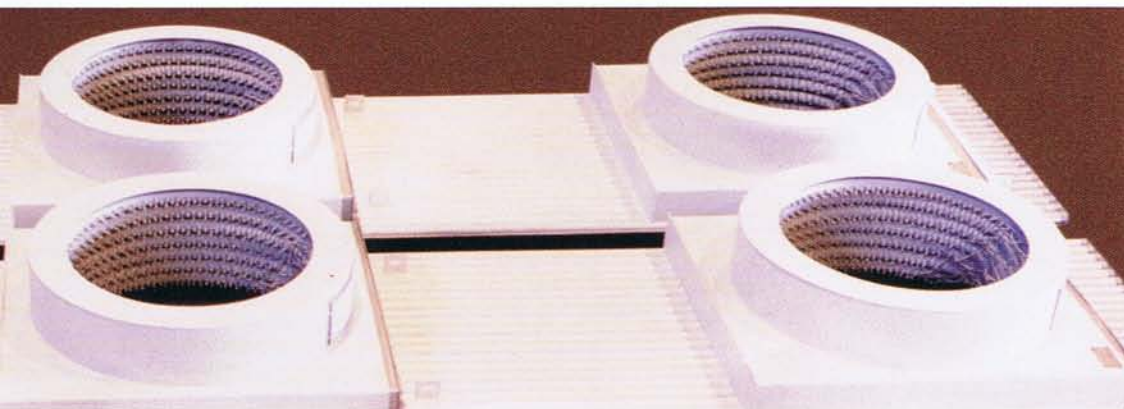
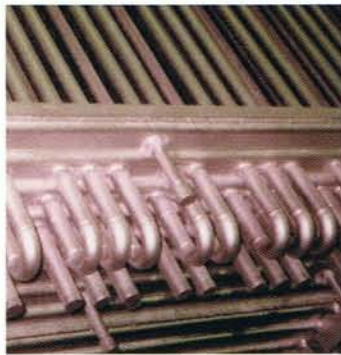




Setting New  
Performance Standards for

# Replacement Boiler Tubing Components

QUALITY-COMMITTED • CUSTOMER-ATTENTIVE • COST-COMPETITIVE



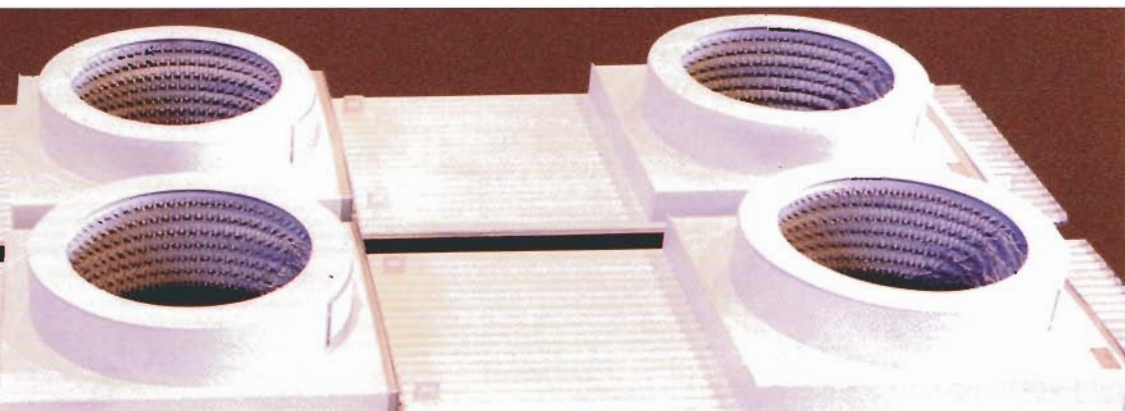
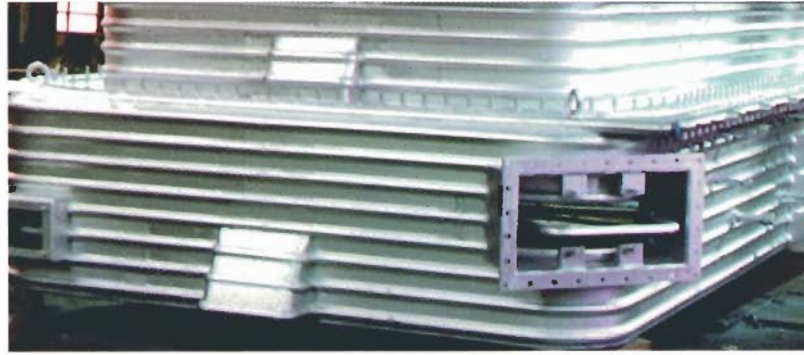




Setting New  
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# Replacement Boiler Tubing Components

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# A Tradition of Excellence in Boiler Tubing Fabrications That Began in 1835.

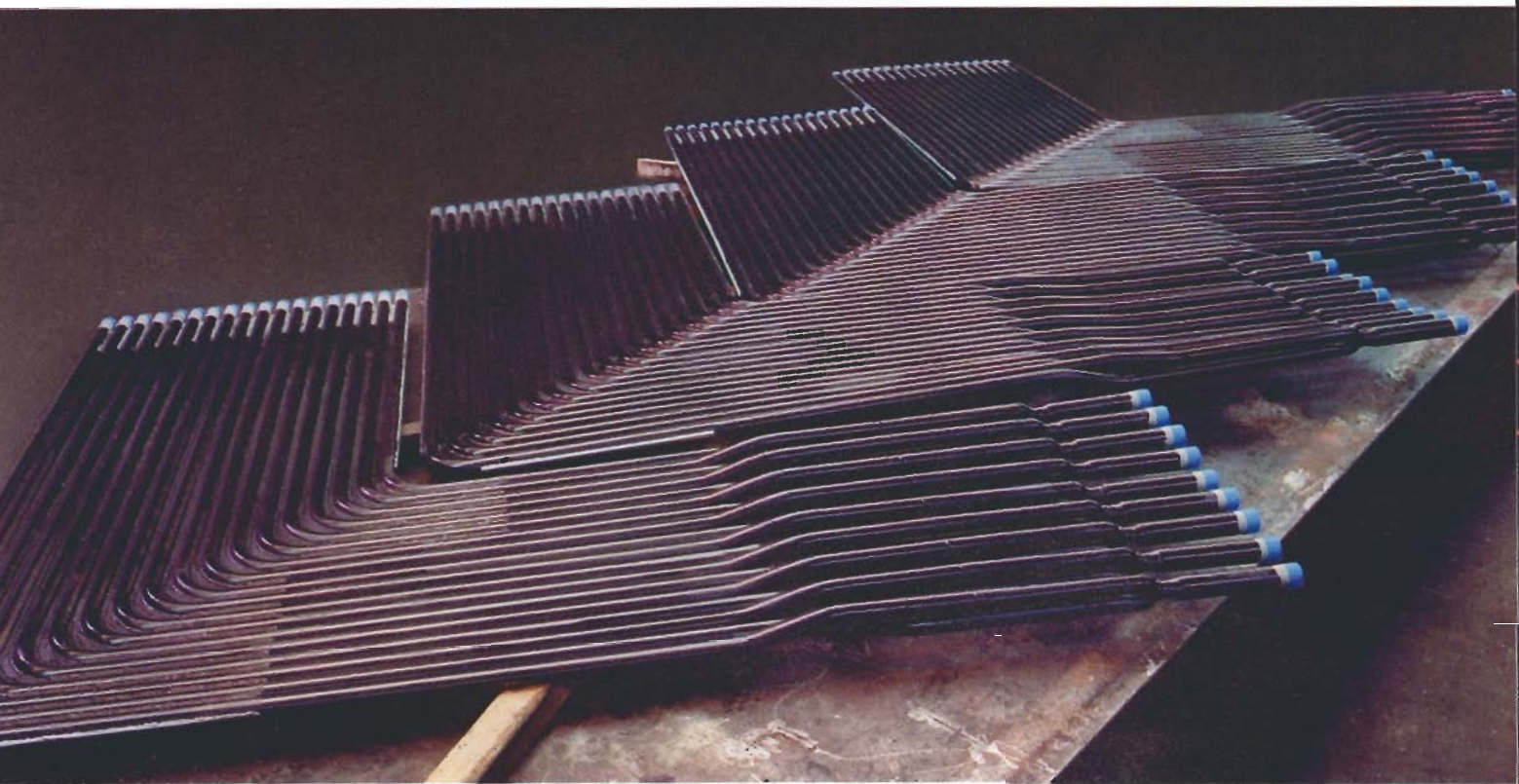
**F**or well over 150 years, Munroe has been innovating new techniques, and refining old methods, to produce superior tubular boiler components for the power generation industry.

Munroe's innovative fabricating and bending capabilities, and the experienced craftsmen who man the machines, offer the power generation industry a single source of competence difficult to find today.

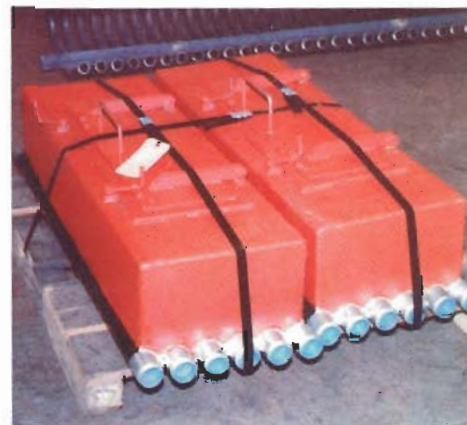
As a producer of boiler waterwalls and other tubular elements destined for **new** boiler construction, as well as for **replacements and retrofits**, Munroe has spent considerable time improving their techniques to manufacture these critical components.







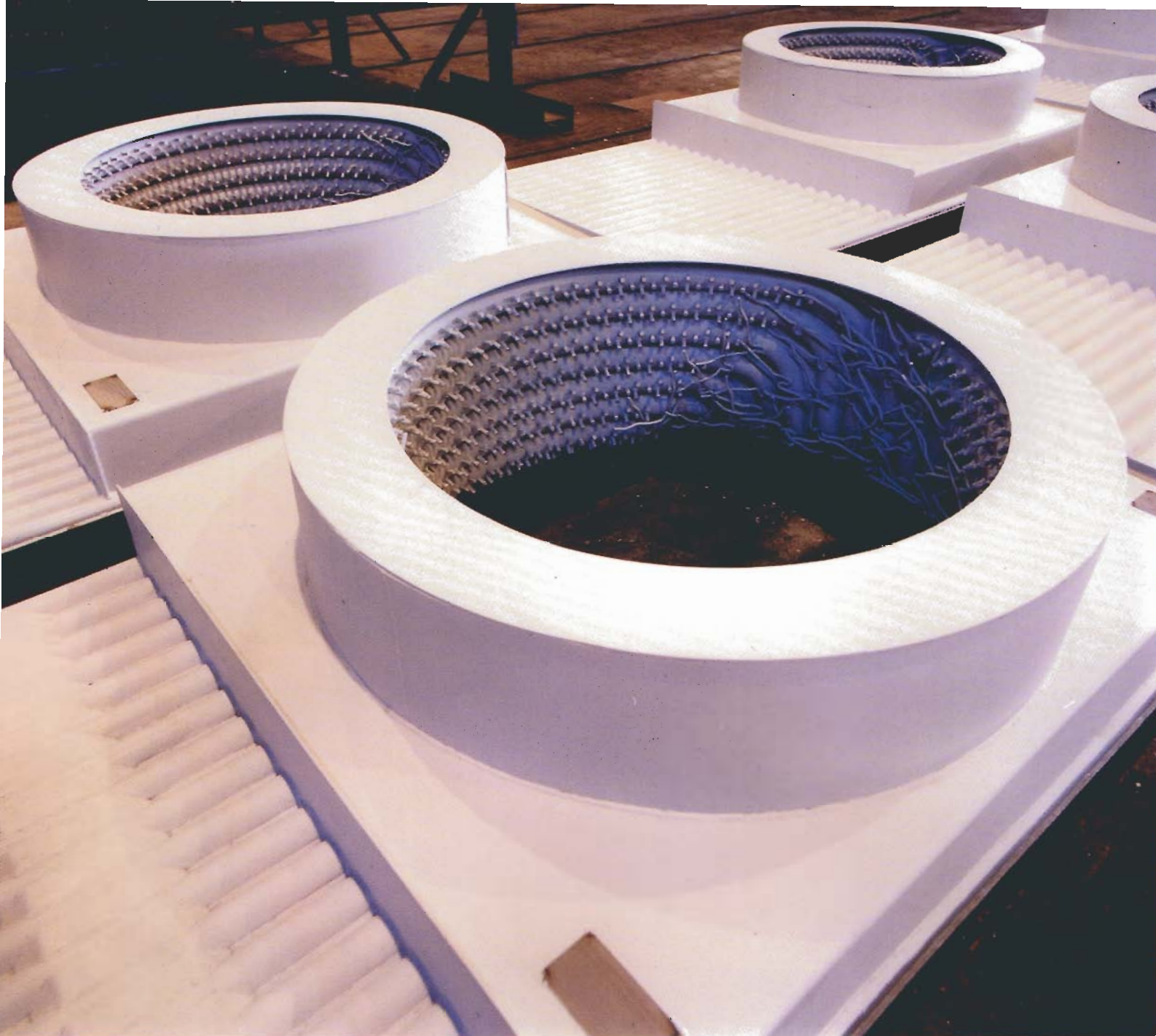
*ular Waterwall Boiler Panels*



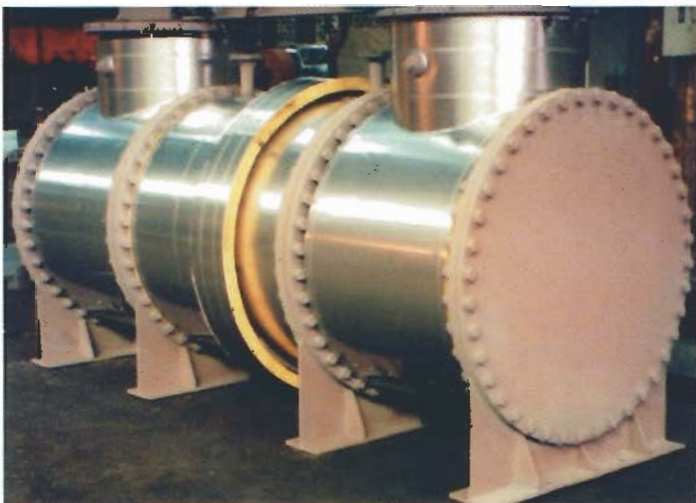
▲ *Observation Doors for Boiler Waterwalls*



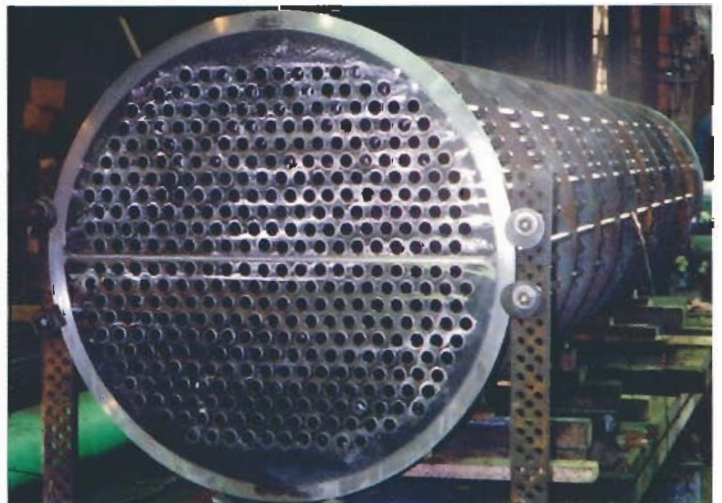




▲ Low NOx Burner Panel Assemblies

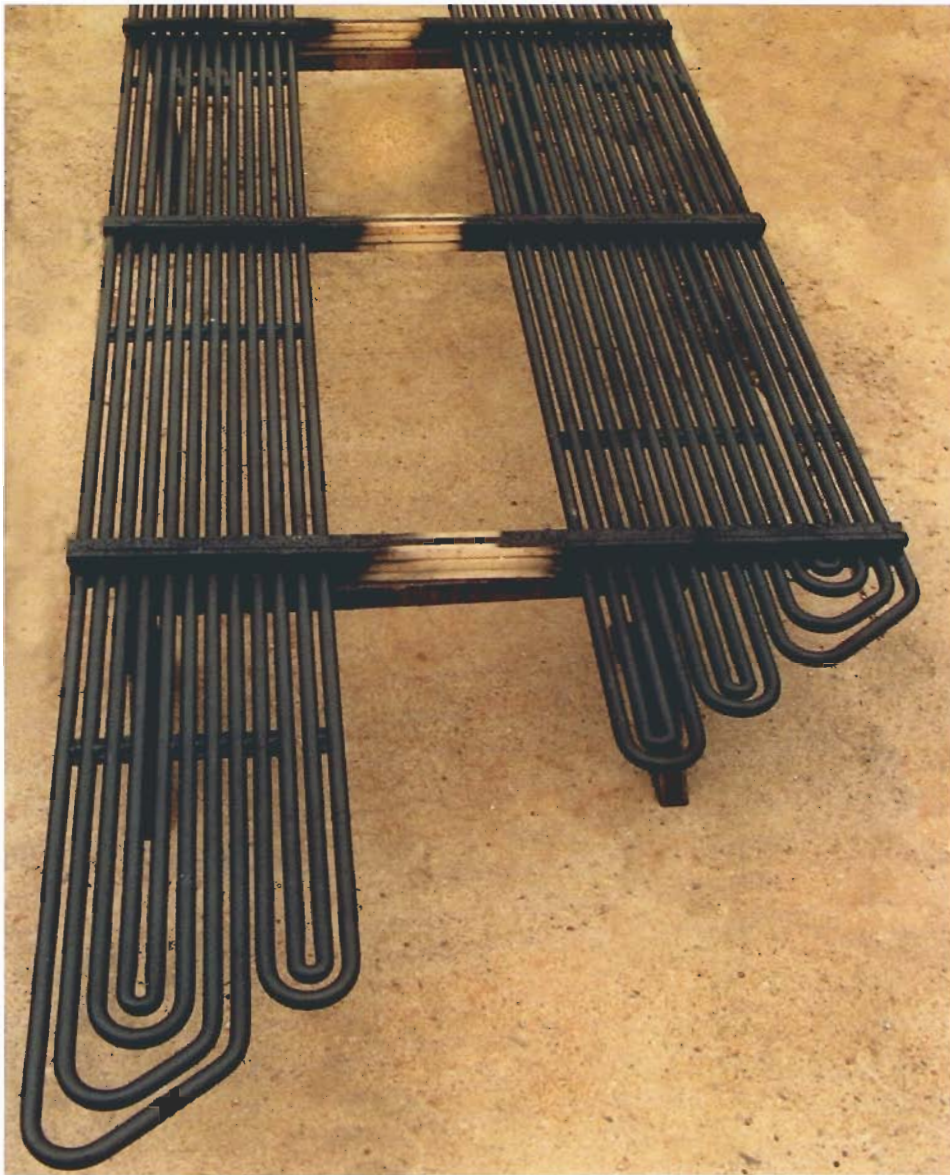


▲ Heat Exchanger Assembly



▲ Tube Bundle





▲ Superheater Elements

## SUPERHEATER AND ECONOMIZER ELEMENTS

A full range of these critical components, in a variety of tubing diameters and bend configurations, is available to meet the individual needs of your particular boiler.

In one instance, Munroe fabricated 43 superheater replacement elements in just three weeks to alleviate a customer's recovery boiler emergency.

## BENT BOILER TUBING

Munroe's extensive experience and its multifaceted production capabilities mean that no matter how complex the configuration or how tight the bend radii, we can hold the tolerances, meet the specs and deliver the bent tubing to meet your deadline.

## BOILER HEADERS

Just as with superheaters, Munroe can provide headers to meet **ASME** codes. Work can include **PWHT**, hydro testing and **NDE** per **ASNT**.

## BOILER OBSERVATION DOORS

Custom door fabrications are available for boilers and waterwalls, including the design and fabrication of bent tubes for various openings.

## WATERWALL PANELS

Munroe's extensive experience provides both **new and replacement** waterwall panels for a wide variety of boilers in power generation plants nationwide. These panels may vary from small and relatively simple to huge and complex. Even low **NOx** burner panels are not difficult for Munroe. The extensive use of automated welding lines assures quality, weld integrity and panel-to-panel consistency.



▲ Bent and Straight Waterwall Panels





### STUDDED and FINNED BOILER TUBING

Studded, finned, swaged or upset forged tubing can be supplied by Munroe to meet special tubing requirements.

### STEAM PIPING

Munroe fabricates heavy wall piping to meet **ASME** Power Piping Code.

### BIFURCATED TUBES

Munroe has the engineering, fabrication and welding know-how to precisely fashion bifurcated tubes or other complex tubular configurations.

### TRANSITION-WELDED COMPONENTS

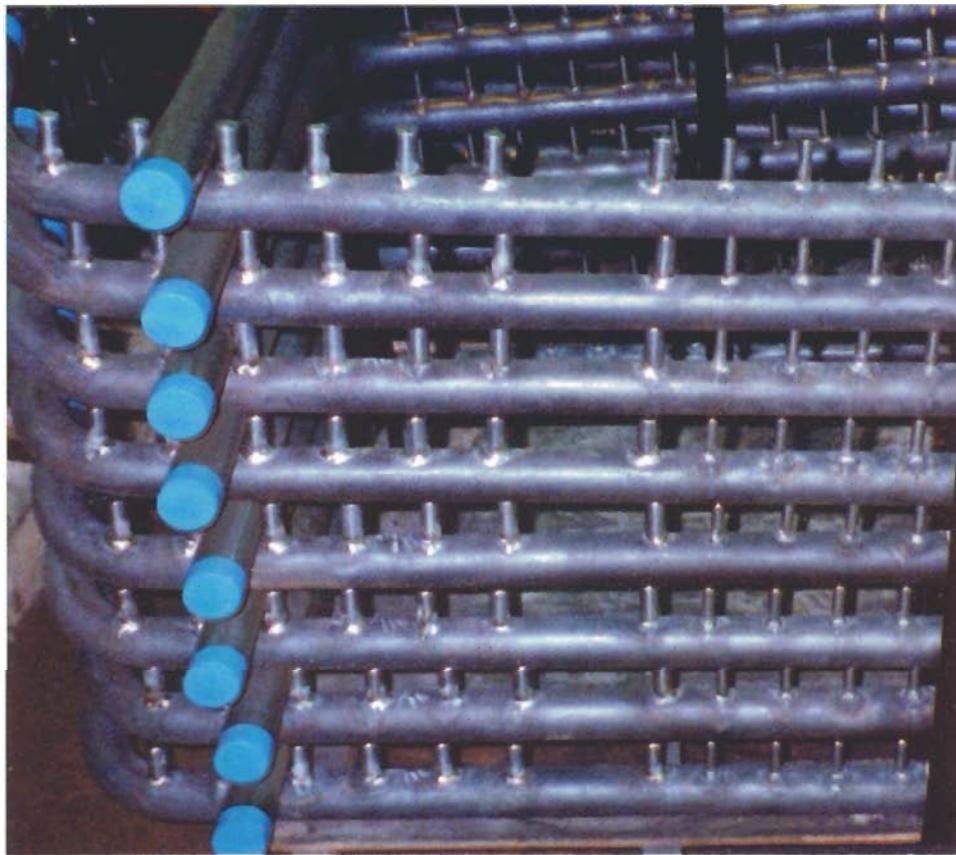
For dissimilar materials, Munroe welding experts fabricate safe end transition pieces to be field installed.

### HEAT EXCHANGERS

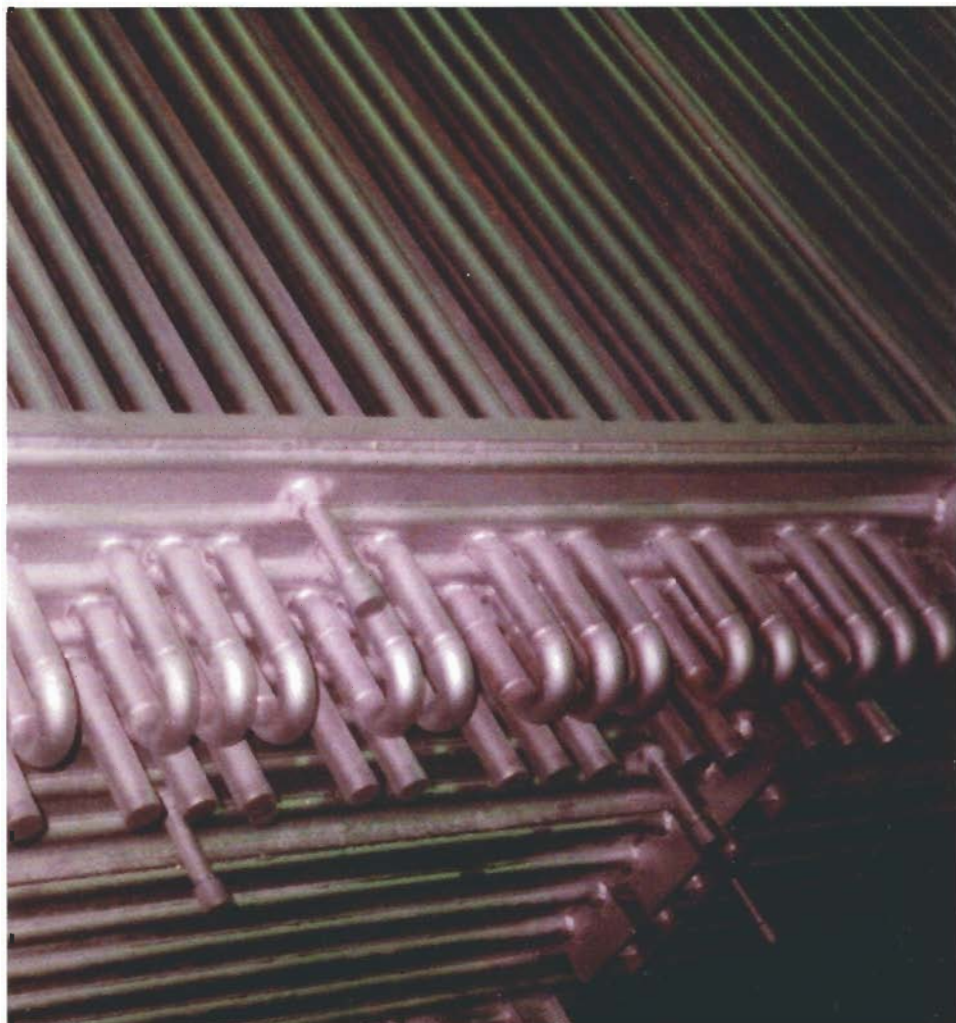
Munroe regularly re-tubes or builds new heat exchangers to National Board, **TEMA** and **ASME** requirements.

### PRESSURE VESSELS

Vessels are designed, fabricated and welded to meet your specifications and the **ASME** Code.



▲ *Stainless Steel Superheater Wrapper Tubing*



▲ *Fluidized Bed Boiler Assembly*





▲ Boiler Front Wall



▲ Double Bifurcated Tube Assembly



▲ Bent Boiler Tubing



▲ Boiler Economizer

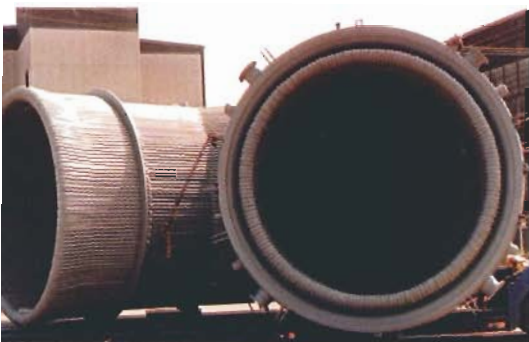
 **MUNROE**



***Munroe also provides  
a wide variety of  
related products and  
services to the power  
generation industry.***

In addition to its expertise and experience in engineering and fabricating boiler tubing, waterwalls and other power generation products, Munroe also has extensive capabilities in these ancillary areas:

- Pressure vessels
- Heat exchangers
- Rental boilers
- Pressure piping
- Custom tubular fabrications
- Repairs and alterations to help you get back on line with minimal down time.



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