

Reconditioning of Metallic Gate, Globe, and Check Valves

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Reconditioning of Metallic Gate, Globe, and Check Valves

1 Scope

1.1 This recommended practice (RP) provides guidelines for reconditioning heavy wall (API 600, API 623, and API 594 type) carbon steel, ferritic alloy (up to 9 % Cr), stainless steel, and nickel alloy gate, globe, and check valves for ASME pressure classes 150, 300, 400, 600, 900, 1500, and 2500. Guidelines contained in this RP apply to flanged and butt weld cast or forged valves.

1.2 It is an expectation of this RP that a contractual agreement shall be established between the Owner and the valve reconditioning facility. The reconditioning facility may be original equipment manufacturer (OEM) owned/operated, or directly associated and approved by the OEM. At the Owner's option, an independent facility may be used. The Owner shall determine that the facility selected for valve reconditioning has a documented and established working Quality Assurance Program. The Quality Assurance Program should include the essential elements described in the ISO 9001 standard.

1.3 This RP does not cover reconditioning or remanufacturing of used or surplus valves intended for resale. The only intent of this RP is to provide guidelines for refurbishing an end user's (Owner) valves for continued service in the Owner's facility. Valves reconditioned or remanufactured to this RP may not meet API Standard requirements for new valves. The correct application of a valve reconditioned to this RP remains the responsibility of the Owner.

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 Recommended Practice 591, *Process Valve Qualification Procedure*

API Standard 594, *Check Valves: Flanged, Lug Wafer, and Butt-welding*

API Standard 598, *Valve Inspection and Testing*

API Standard 600 *Steel Gate Valves—Flanged and Butt-welding Ends, Bolted Bonnets*

API Standard 622, *Type Testing of Process Valve Packing for Fugitive Emissions*

API Standard 623, *Steel Globe Valves—Flanged and Butt-welding Ends, Bolted Bonnets*

ASME B1.5.1, *Acme Screw Thread*

ASME B1.8, *Subsize Screw Threads*

ASME B16.5, *Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/Inch Standard*

ASME B16.10, *Face-to-face and End-to-end Dimensions of Valves*

ASME Boiler and Pressure Vessel Code, *Section V: Nondestructive Examination*

ASME Boiler and Pressure Vessel Code, *Section IX: Welding, Brazing, and Fusing Qualifications*

¹ ASME International, Two Park Avenue, New York, New York 10016, www.asme.org.