



PROCESS  
INDUSTRY  
PRACTICES

TECHNICAL REVISION  
*November 2016*

**Vessels**

**PIP VESTA002**  
**Atmospheric Storage Tank Specification**  
**(Supplement to *API Standard 650*)**

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## PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

In an effort to minimize the cost of process industry facilities, this Practice has been prepared from the technical requirements in the existing standards of major industrial users, contractors, or standards organizations. By harmonizing these technical requirements into a single set of Practices, administrative, application, and engineering costs to both the purchaser and the manufacturer should be reduced. While this Practice is expected to incorporate the majority of requirements of most users, individual applications may involve requirements that will be appended to and take precedence over this Practice. Determinations concerning fitness for purpose and particular matters or application of the Practice to particular project or engineering situations should not be made solely on information contained in these materials. The use of trade names from time to time should not be viewed as an expression of preference but rather recognized as normal usage in the trade. Other brands having the same specifications are equally correct and may be substituted for those named. All Practices or guidelines are intended to be consistent with applicable laws and regulations including OSHA requirements. To the extent these Practices or guidelines should conflict with OSHA or other applicable laws 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 the Practice.

This Practice is subject to revision at any time.

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## PIP VESTA002 Atmospheric Storage Tank Specification (Supplement to *API Standard 650*)

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## Scope

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This Practice supplements *API 650, Welded Steel Tanks for Oil Storage*. Together, this Practice and *API 650* provide requirements for the construction of atmospheric storage tanks.

This Practice and *API 650* describe minimum construction requirements for the materials, design, fabrication, erection, examination, and testing of aboveground, non-refrigerated storage tanks. This Practice describes additions and modifications made to *API 650*. In addition, this Practice describes decisions made regarding options offered by *API 650*. This Practice supplements, but does not supersede, *API 650* and any applicable jurisdictional requirements.

This Practice covers storage tanks that have design internal pressures of 17.2 kPa (2.5 psig) or less (see *API 650, Annex F*) and design temperatures less than 260°C (500°F) (see *API 650, Annex M*).

This Practice presumes the use of the *API 650* Data Sheet to cover the requirements in *API 650*, and the Data Sheet, as a supplement, to define the additional requirements of this Practice.

## References

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

### Process Industry Practices (PIP)

- VEFV1116 - Vessel Manway Hinges
- VEFV1117 - Vessel Vertical Manway Davits

### Industry Codes and Standards

- American Petroleum Institute (API)
  - API Standard 650 - *Welded Steel Tanks for Oil Storage*, 12<sup>th</sup> Edition, including Addendum 2, January 2016
- American Society for Testing and Materials International (ASTM International)
  - ASTM A283/A283M Specification for Low and Intermediate Strength Carbon Steel Plates

## Definitions

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*Minimum Design Metal Temperature (MDMT)*: A site-specific temperature which is used in Figures 4-1a and 4-1b to select materials for the tank.

See *API 650* for other definitions.