



PROCESS
INDUSTRY
PRACTICES

TECHNICAL REVISION
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Piping

PIP PNSM0105
Purchasing Requirements for
Piping and Pipeline Gaskets

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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PUBLISHING HISTORY

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1. Scope

This Practice describes the minimum requirements for gaskets specified in PIP Piping Material Specifications (PMSs). This specification does not cover the purchase of custom gaskets for size ranges or pressure ranges outside the limits of PIP PMSs.

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 will be used herein where appropriate.

2.1 Process Industry Practices (PIP)

- VESPMI01 - *Positive Material Identification Specification*

2.2 Industry Codes and Standards

- American Society of Mechanical Engineers (ASME)
 - ASME B16.5 - *Pipe Flanges and Flanged Fittings NPS 1/2 through NPS 24*
 - ASME B16.20 - *Metallic Gaskets for Pipe Flanges*
 - ASME B16.21 - *Nonmetallic Flat Gaskets for Pipe Flanges*
 - ASME B16.47 - *Large Diameter Steel Flanges NPS 26 Through NPS 60 Metric/Inch Standard*
- Compressed Gas Association (CGA)
 - CGA G-4.1 - *Cleaning Equipment for Oxygen Service*
 - CGA G-4.4 - *Industrial Practices for Gaseous Oxygen Transition and Distribution Piping Systems*

3. Definitions

manufacturer: The party responsible for making the gaskets

owner: The party who owns the facility wherein the gaskets will be used

supplier: The party responsible for furnishing gaskets

purchaser: The party who awards the contract to the supplier. The purchaser may be the owner or the owner's authorized agent.

4. Requirements

4.1 General

- 4.1.1 Gaskets shall be provided in accordance with the following requirements provided in the purchase order and this Practice:
- a. Sizes and quantities
 - b. Materials of construction