

R.T. Patterson Company, Inc.

Engineers and Consultants

CLIENT

Northwestern Steel and Wire Company
Sterling, Illinois

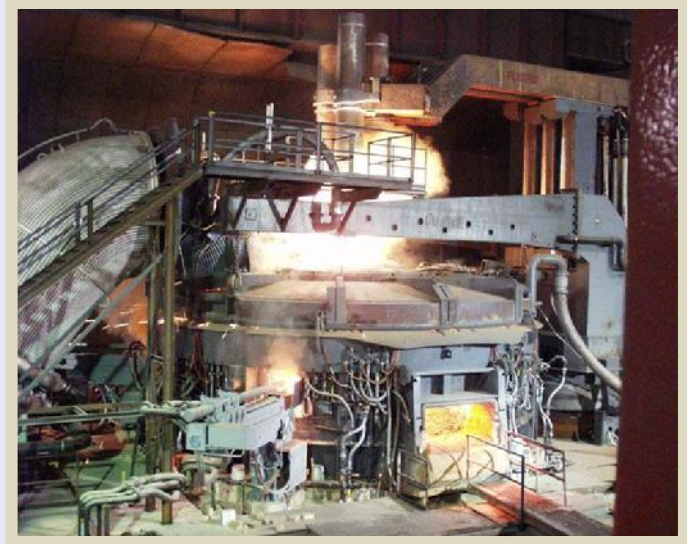
PROJECT

No. 8 EAF Replacement / Modernization

PROJECT SCOPE

The project was to modernize an existing electric Arc Furnace Shop by replacing the existing 38 foot diameter No. 8 Furnace to a new 31 foot normal size, change electrode positioning to hydraulic and provide bottom tapping. In addition, a new off-gas duct system and cooling water system modifications was made.

The new furnace was installed during the No. 8 EAF outage while the existing No. 6 EAF continued operation. After the new No. 8 Furnace was commissioned, the existing No. 6 EAF was idled. The new furnace is an AC energy optimized bottom tap type (EOBT) with a 375-ton heat size and is designed for a production of 1,817,200 tons/year.



RTP SCOPE OF WORK

RTP provided the following installation engineering services:

- Field investigations
- General arrangement and layout drawings
- Dismantling and relocation drawings
- Foundation design drawings
- Structural steel design drawings
- Cooling water process design
- Instrumentation design
- Process and utility piping design and installation drawings
- Electrical design and installation drawings
- Off-gas ductwork analysis and design
- Construction assistance



Project Value: \$30 Million