



PROCESS
INDUSTRY
PRACTICES

TECHNICAL REVISION
January 2024

Vessels

**PIP VEETA001
Tank Selection Guide**

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PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

This Practice has been prepared by harmonizing technical requirements from existing standards of major industrial operators, contractors, and standards development organizations. While this Practice is intended to incorporate the majority of requirements, individual applications may have requirements which take precedence over this Practice. Determinations concerning fitness for purpose or application of this Practice to specific project or engineering situations should not be made solely on information contained in this Practice. All Practices are intended to be consistent with applicable laws and regulations. Should this Practice conflict with applicable law or regulations, such laws or regulations must be followed. Consult an appropriate professional before applying or acting on any material contained in or suggested by this Practice.

Use of trade names should not be viewed as an expression of preference. Other brands having the same specifications are equally correct and may be substituted for those named.

This Practice is subject to revision at any time. For more information refer to PIP ADG001, *Specification for Developing Practices*.

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PIP VEETA001 Tank Selection Guide

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1. Scope

This Practice provides guidelines for aboveground storage of liquid products in tanks at design pressures from atmospheric to 15 psig (103 kPa). This Practice also provides guidance for avoiding recurring problems and outlines preferred practices where appropriate. Although this Practice is intended primarily for carbon steel tanks, most of the guidelines are applicable regardless of the material of construction.

Comment: Requirements for specifying and supplying *API Std 650* tanks are defined in *PIP VESTA002*.

Comment: Design pressure may be limited to 100 kPa in some jurisdictions.

2. References

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

2.1 Process Industry Practices (PIP)

- VESFG001 - *Fiberglass Tank and Vessel Design Guidelines*
- VESLP001 - *Low-Pressure, Welded Vessel Specification*
- VESTA002 - *Atmospheric Storage Tank Specification (Supplement to API Std 650)*
- VESV1003 - *Special Fabrication Requirements for Welded Vessels and Tanks to be Lined*

2.2 Industry Codes, Standards, Recommended Practices, and Bulletins

- American Petroleum Institute (API)
 - ANSI/API 12B - *Specification for Bolted Tanks for Storage of Production Liquids*
 - ANSI/API 12C - *Specification for Welded Oil Storage Tanks*
 - ANSI/API 12D - *Specification for Field-Welded Tanks for Storage of Production Liquids*
 - ANSI/API 12F - *Specification for Shop Welded Tanks for Storage of Production Liquids*
 - ANSI/API 12P - *Specification for Fiberglass Reinforced Plastic Tanks*
 - ANSI/API 575 - *Inspection Practices for Atmospheric and Low-Pressure Storage Tanks*
 - ANSI/API RP652 - *Linings of Aboveground Petroleum Storage Tank Bottoms*
 - API 620 - *Design and Construction of Large, Welded, Low-Pressure Storage Tanks*
 - API 650 - *Welded Tanks for Oil Storage*
 - API 651 - *Cathodic Protection of Aboveground Petroleum Storage Tanks*
 - API 653 - *Tank Inspection, Repair, Alteration, and Reconstruction*