



PROCESS
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PRACTICES

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Piping

PIP PNSM0110
Purchasing Requirements for
Piping and Pipeline Valves

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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1. Scope

This Practice describes the minimum requirements for the procurement of valves.

2. References

Applicable parts of the following Practice and industry codes and standards 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.

Process Industry Practices (PIP)

- VESPMI01 - *Positive Material Identification Specification*

Industry Codes and Standards

- American Petroleum Institute (API)
 - API 6D – *Specification for Pipeline and Piping Valves*
 - API RP 578 – *Guidelines for a Material Verification Program (MVP) for New and Existing Assets*
 - API 599 – *Metal Plug Valves – Flanged, Threaded and Welding Ends*
 - API 608 – *Metal Ball Valves – Flanged, Threaded and Welding Ends*
- American Society of Mechanical Engineers (ASME)
 - ASME Boiler and Pressure Vessel Code–Section IX – *Welding and Brazing Qualifications*
 - ASME B1.1 – *Unified Inch Screw Threads (UN and UNR Thread Form)*
 - ASME B1.20.1 – *Pipe Threads, General Purpose (Inch)*
 - ASME B16.5 – *Pipe Flanges and Flanged Fittings (NPS 1/2 through NPS 24 Metric/Inch Standard)*
 - ASME B16.11 – *Forged Fittings, Socket-Welding and Threaded*
 - ASME B16.25 – *Buttwelding Ends*
 - ASME B16.34 – *Valves – Flanged, Threaded, and Welding End*
 - ASME B16.47 – *Large Diameter Steel Flanges (NPS 26 through NPS 60 Metric/Inch Standard)*
 - ASME B31.3 – *Process Piping*
 - ASME B31.4 – *Pipeline Transportation Systems for Liquids*
 - ASME B31.8 – *Gas Transmission and Distribution Systems*
 - ASME B36.10M – *Welded and Seamless Wrought Steel Pipe*
 - ASME B36.19M – *Stainless Steel Pipe*
- Manufacturers Standardization Society (MSS)
 - MSS SP-25 – *Standard Marking System for Valves, Fittings, Flanges and Unions*
 - MSS SP-45 – *Bypass and Drain Connections*