

# R.T. Patterson Company, Inc.

## Engineers and Consultants

### CLIENT

Wheeling-Pittsburgh Steel Corp  
Mingo Junction, Ohio

### PROJECT

Consteel Electric Arc Furnace Facility

### PROJECT SCOPE

The project consisted of a 1,800,000 tons per year (250 tons/hr.) Electric Arc Furnace Melt Shop at WPSC's Mingo Junction, Ohio Plant. The project included:

- The Consteel Continuous Steel Making, Scrap Preheating and Environmental Control Technology.
- One (1) 250 ton (Tap Weight) AC Electric Arc Furnace.
- One (1) 250 ton Ladle Furnace with Twin Station Swinging Gantry.
- Fume Collection System including a 1,200,000 ACFM baghouse system
- Alloy and Flux Handling System and auxiliary equipment.

### RTP SCOPE OF WORK

RTP provided the following engineering services::

- Field investigations of existing facilities to confirm existing conditions.
- Prepared equipment & installation specs for purchasing of equipment & installation services by WPSC, including assisting WPSC at bid meetings, providing technical liaison during bidding activity, prepared technical bid evaluations and recommendations for purchasing.



### RTP SCOPE OF WORK (Cont.)

- Prepared general arrangement drawings of the facilities, showing equipment arrangements with support facilities, such as control rooms, valve stand locations, operator station locations, equipment accesses, etc.
- Prepared foundation design drawings, including approval of reinforcing steel fabrication detail drawings and concrete demolition requirements.
- Prepared structural steel design and ductwork drawings, including approval of steel fabrication detail drawings.
- Prepared electrical design drawings.
- Provided coordination of vendor drawing review and approval, vendor drawing status documentation and record filing of approval and construction drawings.

### AWARD

The project was awarded  
**"Industrial Project of the Year"**  
by the Engineers' Society of  
Western Pennsylvania.



**Project Value: \$125 Million**