

12.6 Manufactured metals

12.6.1 Aluminum

Canadian production of aluminum in 1978 was 1.0 million tonnes compared with 973 524 t in 1977. Consumption in Canada was 380 290 t for 1978, an increase of about 14.4% above the 332 393 t consumed in 1977. The Canadian aluminum industry's increased output reflected the stronger external demand and Canadian smelters correspondingly operated at near full capacity during the year.

Two companies operate primary aluminum smelters in Canada, the Aluminum Co. of Canada, Ltd. (Alcan), and Canadian Reynolds Metals Co. Ltd. Alcan operates four aluminum smelters in Quebec at Jonquière, Isle-Maligne, Beauharnois and Shawinigan, and one at Kitimat in British Columbia with a combined capacity of 904 000 t of aluminum a year. Alcan also operates an alumina plant at Jonquière that supplies its Quebec smelters. The Baie-Comeau, Que. smelter of Canadian Reynolds Metals Co. Ltd. has a capacity of 158 800 t a year.

Construction continued on Alcan's new 171 000 t a year smelter near La Baie, Que. The first 57 000 t phase was expected to be in production by the end of 1980. The second and third phases were planned for completion in 1981 and 1982, respectively. Total capital cost was estimated at \$415 million.

Alcan's subsidiary and related smelter operations outside Canada are located in Japan, United Kingdom, India, Brazil, Australia, the Federal Republic of Germany and Spain.

12.6.2 Iron and steel

The Canadian steel industry performed above expectations during 1978 and crude steel production increased by 6.0% to 14.9 million tonnes. The industry operated at 83% of installed capacity. Shipments from iron and steel mills were valued at \$4.8 billion. Consumption of crude steel increased by 5.5% to 13.6 million tonnes even though real economic growth was only 3.4%. Domestic markets were firmer as most product lines were strong, notably those related to the automotive sector, construction, and oil and natural gas development. Steel service centres were particularly active. Some hedge-buying occurred early in the year in anticipation of possible strikes; however, labour disruptions were minimal. The lower-valued Canadian dollar improved Canada's competitive position in export markets and this boosted steel exports and exports of steel-based manufactured products, particularly to the United States. From the perspective of the North American steel market alone, there was a marked firming of steel demand after a three-year period of relatively sluggish activity. This, coupled with higher prices, meant higher revenues and increased profits for most Canadian and United States steel producers.

The Steel Co. of Canada Ltd. (Stelco), the largest steel producer in Canada, continued building its Greenfield steel complex near Nanticoke on Lake Erie. The first phase of the Nanticoke project, which commenced in 1974, was scheduled for completion by mid-1980 and will have steelmaking capacity of about one million tonnes a year. Initially, only slabs will be produced and these will be transported to Hamilton for finishing into steel products. Eventual capacity at the Nanticoke site is expected to be 5.4 million tonnes. At Stelco's Stelform pipe mill at Welland, Ont., additional equipment was being installed and modifications made to existing facilities to better meet stringent specifications for northern pipelines.

Production and shipments of Algoma Steel Corp. Ltd. increased. Work recommenced on rebuilding a coke oven battery, constructing a new slab caster, and completing major repairs on a blast furnace. A decision was made to expand the seamless tube heat-treating capacity by 50%. A new \$24 million heat-treating line for wide steel plate was also expected to be on line by late 1980.

Dominion Foundries and Steel Ltd. (Dofasco) completed three major elements of an expansion program. A basic oxygen steelmaking plant came on stream, as did a coke oven battery and eight new soaking pits. A new melt shop, with a capacity of 910 000 t a