



## ASME PRESSURE VESSELS

Alloy Engineering is an ASME code vessel shop and carries a Certificate of Authorization to fabricate pressure vessels to ASME Section VIII, Div. 1 (commonly referred to as a "U" stamp) and perform repairs per NBIC ("R" stamp). We offer extensive expertise in the mechanical design of ASME pressure vessels that will meet rigorous quality standards and procedures and are guaranteed for a long, trouble-free vessel life. Additionally, we have designed and built components and vessels conforming to ASME B31 and various API specifications. This allows Alloy Engineering to fabricate utilizing a wide variety of materials that spans several industries.

### Features:

- Up to 10' outside diameter
- Stamped vessels and chambers
- Automated welding
- Weld cladding
- Stainless and carbon steel
- Jacketed chambers and doors
- Painted and primed in-house
- Engineered in-house or to print
- Explosion clad materials

### DESIGN FLEXIBILITY:

At Alloy Engineering, we have the expertise to customize pressure vessels to your specifications. We can assist with critical issues such as material selection and design optimization. We also offer specialized design and welding techniques for these demanding high temperature and corrosive applications.

**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](mailto:sales@alloyengineering.com) or visit [alloyengineering.com](http://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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