



RADIANT TUBES

Alloy Engineering specializes in radiant tubes for all types of furnace equipment. Our tubes enhance heat transfer for maximum efficiency, extending product life, increased production, and reduced maintenance and energy costs.

Fabricated Wrought Tube Types Include:

- 'P'Tubes
- Straight tubes
- W-tubes
- U-tubes
- Recuperator tube bundles
- Bungs, mounting flanges and insulation

Features:

- Support all furnace OEM tube designs
- Thin and lightweight tubes resist sagging and cracking and have a high resistance to thermal fatigue
- Thermally efficient tubes provide energy savings
- Wall thickness 11 gauge to 3/8"
- Stainless steel or nickel alloys selected for maximum results

OUR FABRICATED TUBES:

- Extensive experience in all stainless and high nickel alloys
- Proven record of superior tube life
- Welded to ASME/AWS standards
- Testing to verify quality when required, including dye-penetrant, pressure testing, x-ray, etc.
- Our ASME-CE's will provide recommendations to extend tube life
- We will reuse portions of the tube, repair and/or replace return bends, flanges, bungs and straight components onsite.

Reduced Maintenance • Longer Life • Lower Life-Cycle Cost

Alloy Engineering

844 Thacker Street, Berea, OH 44017 Phone 440.243.6800 Fax 440.243.6489

Email sales@alloyengineering.com or visit alloyengineering.com



ALLOY ENGINEERING

- Extensive experience in all stainless and high nickel alloys
- Custom fabrications
- Welded to ASME/AWS specifications
- Testing to verify quality including dye-penetrant, pressure testing, x-ray and UT.
- Our ASME-CE's will provide recommendations for longer product life

Quality and Certifications

- ASME Section I S-Stamp
- ASME Section VIII, Div. I U-Stamp
- NBIC R-Stamp
- AWS - CWI and AWS-SCWI Welding Inspectors
- Level II and ASNT TC-1A Certified NDE Inspectors
- In-House Visual, Helium Leak Test, PT, MT, PMI, and Phased Array UT
- RT, UT, Ferrite by Certified Vendors
- Fan Vibration Testing, Balancing and Shaft Run-out

Engineering and Design

- PV Elite (ASME Code Calculations)
- Finite Element Analysis (FEA)
- Fan Design
- SolidWorks 3D
- HTRI for the Thermal Rating of Heat Exchangers

Welding

- Welders Qualified to ASME Section IX and AWS D1.1
- SAW
- GTAW
- GMAW
- FCAW
- PAW
- Manipulators
- Robotic Manipulator-SAW, GMAW
- Strip Cladding Weld Overlays

Fabrication and Prep

- Forming and Corrugation Tooling
- Edge Prep Beveler
- Plasma Table
- Ironworker Hole Puncher
- Bentech 15T Tube/Pipe/Rod Bender
- Shear - 10' Capacity
- Press Brakes to 1,000T/24' Bed/180" Throat
- Plate Rolls - 10' Width/ 1" Thickness (Larger Capacity Available)
- Fan Balancing Machine
- Fan Vibration Testing and Analysis
- Blasting and Painting In-House to Specification

Machining

- CNC Horizontal Boring Mill 168" Capacity
- Large Turning 84" Ø x 37' OAL
- CNC Lathe 80" Ø x 14' OAL
- Vertical Turning Lathes up to 110" Capacity x 66" H
- Milling Machines, Drill Presses, Grinders
- Saws
- Pipe End Machining

Lifting Capacity

- 50,000 LBS in House
- 20' Under Hook
- 20' Shipping Doors

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