

R.T. Patterson Company, Inc.

Engineers and Consultants

CLIENT

Horsehead Corporation
Mooresboro, NC

PROJECT

New Solvent/Extraction
Electrowinning Zinc Recovery Plant

PROJECT SCOPE

Project consisted of installing a Greenfield "Solvent Extraction/Electrowinning" Zinc Production Facility in Mooresboro, North Carolina capable of producing 150,000TPY of high grade zinc slabs and ingots.

- Anode cleaning and handling system
- Automated – EOT crane system for Cathode/Anode handling
- Cathode stripping machine & material handling system
- Transformer & Rectifier AC/DC bus bar system for power supply
- Ventilation and electrolyte cooling system
- Cathode melting, holding & alloy furnaces
- Cathode charging system
- Baghouse emissions control system – for cathode melting
- Cooling water systems
- Material handling systems - feed/transfer systems
- Pre-cast & cast in place concrete Cellhouse Building
- Pre-engineered – Melting & Casting/Warehouse Building/Aux Bldg
- Slab casting system & marking system
- Jumbo casting system
- Dross grinding facility



- Standby Power/ N.G. generator system
- Harmonic filter capacitor station

RTP SCOPE OF WORK

RTP provided the following installation engineering services:

- General arrangement and layout drawings
- Foundation and piling design/ 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
- Preparation of equipment specifications
- Preparation of installation specifications
- Assist the client's scheduler in updating the engineering portion of the project schedule
- Project Management services
- On site construction support services

Project Value: \$485 Million