

BIG STEEL MERGER IS ON THE WAY

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manufacturers are favored by legislation and are aided by such facilities as, for instance, the proposed foreign commerce bank would offer. Given fairly even conditions the American manufacturers believe that they can not only hold the trade they have already secured but can increase it, no matter what competition Great Britain and Germany may offer.

How the Two Steel Plants Compare

Dominion Iron & Steel Company.

| Iron furnaces and supplies. | Annual capacity. |
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| 6 blast furnaces of 250 G.T. capacity each per day | 550,000 G.T. basic and foundry pig iron. |
| Company owns Wabana Ore Mines, Newfoundland | 850,000 tons. |
| By-product coke plant, consisting of 620 ovens | 650,000 N.T. coke. |
| By-product recovery plant for Benzol, Toluol, Naphtha, Naphthaline and Sulphate of Ammonia | |
| Plant for manufacture of cement from blast furnace slag | |
| Limestone quarries in Nova Scotia and Newfoundland ... | 630,000 tons. |

Steel works.

Annual capacity.

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| 10 Basic open hearth furnaces (50-ton) | 400,000 N.T. (Ingots used only for desiliconizing, dephosphorizing, and decarburizing molten pig iron for open hearth furnaces). |
| 3 Basic Bessemer converters (15-ton) | |
| 35" 2 high reversing blooming mill | |
| 16" Morgan cont. billet mill ... | 375,000 tons blooms, billets and slabs. |
| Morgan cont. rod mill | 90,000 tons wire rods. |
| Morgan semi-cont. rod and bar mill with 12" roughing and 9 1/2" finishing trains | 60,000 bars. |
| 16" Merchant mill | 75,000 tons bars. |
| 28" Rail mill | 300,000 tons. |
| Wire department | 50,000 tons. |
| Wire nails | 30,000 tons. |

Nova Scotia Steel & Coal Company.

Iron furnaces.

Annual capacity.

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|---|---|
| 1 Blast furnace at Sydney Mines of 250 G.T. daily capacity .. | 90,000 G.T. basic and foundry pig iron. |
| 1 New blast furnace under construction | 80,000 G.T. |
| By-product coke plant, consisting of 150 ovens | 110,000 N.T. of coke. |

Steel works.

Annual capacity.

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| 5 Basic open hearth furnaces at Sydney Mines | 50,000 N.T. steel and fluid compressed ingots. |
| 28" Cogging mill | |
| 20" Plate mill | Total 60,000 tons of finished, rolled and forged products, including merchant bars, angle bars, tie plates, etc. |
| 18" and 19" Rolling mills | |
| 9" Guide mill | |
| Hammer and forging presses .. | |
| 2 Railway spike machines | 7,500 tons. |

Mines.

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|---|---------------|
| Ore mines at Wabana, Newfoundland | 600,000 tons. |
| Coal mines at Sydney Mines .. | 800,000 tons. |
| Limestone quarries in Nova Scotia | 70,000 tons. |

The Eastern Car Company, a subsidiary concern of the Nova Scotia Steel and Coal Company, manufactures steel and wooden cars, car wheels, etc. It utilizes a considerable portion of the plates and bars made by the Nova Scotia Steel Company, and has important and growing facilities for steel shipbuilding. The Nova Scotia Steel Company operates a number of ocean vessels, which carry its ore and coal to export markets.

The plants of the Dominion Steel Company and the Nova Scotia Steel Company are favorably situated for the utilization of the large iron and coal resources in that territory. A large tonnage of Wabana ore is exported by these companies to Europe and the United States. These exports comprise about two-thirds of the total ore mined, the balance being used in their own blast furnaces in which pig iron is produced for conversion into basic steel, although this iron contains high percentages of phosphorus, silicon and sulphur. The coal supply also is well suited for coking and steam purposes. The cost of transportation to these plants both of ore from Newfoundland and coal from Cape Breton mines is low, compared with that in other important iron districts.

Both companies export a large proportion of their products, notably, rails, forgings and wire products to the United States, the United Kingdom and other countries, and should be able to expand their plants so as to increase the variety and tonnage of iron and steel products for export; while their low cost of production and shipping facilities should enable them to compete for export trade with producers in the United States or Germany.

WIDER RANGE OF STEEL PRODUCTS

That is One of Needs of Canadian Industry—Review and Outlook

One of the needs of the Canadian steel industry is a wider diversification of its products, according to Lieut.-Col. Thomas Cantley, chairman of the board, Nova Scotia Steel and Coal Company, in a review of the industry published in Industrial Canada, the organ of the Canadian Manufacturers' Association. He points out that at the present time there is an absolute dependence on the United States for certain shapes, large sections and heavy steel plates. This applies both to shipbuilding and structural material. The difficulties in connection with the production of these in Canada are not insuperable. To lay down the necessary plant at the present time, in view of the scarcity of material, high prices and existing labor conditions, would call for an excessive capital expenditure. But Canada's needs in this respect are now imperative, and if the government are prepared to meet existing conditions, the requirements of the Dominion in this connection can be met within a reasonable time.

Col. Cantley states that the production of iron and steel during the past year, 1917, has been attended by ever-increasing difficulties, due largely to shortage of important supplies, scarcity of labor, and delay in transportation. It is, therefore, particular gratifying that the production of steel ingots and direct castings in Canada for the year will approximate nearly 1,700,000 tons, creating a new record, the previous banner year being 1916, when some 1,300,000 tons were produced. He continues:—

The production of pig iron in the Dominion has likewise been relatively heavy, it being estimated that the output will approximate 1,200,000 tons in 1917, as compared with 1,150,000 tons in 1916. Of this total some 13,000 tons of so-called pig iron were produced in electric furnaces at different points throughout Canada.

Role of Electric Furnace.

The electric furnace is playing a much larger part in Canada's steel production than heretofore, and it is probable that 45,000 tons of steel will have been produced by this method in the Dominion in 1917. This shows a quite rapid growth, the output from electric furnaces in 1916 amounting only to some 19,000 tons. The growth of this process has been particularly rapid in the United States and Great Britain. In the latter country 131 furnaces are now operated or under construction; of the total number 70 are in the Sheffield district. This probably makes the largest number of such furnaces in any one group in the world.

The development of this branch of the steel industry is directly due to the unprecedented demand for steel for war purposes. The advocates of this process of manufacture claim that it has many inherent advantages, which, together with