



PROCESS
INDUSTRY
PRACTICES

TECHNICAL CORRECTION
January 2019

Vessels

**PIP VEFV1100M
Vessel/S&T Heat Exchanger Standard Details
(Metric Units)**

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1. Scope

This Practice provides fabrication and installation details and dimensional tolerances for the design of supports and other attachments for vessels, heat exchangers and solids products containers.

This Practice describes typical fabrication and installation requirements for the following:

- a. Nameplate
- b. Vessel fabrication tolerances and connection orientation tolerances
- c. Grounding lugs
- d. Horizontal vessel saddle supports
- e. Vertical vessel skirts
- f. Vertical vessel leg type supports
- g. Vertical vessel support lugs
- h. Manway and column davits
- i. Pipe supports and guides from vessels
- j. Insulation and fireproofing supports
- k. Vessel internals
- l. Heat exchanger tube sheet locking studs and vents/drains
- m. Studded joints
- n. Solids product container internals and manways

2. References

Applicable parts of the following industry codes and standards and references shall be considered an integral part of this Practice. The edition in effect at the date of contract award shall be used, except as otherwise noted. Short titles are used herein where appropriate.

2.1 Industry Codes and Standards

- American Society of Mechanical Engineers (ASME)
 - *Boiler and Pressure Vessel Code, Section VIII, Division 1*
- American Society for Testing and Materials (ASTM)
 - *A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products*
 - *A143 - Standard Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement*

2.2 Government Regulations

- U. S. Occupational Safety and Health Administration (OSHA)
 - OSHA 29 CFR 1910.106(b)(5)(ii) - *Fire Protection for Tank Saddles*