANADA, 1936.

Names of Companies	Plant locations	Ferro-alloys made
Abrasive Co. of Canada, Ltd.	Hamilton, Ont.	Ferrosilicon
Canadian Carborundum Co. Ltd.	Niagara Falls, Ont.	Ferrosilicon
Canadian Furnace Co.	Port Colborne, Ont.	Spiegeleisen
Chromium Mining & Smelting Co. of Can.Ltd.	Sault Ste. Marie, Ont.	Ferrosilicon and ferrochrome
Electro Metallurgical Co. of Canada, Ltd.	Welland, Ont.	Ferrosilicon, ferrochrome, ferromanganese, silico manganese, and spiegeleisen
Electric Reduction Co. Ltd.	Buckingham, Que.	Ferrophosphorus
Exolon Company	Thorold, Ont.	Ferrosilicon
Lionite Abrasives Ltd.	Stamford, Ont.	Ferrosilicon
Norton Company	Chippawa, Ont.	Ferrosilicon
Shawinigan Chemicals Ltd.	Shawinigan Falls, Que.	Ferrosilicon
St. Lawrence Alloys Ltd.	Beauharnois, Que.	Ferrosilicon

Table 24 - IMPORTS INTO CANADA AND EXPORTS OF FERRO-ALLOYS, 1935 and 1936.

Items	1935		1936	
	short tons	$	short tons	$
(a) Imports				
Ferromanganese, spiegeleisen and other alloys of manganese and iron containing not more than 1 percentum, by weight of silicon	18	3,789	47	4,730
Ferromanganese, silico-spiegel and other alloys of manganese and iron containing more than 1 percentum, by weight of silicon	34	3,938	18	1,924
Ferrosilicon, being an alloy of iron and silicon containing 8 percentum or more, by weight of silicon and less than 60 percentum	1,294	28,693	412	14,120
Ferrosilicon, being an alloy of iron and silicon containing 60 percentum or more, by weight of silicon and less than 90 percentum	...	...	1	9
Ferrosilicon, being an alloy of iron and silicon containing 90 percentum or more, by weight of silicon	...	...	...	...
Other alloys used in the manufacture of iron or steel	1,068	236,666	639	178,768
TOTAL	2,414	273,146	1,117	199,551
(b) Exports				
Ferrosilicon	7,953	232,638	8,177	277,165
Ferromanganese and other ferro-alloys	35,517	915,116	49,586	1,254,799
TOTAL	43,470	1,147,754	57,763	1,531,964

(c) STEEL INGOTS AND DIRECT STEEL CASTINGS

Table 25 - MATERIALS USED IN STEEL FURNACES, 1935 and 1936.

Materials	1935 Quantity	1935 Cost of purchased materials	1936 Quantity	1936 Cost of purchased materials
	Long tons	$	Long tons	$
(a) Metals:-				
Pig iron - Own make	441,982	...	516,374	...
Purchased	4,289	94,827	5,369	123,172
Spiegeleisen and ferromanganese	10,733	449,155	13,448	562,456
Ferrosilicon	3,867	185,140	4,487	213,572
Ferrochrome	...	283,412	546	106,961
Other ferro-alloys			793	188,969
Scrap iron and steel - Own make	290,462	...	265,351	...
Purchased	351,197	3,694,029	428,638	5,007,161
Metals for making alloy steels - Nickel	...	109,062	262	136,715
Other metals			397	98,332
TOTAL METALS	...	4,815,625	...	6,437,338
(b) Ores:-				
Crude iron ore, imported	49,717	265,439	64,678	293,282
Calcined, roasted, or treated ore, imported	181	2,473	29	264
Manganiferous ore, imported	414	6,632	159	2,276
Chrome ore, imported	208	6,269	324	9,965
TOTAL ORES	50,520	280,813	65,190	305,787
	Short tons			
(c) General Materials:-				
Limestone - Canadian	32,898	52,889	42,556	70,716
Foreign	58,514	55,102	66,644	60,677
Fluorspar	5,859	73,047	7,942	88,403
Dolomite	18,394	79,914	43,562	145,502
Magnesite	3,891	149,987	6,432	230,656
Coke made from Canadian coal	863	8,832	875	8,699
Coke made in Canada from imported coal	354	1,777	314	1,830
Imported coke	1,529	18,081	1,223	12,390
Anthracite coal	256	2,106	296	2,585
Bituminous coal	264	2,116	200	1,600
Charcoal	159	3,922	155	3,639
Electrodes	...	144,580	...	154,727
Moulding sands	20,339	105,592	21,630	109,914
Sand-blast sand			1,790	11,228
Firebrick and fireclay	...	299,961	...	499,598
Other materials	...	1,192,676	...	626,783
TOTAL GENERAL MATERIALS	...	2,136,582	...	2,028,947
TOTAL VALUE OF METALS, ORES AND GENERAL MATERIALS USED	...	7,287,020	...	8,772,072

Table 26 - PRODUCTION OF STEEL INGOTS AND DIRECT STEEL CASTINGS, AND SALES BY THE PRODUCERS, 1935 and 1936.

Grades	Alloy steel made	Total tonnage of steel made (all kinds including alloys)	Tonnage shipped to producers' own plants	SALES	
				Quantity	Income from sales
	Long tons	Long tons	Long tons	Long tons	$
1935					
Steel Ingots -					
Basic open hearth	21,904	872,444	871,614	591	18,469
Electric	...	36,742	35,417	45	4,052
Direct Steel Castings -					
Basic	581	9,119	1,640	6,281	927,561
Converter	...	645	...	665	121,168
Electric	6,936	22,577	3,404	27,810	3,125,672
TOTAL	29,421	941,527	912,075	55,392	4,196,922
1936					
Steel Ingots -					
Basic open hearth	29,476	1,037,713	1,035,209	174	5,396
Electric	5,927	43,836	43,949	...	...
Direct Steel Castings -					
Basic	1,737	10,208	2,213	7,053	1,085,189
Converter	...	575	...	582	119,507
Electric	8,344	23,447	370	20,221	3,578,204
TOTAL	45,484	1,115,779	1,081,741	28,030	4,788,296

Table 27 - PRODUCTION OF STEEL INGOTS AND DIRECT STEEL CASTINGS, BY GRADES, 1927 - 1936.

Years	STEEL INGOTS		DIRECT STEEL CASTINGS			Total steel ingots and castings
	Open hearth	Electric	Open hearth	Converter	Electric	
	(Long tons)					
1927	868,440	134	17,569	2,191	19,611	907,945
1928	1,189,399	602	20,109	2,019	22,590	1,234,719
1929	1,295,162	14,444	35,806	2,590	30,022	1,378,024
1930	925,427	30,051	24,772	2,314	27,014	1,009,578
1931	612,437	25,017	14,760	590	19,305	672,109
1932	308,700	19,670	2,616	846	7,514	339,346
1933	378,666	15,393	5,017	288	10,615	409,979
1934	713,227	23,891	6,457	507	13,700	757,782
1935	872,444	36,742	9,119	645	22,577	941,527
1936	1,037,713	43,836	10,208	575	23,447	1,115,779

Table 28 - PRODUCTION OF STEEL INGOTS AND DIRECT CASTINGS, BY MONTHS, 1930 - 1936.
(Long tons)

Months	1930	1931	1932	1933	1934	1935	1936
January	115,200	57,598	26,060	40,766	60,787	59,526	100,225
February	106,612	82,637	28,469	12,374	57,899	56,006	93,365
March	117,487	99,341	43,572	11,212	72,923	57,840	101,092
April	102,681	91,461	36,030	11,384	70,363	68,530	107,220
May	99,312	75,235	29,239	23,126	71,437	72,811	94,602
June	95,321	55,605	18,118	31,602	64,013	73,450	82,196
July	68,424	45,097	27,506	49,076	66,647	86,101	68,793
August	57,626	52,491	26,710	48,659	63,504	82,488	80,164
September	55,808	33,390	23,139	38,630	57,489	90,952	86,077
October	65,431	30,926	17,102	48,496	57,975	95,016	98,330
November	71,740	28,337	37,088	43,099	57,050	94,074	98,534
December (x)	53,936	19,991	27,313	51,555	57,595	104,733	105,181
TOTAL	1,009,578	672,109	339,346	409,979	757,782	941,527	1,115,779

(x) Monthly errors are compensated in December entries.

Table 29 - ANNUAL PRODUCTION OF STEEL INGOTS AND DIRECT STEEL CASTINGS, BY PROVINCES, 1927 - 1936. (Long tons)

Years	Nova Scotia	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
1927	297,637	22,297	567,119	20,318	...	574	907,945
1928	391,783	24,583	780,511	36,486	361	995	1,234,719
1929	407,062	42,212	899,911	27,425	298	1,116	1,378,024
1930	296,552	45,171	639,128	19,121	8,377	1,229	1,009,578
1931	172,529	35,834	442,231	14,020	6,685	810	672,109
1932	68,630	19,010	243,047	6,412	1,880	367	339,346
1933	124,134	18,917	257,615	8,509	206	598	409,979
1934	260,825	27,744	457,497	9,912	388	1,416	757,782
1935	298,769	35,076	589,558	16,254	370	1,500	941,527
1936	379,018	39,792	675,887	19,199	272	1,611	1,115,779

Table 30 - SALES OF STEEL INGOTS AND DIRECT CASTINGS BY THE PRODUCERS AND SHIPMENTS TO OWN WORKS, 1927 - 1936.

Years	Tonnage shipped to producers' own plants	SALES	
		Tonnage sold	Income from sales
	Long tons	Long tons	$
1927	783,580	34,287	6,157,084
1928	1,190,933	38,444	7,022,696
1929	1,313,624	61,981	10,283,460
1930	963,143	48,563	8,013,707
1931	641,880	30,831	5,143,495
1932	328,624	11,543	1,913,157
1933	394,236	14,934	2,365,171
1934	737,477	20,139	3,228,451
1935	912,075	35,392	4,196,922
1936	1,081,741	28,030	4,788,296

Table 31 - STEEL FURNACES IN CANADA, 1936.

Names of Companies and Location of Furnaces	FURNACES		
	Type	Number	Total Daily Capacity (Long tons)
J. W. Cumming Manufacturing Co. Ltd., New Glasgow, N.S.	Electric (Heroult)	1	16 to 20
Dominion Steel & Coal Corp. Ltd., Sydney, N.S.	Basic open hearth	12	1,190
Canadian Brake Shoe & Foundry Co. Ltd., Sherbrooke, P.Q.	Electric (Heroult)	3	28
Canadian Car & Foundry Co. Ltd., Montreal, P.Q.	(Basic open hearth	3	264
	(Electric (Volta)	1	21
Canadian Tube & Steel Products Limited, Montreal, P.Q.	Electric (Heroult)	2	54
Hull Iron & Steel Foundries, Ltd., Hull, P.Q.	Electric (Heroult)	1	24
Joliette Steel, Limited Joliette, P.Q.	Electric (Greaves Etchell)	1	10
La Compagnie F. X. Drolet, Quebec, P.Q.	Converter (Baillot)	1	2
Lynn MacLeod Engineering Supplies, Ltd., Thetford Mines, P.Q.	Electric (Heroult)	1	1½

Table 31 - STEEL FURNACES IN CANADA, 1936 (concluded)

Names of Companies and Location of Furnaces	FURNACES		
	Type	Number	Total Daily Capacity (Long tons)
Manganese Steel Castings, Limited, Sherbrooke, P. Q.	Electric Heroult	1	6
Shawinigan Chemicals Limited, Shawinigan Falls, P. Q.	Electric (Volta	1	12
	Electric (Heroult	1	12
Sorel Steel Foundries, Limited, Sorel, P. Q.	Pittsburgh Electromelt	1	15
Algoma Steel Corporation, Limited, Sault Ste. Marie, Ont.	(Basic open hearth	12	1,660
	(Converter (acid)	1	900
Burlington Steel Co. Ltd., Hamilton, Ont.	Electric (Moore Lectromelt)	1	55
Canada Electric Castings, Ltd., Orillia, Ont.	Electric (Heroult)	2	24
Canadian Atlas Steels, Ltd., Welland, Ont.	Electric (Heroult)	1	20
Dominion Foundries & Steels Ltd., Hamilton, Ont.	(Basic open hearth	3	482
	(Electric (Heroult)	2	116
Fahralloy Canada Ltd.	Electric (Volta)	2	19
Ford Motor Co. of Canada, Ltd., Windsor, Ont.	Electric (Swindell-Dressler	2	48
	Electric (Canadian Lectromelt	1	32
The William Kennedy & Sons, Limited, Owen Sound, Ont.	Converter	1	15
The Steel Company of Canada, Limited, Hamilton, Ont.	Basic open hearth	10	1,560
Welland Electric Steel Foundry, Welland, Ont.	Electric (Heroult)	3	20
Manitoba Rolling Mill Company, Ltd., Selkirk, Man.	Basic open hearth	2	110
Manitoba Steel Foundries, Limited, Selkirk, Man.	Electric (Moore)	1	30
Vulcan Iron Works, Limited, Winnipeg, Man.	Electric (Moore (Lectromelt)	1	12
Riverside Iron Works, Limited, Calgary, Alberta	Electric (Greene)	1	4
Britannia Mining & Smelting Co., Britannia Beach, B. C.	Electric (Greene)	1	13
Consolidated Mining & Smelting Co. Ltd., Trail, B. C.	Electric (Greene)	1	7
Reliance Foundry Co. Ltd., Vancouver, B. C.	Electric	2	9
Vancouver Engineering Works, Ltd., Vancouver, B. C.	(Converter (acid)	1	32
	(Electric (Greaves Etchell)	1	7
	(Electric (Heroult)	1	5
Wallace Foundry Co. Ltd., Vancouver, B. C.	Electric (Greene)	2	18

Table 32 - SUMMARY OF STEEL FURNACE CAPACITY IN CANADA, 1936.

Type of furnace	Number of furnaces	Total daily capacity (24 hours) (Long tons)
Basic open hearth	42	5,090
Electric	39	618
Converter	4	949
TOTAL	85	6,657

Table 33 - MATERIALS USED IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1935 and 1936.

Materials	1935 Companies' own make	1935 PURCHASED Quantity	1935 PURCHASED Cost at works	1936 Companies' own make	1936 PURCHASED Quantity	1936 PURCHASED Cost at works
	Long tons	Long tons	$	Long tons	Long tons	$
Steel, crude and semi-finished (ingots, blooms, billets, slabs)	943,322	34,088	1,230,403	1,127,220	30,606	1,125,842
Rails, old and scrap	675	20,828	277,608	1,112	25,874	364,642
Axles, scrap	...	3,646	60,902	...	4,413	63,512
Iron muck and scrap bar	1,281	...	...	...	...	...
Iron and steel scrap	2,531	6,043	63,004	4,155	281	6,605
Hot rolled steel bars for cold rolling or drawing	...	15,487	836,422	...	19,087	957,523
All other iron and steel	2,434	818	47,805	2,618	992	55,333
All other materials	...	...	310,112	...	...	410,196
TOTAL	...	...	2,826,256	...	...	2,984,213

Table 34 - PRODUCTS MADE IN THE IRON AND STEEL ROLLING AND DRAWING MILLS, AND SALES BY THE PRODUCERS, 1935 and 1936.

Products	Total tonnage made	Tonnage shipped to producers' own plants	SALES Quantity	SALES Value
	Long tons	Long tons	Long tons	$
1935 -				
Blooms, billets and slabs (except for forging), sheet and tinplate bars and muck and scrap bar	667,442	599,750	71,711	1,899,030
Rails	109,198	506	109,240	4,484,594
Structural shapes including angles, beams, channels, tees, sheet piling, etc. but excluding plates, merchant bars, bars for reinforced concrete	37,972	231	39,068	1,937,695
Plates and sheets, including universal plates (including flats over 6 in.) boiler plates, other plates, plain sheets and galvanized sheets and tinplate made in rolling mills	128,864	18,416	104,722	5,937,008
Merchant bars, including spring steel, alloy steel, tool steel, rounds, squares, flats (6 in. and under) except flats for cold rolling and bars for reinforcing concrete	139,727	16,777	126,047	7,195,199
Bars for reinforcing concrete, including rounds squares, twisted, deformed, etc.	37,519	2,622	31,915	1,597,280
Wire rods, including chain rods	183,469	112,767	68,398	2,412,244
Long angle splice bars, long fish plate bars, long tie plate bars and all other long rail joint shape bars	25,857	25,879	11	593
Rolled blooms, billets, and axle blanks for forging purposes only, excluding all intended for further rolling	5,460	1,651	3,305	173,298
Spike rods, bolt and nut rods, horseshoe bars, and all other miscellaneous hot rolled (not forged) forms, not elsewhere specified	14,374	8,590	4,492	239,481
Cold rolled and cold drawn finished steel shapes	14,968	...	15,120	1,402,950

Table 34 - PRODUCTS MADE IN THE IRON AND STEEL ROLLING AND DRAWING MILLS, AND SALES BY THE PRODUCERS, 1935 and 1936 (concluded)

Products	Total tonnage made	Tonnage shipped to producers' own plants	S A L E S	
			Quantity	Value
	Long tons	Long tons	Long tons	$
1 9 3 5 (concluded) -				
Rail fastenings, finished -				
Tie plates	18,232	1	18,438	944,342
Angle splice bars and fish plates	5,458	17	5,370	344,711
Forgings of iron or steel	5,097	...	4,287	450,726
Scrap iron and steel	2,020	621	1,478	14,817
Other products including railway spikes, bolts, nuts and rivets, horseshoes, etc.	10,314	725	9,788	946,035
TOTAL	...	...	...	29,980,003
1 9 3 6				
Blooms, billets and slabs (except for forging) sheet and tinplate bars and muck and scrap bar	704,023	595,150	110,637	2,902,013
Rails	116,192	136	117,154	4,885,388
Structural shapes, including angles, beams, channels, tees, sheetpiling, etc. but excluding plates, merchant bars, bars for reinforced concrete	37,087	353	36,426	1,835,257
Plates and sheets including universal plates (including flats over 6 in.) boiler plates, other plates, plain sheets and galvanized sheets and tinplate made in rolling mills	163,091	22,810	136,209	8,026,825
Merchant bars, including spring steel, rounds, squares, flats (6 in. and under), except flats for cold rolling and bars for reinforcing concrete - Alloy	16,159	326	15,256	1,466,617
Other	145,373	15,270	133,786	6,850,928
Bars for reinforcing concrete, including rounds, squares, twisted, deformed, corrugated, etc.	42,650	1,935	39,321	1,811,779
Cold rolled and cold drawn finished shapes	16,753	...	16,840	1,585,705
Wire rods, including chain rods	206,185	117,916	87,825	3,132,811
Long angle splice bars, long fish plate bars, long tie plate bars and all other long rail joint shape bars	32,564	32,571	...	...
Rolled blooms, billets and axle blanks for forgining purposes only, excluding all intended for further rolling	6,232	1,214	4,962	249,554
Spike rods, bolt and nut rods, horseshoe bars, toe calk bars, rolled shafting and all other miscellaneous hot rolled (not forged) forms, not elsewhere specified	15,036	13,309	3,833	157,312
Rail fastenings, finished -				
Tie plates	23,418	3	22,831	1,136,175
Angle splice bars and fish plates	5,030	4	5,189	333,712
Forgings of iron and steel	5,902	479	6,231	587,389
Scrap iron and steel	8,739	6,995	1,756	18,622
Other products including railway spikes, bolts and rivets, washers, horseshoes, etc.	11,951	393	11,742	1,073,573
TOTAL	...	...	...	36,054,165

Table 35 - LEADING ROLLED IRON AND STEEL PRODUCTS MADE IN CANADA, 1927 - 1936.
(Long tons)

Products	Years	Total tonnage	Tonnage shipped to makers' own plants	Tonnage sold
Blooms, billets and slabs except for forging (includes sheet and tinplate bar and muck and scrap bar for 1933 to 1936)	1927	984,627	939,605	49,429
	1928	1,058,321	874,394	80,401
	1929	1,159,045	1,012,912	74,402
	1930	756,778	690,391	60,171
	1931	484,437	483,380	50,499
	1932	220,576	196,434	12,464
	1933	224,458	214,618	8,733
	1934	505,304	432,521	54,771
	1935	667,442	599,750	71,711
	1936	704,023	595,150	110,637
Rails	1927	235,683	274	234,521
	1928	349,189	237	349,007
	1929	383,002	194	381,634
	1930	233,432	212	232,414
	1931	140,145	148	135,975
	1932	45,090	22	46,220
	1933	67,835	120	69,052
	1934	96,689	216	88,023
	1935	109,198	506	109,240
	1936	116,192	136	117,154
Wire rods, including chain rods	1927	115,245	92,896	24,020
	1928	144,309	99,805	45,032
	1929	142,589	111,879	33,632
	1930	108,992	85,867	24,389
	1931	78,133	61,081	18,839
	1932	76,589	49,825	26,668
	1933	88,692	61,422	29,111
	1934	175,585	99,089	76,992
	1935	183,469	112,767	68,398
	1936	206,185	117,916	87,825
Merchant bars	1927	186,916	27,533	157,559
	1928	258,773	59,633	208,144
	1929	244,593	36,191	206,605
	1930	164,541	30,666	143,398
	1931	102,247	21,513	87,442
	1932	53,422	7,143	48,439
	1933	56,474	6,949	56,667
	1934	108,980	14,358	92,289
	1935	139,727	16,777	126,047
	1936	161,532	15,596	149,042

Table 35 - LEADING ROLLED IRON AND STEEL PRODUCTS MADE IN CANADA, 1927-1936 - Concluded
(Long tons)

Products	Years	Total tonnage	Tonnage shipped to makers' own plants	Tonnage sold
Bars for reinforcing concrete .....,	1927 ..	34,146	974	32,909
	1928 ..	51,102	3,224	46,005
	1929 ..	59,515	3,700	60,738
	1930 ..	63,153	2,243	64,320
	1931 ..	50,296	1,985	51,280
	1932 ..	20,513	1,218	19,702
	1933 ..	16,400	686	16,019
	1934 ..	24,279	1,776	24,083
	1935 ..	37,513	2,622	31,915
	1936 ..	42,650	1,935	39,321

Table 36 - AVERAGE WHOLESALE PRICES FOR PIG IRON, STEEL BILLETS AND CERTAIN ROLLING MILL PRODUCTS, 1935 and 1936.

Commodities	Unit	Average price 1935	Average price 1936
		$	$
Pig iron, No. 1 foundry	per gross ton, f.o.b. works	20.50	20.58
Pig iron, malleable	per gross ton, f.o.b. works	19.00	19.08
Pig iron, basic	per gross ton, f.o.b. works	18.10	18.08
Steel billets, mild, 4x4 and larger	per gross ton, f.o.b. works	34.00	34.17
Steel bars, structural grade	per 100 pounds, f.o.b. works	2.15	2.16
Merchant bars, mild steel	per 100 pounds, f.o.b. works	2.25	2.26
Steel rails, open hearth	per gross ton, f.o.b. plant	43.00	43.17
Steel tank plates	per 100 pounds, f.o.b. Pittsburgh	1.81	1.86
Light cold rolled sheets, No. 20, U. S. G.	per 100 pounds, f.o.b. Pittsburgh	2.97	3.02
Galvanized corrugated iron sheets, No. 28, U. S. G.	per 100 sq.ft., f.o.b. destination	4.85	5.06
Hot rolled and annealed steel sheets, No. 24, U. S. G.	per 100 pounds, f.o.b. Montreal .	3.39	3.54
Hot rolled and annealed sheets, No. 10, U. S. G.	per 100 pounds, f.o.b. Montreal .	3.23	3.28
Mild steel tank plates, 1/4 - 1/8" thickness	per 100 pounds, f.o.b. Montreal .	3.15	3.16
Steel sheets, black, No. 10, U.S.G.	per 100 pounds, f.o.b. Montreal .	3.40	3.46
Iron boiler plate, $\frac{1}{2}$ inch thickness	per pound net, f.o.b. Montreal ..	0.03	0.03
Tinplate, standard coke	per box, f.o.b. Montreal, car lots	6.08	6.10
Structural shapes, open hearth	per 100 pounds, f.o.b. works	2.00	2.01

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY
1936

(a) PIG IRON

Dominion Steel & Coal Corporation, Limited	Sydney, N. S.
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.
Canadian Furnace Co. Ltd.	Port Colborne, Ont.
Steel Company of Canada, Limited	Hamilton, Ont.

(b) FERRO-ALLOYS /

Canadian Furnace Co. Ltd.	Port Colborne, Ont.
Chromium Mining and Smelting Co. of Canada, Ltd.	Sault Ste. Marie, Ont.
Electro Metallurgical Co. of Canada, Ltd.	Welland, Ont.
St. Lawrence Alloys, Ltd.	Beauharnois, Que.

/ Not including the firms which made ferro-alloys as secondary products.

(c) STEEL INGOTS AND DIRECT STEEL CASTINGS

Cumming, J. W., Manufacturing Co. Ltd.	Glasgow St., New Glasgow, N. S.
Dominion Steel & Coal Corporation, Limited	Sydney, N. S.
Canadian Brake Shoe & Foundry Co. Ltd.	101 Belvidere St., Sherbrooke, P. Q.
Canadian Car and Foundry Co., Limited	Longue Pointe, Montreal, P. Q.
Canadian Tube & Steel Products, Limited	5900 St. Patrick St., Montreal, P. Q.
Hull Iron & Steel Foundries, Ltd.	207 Montcalm St., Hull, P. Q.
Joliette Steel, Limited	Laval St., Joliette, P. Q.
La Compagnie F. X. Drolet	206 rue du Pont, Quebec, P. Q.
Lynn MacLeod Engineering Supplies Ltd.	Notre Dame St., Thetford Mines, P. Q.
Manganese Steel Castings Limited	Abenaquis St., Sherbrooke, P. Q.
Shawinigan Chemicals Ltd. (Stainless Steel and Alloys Division)	Shawinigan Falls, P. Q.
Sorel Steel Foundries Limited	7 Limoges St., Sorel, P. Q.
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.
Burlington Steel Co. Ltd.	Sherman Ave. N., Hamilton, Ont.
Canada Electric Castings Limited	West St., Orillia, Ont.
Canadian Atlas Steels Ltd.	East Main St., Welland, Ont.
Dominion Foundries & Steel Limited	Depew St., Hamilton, Ont.
Fahralloy, Canada, Ltd.	Barrie Road, Orillia, Ont.
Ford Motor Co. of Canada, Ltd.	Windsor, Ont.
Kennedy, William, & Sons, Limited,	Second Ave. W., Owen Sound, Ont.
Steel Company of Canada, Ltd.	Wilcox Ave., Hamilton, Ont.
Welland Electric Steel Foundry	123 Victoria St., Welland, Ont.
Manitoba Rolling Mill Company Limited	Selkirk, Man.
Manitoba Steel Foundries Limited	Selkirk, Man.
Vulcan Iron Works Limited	Pt. Douglas Ave., Winnipeg, Man.
Riverside Iron Works, Limited	803 24th Ave. S.E., Calgary, Alta.
Britannia Mining and Smelting Co. Ltd.	Britannia Beach, B. C.
Consolidated Mining & Smelting Co. of Canada Ltd.	Trail, B. C.
Reliance Foundry Co. Ltd.	149 Fourth Ave., W., Vancouver, B. C.
Vancouver Engineering Works Ltd.	519 Sixth Ave., W., Vancouver, B. C.
Wallace Foundry Co. Ltd.	Granville Island, Vancouver, B. C.

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY
1936 - Concluded

(d) HOT ROLLED IRON AND STEEL

Canadian Car & Foundry Company Limited	Amherst, N. S.
Dominion Steel & Coal Corporation, Limited	Sydney, N. S.
Nova Scotia Steel & Coal Co. Ltd.	Trenton, N. S.
Canadian Tube & Steel Products Limited	St. Patrick St., Montreal, P. Q.
Peck Rolling Mills Ltd.	851 Mill St., Montreal, P. Q.
The Steel Company of Canada, Limited	2320 Notre Dame St. W., Montreal, P. Q.
Algoma Steel Corporation Limited	Sault Ste. Marie, Ont.
Burlington Steel Company, Limited	Sherman Ave. N., Hamilton, Ont.
Canadian Atlas Steels Ltd.	Welland, Ont.
Dominion Foundries & Steel Limited	Depew St., Hamilton, Ont.
The Steel Company of Canada, Limited	Queen St. N., Hamilton, Ont.
The Steel Company of Canada, Limited	Wilcox Ave., Hamilton, Ont.
Manitoba Rolling Mill Company Limited	Selkirk, Man.

(e) COLD ROLLED STEEL

Stanley Steel Company Limited	Gerrard St., Hamilton, Ont.

(f) COLD DRAWN STEEL

Canadian Drawn Steel Company Limited	Gerrard St., Hamilton, Ont.
Union Drawn Steel Co. Ltd.	Victoria Ave. S., Hamilton, Ont.

NOTE - Detailed statistics of imports and exports of iron and steel products are published annually and quarterly in the Trade of Canada, which may be obtained on application to the Dominion Bureau of Statistics, Ottawa, Canada.