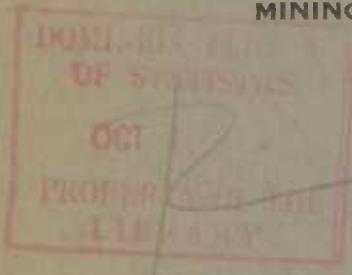


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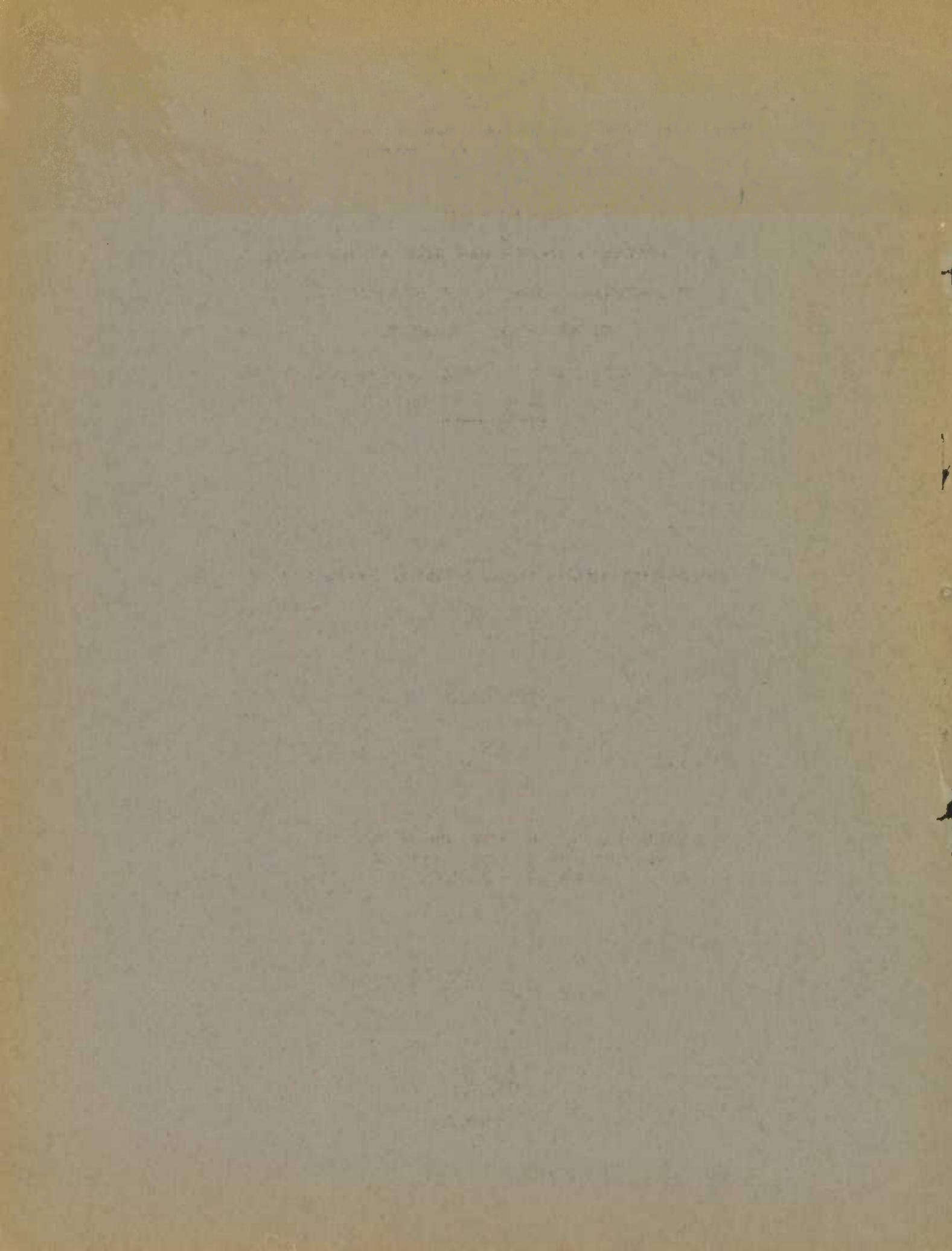
THE
PRIMARY IRON AND STEEL INDUSTRY
IN
CANADA

1939

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



Price 25 cents



DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
CENSUS OF INDUSTRY
MINING, METALLURGICAL AND CHEMICAL BRANCH
OTTAWA - CANADA

Dominion Statistician: R. H. Coats, LL.D., F.R.S.C., F.S.S.(Hon.)
Chief - Mining, Metallurgical and Chemical Branch: W. H. Losse, B.Sc.
Statistician - Metal and Chemical Products: H. McLeod, B.Sc.

ANNUAL INDUSTRY REPORT

IRON AND STEEL AND THEIR PRODUCTS GROUP

THE PRIMARY IRON AND STEEL INDUSTRY, 1939.

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. Thirty-nine firms were included in this industry in 1939 and reports were received for 54 different plants or departments, including 4 blast furnace departments, 4 ferro-alloy plants, 30 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 works.

Factory sales of pig iron, ferro-alloys, steel ingots and castings, and finished rolled products were 27 per cent higher in 1939 than in 1938, the values being \$75,934,481 and \$59,606,150, respectively. The 26 works in Ontario reported sales at \$48,925,939, or 64 per cent of the total for Canada; 6 plants in Nova Scotia accounted for \$15,223,484, or 20 per cent, and 14 works in Quebec for \$9,410,406, or 12 per cent. There were also 4 operating plants in Manitoba, 4 in British Columbia and 1 in Alberta.

Capital employed in 1939 amounted to \$113,660,251, including \$74,640,094 as the value of land, buildings and plant equipment, \$22,820,868 as the value of inventories of raw and finished materials on hand and in process, and \$16,199,289 as the total of operating capital, such as cash, bills and accounts receivable. For works in Ontario the capital was \$75,269,867; for Nova Scotia, \$22,015,230; for Quebec, \$14,358,351; for Manitoba, \$1,732,926, and for Alberta and British Columbia, \$283,877.

The average number of employees in 1939 was 13,827, an increase of 5 per cent from the 1938 average of 13,100. About 989 persons worked in blast furnace departments during the year, 440 in ferro-alloys plants, 4,551 in steel furnace divisions and 7,847 in rolling mills. About 62 per cent of the total or 8,594 were employed in Ontario, 2,473 in Quebec, 2,252 in Nova Scotia, 406 in Manitoba and 102 in British Columbia and Alberta.

Payments in salaries and wages amounted to \$20,410,517 in 1939, a gain of 12 per cent from the previous year's total of \$18,256,627. Salaries increased to \$3,003,672 from \$2,844,190 and wages to \$17,406,845 compared with \$15,412,437 in 1938.

Cost of materials for use in manufacturing processes was \$29,629,376 compared with \$24,786,761 in 1938, and the cost of fuel and electricity was \$6,174,661 against \$5,529,833; an increased expenditure, amounting to 20 per cent, was made for materials and 12 per cent for fuel and power.

PIG IRON -

The output of pig iron in 1939 amounted to 755,731 tons, an increase of 7 per cent over the total in the previous year of 705,427 tons. Production of basic iron was given at 655,560 tons or about 87 per cent of the total; foundry iron amounted to 71,709 tons and the malleable grade to 28,462 tons.

Producers' sales of pig iron totalled 171,977 tons at \$3,757,573 in 1939 compared with sales of 129,565 tons at \$2,961,639 in 1938, a gain of 33 per cent in quantity and 27 per cent in value.

NOTE - Tons of 2240 pounds unless otherwise specified.

A review of the year's output by months shows that 57,660 tons were made in January after which the production fell off to the year's low in March at 40,723 tons, then advanced intermittently to around 65,000 tons in August and September, and closed the year at the high of 94,483 in December.

Charges to iron blast furnaces during the year included 1,272,800 tons of imported ore, 45,152 tons of Canadian ore, 106,834 tons of mill cinder, 775,869 short tons of coke, 259,431 short tons of imported limestone and 97,946 short tons of Canadian limestone.

Imports of pig iron during the calendar year declined to 587 tons from 2,122 tons while exports advanced slightly to 10,728 tons from 10,546 tons in 1938.

Producers' stocks at the end of 1939 were reduced to 61,763 tons compared with 127,909 tons in the preceding year.

The apparent consumption of pig iron in Canada, as calculated by deducting the exports from the sum of the production plus imports, amounted to 811,736 tons in 1939, the corresponding figure for the previous twelve-month period being 681,381 tons.

Producers of pig iron in Canada have 10 blast furnaces available for use, which, if operated at the rated capacity, could produce 15 million tons of pig iron a year. Actual production in 1939 at 755,731 tons was about 50 per cent of capacity. Only 8 of the blast furnaces were used during the year.

FERRO-ALLOYS -

Production of ferro-alloys of all kinds in 1939 amounted to 76,375 tons, a gain of about 37 per cent over the 55,926 tons reported for 1938.

Ferro-alloys were made by 11 different concerns in Canada, 5 of whom recovered ferro-silicon as a by-product in the manufacture of abrasives, while the other six made various alloys as a primary part their production.

Altogether ferrosilicon was made in 9 different plants, and spiegeleisen in two. Other alloys produced by one firm only included ferromanganese, silico-manganese, silico-spiegeleisen, ferrochrome, ferrophosphorus, silicon metal and calcium silicon.

STEEL INGOTS AND CASTINGS -

Steel production advanced 20 per cent to 1,384,870 tons in 1939 from 1,155,190 tons in the preceding year, the output of steel ingots advancing to 1,330,408 from 1,103,094 tons and steel castings to 54,462 tons from 52,096 tons. Factory sales of ingots and castings totalled 56,566 tons valued at \$9,169,097.

Thirty steel plants were in operation during the year. These plants had 87 furnaces including 40 basic open hearth with an annual capacity of 1,774,946 tons, 44 electric furnaces rated at 279,076 tons and 3 converters at 2,600 tons. Of the 30 companies, 18 made electric castings only, 3, electric ingots only, 2, basic ingots only, 2, basic ingots and castings, 2, converter castings only, 1, basic and electric ingots also electric castings, 1, basic and electric castings and 1 made electric and converter castings.

Operating steel furnaces in 1939 used 654,550 tons of pig iron, 827,695 tons of scrap iron or steel, 81,830 tons of ore, 121,007 short tons of limestone, 55,450 short tons of dolomite, 20,540 short tons of lime, 19,090 short tons of silica sand, 11,401 short tons of magnesite and 23,734 tons of ferro-alloys.

ROLLED AND DRAWN STEEL -

In 1939 there were 13 hot rolling mills in operation, 1 cold rolling plant and 2 making cold drawn shapes. Nine of these mills were in Ontario, 3 in Nova Scotia, 3 in Quebec and 1 in Manitoba. One rolling mill in Ontario and 1 in Alberta were idle throughout the year.

Rolling mill sales advanced 28 per cent to \$58,978,429 from \$46,040,787 in 1938. The main items for the year under review were - 251,164 tons of bars at \$16,581,204; 226,311 tons of plates, sheets, hoop, band and strip at \$17,614,271; 156,262 tons of semi-finished rolled products, such as blooms, etc., at \$5,936,729; 87,563 tons of wire rods at \$3,954,970; 82,072 tons of structural shapes at \$4,554,201; 144,344 tons of rails and rail fastenings at \$7,080,427; 12,182 tons of other rolled forms at \$785,502 and miscellaneous products, not rolled, at \$2,471,125.

Imports of rolling mill products were valued at \$32,335,519 in 1939 against \$25,470,444 in 1938. Of this year's total, \$23,286,673 came from the United States and \$7,964,021 from the United Kingdom.

Table 1 - PROVINCIAL DISTRIBUTION OF ACTIVE PLANTS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1939.

Province	No. of firms	PIG IRON		STEEL INGOTS and CASTINGS		Rolling and Drawing Mills		Ferro-alloys (a)
		No. of plants	No. of blast furnaces	No. of plants	No. of steel furnaces	and	Mills	
Nova Scotia	4	1	3	2	14	3	...	
Quebec	13	...	...	10	19	3	1	
Ontario	16	3	7	10	41	9	3	
Manitoba	3	...	...	3	4	1	...	
Alberta	1	...	...	1	1	...	...
British Columbia	4	...	...	4	8	...	...
CANADA	39(b)	4	10	30	87	16	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, 1929 - 1939.

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	Gross 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	4,847	6,131,057	2,367,122	6,289,483	16,197,526
1933	50	96,444,846	5,200	6,049,189	2,699,837	7,598,931	18,492,549
1934	51	90,079,004	7,400	9,009,512	3,969,136	12,673,398	29,101,463
1935	53	86,465,490	9,523	12,279,390	4,845,589	18,539,072	38,700,961
1936	55	92,103,774	11,138	13,630,377	5,440,129	21,424,052	46,636,892
1937	55	96,875,377	14,054	19,926,498	6,934,008	33,805,631	74,580,669
1938	55	100,272,104	13,100	18,256,627	5,529,833	24,786,761	59,606,150
1939 -							
Nova Scotia	6	22,015,230	2,252	3,248,185	1,296,558	7,028,632	15,223,484
Quebec	14	14,258,351	2,473	3,088,867	813,224	3,461,268	9,410,406
Ontario	25	75,269,867	8,594	13,378,862	3,866,771	18,586,517	48,925,939
Manitoba	4	1,732,426	406	538,227	172,766	424,684	1,610,745
Alberta	1)	283,877	102	156,376	25,342	128,275	763,907
British Columbia	4)						
CANADA	54	113,660,251	13,827	20,410,517	6,174,661	29,629,376	75,934,481

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 - CAPITAL EMPLOYED, BY PROVINCES, 1938 and 1939.

Province	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
1938	\$	\$	\$	\$
Nova Scotia	8,881,410	7,975,892	1,889,543	18,746,845
Quebec	8,964,523	2,571,514	1,147,775	12,683,812
Ontario	47,217,252	12,585,025	6,895,858	66,698,135
Manitoba	740,312	608,209	470,217	1,818,738
Alberta	182,601	73,552	68,421	324,574
British Columbia				
CANADA	65,986,098	23,814,192	10,471,814	100,272,104
1939				
Nova Scotia	14,117,970	5,021,402	2,875,858	22,015,230
Quebec	9,873,478	2,611,038	1,973,835	14,358,351
Ontario	49,742,627	14,750,052	10,777,188	76,269,867
Manitoba	731,205	479,973	521,748	1,732,926
Alberta	174,814	58,403	50,660	283,877
British Columbia				
CANADA	74,640,094	22,820,868	16,199,289	114,660,251

Table 4 - EMPLOYEES, SALARIES AND WAGES, BY PROVINCES, 1938 and 1939.

Province	Average number of employees				EMPLOY- EES	TOTAL		TOTAL SALARIES AND WAGES	
	On salaries		On wages			Salaries	Wages		
	Male	Female	Male	Female		\$	\$		
1938									
Nova Scotia	55	5	2,138	24	2,222	136,770	2,764,354	2,901,124	
Quebec	222	50	2,145	8	2,425	580,804	2,363,060	2,943,864	
Ontario	572	140	7,220	28	7,960	1,973,271	9,783,234	11,756,505	
Manitoba	30	3	337	1	371	115,747	366,813	482,560	
Alberta and British Columbia....	21	2	99	...	122	37,598	134,976	172,574	
CANADA	900	200	11,939	61	13,100	2,844,190	15,412,437	18,256,627	
1939									
Nova Scotia	60	5	2,161	26	2,252	138,492	3,109,693	3,248,185	
Quebec	231	59	2,174	9	2,473	621,205	2,487,662	3,088,867	
Ontario	583	161	7,802	48	8,594	2,091,554	11,287,308	13,378,862	
Manitoba	31	3	371	1	406	119,233	418,994	538,227	
Alberta and British Columbia....	17	1	84	...	102	33,188	123,188	156,376	
CANADA	922	229	12,592	84	13,827	3,003,672	17,406,845	20,410,517	

Table 5 - WAGE-EARNERS, BY MONTHS, 1938 and 1939.

Month	1938			1939		
	Male	Female	TOTAL	Male	Female	TOTAL
January	12,510	58	12,568	11,208	65	11,273
February	12,120	66	12,186	11,332	64	11,396
March	12,783	66	12,849	11,589	69	11,658
April	12,810	67	12,877	11,918	84	12,002
May	13,088	63	13,151	11,921	62	11,983
June	12,609	65	12,674	11,749	81	11,830
July	12,467	61	12,528	12,051	87	12,138
August	11,336	59	11,395	11,842	88	11,930
September	11,124	58	11,182	13,236	99	13,335
October	10,606	57	10,663	14,462	98	14,560
November	10,666	55	10,721	14,767	108	14,875
December	11,138	56	11,194	15,007	112	15,119
AVERAGE	11,939	61	12,000	12,592	84	12,676

Table 6 - FUEL AND ELECTRICITY USED, 1938 and 1939.

Kinds	Unit of Measure	1938		1939	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal - Canadian	short ton	193,480	\$ 806,731	199,170	\$ 872,406
Imported	short ton	54,659	276,261	44,125	221,309
Anthracite coal	short ton	1,750	9,925	446	3,001
Coke (for fuel only)	short ton	38,886	109,206	40,365	134,910
Gasoline	Imp. gal.	82,733	16,361	73,763	11,080
Kerosene or coal oil	Imp. gal.	6,490	1,059	89,289	8,299
Fuel oil	Imp. gal.	20,538,040	1,091,730	30,373,506	1,330,585
Wood	cord	461	2,700	453	1,713
Gas - Manufactured (x)	M cu. ft.	30,162,764	1,433,225	37,657,095	1,533,728
Natural	M cu. ft.	12,744	6,747	14,875	8,011
Other fuel .....	\$	...	13,781	...	12,242
Electricity purchased	K. W. H.	376,988,956	1,762,107	488,495,459	2,037,377
TOTAL .....	\$	...	5,529,833	...	6,174,661
Electricity generated for own use ...	K. W. H.	22,297,961	...	40,823,196	...

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

Table 7 - POWER EQUIPMENT, 1939.

Kinds	Ordinarily in Use		In Reserve of Idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines	64	48,236	33	7,443
Gasoline, gas and oil engines	11	18,760	2	850
Hydraulic turbines or water wheels	4	1,300	...	...
Total Primary	79	68,296	35	8,293
Electric motors operated by purchased power	3,158	128,115	48	2,301
TOTAL	3,237	196,411	83	10,594
Electric motors operated by power generated by above primary units	1,800	74,347	3	295
Total Electric Motors	4,958	202,462	51	2,596
Boilers	129	50,539	5	1,450

(a) PIG IRON

Table 8 - MATERIALS CHARGED TO IRON BLAST FURNACES, 1938 and 1939.

Materials	Unit of measure	1938		1939	
		Quantity	Cost at furnace	Quantity	Cost at furnace
Iron ore - Imported (crude).....	long ton	1,234,433	\$ 4,368,325	1,272,800	\$ 4,582,210
Canadian (Beneficiated)	long ton	...	...	45,152	187,010
Mill cinder, roll scale, flue dust, etc.	long ton	66,614	153,689	106,834	225,698
Scrap (net charge)	long ton	19,123	175,648	18,932	192,362
Limestone -					
From Canadian quarries	short ton	123,078	161,962	97,946	129,458
From foreign sources	short ton	222,104	195,165	259,431	229,194
Coke	short ton	697,615	3,914,413	775,869	4,474,474
Other materials .....	\$	...	62,774	...	51,996
TOTAL .....	\$	...	9,031,976	...	10,072,402

Table 9 - PRODUCTION OF PIG IRON AND SALES BY THE PRODUCERS, 1938 and 1939.

Grades	Total tonnage made	SALES	
		Quantity	Income from sales \$
	Long tons	Long tons	\$
<u>1938</u>			
Basic	557,578	26,501	604,790
Foundry	81,088	62,492	1,419,826
Malleable	66,761	40,572	937,023
TOTAL	705,427	129,565	2,961,639
<u>1939</u>			
Basic	655,560	24,685	552,309
Foundry	71,709	86,738	1,891,656
Malleable	28,462	60,554	1,313,608
TOTAL	755,731	171,977	3,757,573

Table 10 - PRODUCTION OF PIG IRON, BY GRADES, 1929 - 1939. (Long tons)

Years	Basic	Foundry	Malleable	TOTAL
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
1937	721,711	105,409	71,735	898,855
1938	557,578	81,088	66,761	705,427
1939	655,560	71,709	28,462	755,731

Table 11 - PRODUCTION OF PIG IRON, BY PROVINCES, 1929 - 1939. (Long tons)

Years	Nova Scotia	Ontario	TOTAL
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
1937	320,318	578,537	898,855
1938	241,856	463,571	705,427
1939	259,136	496,595	755,731

Table 12 - PRODUCTION OF PIG IRON, BY MONTHS, 1935 - 1939. (Long tons)

Months	1935	1936	1937	1938	1939
January	44,416	61,336	66,400	74,862	57,660
February	37,259	55,751	61,995	61,447	41,333
March	44,727	54,009	70,986	66,228	40,723
April	43,388	54,045	68,138	65,644	46,254
May	45,432	58,832	78,147	71,602	57,746
June	44,555	56,362	78,278	64,375	52,805
July	50,513	34,988	79,736	51,238	59,587
August	54,414	38,570	74,578	49,477	65,920
September	54,360	51,892	76,180	49,972	65,594
October	45,521	70,051	80,922	50,657	85,758
November	64,562	74,337	81,463	46,216	87,868
December	70,728	68,058	82,032	53,709	94,483
TOTAL	599,875	678,231	898,855	705,427	755,731

Table 13 - PRODUCTION OF PIG IRON, BY GRADES AND BY METHOD OF CASTING OR DELIVERY, 1938 and 1939.
(Long tons)

Grades	Delivered in molten condition	Machine cast	TOTAL
1938			
Basic	480,415	77,163	557,578
Foundry .....	...	81,088	81,088
Malleable .....	...	66,761	66,761
TOTAL	480,415	225,012	705,427
1939			
Basic	571,224	84,336	655,560
Foundry .....	...	71,709	71,709
Malleable .....	...	28,462	28,462
TOTAL	571,224	184,507	755,731

Table 14 - SALES OF PIG IRON BY THE PRODUCERS, 1929 - 1939. (Long tons)

Years	Tonnage sold	Income from sales	Years	Tonnage sold	Income from sales
		\$			\$
1929	324,759	6,544,645	1935	131,749	2,650,990
1930	215,304	4,123,562	1936	168,054	3,327,716
1931	139,620	2,613,511	1937	225,716	5,146,017
1932	55,440	1,088,532	1938	129,565	2,961,639
1933	76,507	1,402,903	1939	171,977	3,757,573
1934	97,440	1,956,284			

Table 15 - IRON ORE, FUEL AND FLUX CHARGED TO IRON BLAST FURNACES, 1929 - 1939.

Years	Iron Ore	Mill cinder, scale, etc.		Coke	Limestone
		Long tons	Long tons		
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	4,145	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
1937	1,604,073	119,910	16,467	890,384	470,549
1938	1,234,433	66,614	19,123	697,615	345,182
1939	1,317,952	106,834	18,932	775,869	357,377

Table 16 - IMPORTS INTO CANADA, and EXPORTS OF PIG IRON, 1929 - 1939.

Years	Imports		Exports	
	Long tons	\$	Long tons	\$
1929	32,548	624,891	7,478	151,967
1930	13,643	270,157	593	12,653
1931	7,912	148,051	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
1937	6,371	144,354	38,516	851,701
1938	2,122	62,494	10,546	224,261
1939	587	15,176	10,728	221,787

Table 17 - STOCKS OF PIG IRON HELD BY PRODUCERS IN CANADA, 1931 - 1939.

Years	Long tons	Years	Long tons
1931	128,222	1936	76,829
1932	113,739	1937	112,287
1933	109,507	1938	127,909
1934	65,537	1939	61,763
1935	87,346		

Table 18 - APPARENT CONSUMPTION OF PIG IRON IN CANADA, 1929 - 1939. (Long tons)

Years	Production	Add Imports	Deduct Exports	Add or deduct changes in stock	Apparent Consumption
1929	1,080,160	32,548	7,478	not avail-	1,105,230
1930	747,178	13,643	593	able	760,228
1931	420,038	7,912	2,787		425,163
1932	144,130	4,753	2,029	+ 14,483	161,337
1933	227,317	2,459	11,903	+ 4,232	222,105
1934	404,995	6,419	9,221	+ 43,870	446,059
1935	598,875	8,920	13,759	- 21,709	573,327
1936	678,231	3,960	13,904	+ 10,517	678,804
1937	898,855	6,371	38,516	- 35,458	831,252
1938	705,427	2,122	10,546	- 15,622	681,381
1939	755,731	587	10,728	+ 66,146	811,736

Table 19 - CONSUMPTION OF PIG IRON IN CANADA, BY INDUSTRIES AND BY PROVINCES, 1935 - 1938.
(As reported by consumers)

	1935	1936	1937	1938
	(Long tons)			
(a) By Industries				
Steel ingots and castings	446,271	522,243	667,631	566,893
Castings and forgings	50,670	49,167	72,072	51,877
Boilers, tanks and engines	8,947	10,331	9,974	8,317
Agricultural implements	13,705	16,194	23,238	14,289
Machinery	8,070	9,969	15,066	10,403
Automobiles		(Not available)		
Automobile parts	5,634	6,517	5,991	4,464
Railway rolling stock	12,772	16,362	21,921	15,108
Brass and copper products	1,498	1,022	1,580	1,350
Shipbuilding .....	...	...	126	149
Hardware and tools	1,491	2,901	2,781	2,753
Miscellaneous iron and steel	314	383	437	428
Heating and cooking apparatus	14,596	18,721	19,493	15,233
Electrical apparatus and supplies	1,921	1,496	2,507	1,393
TOTAL	565,889	655,296	842,817	692,657
(b) By Provinces				
Prince Edward Island	32	30	35	25
Nova Scotia	206,717	254,934	296,289	233,231
New Brunswick	1,953	3,073	2,402	2,007
Quebec	19,897	23,479	36,370	25,601
Ontario	335,182	371,241	504,859	429,178
Manitoba	1,192	1,478	1,632	1,588
Saskatchewan .....	...	...	50	...
Alberta	123	109	157	99
British Columbia	793	952	1,023	928
CANADA	565,889	655,296	842,817	692,657

Table 20 - BLAST FURNACES IN CANADA, 1937 to 1939.

Names of Companies	Location of plants	Number of stacks	Total daily capacity (24 hours)	Number of days in blast		
				1937	1938	1939
(Long tons)						
Dominion Steel and Coal Corporation Ltd.	Sydney, N. S.	1	350	357	165	31
		1	300	...	...	265
		1	550	363	365	365
TOTAL		3	1,200	...	...	...
Canadian Furnace Company, Limited	Port Colborne, Ont.	1	350	245	193	200
The Steel Company of Canada, Limited	Hamilton, Ont. ...	1	325	365	365	158
		1	650	365	365	365
TOTAL		2	975	...	...	...
Algoma Steel Corporation, Limited	Sault Ste. Marie, Ont.	1	300	...	...	...
		1	300	...	...	...
		1	450	365	290	362
		1	550	...	...	85
TOTAL		4	1,600	...	...	...
TOTAL FOR CANADA		10	4,125	...	...	...

Table 21 - WHOLESALE PRICES OF PIG IRON IN CANADA, BY MONTHS, 1938 and 1939.

Months	No. 1 foundry, base silicon 2.25 max., (price per gross ton, car lots, f.o.b. sellers' works)		Standard malleable base silicon 2.25 max., (price per gross ton, f.o.b. plant)		Basic silicon 1.30 max., (price per gross ton, f.o.b. plant)	
	1938	1939	1938	1939	1938	1939
January	\$ 25.50	\$ 22.50	\$ 23.50	\$ 20.50	\$ 23.00	\$ 20.00
February	25.50	22.50	23.50	20.50	23.00	20.00
March	25.50	22.50	23.50	20.50	23.00	20.00
April	25.50	22.50	23.50	20.50	23.00	20.00
May	25.50	22.50	23.50	20.50	23.00	20.00
June	25.50	22.50	23.50	20.50	23.00	20.00
July	22.50	22.50	20.50	20.50	20.00	20.00
August	22.50	22.50	20.50	20.50	20.00	20.00
September	22.50	22.50	20.50	23.50	20.00	23.00
October	22.50	22.50	20.50	23.50	20.00	23.00
November	22.50	22.50	20.50	23.50	20.00	23.00
December	22.50	22.50	20.50	23.50	20.00	23.00
AVERAGE	24.00	22.50	22.00	21.50	21.50	21.00

(b) FERRO-ALLOYS

Table 22 - PRODUCTION OF FERRO-ALLOYS, 1927 - 1939.

Years	Long tons	Years	Long tons
1927	56,230	1934	31,921
1928	44,842	1935	56,616
1929	89,116	1936	76,284
1930	65,223	1937	82,072
1931	46,764	1938	55,926
1932	16,161	1939	76,375
1933	30,133		

Table 23 - PRODUCERS OF FERRO-ALLOYS IN CANADA, 1939.

Names of Companies	Plant locations	Products made
Abrasive Company of Canada, Limited	Hamilton, Ont.	Ferrosilicon
Canadian Carborundum Company, Limited	Niagara Falls, Ont.	Ferrosilicon
Canadian Furnace Limited	Port Colborne, Ont.	Spiegeleisen
Chromium Mining & Smelting Corp., Limited	Sault Ste. Marie, Ont.	Ferrosilicon, chrom-x
Electro Metallurgical Company of Canada, Limited	Welland, Ont.	Ferrosilicon, ferrochrome, ferromanganese, silico manganese, spiegeleisen and silico spiegeleisen
Electric Reduction Company of Canada, Limited	Buckingham, P.Q.	Ferrophosphorus
Exelon Company	Thorold, Ont.	Ferrosilicon
Lionite Abrasives Limited	Stamford, Ont.	Ferrosilicon
Norton Company	Chippawa, Ont.	Ferrosilicon
Shawinigan Chemicals Limited	Shawinigan Falls, P.Q.	Ferrosilicon
St. Lawrence Alloys and Metals Limited	Beauharnois, P.Q.	Ferrosilicon, silicon metal and calcium silicon

Table 24 - IMPORTS INTO CANADA and EXPORTS OF FERRO-ALLOYS, 1938 and 1939.

Items	1938		1939	
	Long tons	\$	Long tons	\$
IMPORTS -				
Ferromanganese, spiegeleisen and other alloys of manganese and iron containing not more than 1 per cent, by weight, of silicon	138	16,276	264	55,935
Silico-manganese, silico-spiegeleisen and other alloys of manganese and iron containing more than 1 per cent, by weight, of silicon	60	5,305	100	8,587
Ferrosilicon, being an alloy of iron and silicon containing 8 per cent or more, by weight, of silicon and less than 60 per cent	5	166	2	294
Ferrosilicon, being an alloy of iron and silicon containing 90 per cent or more, by weight, of silicon.....	...	...	...	16
Other alloys used in the manufacture of iron or steel ...	548	241,409	1,005	461,596
TOTAL	751	263,156	1,371	526,428
EXPORTS -				
Ferrosilicon	12,492	657,359	21,149	1,196,381
Ferromanganese and other ferro-alloys	16,866	648,549	36,000	1,280,526
TOTAL	29,358	1,305,908	57,149	2,476,907

(c) STEEL INGOTS AND DIRECT STEEL CASTINGS

Table 25 - MATERIALS USED IN STEEL FURNACES, 1938 and 1939.

Materials	Unit of measure	1938		1939	
		Quantity	Cost of purchased materials	Quantity	Cost of purchased materials
(a) Metals -					
Pig iron - Own make	Long ton	555,048	...	646,158	...
Purchased	Long ton	11,845	294,086	8,392	206,379
Scrap iron or steel - Own make	Long ton	245,073	...	332,512	...
Purchased	Long ton	413,195	5,782,857	495,183	7,227,009
Spiegeleisen	Long ton	2,518	86,833	2,790	92,364

Table 25 - MATERIALS USED IN STEEL FURNACES, 1938 and 1939 - (concluded).

Materials	Units of measure	Quantity	1938		1939	
			Cost of purchased materials	\$	Quantity	Cost of purchased materials
(a) Metals (concluded) :						
Ferromanganese	Long ton	11,710	614,317		13,961	887,536
Silicomanganese	Long ton	...	(a)	959	84,932	
Ferrosilicon	Long ton	3,789	195,271		4,233	226,408
Ferrochrome, high carbon low carbon	Long ton)	739	116,639		483	55,822
	Long ton)				512	119,937
Ferromolybdenum	Long ton	...	(a)	10	18,896	
Perrophosphorus	Long ton	...	(a)	478	42,203	
Ferroselenium	Long ton	...	(a)	1	913	
Ferrotitanium	Long ton	76	14,547		118	23,498
Ferrotungsten	Long ton	30	69,806		95	173,250
Ferrozirconium	Long ton	...	(a)	19	2,122	
Other ferro-alloys	Long ton	...	106,730		25	55,834
Aluminium ingots	Short ton	...	(a)	249	87,837	
Copper ingots	Short ton	...	(a)	364	46,217	
Silicon metal	Short ton	...	(a)	1,120	29,042	
Nickel	Short ton	290	176,534		300	187,001
Other metals	Short ton	...	214,113		174	42,026
(b) Ores -						
Ore, iron, crude	Long ton	74,137	462,773		81,095	501,436
Ore, iron, calcined, roasted or treated	Long ton	81	774		403	2,480
Ore, manganese	Long ton	104	1,300		6	287
Ore, chrome	Long ton	252	8,440		336	10,255
(c) Other materials -						
Coal, anthracite	Short ton	482	4,036		246	2,184
bituminous	Short ton	94	704		99	813
Coke,	Short ton	5,567	46,899		4,510	38,938
Charcoal	Short ton	156	5,880		44	1,369
Dolomite, crude	Short ton)	40,540	137,127		40,592	78,904
calcined	Short ton)				14,858	99,838
Fluorspar	Short ton	7,128	119,301		7,972	122,778
Lime	Short ton	...	(a)	20,540	183,807	
Limestone, Canadian	Short ton	36,882	64,436		39,708	65,161
Imported	Short ton	69,999	59,039		81,299	69,565
Magnesite	Short ton	9,219	336,811		11,401	351,680
Electrodes	-	...	181,981		...	208,565
Silica sand	Short ton	1,781	12,215		19,090	122,123
Moulding sand	Short ton	34,342	182,211		80	900
Other foundry sand	Short ton	...	(a)	15,495	82,405	
Firebrick, fireclay and other refractories	-	...	521,436		...	620,259
Calcium molybdate and molybdenum oxide briquettes	Short ton	...	(a)	56	70,895	
Calcium silicon	Short ton	...	(a)	124	27,925	
All other materials	-	...	1,090,738		...	794,734
TOTAL VALUE OF METALS, ORES AND OTHER MATERIALS USED .....		...	10,909,834		...	13,066,527

(a) Not separately shown for 1938.

Table 26 - PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS and SALES BY THE PRODUCERS, 1938 and 1939.

	1938			1939		
	Total tonnage of steel made(all kinds, Quan- tity including alloys)		SALES	Total tonnage of steel made (all kinds Quan- tity from sales including alloys)		SALES
	Long tons	L.tons	\$	Long tons	L.tons	\$
STEEL INGOTS:						
Basic open hearth	1,047,203	301	9,993	1,259,231	6,085	173,703
Electric	55,891	...	...	71,177	...	...
Total steel ingots	1,103,094	301	9,993	1,330,408	6,085	173,703
STEEL CASTINGS:						
Basic open hearth	15,525	14,507	2,488,384	15,601	12,637	2,168,007
Converter	759	780	168,694	834	834	191,474
Electric	35,812	27,498	5,113,092	38,027	37,010	6,635,913
Total steel castings	52,096	42,785	7,770,170	54,462	50,481	8,995,394
TOTAL STEEL INGOTS AND CASTINGS	1,155,190	43,086	7,780,163	1,384,870	56,566	9,169,097
Any other products .....	...	...	404,177	1,965	1,904	94,911
TOTAL ALL PRODUCTS .....	...	...	8,184,340	...	...	9,264,008
Alloy steel included in above:						
Ingots	38,057			46,324		
Castings	2,608	2,382	595,348	5,089	6,515	1,497,179
TOTAL	40,665	2,382	595,348	51,413	6,515	1,497,179

Years	STEEL INGOTS		DIRECT STEEL CASTINGS		Total steel : ingots and : castings	
	Open hearth	Electric	Open hearth	Con- verter		
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
1937	1,274,992	61,236	23,827	1,016	41,811	1,402,882
1938	1,047,203	55,891	15,525	759	35,812	1,155,190
1939	1,259,231	71,177	15,601	834	38,027	1,384,870

Months	1 9 3 5	1 9 3 6	1 9 3 7	1 9 3 8	1 9 3 9
January	59,526	100,225	115,237	112,380	78,105
February	56,006	93,365	111,823	98,980	77,179
March	57,840	101,092	125,104	118,676	95,626
April	68,530	107,220	121,426	116,445	99,777
May	72,811	94,602	120,843	114,859	121,438
June	73,450	82,196	118,744	109,401	107,908
July	86,101	68,793	122,968	83,927	111,247
August	82,488	80,164	126,695	82,781	121,951
September	90,952	86,077	114,622	73,556	124,342
October	95,016	98,330	114,527	76,256	149,924
November	94,074	98,534	110,688	90,120	147,166
December	104,733	105,181	100,205	77,809	150,207
TOTAL	941,527	1,115,779	1,402,882	1,155,190	1,384,870

Years	ANNUAL PRODUCTION OF STEEL INGOTS AND STEEL CASTINGS, BY PROVINCES, 1929 - 1939. (Long tons)						
	Nova Scotia	Quebec	Ontario	Manitoba	Alberta	British Columbia	CANADA
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
1937	427,104	60,815	887,906	24,536	359	2,162	1,402,882
1938	338,479	48,742	746,951	18,086	374	2,558	1,155,190
1939	402,959	50,627	905,360	22,360	397	3,167	1,384,870

Table 30 - SALES OF STEEL INGOTS AND STEEL CASTINGS, BY THE PRODUCERS, 1929 - 1939.

Years	Tonnage sold	Income from sales	Tonnage sold	Income from sales
	Long tons	\$		
1929	61,981	10,283,460	1935	35,392
1930	48,563	8,013,707	1936	28,030
1931	30,831	5,143,495	1937	64,907
1932	11,543	1,913,157	1938	43,086
1933	14,934	2,365,171	1939	56,566
1934	20,139	3,228,451		9,169,097

Table 31 - METAL, ORE AND FLUX CHARGED TO STEEL FURNACES, 1929 - 1939.

Years	Pig Iron	Ferro- manganese and spiegeleisen	Other ferro- alloys	Scrap iron and steel	Ore	Lime- stone	Fluorspar and dolomite
	Long tons	Long tons	Long tons	Long tons	Long tons	Short tons	Short tons
1929	761,878	11,769	6,189	736,275	95,059	154,238	29,794
1930	520,562	9,087	5,232	573,050	61,223	109,119	19,282
1931	328,063	6,339	3,442	401,450	32,529	74,524	20,742
1932	106,951	3,878	2,363	269,202	8,750	27,706	8,978
1933	156,962	4,157	3,182	308,326	18,151	34,532	9,823
1934	352,346	6,771	4,041	480,679	34,844	77,815	19,303
1935	446,271	10,733	3,867	641,659	50,520	91,412	24,253
1936	522,243	13,448	5,826	693,989	65,190	109,200	51,504
1937	667,631	16,074	8,287	896,242	87,165	125,922	62,105
1938	566,893	14,228	5,058	667,268	74,574	106,881	47,668
1939	654,550	16,751	6,933	827,695	81,830	121,007	63,422

TABLE 32 - SUMMARY OF STEEL FURNACE CAPACITY IN CANADA, 1939.

Type of furnace	Number of furnaces	Total rated annual capacity (Long tons)
Basic open hearth	40	1,774,946
Electric	44	279,076
Converter	3	2,600
TOTAL	87	2,056,622

Table 33 - STEEL FURNACES IN CANADA, 1939.

Names of companies and location of furnaces	F U R N A C E S			
	Type	Number of Units	Size of each (in tons per heat)	Total rated annual capacity
Maritime Steel Foundries Company Limited, New Glasgow, N. S.	<u>Electric (Heroult)</u>	1	4	6,000
Dominion Steel and Coal Corporation, Limited, Sydney, N. S.	Basic open hearth	10	50	285,710
	Basic open hearth	2	100	114,290
	<u>Electric</u>	1	10	25,000
Canadian Brake Shoe & Foundry Company Limited, Sherbrooke, P.Q.	<u>Electric (Heroult)</u>	1	1	2,000
	<u>Electric (Heroult)</u>	2	2	2,500
Canadian Car & Foundry Company Limited, Montreal, P.Q.	Basic open hearth	3	22	32,046
	<u>Electric (Volta)</u>	1	3	5,357
Canadian Tube & Steel Products Limited, Montreal, P.Q.	<u>Electric (Volta)</u>	3	4½	48,000
Hill Iron & Steel Foundries, Limited, Hull, P.Q.	<u>Electric (Heroult)</u>	1	6	7,500
Joliette Steel Limited, Joliette, P.Q.	<u>Electric (Greaves- Etchell)</u>	1	2	2,000

Table 33 - STEEL FURNACES IN CANADA, 1939, (concluded)

Names of companies and location of furnaces	Type	Number of Units	FURNACES		Total rated annual capacity
			Size of each (in tons per heat)	Long tons	
La Cie F. X. Drolet, Québec, P.Q.	Converter (Baillot)	1	1	300	
Lynn MacLeod Engineering Supplies, Ltd., Thetford Mines, P.Q.	Electric (Heroult)	1	1	{	2,400
Manganese Steel Castings Limited, Sherbrooke, P.Q.	Electric (Heroult)	1	2		360
Shawinigan Chemicals Limited, Shawinigan Falls, P.Q.	Electric (Volta)	1	1		936
Sorel Steel Foundries, Limited, Sorel, P.Q.	Electric (Volta)	1	2		1,872
Algoma Steel Corporation, Limited, Sault Ste. Marie, Ont.	Electric ('Lectromelt)	1	1½		2,500
Burlington Steel Company Limited, Hamilton, Ont.	Basic open hearth	8	55		300,000
Canada Electric Castings, Limited, Orillia, Ont.	Basic open hearth	3	110		250,000
Atlas Steels Limited, Welland, Ont.	Electric ('Lectromelt)	1	5½		21,000
Dominion Foundries & Steel, Limited, Hamilton, Ont.	Electric (Heroult)	1	2		7,200
Fahralloy Canada Limited, Orillia, Ont.	Electric (Heroult)	1	10		16,800
Fahralloy Canada Limited, Orillia, Ont.	Electric (Heroult)	1	4		7,500
Fort Motor Company of Canada, Limited, Windsor, Ont.	Basic open hearth	1	40		41,850
Kennedy, William & Sons, Limited, Owen Sound, Ont.	Basic open hearth	1	50		47,925
The Steel Company of Canada, Limited, Hamilton, Ont.	Basic open hearth	1	58		50,625
Welland Electric Steel Foundry, Welland, Ont.	Electric	1	½		730
Welland Electric Steel Foundry, Welland, Ont.	Electric	2	9		29,400
Welland Electric Steel Foundry, Welland, Ont.	Electric	1	20		32,600
Manitoba Rolling Mill Company, Limited, Selkirk, Man.	Electric (Volta)	1	½	{	1,500
Manitoba Steel Foundries Limited, Selkirk, Man.	Electric (Volta)	1	1	{	
Vulcan Iron Works Limited, Winnipeg, Man.	Electric ('Lectromelt)	1	100 pounds	experimental	
Riverside Iron Works, Limited, Calgary, Alta.	Electric (Swindel)	1	3		13,400
Britannia Mining & Smelting Company, Britannia Beach, B. C.	Electric (Swindel)	1	3		6,700
Consolidated Mining & Smelting Company Ltd., Trail, B. C.	Electric (Moore 'Lectromelt)	1	3		6,700
Reliance Foundry Company Limited, Vancouver, B. C.	Basic open hearth	2	18½		40,000
Vancouver Engineering Works, Limited, Vancouver, B. C.	Electric ('Lectromelt)	1	1½		5,000
	Electric (Greene)	1	1½		3,000
	Electric (Greene)	1	1½		5,500
	Electric (Greene)	1	3½		4,500
	Electric	1	2		2,000
	Electric	1	1		1,000
	Electric	1	½		500
	Converter	1	1		300
	Electric (Greaves-Etchell)	1	1½		450
	Electric (Arnold)	1	1		150

Table 34 - MATERIALS USED IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1938 and 1939.

Materials	Companies' own make	PURCHASED	
		Quantity	Cost at works
	Long tons	Long tons	\$
<u>1938</u>			
Steel ingots	1,114,728	305	10,617
Steel billets	24,094	46,977	1,759,250
Steel bars .....	...	18,454	1,125,583
Rails, old	1,100	26,124	501,092
Axles, old .....	...	3,209	69,279
Scrap iron and steel, other	1,657	966	15,621
All other materials and supplies .....	...	...	375,102
TOTAL .....	...	...	3,856,544
<u>1939</u>			
Steel ingots	1,342,627	641	23,554
Steel billets	30,015	52,903	1,967,450
Steel bars .....	...	23,111	1,364,890
Rails, old	1,138	32,078	694,889
Axles, old .....	...	4,689	100,769
Scrap iron and steel, other	2,415	1,095	19,633
Spelter .....	...	3,224	284,946
Other materials and supplies .....	...	...	238,389
TOTAL .....	...	...	4,694,520

Table 35 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1938 and 1939.

Products	Total tonnage made	FACTORY SALES	
		Tonnage sold in Canada or for export	Income from tonnage sold
	Long tons	Long tons	\$
<u>1938</u>			
<u>Semi-finished rolled forms of iron and steel -</u>			
Blooms, billets and slabs, except those for forging, but including sheet and tinplate bars	775,074	89,304	3,037,373
Muck and scrap bars	178	...	...
Blooms, billets and axle blanks, for forging purposes only, excluding all those intended for further rolling	23,617	21,189	979,797
Total Semi-finished rolled forms	798,869	110,393	4,017,170
<u>Rails and rail fastenings -</u>			
Rails	112,928	108,582	5,002,610
Splice bars or fish plates	4,949	4,445	335,396
Tie plates	19,813	18,419	1,090,726
Total rails and rail fastenings	137,690	131,446	6,428,732
Wire rods of iron or steel, including chain rods	171,253	69,245	3,075,006
<u>Structural steel shapes (including angles over 3 inches by 3 inches; beams, channels, tees, sheet piling, etc., but excluding plates and bars</u>			
	58,601	60,473	3,589,905
<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	147,995	136,002	8,060,887
Bars rolled from alloy steel	19,315	18,722	2,008,180
Bars for concrete reinforcing, including twisted and other deformed bars, except bars rolled from old rails or axles	21,295	20,789	1,233,635
Bars rolled from old rails or axles	17,955	15,935	908,026
Long anglesplice bars, tie plate bars and all other long rail joint bars	29,674	...	...
All other bars, including spike rods, bolt stock, horseshoe bars, toe calk steel and all other finished rolled forms not elsewhere specified	11,787	1,257	84,572
Total hot rolled bars	248,021	192,705	12,295,300
Cold rolled and cold drawn bars	10,719	10,392	1,133,816

Table 35 - PRODUCTS MADE IN IRON AND STEEL ROLLING AND DRAWING MILLS, 1938 and 1939. (Concluded)

Products	Total tonnage made	FACTORY SALES	
		Tonnage sold in Canada or for export	Income from tonnage sold
	Long tons	Long tons	\$
1 9 3 8 (Concluded)			
<u>Plates</u> , all kinds (iron or steel flats over 14 inches in width, and thicker than No. 7 U. S. standard gauge)	70,899	70,562	3,590,846
<u>Sheets, hoops, bands and strips</u> , including plain sheets, hot rolled strips, cold rolled strips, and galvanized sheets (x) and tinplate (x)	106,865	103,184	9,459,555
Total plates, sheets, hoops, bands and strips	177,764	173,746	13,050,401
<u>Other rolled forms</u> including mine arches, steel tubing, etc.	4,376	4,176	247,692
<u>Miscellaneous products</u> (not rolled) made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc. ....	...	...	2,202,765
TOTAL VALUE OF PRODUCTION .....	...	...	46,040,787
1 9 3 9			
<u>Semi-finished rolled forms of iron and steel</u> -			
Blooms, billets and slabs, except those for forging, but including sheet and tinplate bars	990,308	132,123	4,702,975
Muck and scrap bars.....	70	...	...
Blooms, billets and axle blanks, for forging purposes only, excluding all those intended for further rolling	26,074	24,139	1,233,754
Total semi-finished rolled forms	1,016,452	156,262	5,936,729
<u>Rails and rail fastenings</u> -			
Rails	109,842	114,013	5,182,146
Splice bars or fish plates	9,209	9,629	716,985
Tie plates, rail joints, frogs, etc.	21,921	20,702	1,181,296
Total rails and rail fastenings	140,972	144,344	7,080,427
Wire rods of iron or steel, including chain rods	214,459	87,563	2,954,970
<u>Structural steel shapes</u> (including angles of all sizes; beams, channels, tees, etc., but excluding plates and bars	81,080	82,072	4,554,201
<u>Bars of iron or steel</u> -			
Bars, hot rolled, of all grades in rounds, squares, flats, but omitting all bars reported under the items immediately below	172,019	165,143	9,660,827
Bars rolled from alloy steel	31,226	23,190	2,590,208
Bars for concrete reinforcing, including twisted and other deformed bars, except bars rolled from old rails or axles.	22,391	21,877	1,275,635
Bars rolled from old rails or axles	27,283	27,007	1,514,107
Long angle splice bars, tie plate bars and all other long rail joint bars	32,526	...	...
All other bars, including spike rods, bolt stock, horseshoe bars, toe calk steel and all other finished rolled forms not elsewhere specified	9,705	1,535	82,337
Total hot rolled bars	295,150	238,752	15,123,114
Cold rolled and cold drawn bars	12,375	12,412	1,458,090
<u>Plates</u> , all kinds (iron or steel flats over 14 inches in width, and thicker than No. 7 U.S. standard gauge)	67,549	68,026	3,770,927
<u>Sheets, hoops, bands and strips</u> , including plain sheets, hot rolled strips, cold rolled strips, and galvanized sheets (x) and tinplate (x)	162,765	158,285	13,843,344
Total plates, sheets, hoops, bands and strips	230,314	226,311	17,614,271
<u>Other rolled forms</u> including mine arches, sheet piling, steel tubing, etc.	13,291	12,182	785,502
<u>Miscellaneous products</u> (not rolled) made in rolling mills, including horseshoes, grinding balls, washers, forged axles, railway spikes, pressed spikes, etc. ....	...	...	2,471,125
TOTAL VALUE OF PRODUCTION .....	...	...	58,978,429

(x) Includes only the tonnages of galvanized sheets and tinplate made in rolling mills. These tonnages are included in sales figures only.

Table 36 - AVERAGE WHOLESALE PRICES PIG IRON, STEEL BILLETS and CERTAIN ROLLING MILL PRODUCTS.
1936, 1937, 1938 and 1939.

Commodities	Unit	Average	Average	Average	Average
		1936	1937	1938	1939
Pig iron, No. 1 foundry	per gross ton, f.o.b. works ...	20.58	24.92	24.00	22.50
Pig iron, malleable	per gross ton, f.o.b. works	19.08	23.25(a)	22.00	21.50
Pig iron, basic	per gross ton, f.o.b. works	18.08	22.50	21.50	21.00
Steel billets, mild, 4x4 and larger..	per gross ton, f.o.b. works	34.17	41.17(b)	40.00	38.67
Steel bars, structural grade	per 100 pounds, f.o.b. works....	2.16	2.56	2.53	2.45
Merchant bars, mild steel	per 100 pounds, f.o.b. works....	2.26	2.66	2.63	2.55
Steel rails, open hearth	per gross ton, f.o.b. plant	43.17	46.67	47.00	47.00
Steel tank plates	per 100 pounds, f.o.b. Pittsburgh	1.86	2.22	2.19	2.23
Light cold rolled sheets, No. 20, U.S.G.	per 100 pounds, f.o.b. Pittsburgh	3.02	3.50	3.34	3.22
Galvanized corrugated iron sheets					
No. 28, U.S.G.	per 100 sq.ft., f.o.b. destination	5.06	6.19	6.23	5.89
Hot rolled and annealed steel sheets,					
No. 24, U.S.G.	per 100 pounds, f.o.b. Montreal..	3.54	4.60	4.58	4.44
Hot rolled and annealed sheets,					
No. 10, U.S.G.	per 100 pounds, f.o.b. Montreal..	3.28	4.18	3.97	3.64
Mild steel tank plates, 1/4" - 1/8"					
thickness	per 100 pounds, f.o.b. Montreal..	3.16	3.88	3.76	3.72
Steel sheets, black, No. 10, U.S.G... per 100 pounds, f.o.b. Montreal..	3.46	4.40	4.26	4.04	
Iron boiler plate, $\frac{1}{2}$ inch thickness.. per pound net, f.o.b. Montreal..	0.03	0.04	0.04	0.04	
Tinplate, standard coke	per box, f.o.b. Montreal car lots	6.10	7.19	7.35	7.17
Structural shapes, open hearth	per 100 pounds, f.o.b. works....	2.01	2.49	2.43	2.40

(a) New grade base silicon 2.25 max.

(b) New classification base 6 x 6 to 9 x 9 since 1937.

Table 37 - PRODUCTION AND FACTORY SALES OF STEEL RAILS, 1927 - 1939.

Years	Tonnage made	FACTORY SALES	
		Tonnage sold	Income from sales
1927	Long tons 235,683	Long tons 234,521	\$ 10,494,441
1928	349,189	349,007	16,109,847
1929	383,002	381,634	17,543,906
1930	233,432	232,414	10,504,700
1931	140,145	135,975	6,238,208
1932	45,090	46,220	2,123,150
1933	67,835	69,052	2,899,750
1934	96,689	88,023	3,660,274
1935	109,198	109,240	4,484,594
1936	116,192	117,154	4,885,388
1937	77,618	77,245	3,422,501
1938	112,928	108,582	5,002,610
1939	109,842	114,013	5,182,146

Table 38 - PRODUCTION OF FINISHED RAIL FASTENINGS, 1927 - 1939.

Years	TIE PLATES			FISH PLATES AND SPLICE BARS		
	Quantity made	Factory Sales	Income from sales	Quantity made	Factory Sales	Income from sales
	Long tons 50,632	Long tons 49,864	\$ 2,623,839	Long tons 9,159	Long tons 9,282	\$ 594,939
1927	70,613	71,523	3,910,522	17,549	15,179	957,447
1928	60,191	59,323	3,168,851	18,626	18,853	1,188,486
1929	42,205	43,017	2,359,710	12,245	13,277	849,507
1930	30,402	31,661	1,691,098	8,616	9,357	591,407
1931	7,047	6,982	353,714	2,120	1,574	103,241
1932	4,071	4,074	229,942	4,903	1,085	78,047
1933	16,003	16,482	834,258	3,190	3,499	224,457
1934	18,232	18,438	944,342	5,458	5,370	344,711
1935	23,418	22,831	1,136,175	5,030	5,189	333,712
1936	20,789	21,780	1,123,923	6,362	6,411	430,204
1937	19,813	18,419	1,090,726	4,949	4,445	335,396
1938	21,918	20,699	1,181,086	9,209	9,629	716,985

Table 39 - PRODUCTION AND FACTORY SALES OF WIRE RODS, OF IRON OR STEEL, 1927 - 1939.

Years	Total tonnage made	FACTORY SALES	
	Long tons	Tonnage sold	Income from sales
1927	115,245	24,184	1,040,956
1928	144,309	45,032	1,765,168
1929	142,589	33,632	1,316,546
1930	108,992	24,889	987,405
1931	78,133	18,839	726,442
1932	76,589	28,668	1,022,315
1933	88,692	29,111	1,104,532
1934	175,585	76,992	2,705,167
1935	183,469	68,398	2,412,244
1936	206,185	87,825	3,132,811
1937	216,154	86,177	3,568,873
1938	171,253	69,245	3,075,006
1939	214,459	87,563	3,954,970

Table 40 - PRODUCTION AND FACTORY SALES OF Blooms, BILLETS AND SLABS, 1929 - 1939.

Years	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
	Long tons	Long tons	\$	Long tons	Long tons	\$
1929	1,159,045	74,402	2,488,945	9,058	4,558	192,304
1930	756,778	60,171	2,017,747	12,142	6,964	320,673
1931	484,437	50,499	1,601,299	3,821	2,148	92,372
1932	220,576	12,464	412,049	1,243	931	56,862
1933	224,458	8,733	260,978	1,497	1,159	69,457
1934	505,304	54,771	1,440,318	3,133	2,027	110,118
1935	667,442	71,711	1,899,030	5,460	3,305	173,298
1936	704,023	110,637	2,902,013	6,232	4,962	249,554
1937	1,250,931	162,242	5,128,779	37,259	24,828	1,171,280
1938	775,074	89,204	3,037,373	23,617	21,189	979,797
1939	990,308	132,123	4,702,975	26,074	24,139	1,233,754

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

Table 41 - PRODUCTION OF HOT ROLLED BARS OF ALL KINDS, 1931 - 1939.

Years	Total tonnage made	FACTORY SALES	
	Long tons	Tonnage sold	Income from sales
1931	209,802	144,968	7,508,040
1932	89,877	69,423	3,629,007
1933	84,007	74,530	4,121,813
1934	165,368	118,811	6,642,341
1935	217,477	133,665	9,032,553
1936	252,809	193,251	10,374,417
1937	347,020	287,067	18,066,438
1938	248,021	192,705	12,295,300
1939	295,150	238,752	15,123,114

Table 42 - PRODUCTION OF STRUCTURAL STEEL SHAPES, OF ALL KINDS, 1931 - 1939.

Years	Total tonnage made	FACTORY SALES	
	Long tons	Tonnage sold	Income from sales
1931	33,867	32,010	1,627,545
1932	14,290	12,896	671,702
1933	16,153	14,974	740,200
1934	23,070	23,258	1,104,324
1935	37,972	39,068	1,937,695
1936	37,087	36,426	1,835,257
1937	83,285	84,340	4,605,796
1938	58,601	60,473	3,589,905
1939	81,080	82,072	4,554,201

DIRECTORY OF FIRMS IN THE PRIMARY IRON AND STEEL INDUSTRY, 1939.

Names of Firms

(a) PIG IRON

Location of Plants

Dominion Steel & Coal Corporation, Limited,
Algoma Steel Corporation, Limited.
Canadian Furnace Limited,
Steel Company of Canada, Limited,

Sydney, N. S.
Sault Ste. Marie, Ont.
Port Colborne, Ont.
Hamilton, Ont.

(b) FERRO-ALLOYS (f)

Canadian Furnace Limited,
Chromium Mining & Smelting Corp. Limited,
Electro Metallurgical Company of Canada, Limited,
St. Lawrence Alloys and Metals Limited,

Port Colborne, Ont.
Sault Ste. Marie, Ont.
Welland, Ont.
Beauharnois, P.Q.

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

(c) STEEL INGOTS AND DIRECT STEEL CASTINGS

Maritime Steel Foundries Limited.
Dominion Steel & Coal Corporation, Limited,
Canadian Brake Shoe & Foundry Company Limited,
Canadian Car & Foundry Company Limited,
Canadian Tube & Steel Products, Limited,
Hull Iron & Steel Foundries, Limited,
Joliette Steel, Limited,
La Compagnie E. X. Drolet,
Lynn MacLeod Engineering Supplies, Limited,
Manganese Steel Castings Limited,
Shawinigan Chemicals Limited, (Stainless Steel and Alloys
Division)

Glasgow Street, New Glasgow, N. S.
Sydney, N. S.
101 Belvidere Street, Sherbrooke, P.Q.
Longue Pointe, Montreal, P.Q.
5900 St. Patrick Street, Montreal, P.Q.
207 Montcalm Street, Hull, P. Q.
Laval Street, Joliette, P.Q.
206, rue du Pont, Québec, P.Q.
Notre Dame Street, Thetford Mines, P.Q.
Abenaquis Street, Sherbrooke, P.Q.

Sorel Steel Foundries Limited,
Algoma Steel Corporation Limited,
Atlas Steels Limited,
Burlington Steel Company Limited,
Canada Electric Castings Limited,
Dominion Foundries & Steel Limited,
Fasalloy, Canada, Limited,
Fort Motor Company of Canada, Limited,
Kennedy, William & Sons, Limited,
Steel Company of Canada, Limited,
Welland Electric Steel Foundry,
Manitoba Rolling Mills Company Limited,
Manitoba Steel Foundries Limited,
Vulcan Iron Works Limited,
Riverside Iron Works, Limited,
Britannia Mining and Smelting Company Limited,
Consolidated Mining & Smelting Company of Canada, Limited,
Reliance Foundry Company Limited,
Vancouver Engineering Works Limited,

Shawinigan Falls, P.Q.
7 Limoges Street, Soral, P.Q.
Sault Ste. Marie, Ont.
East Main Street, Welland, Ont.
Sherman Avenue North, Hamilton, Ont.
West Street, Orillia, Ont.
Depew Street, Hamilton, Ont.
Barrie Road, Orillia, Ont.
Windsor, Ont.
Second Avenue West, Owen Sound, Ont.
Wilcox Street, Hamilton, Ont.
123 Victoria Street, Welland, Ont.
Selkirk, Man.
Selkirk, Man.
Pt. Douglas Avenue, Winnipeg, Man.
803 .. 24th Avenue S.E., Calgary, Alta.
Britannia Beach, B.C.
Tadanac, B.C.
149 Fourth Avenue West, Vancouver, B.C.
519 Sixth Avenue West, Vancouver, B.C.

(d) HOT ROLLED IRON AND STEEL

Canadian Car & Foundry Company Limited,
Dominion Steel & Coal Corporation, Limited,
Trenton Steel Works Limited,
Canadian Tube & Steel Products Limited,
Peck Rolling Mills Limited,
The Steel Company of Canada, Limited,
Algoma Steel Corporation, Limited,
Atlas Steels Limited,
Burlington Steel Company Limited,
Dominion Foundries & Steel Limited,
The Steel Company of Canada, Limited,
The Steel Company of Canada, Limited,
Manitoba Rolling Mill Company Limited,

Amherst, N.S.
Sydney, N.S.
Trenton, N.S.
5900 St. Patrick Street, Montreal, P.Q.
851 Hill Street, Montreal, P.Q.
Notre Dame Street West, Montreal, P.Q.
Sault Ste. Marie, Ont.
Welland, Ont.
Sherman Avenue North, Hamilton, Ont.
Depew Street, Hamilton, Ont.
Queen Street North, Hamilton, Ont.
Wilcox Street, Hamilton, Ont.
Selkirk, Man.

(e) COLD ROLLED STEEL

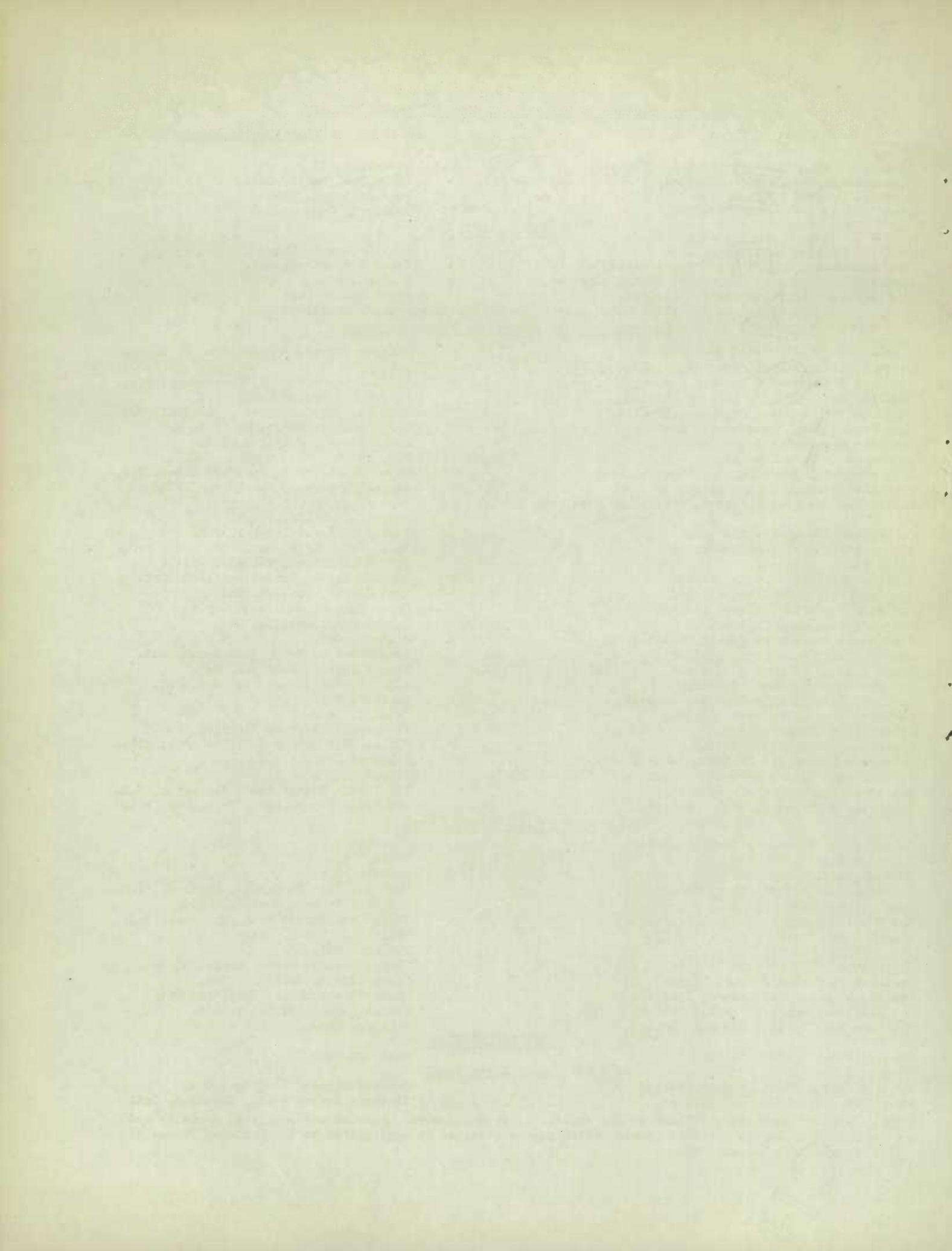
Stanley Steel Company Limited,

Hamilton, Ont.

Canadian Drawn Steel Company Limited,
Union Drawn Steel Company Limited.

Gerrard Street, Hamilton, Ont.
Victoria Avenue South, 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.





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