R.T. Patterson Company, Inc.

Engineers and Consultants

CLIENT

Outokumpu Stainless USA, LLC (formerly ThyssenKrupp Stainless USA) Calvert, Alabama

PROJECT

Stainless Steel Melt Shop Installation



PROJECT SCOPE

The project consisted of installing a "Greenfield" Stainless Steel Melt Shop in Calvert, Alabama capable of producing 900,000 TPY of stainless steel slabs. Major pieces of equipment included:

- Material Handling Systems, including alloy addition systems
- AC powered Electric Arc Furnace installed in a "doghouse"
- Argon Oxygen Decarburization Vessel (AOD)
- Two (2) Ladle Treatment Stations
- Continuous Slab Caster
- Emissions Control Systems
- Scrap Yard Facility
- Slab Yard and Grinding Facility
- Melt Shop Building and Ancillary Buildings and Pulpits

RTP SCOPE OF WORK

RTP provided the following installation engineering services:

- General Arrangement and Layout Drawings
- Foundation design and installation drawings for buildings and equipment support
- Structural design and installation drawings for buildings and equipment support
- Architectural design and installation drawings for the buildings
- Process/utility piping design and installation drawings
- Electrical design and installation drawings complete with conduit and cable schedules
- 3D model generation which included the RTP design drawings
- Preparation of equipment and installation specifications
- Assistance to the client's scheduler in updating the engineering portion of the project schedule
- Project Management Services

RP

Project Value: \$300 Million