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PRODUCTION OF IRON AND STEEL  
IN CANADA

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## PRODUCTION OF IRON AND STEEL IN CANADA DECEMBER 1925

### PIG IRON AND FERRO-ALLOYS

Production of pig iron in Canada at 54,889 long tons in December was well over the average monthly output for the year of 48,000 tons, although it was 20 per cent under the 68,535 tons reported for November.

For the twelve months ending December, 1925, the total output of pig iron at 570,397 tons showed a slight recession from the 1924 production of 593,024 tons which in turn marked a decline of 33 per cent from the 880,018 tons of 1923, but it was 49 per cent over the 383,057 tons of 1922. In 1925, the tonnage produced for the further use of the makers, consisted mostly of basic iron and represented 74 per cent of the total as against 61 per cent in 1924. Taking the population of Canada at 9,364,200 persons in 1925, the per capita production of pig iron was 136 pounds, as against 144 pounds in the preceding year, 216 pounds in 1923, an average of 96 pounds in 1922, and 151 pounds in 1921.

In 1925, Ontario produced 370,000 tons of pig iron or 65 per cent of the Canadian output as against 70 per cent of the total in 1924. Nova Scotia accounted for the balance in each year. In January, Ontario furnaces produced 20,000 tons of pig iron and maintained this rate of output in February. In March large rail orders caused an increase in output to 41,000 tons which was also fairly well maintained during the next two succeeding months. In June, production fell to 26,000 tons and in July to 21,000 tons. In October, further rail orders caused an increase to 48,000 tons, the maximum monthly output for the year, after which production declined to 40,000 tons in November and to 31,000 tons in December.

Production in Nova Scotia showed a somewhat similar trend. In January, the output stood at 8,000 tons but rose to 23,000 tons in March and continued at this level until the furnaces were banked about the end of June. In July, there was no production from these furnaces but in August, they were started up again to produce 4,000 tons; the maximum output of 29,000 tons was reached in November; in the closing month of the year production was shaded to 24,000 tons.

For the whole of Canada, furnace charges during the year consisted of 6,098 long tons of Canadian iron ore, 1,023,486 long tons of imported ore, 636,594 short tons of coke and 322,882 short tons of limestone. For each long ton of pig iron produced during the year, the furnace charges consisted of 4,043 pounds of ore, 2,230 pounds of coke and 1,133 pounds of limestone.

Five furnaces, having a capacity of 1,825 tons per day or 36 per cent of the total capacity of all iron blast furnaces in Canada were in blast on December 31st, at the following points; 2 at Sydney, N.S.; 2 at Hamilton, Ont.; and 1 at Sault Ste. Marie, Ont.

Altogether there are 15 blast furnaces in Canada which if operated at full capacity are capable of an annual production approximating 1.8 million tons; the output of 570,397 tons in 1925 then would indicate that on the average the blast furnaces in Canada in that year operated at 32 per cent of capacity. During October when the year's record monthly output of 74,013 tons was made, there were 7 furnaces in blast having in the aggregate a capacity of 2,675 tons or 53 per cent of the total capacity of all such furnaces in Canada. The low point for the year was reported in July as the Nova Scotia furnaces were banked in June and were not blown in again until August. During January, 21 per cent of Canada's furnace capacity was in blast, 41 per cent from February to May, 15 per cent in June and July, 25 per cent in August, 42 per cent in September, 53 per cent in October and 36 per cent in November and December. Statistics of the capacity of furnaces in blast are not available for the previous year, 1924, but in that year there were 5 furnaces in blast in January, 7 in February, March and April, 6 in May, 4 in June and July, 2 in August, 3 in September and October, 2 in November and 3 in December.

In December, the production of ferro-alloys was 3,008 tons marking a slight increase over the 2,094 tons of November. The total for the year was 25,709 tons as against 26,400 tons in 1924 and 28,961 tons in 1923.

Reflecting the lowered output of pig iron the December production of 62,333 tons of steel ingots and castings marked a drop of 15 per cent from the 73,205 tons made in the preceding month, and was slightly lower than the average monthly output of 63,000 tons for the year. The decline was mostly in steel ingots made for the further use of the producers. The actual figures for December were 60,699 tons of ingots and 1,654 tons of castings while for November 71,495 tons of ingots and 1,710 tons of castings were reported.

For the twelve months' period, 752,695 tons of steel ingots and castings were made; this was an increase of 16 per cent over the 650,690 tons of 1924. This year's output was composed of 733,855 tons of ingots and 18,440 tons of castings as compared with 625,175 tons of ingots and 25,515 tons of castings in 1923. Per capita production of steel in Canada was 180 pounds in 1925, as against 158 pounds in the preceding year, 217 pounds in 1923, an average of 121 pounds in 1922 and 170 pounds in 1921.

A review of the price trend during 1925 shows that iron and its products fluctuated within narrower limits, but at considerably lower levels than in 1924. Based on 1913 prices as 100, the Bureau index was 158.4 in January and 147.3 in December, a decline of about 11 points over the twelve-month period. February at 158.5 marked the high point for the year and November at 147.1 the low point. In 1924, the prices ranged from 168.5 in January to 154.8 in November.

In the "Iron Age" review of the world market, as represented by the six leading producing nations, it is shown that the steel industry made a new production record of 75.3 million tons in 1925 but pig iron at 66.1 million tons was still short of 1913 levels. United States again led by producing 60 per cent of the world's steel and 55.5 per cent of the pig iron; Germany, France, Great Britain, Belgium and Luxemburg followed in the order named. Exports from all six countries were about two million tons lower than in 1924, France and Germany being the only two countries to show increases. Great Britain led the exporting nations with France a close second; Germany doubled her previous year's exports to rank third; Belgium (including Luxemburg) came next and the United States although the greatest producer ranked last among the exporters.

PIG IRON AND FERRO ALLOYS IN CANADA

Table 1. PRODUCTION FOR THE CURRENT AND PRECEDING MONTH (Tons of 2240 lb.)

ITEM	DECEMBER 1925			NOVEMBER 1925		
	For Own Use	For Sale	TOTAL	For Own Use	For Sale	TOTAL
In blast furnace:						
Basic.....	38,320		38,320	40,174	1,212	41,386
Foundry.....	69	1,903	1,972	74	25,528	25,602
Malleable.....		14,597	14,597		1,547	1,547
TOTAL.....	38,389	16,500	54,889	40,248	28,287	68,535
Ferro-alloys.....		3,008	3,008		2,094	2,094

Table 2. CUMULATIVE PRODUCTION FOR THE TWELVE MONTHS ENDING DECEMBER  
(Tons of 2240 lb.)

ITEM	1925			1924		
	For Own Use	For Sale	TOTAL	For Own Use	For Sale	TOTAL
In blast furnace:						
Basic.....	422,805	1,710	424,515	347,461	6,866	354,327
Foundry.....	304	101,690	101,994	1,512	178,867	180,379
Malleable.....	936	42,952	43,888	12,891	45,427	58,318
TOTAL.....	424,045	146,352	570,397	361,864	231,160	593,024
Ferro-alloys.....		25,709	25,709		26,400	26,400

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

		DECEMBER	NOVEMBER	TOTAL 12 months
Canadian Iron ore	Long tons			6,098
Imported Iron ore	" "	99,925	123,374	1,023,486
Coke	Short tons	59,972	77,848	636,594
Limestone	" "	32,071	39,130	322,882

# STEEL INGOTS AND CASTINGS IN CANADA

Table 4 PRODUCTION FOR THE CURRENT AND PRECEDING MONTH (Tons of 2240 lb.)

	DECEMBER 1925			NOVEMBER 1925		
	For Own Use	For Sale	TOTAL	For Own Use	For Sale	TOTAL
<b>STEEL INGOTS:</b>						
Open Hearth-Basic	59,544	-----	59,544	69,497	-----	69,497
Acid	-----	-----	-----	-----	-----	-----
Bessemer	-----	-----	-----	-----	-----	-----
Other	1,155	-----	1,155	1,998	-----	1,998
TOTAL STEEL INGOTS	60,699	-----	60,699	71,495	-----	71,495
<b>STEEL CASTINGS:</b>						
Open Hearth-Basic	200	504	704	231	701	932
Acid	-----	-----	-----	-----	-----	-----
Bessemer	11	137	148	4	162	166
Electric	1	801	802	1	611	612
TOTAL DIRECT STEEL CASTINGS	212	1,442	1,654	236	1,474	1,710
GRAND TOTAL	60,911	1,442	62,353	71,731	1,474	73,205

Table 5 CUMULATIVE PRODUCTION For the TWELVE MONTHS ending DECEMBER

	1925			1924		
	For Own Use	For Sale	TOTAL	For Own Use	For Sale	TOTAL
<b>STEEL INGOTS:</b>						
Open Hearth-Basic	722,603	-----	722,603	620,510	-----	620,510
Acid	-----	-----	-----	-----	-----	-----
Bessemer	-----	-----	-----	-----	-----	-----
Other	11,252	-----	11,252	4,665	-----	4,665
TOTAL STEEL INGOTS	733,855	-----	733,855	625,175	-----	625,175
<b>STEEL CASTINGS:</b>						
Open Hearth-Basic	1,540	7,471	9,011	1,234	16,373	17,607
Acid	-----	-----	-----	-----	782	782
Bessemer	78	1,674	1,752	48	1,319	1,367
Electric	34	8,043	8,077	144	5,615	5,759
TOTAL DIRECT STEEL CASTINGS	1,652	17,188	18,840	1,426	24,089	25,515
GRAND TOTAL	735,507	17,188	752,695	626,601	24,089	650,690

Table 6 AVERAGE MONTHLY PRODUCTION OF  
PIG IRON, STEEL INGOTS AND CASTINGS  
IN CANADA, 1912 - 1923.  
(In 1000's of Long Tons)

YEAR	MONTHLY AVERAGE		YEAR	MONTHLY AVERAGE	
	Iron	Steel		Iron	Steel
1912	75	71	1918	89	140
1913	84	87	1919	68	77
1914	58	62	1920	81	92
1915	68	76	1921	50	56
1916	87	106	1922	32	40
1917	87	130	1923	73	74

TABLE 7 PRODUCTION OF PIG IRON BY MONTHS AND BY PROVINCES, AND STEEL  
INGOTS AND CASTINGS BY MONTHS IN CANADA (In 1000's  
Long Tons) 1924-25.

MONTH	PIG IRON						STEEL	
	Nova Scotia		Ontario		Total Canada		Total Canada	
	1924	1925	1924	1925	1924	1925	1924	1925
January	15	8	49	20	64	28	41	27
February	12	9	48	21	60	30	71	37
March	32	23	45	41	77	64	95	108
April	31	23	53	37	84	60	104	88
May	26	24	59	39	85	63	108	100
June	22	20	35	26	57	46	69	63
July	22	-	23	21	45	21	52	22
August	3	4	20	23	23	27	23	25
September	3	12	20	23	23	35	18	37
October	8	26	21	48	29	74	20	109
November	2	29	21	40	23	69	23	73
December	1	24	22	31	23	55	26	62
TOTAL	177	202	416	370	593	572	650	751
MONTHLY AVERAGE	15	17	34	31	49	48	54	63

Table 8. BLAST FURNACES IN CANADA, 1925

Name of Company	Location	Number of Stacks	Total Daily Capacity (Long Tons)
British Empire Steel Corporation, Ltd.	Sydney, N.S.	8	2,475
Canadian Furnace Co., Ltd.	Port Colborne, Ont.	1	325
The Steel Company of Canada, Ltd.,	Hamilton, Ont.	2	725
Algoma Steel Corporation, Ltd.	Sault Ste. Marie, Ont.	4	1,500
TOTAL		15	5,025

NOTE: In previous issues of this report, the number of furnaces has been given as 20 but as 5 of this number have not been operated for several years, they have been omitted from the present record.

Table 9. DESCRIPTION OF FURNACES AT END OF DECEMBER

Condition of Furnace	Number of Furnaces	Total Daily Capacity	
		Long tons	Per cent
In blast.....	5	1,825	36
Banked .....	-	-	-
Blown out.....	10	3,200	64
Total furnaces reporting.....	15	5,025	100

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