on January 6, 1953. The major problem in the project was the construction of the new heating furnace with a minimum of interference with production. This was done by constructing it in an area close to the new permanent location on a temporary foundation in which heavy track rails were imbedded. It was supported on 132 anti-friction roller-bearing rollers. Furnace auxiliaries and mill additions were installed or partially assembled as space and mill operations would permit. The old mill was shut down at 11:00 P.M. December 20, 1952. The permanent foundation for the new furnace was completed on December 27, and the new furnace rolled into position with hydraulic jacks.

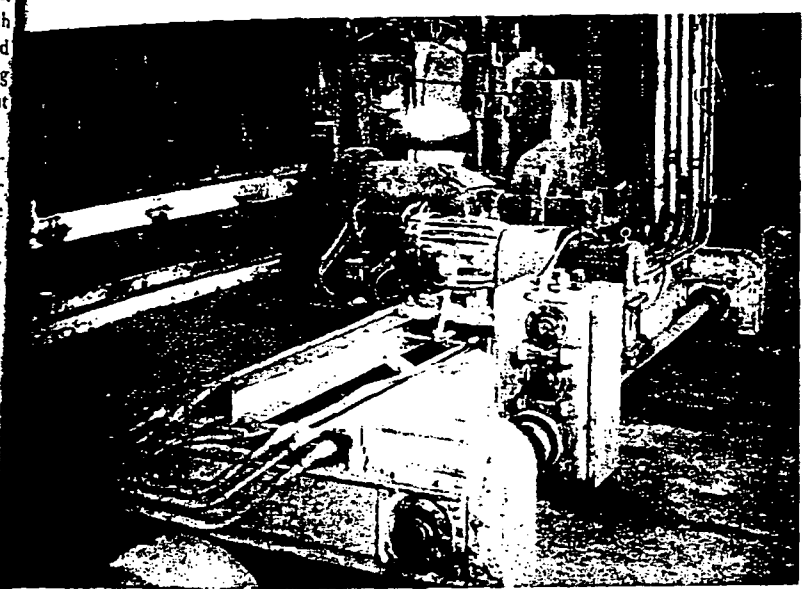
Work then proceeded on the piping connections to the recuperator and combustion equipment, the billet charger, pushing machinery, billet ejector, pinch rolls, waste gas piping, etc.

A small temporary furnace 5 ft wide and 30 ft long was installed to bridge the space between the furnace push-out door and the first stand of the old mill in order that production could proceed while the foundations for the new stands were being completed.

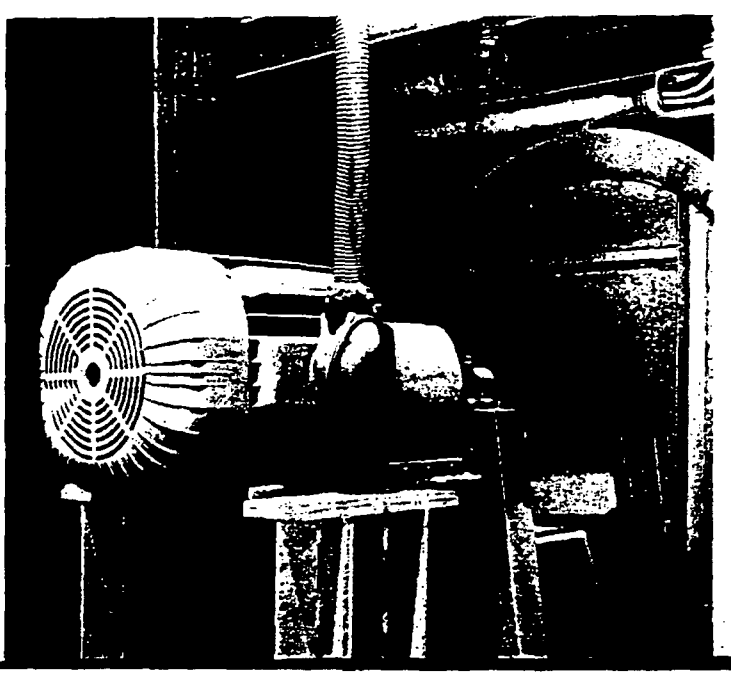
Slabs heated to 2100 F started passing from the new furnace, through the small furnace and to the oil mill at 7:00 A.M. January 6, 1953, after 16⅓ days of construction. The new stands and gearing changes were then completed during mill operations.

This installation is an example of effective modern engineering and planning between mill operators, engineers, and equipment builders wherein an important production unit obtained an increase in capacity with minimum loss of product at a reasonable cost.

Besides the Elliott 1000-hp d-c motor, a number of Elliott C-W mill type and totally-enclosed fan-cooled motors are in service in this mill.



An Elliott C-W 7.5-hp motor driving the skid bed of the billet ejector machine. This is the machine, designed and built by Wheeling Steel Corporation, which pushes the hot billet out of the furnace and into the first stand of the mill.



This Elliott C-W 75-hp, 1200-rpm CFC totally-enclosed fan-cooled motor drives a combustion air fan. Many C-W Motors, ranging in size from 200 hp down to 1.5 hp, are driving shears, edgers, cranes, etc.