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OTTAWA - CANADA

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PRODUCTION OF IRON AND STEEL IN CANADA

REVIEW, 1934.

Production of pig iron and primary steels in Canada during 1934 showed an improvement for the second year in succession with a gain over 1933 of 79 per cent for pig iron and 85 per cent for steel. In 1933 the increase in pig iron was 58 per cent and in steel, 21 per cent, as compared with 1932.

Pig iron output as in other years was largely confined to the basic grade for steel making purposes but compared with 1933 the foundry and malleable grades showed a gain of 149 per cent as against an increase of 65 per cent in the basic grade. Production has been adversely affected by comparatively low scrap prices and by the substitution of steel stampings, forgings, etc., for pig iron. The iron furnaces in blast in January represented 17 per cent of the total Canadian capacity but the percentage dropped to 11 in February and remained at that figure until May when it advanced to 37. A change in June caused a decline to 26 per cent, but in July there was a gain to 34 per cent which was maintained until October when the year's high of 45 per cent was reached. For the remainder of the year only 34 per cent of capacity was in blast.

About 97 per cent of Canada's primary steel production in 1934 consisted of steel ingots for further processing by the producers, the balance of nearly 3 per cent being direct steel castings. Support for steel making during the year under review came largely from the improvement in the automotive trade and the continued activity in the mining fields. Although construction increased 29 per cent, most of the permits were for small buildings, resulting in an increased sale of builders' supplies but making little change in the demand for structural steel.

DECEMBER, 1934.

PIG IRON - Production of pig iron in Canada at 42,364 tons in December compares with 38,968 tons in the previous month and 38,612 tons in December of a year ago. The increase over November was in the malleable grade which rose to 11,136 tons from 749 tons while foundry iron dropped to 4,591 tons from 7,144 tons and basic iron to 26,637 tons from 31,075 tons.

Blast furnace charges during the month included 73,804 long tons of imported iron ore, 20,804 short tons of limestone and 42,112 short tons of coke. Of the limestone 8,075 tons were quarried in Canada and of the coke 33,968 tons were carbonized in Canada, including 18,377 tons from Canadian coal.

During 1934 a total of 406,995 tons of pig iron were produced in Canada as against 227,317 tons in 1933 and 144,130 tons in 1932. Of this year's output 312,631 tons were basic iron, 50,923 tons were foundry iron and 43,441 tons were malleable iron. Excepting 49 tons, all the foundry and malleable iron and 11,215 tons of basic iron were made for sale, the balance being intended for the further use of the producer.

FERRO-ALLOYS - Production of ferro-alloys in Canada amounted to 3,641 tons in December to make a total for the twelve months period of 33,085 tons. Corresponding outputs for other years were 30,133 tons in 1933 and 16,161 tons in 1932.

STEEL INGOTS AND CASTINGS - Output of steel ingots and direct steel castings in Canada at 58,732 tons showed little change from the 57,050 tons of November and compares with 49,557 tons made in December, 1933.

For the ~~twelve~~ months of 1934 the total output of steel amounted to 759,070 tons as against 409,979 tons in 1933 and 339,346 tons in 1932. The year's output included 715,363 tons of basic open hearth ingots, 23,067 tons of electric ingots, 6,439 tons of basic open hearth castings, 488 tons of converter castings and 13,713 tons of electric furnace castings.

PRICES - Firm prices and steady demand for small tonnages characterized the Canadian market for iron and steel products during December. More frequent buying for replacement of stocks by dealers was reported but as in recent months, the greater portion of orders originated from the mining and automobile industries.

The Dominion Bureau of Statistics index number of "Iron and Its Products" on the base 1926 = 100, rose from 86.7 in November to 86.8 in the following month, owing principally to higher prices for tinplate.

No changes were recorded in the prices of foundry pig iron delivered at Montreal and Toronto. No. 1 foundry was quoted at \$23.00 at Montreal and at \$21.50 per long ton at Toronto. No. 2 foundry was \$22.50 and \$21.00 per long ton at these respective centres.

UNITED STATES - Production of coke pig iron in the United States averaged 33,149 tons a day in December, an increase of 3.9 per cent over the November rate of 31,898 tons a day. There were 69 furnaces in blast on January 1, making iron at the rate of 37,615 tons a day as against 59 furnaces on December 1 operating at the rate of 29,395 tons a day.

#### (a) PIG IRON AND FERRO-ALLOYS

Table 1 - Production for the Current and Preceding Month (Tons of 2,240 lb.)

Item	DECEMBER, 1934			NOVEMBER, 1934		
	For own use	For sale	TOTAL	For own use	For sale	TOTAL
In blast furnace:-						
Basic .....	26,189	448	26,637	31,075	...	31,075
Foundry .....	...	4,591	4,591	...	7,144	7,144
Malleable .....	...	11,136	11,136	...	749	749
TOTAL .....	26,189	16,175	42,364	31,075	7,893	38,968
Ferro-alloys .....	...	3,641	3,641	...	8,778	8,778

Table 2 - Cumulative Production for the Twelve Months ending December (Tons of 2,240 lb.)

Item	1	9	3	4	1	9	3	3(x)
	For own use	For sale	(x)	TOTAL	For own use	For sale	TOTAL	
In blast furnace:-								
Basic .....	301,416	11,215	312,631	176,784	12,644	189,428		
Foundry .....	49	50,874	50,923	...	22,333	22,333		
Malleable .....	...	43,441	43,441	...	15,556	15,556		
TOTAL .....	301,465	105,530	406,995	176,784	50,533	227,317		
Ferro-alloys .....	...	33,085	33,085	...	30,133	30,133		

(x) Revised.



Table 3 - IRON BLAST FURNACE CHARGES, DECEMBER, NOVEMBER, AND YEAR TO DATE.

		December	November	Year to Date
Imported iron ore .....	long ton	73,804	70,577	704,719
Canadian limestone .....	short ton	8,075	6,676	69,318
Imported limestone .....	short ton	12,729	13,044	137,733
Coke made in Canada -				
From Canadian coal .....	short ton	18,377	18,104	155,085
From imported coal .....	short ton	15,591	20,582	215,508
Imported coke .....	short ton	8,144	...	38,024

(b) STEEL INGOTS AND DIRECT CASTINGS

Table 4 - Production for the Current and Preceding Month (Tons of 2,240 lb.)

Item	DECEMBER, 1934			NOVEMBER, 1934		
	For own use	For sale	TOTAL	For own use	For sale	TOTAL
<b>STEEL INGOTS</b>						
Open hearth - Basic .....	55,016	...	55,016	53,052	...	53,052
Acid .....	...	...	...	...	...	...
Electric .....	1,860	...	1,860	1,980	...	1,980
Other .....	...	...	...	...	...	...
Total Steel Ingots .....	56,876	...	56,876	55,032	...	55,032
<b>STEEL CASTINGS</b>						
Open hearth - Basic .....	91	454	545	85	616	701
Acid .....	...	...	...	...	...	...
Bessemer .....	...	13	13	...	54	54
Electric .....	21	1,077	1,098	41	1,222	1,263
Total Direct Steel Castings .	112	1,544	1,656	126	1,892	2,018
GRAND TOTAL .....	56,988	1,544	58,732	55,158	1,892	57,050

Table 5 - Cumulative Production for the Twelve Months ending December

Item	1 9 3 4			1 9 3 3		
	For own use	For sale	TOTAL	For own use	For sale	TOTAL
<b>STEEL INGOTS</b>						
Open hearth - Basic .....	715,201	162	715,363	378,549	117	378,666
Acid .....	...	...	...	...	...	...
Electric .....	23,067	...	23,067	15,393	...	15,393
Other .....	...	...	...	...	...	...
Total Steel Ingots .....	738,268	162	738,430	393,942	117	394,059
<b>STEEL CASTINGS</b>						
Open hearth - Basic .....	1,191	5,248	6,439	355	4,662	5,017
Acid .....	...	...	...	...	...	...
Bessemer .....	...	488	488	8	280	288
Electric .....	734	12,979	13,713	342	10,273	10,615
Total Direct Steel Castings .	1,925	18,715	20,640	705	15,215	15,920
GRAND TOTAL .....	740,193	18,877	759,070	394,647	15,332	409,979

Table 6 - Average Monthly Production of Pig Iron, Steel Ingots and Castings in Canada, 1916 - 1932 (In 1000's of long tons)

Years	Monthly Average		Years	Monthly Average	
	Iron	Steel		Iron	Steel
1916 .....	87	106	1925 .....	48	63
1917 .....	87	130	1926 .....	63	64
1918 .....	89	140	1927 .....	59	76
1919 .....	68	77	1928 .....	86	103
1920 .....	81	92	1929 .....	91	115
1921 .....	50	56	1930 .....	62	84
1922 .....	32	40	1931 .....	36	56
1923 .....	73	74	1932 .....	12	29
1924 .....	49	54			

Table 7 - Production of Pig Iron by Months and by Provinces, and Steel Ingots and Castings, by Months, in Canada, 1933 and 1934. (In 1000's of long tons)

Months	P I G		I R O N		S T E E L			
	NOVA SCOTIA		ONTARIO		TOTAL CANADA		TOTAL CANADA	
	1933	1934	1933	1934	1933	1934	1933	1934
January .....	16	12	13	19	29	31	41	61
February .....	6	..	..	12	6	12	12	58
March .....	..	..	..	12	..	12	11	73
April .....	..	..	..	27	..	27	12	70
May .....	..	9	..	29	..	38	23	71
June .....	1	15	..	22	1	37	32	64
July .....	16	15	16	22	32	37	49	67
August .....	16	16	19	26	35	42	49	64
September .....	16	17	15	26	31	43	38	57
October .....	17	18	10	29	27	47	48	58
November .....	16	16	14	23	30	39	43	57
December .....	15	17	23	25	36	42	52	59
TOTAL .....	119	135	110	272	227	407	410	759
Monthly Average .....	10	11	9	23	19	34	34	63

Table 8 - Iron Blast Furnaces in Canada, 1933.

Name of Company	Location	Number of stacks	Total Daily Capacity (Long tons)
British Empire Steel Corp. Ltd.	Sydney, N.S.	4	1,450
Canadian Furnace Co. Ltd.	Port Colborne, Ont.	1	350
The Steel Company of Canada, Ltd.	Hamilton, Ont.	2	825
Algoma Steel Corporation Ltd.	Sault Ste. Marie, Ont.	4	1,600

Table 9 - Description of Furnaces at end of December, 1934.

Condition of furnace	Number of furnaces	Total Daily Capacity	
		Long tons	Per cent
In blast .....	3	1,450	34
Banked .....	1	450	11
Blown out .....	7	2,325	55
Total furnaces reporting .....	11	4,225	100

NOTE - Figures in this report are the latest available at time of printing. Where necessary, data for earlier months have been revised.

