Inspection Practices for Pressure Vessels

Downstream Segment

RECOMMENDED PRACTICE 572
THIRD EDITION, NOVEMBER 2009

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1 Scope

This recommended practice (RP) covers the inspection of pressure vessels. It includes a description of the various types of pressure vessels (including pressure vessels with a design pressure below 15 psig) and the standards for their construction and maintenance. This RP also includes reasons for inspection, causes of deterioration, frequency and methods of inspection, methods of repair, and preparation of records and reports. Safe operation is emphasized within this RP.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API 510, *Pressure Vessel Inspection Code: In-service Inspection, Rating, Repair, and Alteration*

API Recommended Practice 571, *Damage Mechanisms Affecting Fixed Equipment in the Refining Industry*

API Recommended Practice 574, *Inspection Practices for Piping System Components*

API Recommended Practice 575, *Guidelines and Methods for Inspection of Existing Atmospheric and Low-pressure Storage Tanks*

API Recommended Practice 576, *Inspection of Pressure-Relieving Devices*

API Recommended Practice 577, *Welding Inspection and Metallurgy*

API 579-1/ASME FFS-1 [1], *Fitness-For-Service*

API Standard 660, *Shell-and-Tube Heat Exchangers*

API Standard 661, *Air-Cooled Heat Exchangers for General Refinery Service*

API Recommended Practice 945, *Avoiding Environmental Cracking in Amine Units*

API Publication 2214, *Spark Ignition Properties of Hand Tools*

API Publication 2217A, *Guidelines for Safe Work in Inert Confined Spaces in the Petroleum and Petrochemical Industries*

ASME *Boiler and Pressure Vessel Code* (*BPVC*), *Section VIII: Pressure Vessels*

ASME PCC-2, *Repair of Pressure Equipment and Piping*

NB-23 [2], *National Board Inspection Code*

TEMA [3], *Standards of Tubular Exchanger Manufacturers Association*

[1] ASME International, 3 Park Avenue, New York, New York 10016, www.asme.org.
[2] National Board of Boiler and Pressure Vessel Inspectors, NBBI, 1055 Crupper Avenue, Columbus, Ohio 43229, www.nationalboard.org.
[3] Tubular Exchanger Manufacturers Association, 25 North Broadway, Tarrytown, New York 10591, www.tema.org.