

**Cement.** The Canadian industry has capacity to produce 17.9 million tonnes from a total of 23 plants. In 1986, cement production was 10.0 million tonnes which represents a capacity utilization of 57%. Plants utilizing the dry process constitute over 70% of Canadian capacity.

**Mineral aggregates.** Production of mineral aggregates, sand, gravel and crushed stone in 1986 was approximately 334 million tonnes.

## 10.6 Manufactured metals

**Aluminum.** Canada is the second largest aluminum producer in the western world. Canadian output of aluminum in 1986 was estimated at 1.35 million tonnes. Since Canada consumes only about 500 000 t per year, it is the largest aluminum exporter in the world. The United States is the largest market for Canadian aluminum exports, with 1986 shipments to that market estimated at 850 000 t.

Three companies operate primary aluminum smelters in Canada. One company has five smelters in Quebec at Jonquière, Isle-Maligne, Grande Baie, Beauharnois and Shawinigan, and one at Kitimat, BC with a combined annual capacity of 1 075 000 t. The company also operates an alumina refinery at Jonquière; its output is consumed by the company's smelters in the region. The other two companies each operate one smelter in Quebec; one at Baie-Comeau, with a capacity of 272 000 tpy, and the other at Bécancour. The latter plant was officially opened in September 1986 and was expected to reach its full operating capacity of 230 000 tpy by the end of February 1987.

With abundant supplies of hydroelectric power, Canada is one of the lowest cost aluminum-producing nations in the world. Despite this advantage, several aluminum smelter developments in Canada have been cancelled or postponed due to depressed market conditions. While the aluminum price averaged 52 cents US per pound in 1986, an improvement over levels recorded in 1985, significant improvement in the market will be required before any new smelter projects can proceed.

**Iron and steel.** Canadian steel mills produced 13.9 and 13.3 million tonnes of crude steel in 1985 and 1986, respectively. The operating rate averaged 67% of capacity in 1985 and 66% in 1986. Employment, averaged over the year, declined to 47,438 in 1985 compared to 49,868 in 1984; in November 1986, it was 45,232.

Capital spending intentions for construction and equipment was \$424.1 million in 1985, a

considerable increase from the \$228.3 million spent in 1984. Capital expenditure intentions for 1986 were \$661.1 million. Most steel companies continued to modernize their facilities, including the addition of five continuous casters which were under construction or committed for construction. By 1990, approximately 95% of the steel produced in Canada will be continuous cast. There were also several expenditures for ladle refining stations which will allow much greater control of the chemical composition of the steel produced.

Exports, predominately to the United States, accounted for about 25% of shipments in both years.

The world overcapacity in steel persisted and the availability of low-priced imported steel depressed domestic prices. Steel products from a number of countries were subjected to anti-dumping duties.

Two associations were created to address a number of serious problems faced by the Canadian steel industry and its workforce. The Canadian Steel Trade Conference Inc. was formed in 1985 and the Canadian Steel Producers Association in 1986.

Canada announced that effective September 1, 1986 carbon steel products were placed on the control list for a period of three years. Although this action did not limit the quantity of carbon steel products that could be imported into Canada, it did provide a means to monitor imports in greater detail.

## 10.7 Government and the industry

### 10.7.1 Tax incentives

Although mineral industry enterprises are subject to federal income tax, certain benefits granted under the Income Tax Act serve as incentives to exploration and development. Up-to-date information on income tax allowances which apply to the mining industry may be obtained from Revenue Canada, Taxation and appropriate provincial tax offices.

### 10.7.2 Technical services

The provinces own the natural resources within their borders and control exploration, development, conservation and primary production of mineral resources. Provinces support mining activities by supplying geoscientific data, mainly in the form of maps and reports. In general, a wide range of programs is available to stimulate the industry, although there is variation from province to province. They issue prospecting