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Monthly Report
of the
**PRODUCTION OF IRON AND STEEL
IN CANADA**

DECEMBER, 1921

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MONTHLY REPORT

of the

PRODUCTION OF IRON AND STEEL

IN CANADA

December, 1921.

FIG IRON AND FERRO-ALLOYS

The production of pig iron in Canada during December declined to the lowest level for the year, the total pig iron made amounting to only 39,917 long tons, all of which was made in blast furnaces. By kinds of iron produced the outputs for December were as follows: basic, 30,698 tons; foundry, 2,948 tons; and malleable 6,271 tons. Practically all the basic iron was made by the operators for their own further use, only 516 tons being made for direct sale. Foundry iron while showing a considerable decline from the amount produced in November was for the most part made for direct sale, a total of 2,882 tons having been credited to this item during the month. For the first month since August a production of malleable iron was recorded and a total of 6,271 tons was produced for sale.

Ferro-alloys declined from 1,683 tons in November to 846 tons in December, the entire output consisting of the several grades of ferro-silicon.

Two furnaces of the Algoma Steel Corporation which were in blast at the beginning of the month were closed down before the end of the month. The Dominion Steel Corporation also which had two furnaces in blast on December 1st, finished up the year with only one furnace working. There were therefore only two furnaces active on December 31st, one operated by the Steel Company of Canada at Hamilton and one by the Dominion Steel Corporation at Sydney. Throughout the greater part of the year at least five furnaces were active, December being the only month in which fewer than five were in blast.

The average monthly output of pig iron in Canada during the twelve months ending December was 50,000 tons, or less than the average monthly record for any year since 1908. Throughout the entire period during which a total of 595,000 long tons of pig iron was made, the market was decidedly quiet and the suspension of interest in iron was general. In the United States as in Canada the final week of 1921 was characterized by a quiet market and declining production. In spite of this there was evidence at the close of the year that there would be an early resumption of activities in the iron trade and the opinion was generally expressed that the first month of the new year would see the beginning of an upward movement in production.

Table 1 (a) shows the production of pig iron by grades, and ferro-alloys during the month. For comparison Table 1 (b) shows the corresponding data for the month of November, and Table 1 (c) shows the total output for the months of the calendar year to date.

PIG IRON AND FERRO-ALLOYS PRODUCTION (Tons of 2240 lbs.)

Table 1 (a) - December - 1921.

	IN BLAST FURNACES		IN ELECTRIC FURNACES		TOTAL PRODUCTION
	For Own Use	For Sale	For Own Use	For Sale	
PIG IRON:					
Basic.....	30,182	516	--	--	30,698
Foundry.....	66	2,882	--	--	2,948
Malleable.....	--	6,271	--	--	6,271
Castings.....	--	--	--	--	--
TOTAL PIG IRON.....	30,248	9,669	--	--	39,917
TOTAL FERRO-ALLOYS	--	--	--	846	846

Table 1 (b) - November - 1921.

PIG IRON:					
Basic.....	41,014	309	--	--	41,323
Foundry.....	97	6,287	--	--	6,384
Malleable.....	--	--	--	--	--
Castings.....	--	--	--	--	--
TOTAL PIG IRON.....	41,111	6,596	--	--	47,707
TOTAL FERRO-ALLOYS	--	--	--	1,683	1,683

Table 1 (c) - TOTAL for the twelve months ending December, 1921.

PIG IRON:					
Basic.....	459,580	1,998	--	--	461,578
Foundry.....	33,265	63,817	222	--	97,304
Malleable.....	7,837	27,247	--	--	35,084
Castings.....	--	--	--	388	388
TOTAL PIG IRON.....	500,682	93,062	222	388	594,354
TOTAL FERRO-ALLOYS	9,563	167	--	12,743	22,493

No. of blast furnaces:

	First of Month	End of Month
ACTIVE.....	5.....	2
IDLE.....	15.....	18

Table 2 (a) shows the average monthly production of pig iron in Canada for the ten-year period from 1907 to 1916, inclusive, and Table 2 (b) shows the actual production by months for the years 1917 to date.

Table 2 (a)

AVERAGE MONTHLY PRODUCTION OF PIG IRON

IN CANADA, 1907 - 1916.

In 1000's of Long Tons

YEAR	MONTHLY AVERAGE	YEAR	MONTHLY AVERAGE
1907	48	1912	75
1908	47	1913	84
1909	56	1914	58
1910	60	1915	68
1911	68	1916	87

Table 2 (b)

TOTAL PRODUCTION OF PIG IRON IN CANADA BY MONTHS

From 1917 to Date

(In 1000's of Long Tons)

MONTH	1917	1918	1919	1920	1921
January	80	66	93	73	41
February	75	70	78	64	58
March	93	86	82	69	60
April	90	93	83	77	39
May	97	94	74	87	56
June	89	92	59	80	55
July	83	98	54	84	54
August	90	86	60	93	50
September	90	85	51	94	44
October	92	96	50	105	50
November	87	95	65	94	48
December	78	106	70	54	40
TOTAL	1044	1067	819	974	595
MONTHLY AVERAGE	87	89	68	81	50

STEEL INGOTS AND CASTINGS.

The decline in the output of pig iron during December, and the generally dull market for steel resulted in a marked falling off in the production of steel ingots and castings, the decline from November amounting to more than 23,000 tons. The outputs for the months of November and December were respectively 75,039 tons and 42,653 tons. Of the December output 41,100 tons consisted of basic open hearth steel ingots made by the producers for their own further use in manufacturing. A total of 1,551 tons of direct steel castings was made, of which 1,458 tons was produced for direct sale, comprising 657 tons of basic open hearth castings, 97 tons bessemer castings, and 704 tons of steel castings made from electric furnaces. During the month 93 tons of direct steel castings was made by the firms reporting for use in manufacturing in their own plants.

During the twelve months ending December 667,484 long tons of steel ingots and castings was produced as compared with 1,109,000 tons made during 1920. The average monthly production during the year just closed was 56,000 tons as compared with 92,000 tons during the preceding year. Of the total production of steel ingots and castings during 1921, 645,075 tons was in the form of direct steel ingots comprising 641,882 tons of basic open hearth steel, 239 tons acid open hearth steel, 94 tons bessemer, and 2,860 tons made in electric furnaces. The whole basic and acid open hearth production of steel ingots was made by the operators for the use of their own mills. Of the bessemer ingots produced 37 tons was used directly and the balance was produced for sale. A total of 2,200 tons of electric steel ingots was used by the plants reporting and 660 tons was made for sale.

Steel castings produced during the year amounted to 22,409 tons, comprising 6,531 tons basic open hearth, 256 tons acid open hearth, 1,638 tons bessemer and 13,984 tons castings made from electric furnaces. Of the whole amount 18,495 tons was made for sale and 3,914 tons used by the firms reporting. An analysis of the 18,495 tons of direct steel castings made for sale shows 5,081 tons was made by the basic open hearth process, 252 tons in acid open hearth furnaces, 1,401 tons by the bessemer process and 11,761 tons from electric furnaces.

The low price of steel in December was not only the low for the year but was lower than at any time since January, 1916. While the production of steel during 1921 was less than for any preceding year since 1908 the sentiment prevailing in the steel trade at the end of December was favorable to an early resumption of activity and the hope was everywhere expressed that the early months of the new year would be marked by a resumption of construction work as a result of the more favorable purchasing market established and that as a consequence a considerable development in the production of steel might be expected.

Table 3 (a)

PRODUCTION OF STEEL INGOTS AND CASTINGS IN CANADA
FOR THE CURRENT AND PRECEDING MONTH
(Tons of 2240 lbs.)

	NOVEMBER			DECEMBER		
	For Own Use	For Sale	Total	For Own Use	For Sale	Total
STEEL INGOTS:						
Open Hearth-Basic	73,615		73,615	41,100		41,100
Acid						
Bessemer	1	2	3	1	1	2
Electric	40		40			
TOTAL STEEL INGOTS	73,656	2	73,658	41,101	1	41,102
STEEL CASTINGS:						
Open Hearth-Basic	129	587	716	76	657	733
Acid						
Bessemer	8	73	81	3	97	100
Electric	13	571	584	14	704	718
TOTAL DIRECT STEEL CASTINGS	150	1,231	1,381	93	1,458	1,551
GRAND TOTAL	73,806	1,233	75,039	41,194	1,459	42,653

Table 3 (b)

TOTAL PRODUCTION OF STEEL INGOTS AND CASTINGS

For the Twelve MONTHS ending DECEMBER, 1921.

	For Own Use	For Sale	Total Production
STEEL INGOTS:			
Open Hearth-Basic	641,882		641,882
Acid	239		239
Bessemer	37	57	94
Electric	2,200	660	2,860
TOTAL STEEL INGOTS	644,358	717	645,075
STEEL CASTINGS:			
Open Hearth-Basic	1,450	5,081	6,531
Acid	4	252	256
Bessemer	237	1,401	1,638
Electric	2,223	11,761	13,984
TOTAL DIRECT STEEL CASTINGS	3,914	18,495	22,409
GRAND TOTAL	648,272	19,212	667,484

Table 4 (a)

AVERAGE MONTHLY PRODUCTION OF STEEL INGOTS AND DIRECT STEEL CASTINGS

IN CANADA, 1907 - 1916.

In 1000's of Long Tons

YEAR	MONTHLY AVERAGE	YEAR	MONTHLY AVERAGE
1907	53	1912	71
1908	44	1913	87
1909	56	1914	62
1910	61	1915	76
1911	66	1916	106

Table 4 (b)

TOTAL PRODUCTION OF STEEL INGOTS AND CASTINGS IN CANADA BY MONTHS

From 1917 to Date

(In 1000's of Long Tons)

MONTH	1917	1918	1919	1920	1921
January	117	130	107	92	40
February	108	124	90	84	59
March	136	141	100	97	53
April	125	149	75	93	27
May	139	156	69	90	52
June	122	148	68	91	64
July	124	147	66	94	54
August	130	152	54	105	72
September	133	149	60	99	56
October	144	164	66	111	72
November	141	116	82	97	75
December	139	105	87	56	43
TOTAL	1558	1681	924	1109	667
MONTHLY AVERAGE	130	140	77	92	56



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