

GENERAL - VESSELS

- A. All pressure vessels shall be designed, fabricated, tested, inspected, and stamped in compliance with the latest edition of Section VIII, Division 1 (Rules for Construction of Pressure Vessels) of the ASME Boiler and Pressure Vessel Code. Additionally, industrial refrigeration specific vessels shall comply with ANSI B9.1 Safety Code for Mechanical Refrigeration Systems and IIAR2. Pressure vessels shall be stamped with ASME Certification Mark, and registered with the National Board of Boiler and Pressure Vessel Inspectors. An ASME Nameplate shall be attached to each vessel.
- B. Vessels shall be suitable for service with the specified gas or liquid within the design pressure and temperatures indicated in the drawings. The Maximum Allowable Working Pressure (MAWP) and Minimum Design Metal Temperature (MDMT) and test pressure shall be indicated in the drawings.
- C. Vessel components, including heads, shells, pipe nozzles, V-baffles, etc. must be shot blasted to a minimum SSPC-6 on the interior and exterior of the component before assembly into the vessel.
- D. Vessels must be thoroughly cleaned and inspected before the last head is attached to the vessel.
- E. Vessels shall be pressure tested in accordance with the latest edition of ASME Code. Refrigeration package systems shall be tested in accordance with B31.5 Piping Code latest edition.
- F. Vessels shall be vacuum tested and held in a vacuum for a minimum of one hour. Vacuum shall be broken with dry nitrogen. Vessels shall be shipped with 15# of dry nitrogen with gauge, gauge valve, and safety stickers indicating that the vessel is shipped under pressure.
- G. Vessels shall be painted or finished as per the job or customer specific requirements. As a minimum standard, insulated vessels shall be painted with a two component, high solids epoxy coating. Uninsulated vessels shall be painted with a two coat system – a base layer of a two component, high solids epoxy coating followed by a finish layer of a two component, glossy acrylic polyurethane top coating.