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# API Standard 623

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

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

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

- bolted bonnet,
- outside screw and yoke,
- rotating rising stems, and nonrotating rising stems,
- rising handwheels and nonrising handwheels,
- conventional, y-pattern, right-angle,
- stop-check (nonreturn type globe valves in which the disc may be positioned against the seat by action of the stem, but is free to rise as a check valve due to flow from under the disc, when the stem is in a full or partially open position),
- plug, narrow, conical, ball, or guided disc,
- metallic seating surfaces,
- flanged or butt-welding ends.

It covers valves of the nominal pipe sizes NPS:

- 2, 2 1/2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24;  
corresponding to nominal pipe sizes DN:
- 50, 65, 80, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600;

applies for pressure class designations:

- 150, 300, 600, 900, 1500, 2500.

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