

Electric Furnace Plants making Pig-Iron from Scrap Metal, Chiefly Steel Turnings.

Fraser, Brace & Co., Ltd.: Furnace plant at Shawinigan Falls, Que.: One single phase 6-ton non-tilting furnace.

Electro Foundries, Ltd., Orillia: One 6-ton three phase type non-tilting electric furnace.

Wm. Kennedy & Sons, Collingwood: One 4½-ton three phase non-tilting electric furnace.

Turnbull Electro Metals, Ltd., St. Catharines, Ont.: One 6-ton three phase non-tilting electric furnace.

British Forgings, Ltd., Toronto, Ont.: An electric steel furnace plant comprising two 6-ton Heroult furnaces some of which were used for the production of pig-iron during a portion of 1917 and 1918.

Tivani Electric Steel Co., Ltd., Belleville, Ont.: This electric steel plant which includes three small furnaces was operated for the production of ferro-molybdenum during 1917, but in March 1918, began the production of pig-iron.

Bowmanville Foundry Co., Ltd., Bowmanville, Ont.: One ½-ton Gronwall Dixon electric furnace.

Hull Iron & Steel Foundries, Hull, Que.: One 6-ton three phase tilting type electric furnace—first production in April 1918.

Electric Smelting Co. of Brantford, Ltd., Hull, Que.: One 4-ton electric furnace—first production in June 1918.

Columbia Iron & Steel Co., Ltd., Port Moody, B.C.: One 6-ton Heroult electric furnace—first production in May 1918.

Tudhope Electro-Metals, Ltd., Vancouver, B.C.: One 5-ton stationary three phase electric furnace, first operated Dec. 29, 1918.

Ferro-Alloy Production.

The production of ferro-alloys in Canada in 1918, chiefly ferro-silicon but including also spiegeleisen, ferro-molybdenum, and ferro-phosphorus, all with the exception of the spiegeleisen being made in electric furnaces, reached a total of 44,704 tons valued at \$4,731,521. In 1917 the production was 43,465 tons, valued at \$3,549,814. The ferro-silicon production during the past two years includes a small tonnage of low grade ferro-silicon recovered as a by-product in the manufacture of abrasives from bauxite in electric furnaces.

The total production in 1916 which included only ferro-silicon, ferro-molybdenum and ferro-phosphorus made in electric furnaces, was 28,628 tons, valued at \$1,777,615, as against 10,794 tons, valued at \$753,404 in 1915; 7,524 tons, valued at \$478,355 in 1914, and 8,075 tons, valued at \$493,018 in 1913. In 1912 the production was 7,834 tons, valued at \$465,225 and in 1911, 7,507 tons, valued at \$376,401.

Ferro-Alloy Plants in 1918.

Canadian Ferro-Alloys, Ltd., Shawinigan Falls, Que.: One 1½-ton stationary type electric furnace producing 50% ferro-silicon.

Leaside Munitions Company, Ltd., Beaupre, Que.: Three stationary type electric furnaces with capacity of 10 gross tons per 24 hours each producing 50% and 85% ferro-silicon.

Electro-Metals, Ltd., Welland, Ont.: Plant includes 8 electric furnaces producing ferro-silicon of 25%, 50%, 75%, and 85% grades.

Tivani Electric Steel Co., Ltd., Belleville, Ont.: Small electric furnaces comprising three units of two furnaces each making ferro-molybdenum in 1917 and for a few months only in 1918.