Steel Gate Valves—Flanged and Butt-welding Ends, Bolted Bonnets

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Suggested revisions are invited and should be submitted to the Standards Department, API, 1220 L Street, NW, Washington, DC 20005, standards@api.org.

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1 Scope

This standard specifies the requirements for a heavy-duty series of bolted bonnet steel gate valves for petroleum refinery and related applications where corrosion, erosion, and other service conditions would indicate a need for full port openings, heavy wall sections, and large stem diameters.

This standard sets forth the requirements for the following gate valve features:

— bolted bonnet,

— outside screw and yoke,

— rising stems,

— non-rising handwheels,

— single or double gate,

— wedge or parallel seating,

— metallic seating surfaces,

— flanged or butt-welding ends.

It covers valves of the nominal pipe sizes DN:

— 25, 32, 40, 50, 65, 80, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 650, 700, 750, 800, 850, 900, 950, 1000, 1050;

corresponding to nominal pipe sizes NPS:

— 1, 1 1/4, 1 1/2, 2, 2 1/2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42;

and applies to pressure class designations:

— 150, 300, 600, 900, 1500, 2500.

If product is supplied bearing the API Monogram and manufactured at a facility licensed by API, the requirements of Annex A apply.

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 Standard 598, *Valve Inspection and Testing*

API Standard 624, *Type Testing of Rising Stem Valves Equipped with Graphite Packing for Fugitive Emissions*

ASME B1.1 [1], *Unified Inch Screw Threads (UN and UNR Thread Form)*

[1] ASME International, 2 Park Avenue, New York, New York 10016-5990, www.asme.org.