



High-Performance Components

FOR DEMANDING POWER, STEEL, PETROCHEM AND PULP/PAPER APPLICATIONS

When you need boiler components or BOF/EAF hoods, you need nothing less than a perfect fit. Perfect in terms of performance, engineering, quality, service, delivery and cost.

Munroe, Inc. is that perfect fit.

For more than 150 years, Munroe has been supplying superior engineered and fabricated components for boilers and BOF/EAF hoods to satisfied customers throughout North America.

When you place an order with Munroe, you get peace of mind knowing that the solution will be precisely what you need, the job will be done exactly right, at the right price, and the product will be delivered when needed and will work ...perfectly.

45 SUPERHEATER PENDANTS IN RECORD TIME

ANOTHER RUSH JOB, ANOTHER MUNROE SUCCESS STORY

Right on the heels of an emergency repair job for a major steel producer, Munroe again received another rush job from the same customer, this time involving Munroe's Ringgold, GA facility

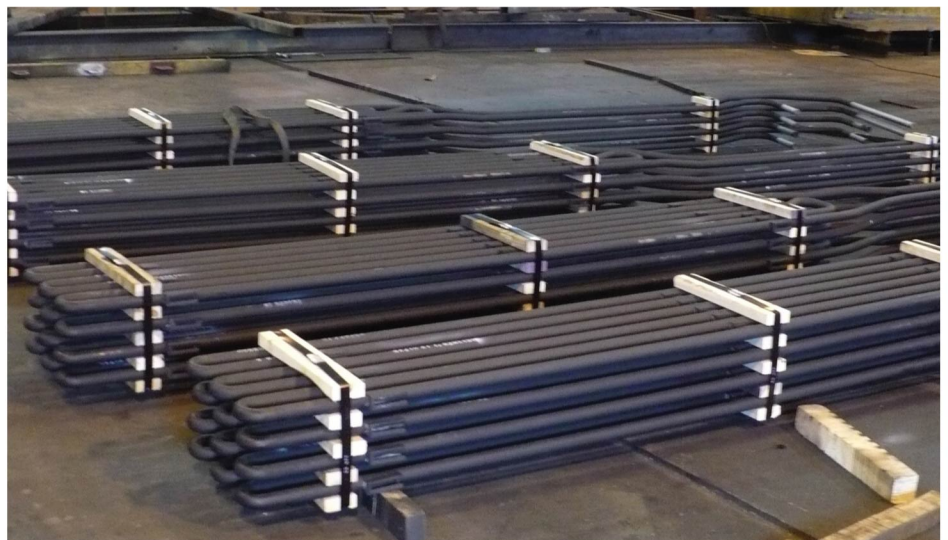
Forty five superheater pendants needed to be replaced on a coke furnace. The timeframe to complete the work was, "Three-to-four weeks—tops." There was no other alternative. No room for delays.

Within two days, Munroe personnel were on-site and engineering the project. Due to strong vendor relations, Munroe was able to

procure the tube material for all of the pendants in less than two weeks.

A full team effort, Munroe utilized the skilled craftsmen at its Ambridge, PA facility to provide support for the Ringgold operation. Working seven days a week, 'round the clock, the Munroe team completed the project in less than three weeks.

The combination of multiple facilities, strong vendor relationships and a dedicated workforce, allowed Munroe to again meet a customer's most critical demands without a glitch.





TYPICAL PRODUCTS

STEEL

BOF and EAF hood products include but are not limited to:

- Hood sections
- Skirts
- Troughs
- Water cooled ducts
- Removable doors
- Lance inserts
- Header pipe
- Furnace Roofs

POWER, PETROCHEMICAL, PULP/PAPER, WASTE

Products include but are not limited to:

- Superheater elements
- Economizer elements
- Bent boiler tubing
- Boiler headers
- Boiler observation doors
- Waterwall panels
- Studded and finned tubing
- Steam piping
- Bifurcated tubes
- Transition-welded components
- Heat exchangers



From the largest rebuilds to simple replacement components, Munroe can provide the complete gamut of products, engineering, manufacturing, construction and installation services that your project requires.

MANUFACTURING

Munroe is your one-stop source for engineered and fabricated components. Munroe's ability to produce high quality, tight radius bends is unmatched in the industry. Equipment includes:

- Pines Tube Benders with power die assist and CNC control
- Compression Benders
- Eaton Leonard Benders with IPDA
- Westinghouse Induction Bending equipment



WELDING CAPABILITIES

Our employees are certified to ASME codes. We are skilled in:

- Gas Tungsten Arc (GTAW or TIG)
- Gas Metal Arc (GMAW or MIG)
- Shielded Metal Arc (SMAW)
- Flux Cored Arc (FCAW)
- Submerged Arc (SAW)



Munroe offers inconel and stainless steel weld overlay that vastly improves resistance to corrosion and erosion and extends component life.

OTHER SERVICES

Panel Welding • Swaging • Finning
Tube Beveling • Flame Cutting
Plasma Cutting • Sawing • Bending
Shearing • Anneal • Stress Relieving
Painting • Polishing • Hydrostatic Testing

ENGINEERING

With a full staff of engineers Munroe can offer you a remarkably strong and wide base of technical knowledge and experience. Our engineers can evaluate your project and translate your technical needs to our manufacturing. We are also adept at reverse engineering.

QUALITY/CERTIFICATIONS

Munroe holds ASME "S", "H" and "U" code stamps and "R" Certificate of Authorization from the National Board of Boiler and Pressure Vessel Inspectors, but our quality standards go above and beyond these certifications.

FACILITIES

- Three operating facilities with over 300,000 sq. ft. of manufacturing space
 - Youngstown, OH
 - Ambridge, PA
 - Ringgold, GA
- Sales Office
 - Pittsburgh, PA

A TURN-KEY CONSTRUCTION SOURCE



Munroe provides turnkey construction services from excavation through start-up for any project. Our expert staff can handle the toughest jobs with speed and efficiency.