



PROCESS
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PRACTICES

COMPLETE REVISION
May 2024

Piping

**PIP PNSMV053
Nickel and Nickel Alloy
Gate Valve Descriptions**

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PURPOSE AND USE OF PROCESS INDUSTRY PRACTICES

This Practice has been prepared by harmonizing technical requirements from existing standards of major industrial operators, contractors, and standards development organizations. While this Practice is intended to incorporate the majority of requirements, individual applications may have requirements which take precedence over this Practice. Determinations concerning fitness for purpose or application of this Practice to specific project or engineering situations should not be made solely on information contained in this Practice. All Practices are intended to be consistent with applicable laws and regulations. Should this Practice conflict with 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 this Practice.

Use of trade names should not be viewed as an expression of preference. Other brands having the same specifications are equally correct and may be substituted for those named.

This Practice is subject to revision at any time. For more information refer to PIP ADG001, *Specification for Developing Practices*.

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Process Industry Practices
3925 West Braker Lane (P1500),
Austin, Texas 78759

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1. Scope

This Practice provides requirements for suppliers providing nickel and nickel alloy gate valves included in PIP Piping Material Specifications (PMSs). This Practice provides the detailed purchase descriptions for nickel and nickel alloy gate valve tag numbers included in PIP PMSs and used along with *PIP PNSM0110* for the procurement of valves. This Practice also provides a cross reference for nickel and nickel alloy gate valve tag numbers to applicable PIP PMSs.

2. References

Applicable parts of the following Practice 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)

- PIP PNCM0004 - *Valve Tag Number Designator System*
- PIP PNC00005 - *Design of ASME B31.3 Metallic Piping Systems*
- PIP PNSM0110 - *Purchasing Requirements for Pipelines & Pipeline Valves*

3. Valve Designation System

- 3.1 For a full explanation of the format used to structure the valve numbers listed within this Practice, refer to *PIP PNCM0004*. The first two characters in the valve tag numbers are GA.
- 3.2 The valves listed in Sections 5 and 6 of this Practice are sorted by the unique valve tag number designation in ascending alphanumeric sequence (e.g., GA01NU500, GA03NU500).

4. Notes

- 4.1 Occasionally, valve size ranges listed in this Practice are broader than the size ranges shown for the same valves on a PIP PMS. While the “most common practice” has been used to specify valve size ranges on PMSs, a purchaser may need to utilize a valve in a size outside this “common practice” choice. Thus, for reference purposes, the full size range for which a given valve is typically manufactured is shown in this Practice.
- 4.2 Gear operation may be specified in either of the following ways:
 - a. Select a valve description that includes a gear operator.
 - b. Select a valve description that includes a handwheel and use Field 5 (Owner Designation) of the valve tag numbering system described in *PIP PNCM0004*. For guidance, see *PIP PNC00005*, Section 3.5.5.2.
- 4.3 If fluids can be trapped (e.g., in double-seated valves) and subjected to heating and subsequent expansion, means of pressure relief should be considered to avoid excessive pressure build-up.