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 of API Standard 594, API Standard 599, API Standard 600, API Standard 603, API Standard 608, API Standard 609, and API Standard 623 valves. Guidelines contained in this RP apply to flanged and butt weld cast or forged valves. Parts of this standard may also be applied to other valves not specifically addressed with agreement between the Owner and the valve Reconditioner.

1.2 This RP does not cover reconditioning or remanufacturing of used or surplus valves intended for resale. It does not cover the modification of new valves (e.g. converting or changing the trim). For modification of new valves, see MSS SP-141, *Multi-Turn and Check Valve Modifications*. Electric and pneumatic actuator repair and reconditioning are not included in the scope of this document. 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 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 documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

API Recommended Practice 571, *Damage Mechanisms Affecting Fixed Equipment in the Refining Industry*

API Recommended Practice 591, *Process Valve Qualification Procedure*

API Recommended Practice 751, *Safe Operation of Hydrofluoric Acid Alkylation Units*

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

API Standard 598, *Valve Inspection and Testing*

API Standard 599, *Metal Plug Valves—Flanged, Threaded, and Welding Ends*

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

API Standard 603, *Corrosion-resistant, Bolted Bonnet Gate Valves – Flanged and Butt-welding Ends*

API Standard 608, *Metal Ball Valves—Flanged, Threaded, and Welding Ends*

API Standard 609, *Butterfly Valves: Double-flanged, Lug and Wafer-type, and Butt-welding Ends*

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, *Stub Acme Screw Threads*

ASME B16.5, *Pipe Flanges and Flanged Fittings NPS $^1/_2$ Through NPS 24 Metric/Inch Standard*

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