

Sodium Sulphate.—Production of sodium sulphate (salt cake) in Canada increased more than 59,800 tons in 1966 to establish a new high of 405,300 tons, all derived from alkali lake deposits in the southern part of Saskatchewan. Steadily rising demand for kraft pulp, the major use for sodium sulphate, has stimulated expansion of productive facilities in Saskatchewan. At the end of 1966, two new plants were under construction for operation in 1967—one at Fox Valley to be operated by the Sodium Sulphate Division of Saskatchewan Minerals, which will have a capacity of 150,000 tons a year, and the other at Alsask to be operated by Sodium Sulphate (Saskatchewan) Ltd., having a capacity of 50,000 tons a year. A third plant having a capacity of 100,000 tons, to be operated by Tombill Mines Ltd., was planned for construction during 1967 at Cabri, 40 miles north of Swift Current.

Silica.—The production of silica (quartz) in 1966, at 2,300,000 tons, was 6 p.c. lower than in 1965 but the output value, at \$5,514,000, was 8 p.c. higher as a result of increased output of higher-value silica sand. Metallurgy flux accounts for 70 p.c. of the total production of silica; the remainder consists of lump silica for use in silicon and ferro-silicon manufacture and in the production of elemental phosphorus (15 p.c.), and silica sand for glass manufacture, silicon carbide production, foundry use and for other purposes (15 p.c.).

Interest in silica, in particular silica sand, continued at a high level during 1966. Several companies were actively investigating the feasibility of producing sand from silica deposits in Quebec and Ontario. Canada's two producers of silica sand—Industrial Minerals of Canada Limited, operating a sandstone deposit at St. Canut des Deux Montagnes and a friable quartzite deposit at St. Donat de Montcalm in Quebec, and The Winnipeg Supply and Fuel Company, Limited, operating a loosely bonded sandstone deposit on Black Island in Lake Winnipeg—together supply about one third of the domestic market for silica sand. The remainder is supplied by imports from the United States, chiefly into Ontario, Quebec and British Columbia, for use by the glass industries and also for use in steel and iron foundries, in artificial abrasives manufacture, for silicate chemicals and for other purposes. Current consumption of silica sand in Canada is in the order of 1,000,000 tons a year.

Structural Materials

Total construction in Canada in 1966 was valued at a record \$11,200,000,000, an increase of more than 13.5 p.c. over 1965. The estimated value of the 1966 production of structural materials (non-metallic mineral) was \$474,109,000 which represents nearly 12 p.c. of the total value of mineral production for that year.

In addition to normal growth of construction work, 1966 was a year of considerable construction activity in preparation for Canada's Centennial celebrations. To support the expanding building activities, construction materials were required in far greater quantities than ever before. Expo 67 with its numerous structures, road development in the Montreal area, new bridges, viaducts and tunnels, all required increased amounts of construction materials, particularly concrete. Of importance also was the development of the Trans-Canada Highway system with its Louis Hippolyte Lafontaine tunnel under the St. Lawrence River at Montreal; completion of the 200-ft.-high Manicouagan-5, multiple-arch dam in northern Quebec; work on hydro-electric power developments in British Columbia, Saskatchewan, Manitoba, Ontario and New Brunswick; construction of the nuclear power station at Pickering, Ont., in which high-density ilmenite concrete was used for biological shielding; work on the Prince Edward Island causeway; and numerous high-rise buildings in all the major cities of Canada.