



PROCESS
INDUSTRY
PRACTICES

COMPLETE REVISION
February 2019

Piping

**PIP PNFJ8000
Jacketed Piping
Fabrication and Installation Details**

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 requirements for the design, material selection, fabrication, installation, inspection, and testing of jacketed piping systems. This practice is not a substitute for competent engineering analysis and design based on specific requirements of each project. Engineering should work with an experienced jacketed piping vendor to validate proposed system design and fabrication details.

2. References

Applicable parts of the following Practices and industry codes and standards shall be considered an integral part of this Practice. The latest edition in effect at 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)

- PIP PNC00004 - *Piping Flexibility Analysis Criteria for ASME B31.3 Metallic Piping*
- PIP PNE00012 - *Piping Examination and Leak Test Guide*
- PIP PNSC0001 - *ASME B31.3 Metallic Piping Fabrication and Examination Specification*
- PIP PNSM0110 – *Procurement of Valves*

2.2 Industry Codes and Standards

- American Society of Mechanical Engineers (ASME)
 - ASME B16.5 - *Pipe Flanges and Flanged Fittings*
 - ASME B31.3 - *Process Piping*
- ASME Section VIII, Appendix 9

3. Requirements

3.1 General

- 3.1.1 The fabrication details in this Practice shall be used in the design and fabrication of jacketed piping.
- 3.1.2 Any substitution to or variance from this Practice shall be approved by purchaser before implementation.
- 3.1.3 Codes, standards, and specifications referenced in this Practice, the piping line class specifications, valve purchase descriptions, or any referenced document form a part of the requirements of this Practice in the manner and to the extent specified.

3.2 Materials of Construction

- 3.2.1 Materials shall be in accordance with the PIP Piping Material Specifications or the PIP Valve Descriptions.
- 3.2.2 All materials shall be new and unused.