The Steel Industry

Steel is one of the best barometers of a nation's industrial growth and during the past two decades the progress made by Canada's steel industry has been remarkable. In 1939, steelmakers of this country produced 1,551,054 tons of steel ingots and castings and by 1959 had achieved a production of 5,921,728 tons. Despite the rapid growth of the industry since the close of World War II and its increased diversification, the domestic industry continues to supply only about 70 p.c. of steel mill products that are consumed. The remainder, consisting mainly of plate, heavy structurals, skelp and wide sheet, is supplied in whole or in part through imports chiefly from the United States, with smaller amounts coming from the United Kingdom, Western Europe and Japan.

Four fully integrated companies are the nucleus of the Canadian steel industry: The Steel Company of Canada, Limited, Hamilton, Ont.; Algoma Steel Corporation, Limited, Sault Ste. Marie, Ont.; Dominion Steel and Coal Corporation, Limited, Sydney, N.S.; and Dominion Foundries and Steel, Limited, Hamilton, Ont. During 1960, production from these four companies amounted to approximately 5,300,000 tons and an additional 500,000 tons were produced by a number of electric smelting plants.

Noteworthy developments have taken place during the past few years. Companies have increased capacities and adopted many changes in technology which include new types of concentrated furnace feed and more efficient iron and steelmaking processes.

The Steel Company of Canada, Limited, which produced 2,152,000 tons of steel in 1960, is completing a $60,000,000 expansion program which will both diversify output and increase the company's capacity to 3,000,000 tons a year. Included in this program is a second electrolytic tinning line which will double the capacity for the manufacture of tin plate, a new $10,000,000 continuous-weld pipe mill now in operation at Contrecoeur, Que., and a fifth open hearth furnace of 400-ton capacity.

Dominion Foundries and Steel, Limited produced 1,000,845 tons of steel ingots and castings in 1960. This company was the first steel producer in Canada to introduce the basic oxygen process. Expenditures on new plant facilities totalling $55,000,000 during the past two years have been made by this company. Major additions included three new stands in the hot-rolling mill, a 56" cold-rolling mill and a third oxygen gas producing plant. In 1960, a third blast furnace, a second continuous-galvanizing line, four new soaking pits and additions to the oxygen steelmaking plant were made. Ingot capacity is now rated at 1,250,000 tons a year.

Algoma Steel Corporation, Limited, which produced 1,278,000 tons of steel ingots and castings in 1960, has also increased capacity in a program that commenced in 1956. An important addition is Canada's first wide-flange beam mill which will produce wide beams not previously made in this country. During the four years prior to construction of the mill in 1960, Canada's imports of wide-flange beams averaged 200,000 tons annually. Algoma Steel was the second producer to use the basic oxygen steelmaking process.

Dominion Steel and Coal Corporation, Limited increased capacity at its Sydney Mines works in 1959 from 930,000 tons to 1,000,000 tons annually. In 1960, production reached 864,300 tons.

A wide range of alloy and specialty steels is produced by Atlas Steels Limited in its plant at Welland, Ont. A continuous steel casting machine, one of the first on this Continent, is in operation there. The company has installed a hot planetary mill that will take slab from the continuous casting machine and in a single pass convert it to a thickness of approximately one-quarter inch. These and other recently installed facilities place Canada in a favourable position for the economical production of stainless steel mill products.

Crucible Steel Company of Canada, formed in 1959 to acquire the steelmaking facilities of Sorel Industries Limited at Sorel, Que., is now in operation and has announced its inten-