

R.T. Patterson Company, Inc.

Engineers and Consultants

CLIENT

Wheeling-Pittsburgh Steel Corporation
Yorkville Plant
Yorkville, Ohio

PROJECT

5-Stand Tandem Cold Mill Modernization

PROJECT SCOPE

The objective of the Project was to modernize a mid-1950s vintage tandem cold mill to improve product quality and increase mill throughput. The following was Included in the scope :

- Existing operating equipment reapplication or demolition.
- Long-stroke hydraulic cylinders on all stands, replacing existing electro-mechanical screwdowns.
- Positive/negative work roll bending on Stand 5 with provisions for future addition to all stands.
- New x-ray gauges replacing existing radiation thickness gauges, and new interstand tensionmeters replacing all existing, less reliable units.
- Static exciters, digital speed regulators and control replacing existing main drive rotating exciters, voltage regulators and control and upgrade of main drive power circuits.
- Mill roll coolant and fume exhaust system upgrades.
- Automated shape control system, and a new automatic gauge control system replacing an outdated existing system.

PROJECT SCOPE (Cont.)

- Fully automated (Level III) mill control system including mill schedule calculation, adaptive learning, mill setup and sequencing.
- Mill pulpit; and control, computer and hydraulic power unit rooms.
- Power distribution system modifications.

RTP SCOPE OF WORK

RTP providing overall project management and construction engineering and design for the total project. In addition, RTP provided the following engineering services:

- Feasibility Study
- Appropriation Cost Estimate
- Equipment Bid Specifications and Bid Evaluations
- Overall Project Scheduling and Control
- Cost Control
- Client Project Management Assistance
- Construction Assistance
- Expediting
- Estimating
- Specification Writing



Project Value: \$29 Million