

# Mining & Metals



# SAMCO

Separation from the ordinary

## PROJECT BRIEF

Leading Wire Manufacturer Achieves Rapid Discharge Compliance with Space-Saving SAMCO Wastewater Treatment Technology

### PROJECT OVERVIEW

At a leading wire manufacturing facility in Ohio, space limitations demanded a cost-effective wastewater treatment system (WWTS) with a small footprint. SAMCO delivered, providing a turnkey solution that cut project costs by 30% and execution time by 50%.

### OBJECTIVE

Treat variable wastewater streams from steel wire pickling and rinse line operations for complex contaminants, including:

- Heavy metals
- Suspended solids

### SCOPE OF SERVICE

SAMCO delivered a comprehensive fast-track solution comprising detailed design and engineering, fabrication, field installation, controls integration, and ongoing first year operations and maintenance support.

### CHALLENGES

- Stringent discharge limitations
- Complex contaminants and varied flow
- Limited space

### SOLUTION

SAMCO designed a 30 GPM system for treatment of wastewater from steel wire pickling and rinse line wastewater per stringent discharge regulations. The system deployed heavy metals precipitation, clarification, sludge handling/dewatering, and filtration in a compact prepackaged design that cut required space by 30% to make efficient use of limited space at the client facility. The modular design and standard SAMCO products enabled delivery in half the time, and at a 30% project cost reduction, while allowing for scalability to future needs. To minimize operations and maintenance demands, the system included programmable logic controllers (PLC) with graphic operator interface terminals for simplified monitoring of flow, level, pressure, and pH. Lastly, SAMCO included one year of ongoing operations and maintenance support to ensure smooth implementation and startup.

### TECHNOLOGY

Modular 30 GPM WWTS, with equipment including:

- Equalization and reaction tanks
- Chemical feeds
- Inclined plate clarifier
- Influent and discharge pumps
- Sludge handling/filter press
- Multimedia filters
- PLC controls

## OVERVIEW

### Industry

Mining & Metals

### Location

Ohio, US

### Objective

Remove heavy metals from wire manufacturing wastewater per stringent discharge specifications

### Solution

30 GPM Wastewater Treatment System

Need help bringing your wastewater to industry compliance standards? Is water purity an issue? Contact us today at [SamcoTech.com](http://SamcoTech.com) • [askengineers@samcotech.com](mailto:askengineers@samcotech.com) • (716) 743 9000