

ASME PRESSURE VESSELS

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Why use ASME Code?

For those applications where vessels are required to be rated for, or operating at pressures over 15 PSIG, ASME code design and fabrication is required. Some applications when pressures are less than 15 PSIG ASME design is also preferred. Those vessels and equipment that are manufactured using ASME code specifications provide a higher level of safety, reliability, and design documentation.

Some typical reasons to specify an ASME pressure vessel are:

- ▶ Pressure requirements of the process
- ▶ Explosion containment
- ▶ Hazardous material containment
- ▶ Added level of fabrication inspection and testing

YOUNG INDUSTRIES DESIGNS AND MANUFACTURES CUSTOM ASME PRESSURE VESSELS

Young Industries has been supplying systems and components for dry bulk material handling processes since our founding in 1947. Being involved in the design of dry bulk solids processes with our customers, we saw the need to design equipment to pressures greater than 15 PSIG. We made the decision to manufacture the pressure rated equipment at our facility in Muncy PA and became an ASME Code certified shop. This assures that we can maintain a high degree of quality and apply our expertise in handling powders to each design.

The pressure vessels designed and manufactured by Young Industries are mostly custom designs that are manufactured in accordance with the requirements of the ASME code, Section VIII, Division 1 and related sections. We manufacture ASME equipment with design pressure up to 3000 PSIG. Our Quality Control Program meets all the requirements of the ASME Code and the National Board Inspection Code. We provide full documentation and certifications for all ASME projects. CRN vessel registration is also available for projects in the Canadian provinces.



400 cu. ft. Holding Hopper with TransFlow® Lining (See Young Bulletin 265-200-1)
Constructed of 304L S/S
Operating pressure – 135 psig
Build per ASME Code Section VIII, Div 1
ASME "U" Stamped

**ADVANCED
TECHNOLOGY
PROVEN DESIGN**

ASME PRESSURE VESSELS



ASME "U" & "UM", AND NATIONAL BOARD "R" STAMPS

Young Industries is authorized to apply ASME "U", "UM", and National Board "R" Stamps to pressure vessels as needed to meet the design criteria of the application. We apply our experience in material handling of dry powders and granules in the over-all design of the equipment. Each vessel is properly manufactured, pressure rated, stamped and designed to handle the dry powder handled in the process. Young Industries is much more than a fabrication shop and our experience in handling dry bulk materials enables us to supply ASME stamped equipment that will reliably handle dry powders.



- 250 cu. ft. Horizontal Mixer with high pressure jacket
- Materials of construction
 - ▶ 304L S/S Body WPC
 - ▶ C/S Jacket
- Body max pressure – 14.5 psig
- Jacket max pressure – 75 psig
- Spot radiographed welds
- Build per ASME Code Section VIII, Div 1
- ASME "U" Stamped



Dense phase pneumatic conveyor transport vessel
Working capacity - 100 cu. ft.
Materials of construction – C/S
Max. interior operating pressure – 150 psig
Build per ASME Code Section VIII, Div 1
ASME "U" Stamped

PRESSURE CONTAINMENT VESSELS FOR NFPA STANDARDS

In some instances, it is not practical to provide explosion vents or suppression systems on process vessels when handling combustible powders. Young Industries can provide vessels including filtration equipment that is designed, manufactured, and ASME code stamped to the maximum pressure developed in an unvented vessel during a deflagration (P-red) of a combustible dust. These vessels while having higher initial cost will provide maintenance free service and have no periodic inspections or maintenance that may be required when using equipment equipped with explosion venting and suppression systems.

OUR CAPABILITIES

Our fabrication facility handles horizontal and vertical vessels ranging up to 96" in diameter and length up to 30 ft. Depending on configuration, operating conditions and materials, wall thicknesses can range from 1/16" to 2" or more. In addition, we have fabricated, altered or repaired vessels weighing up to 40,000 lbs. Our high bay manufacturing facilitates efficient handling and manipulating of larger vessels.



16 PAINTER STREET, MUNCY, PA 17756
(800) 546-3165 | WWW.YOUNGINDS.COM

ASME PRESSURE VESSELS



30" x 60" Extended Length
Rotary Valve
304 S/S - Construction
280° F - Design Temp.
15 PSIG - Design Pressure
Steam jacket designed for 60
PSIG
Per ASME Code Section
VIII, Div 1, ASME "UM"
Stamped



Pressure Vessel Testing

As a minimum ASME pressure vessels are Hydrostatic tested per section VIII-1, UG-99 to a test pressure equal to at least 1.3 times the maximum allowable working pressure. Young Industries also can provide non-destructive testing by spot or full radiography per ASME, Section VIII, Div. 1, UW11 and 12.

OUR ENGINEERING AND MANUFACTURING STAFF

Our engineers are experienced in design of ASME code equipment. Our experience in design of dry bulk handling equipment gives us an advantage when ASME code vessels are required for handling dry powders. Manufacturing equipment per ASME requires a high level of quality and documentation of the various welding process. Our welders are certified to our ASME Section IX code qualified welding procedures and maintain traceability and certifications on a wide variety of materials. Our in-house Quality Control Program meets all the requirements of the ASME code and the National Board Inspection Code. For daily inspection of code fabrication, Young Industries in house inspectors are National Board Certified.



3.5 cu. ft. dense phase pneumatic conveyor transport vessel
Constructed of carbon steel
Interior operating pressure – 150 psig
Build per ASME Code Section VIII, Div 1, ASME "UM" Stamped



1.5 cu. ft. Multi-phase
Product Pump Conveying
vessel
304S/S construction
Design pressure 150 PSIG
Build per ASME code
Section VIII, Div,1 National
Board "UM" Stamped

Whether the need is for mixers, process tanks, filtration equipment, piping transitions or pneumatic conveying equipment, Young Industries capabilities are best in the industry. Contact us for additional information and assistance regarding ASME equipment.

Now Available

Rotary Valve Calculator App



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