

# R.T. Patterson Company, Inc.

## Engineers and Consultants

### CLIENT

CSC, Ltd.  
Warren, Ohio

### PROJECT

New Melt Shop Project

### PROJECT SCOPE

Project consisted of modernizing the existing steel making shop at CSC, Ltd., in Warren, Ohio by installing a new Melt Shop and Billet Casting Facility. The new facility was constructed while the existing Melt Shop was in operation. After the new facility was commissioned, the old Melt Shop was idled. The new Melt Shop is designed for a production of 565,000 ton/year.

Major components of the new facility are:

- New Electric Arc Furnace – 100 ton capacity, EBT, AC power, with oxygen-carbon lance, carbon injection system and oxy-fuel burners.
- Revamped Ladle Refining Furnace – 100 ton capacity – reconditioned with new water-cooled roof installed in the new facility.
- New Vacuum Tank Degasser – 100 ton capacity, complete with steam ejector vacuum pumping system.
- Revamped four strand Boom Caster complete with cooling bed structure, reconditioned, installed in the new facility.
- Water Treatment and Boiler Facilities
- Fume Exhaust Duct System to existing baghouse 1,200,000 CFM capacity.



### RTP SCOPE OF WORK

RTP provided the Installation engineering services to include:

- Field investigations
- General arrangement and layout drawings
- Preparation and maintenance of the project CPM schedule
- Dismantling and relocation drawings and specifications
- Foundation design drawings
- Structural steel design drawings
- Architectural design drawings
- Process and utility piping design and installation drawings
- Electrical design and installation drawings
- Preparation of installation specification packages
- Preparation of building permit drawings
- Expediting and Cost Control services
- Construction and Project Management services



**Project Value: \$80 Million**