

VALVE CODES AND STANDARDS

ANSI -American National Standards Institute

B16.34:	"Valves - Flanged, Threaded, and Welding End"
	- Design basis for all kinds of valves, including pressure-temperature ratings, dimensions, materials, and testing.
	- Cast and forged flanged, threaded, and welding end valves.
	- Class 150 thru Class 4500.
B16.10:	"Face-to-Face and End-to-End Dimensions of Valves"
	- Face-to-Face dimensions for flanged end valves and end-to-end dimensions for welding end valves.
	- Gate, globe, angle, check, plug, and ball valves.
	- Class 150 thru Class 2500.
B 16.5:	"Pipe Flanges and Flanged Fittings"
	- Design basis for all kinds of flanges such as raised face, ring joint face, tongue and groove face.
	- Class 150 thru 2500, NPS (Nominal Pipe Size) 1/2" thru 24".

API - American Petroleum Institute

600:	"Bolted Bonnet Steel Gate Valve for Petroleum and Natural Gas Industries"
	- Specific and detailed design requirements.
	- 1"-24" Sizes, Class 150 thru 2500 flange and butt welding ends.
602:	"Compact Steel Gate Valves - Flanged, Threaded, Welding, and Extended-Body Ends"
	- Specific and detailed design requirements for compact gate valves.
	- 2 1/2" and smaller, Class 800 and 1500, threaded and socket ends.
	- 4" and small, Class 150 thru 1500, flanged and butt welding ends.
	- Cast and forged, Carbon Steel and Stainless Steel.
598:	"Valve Inspection and Testing"
	- Pressure test requirements and acceptance criteria for shell, backseat, and closure tests.

MSS - Manufacturers Standardization Society of Valve and Fittings Industry

SP-61:	"Pressure Testing of Steel Valves"
	- Requirements and acceptance criteria for shell and seat closure pressure testing of steel valves.
SP-25:	"Standard Marking System for Valves, Fittings, Flanges, and Unions"
	- Requirements for marking on nameplate and valve body.
SP-55:	"Quality Standard for Steel Castings for Valves, Flanges and Fittings, and other piping components. – Visual Methods"
	- Reference photographs of casting surface irregularities.
SP-117:	"Bellows Seals for Globe and Gate Valves"
	- Reference requirements for design, materials, fabrication, installation, qualification and testing of bellows/assemblies for gate and globe valves.

ASME - American Society of Mechanical Engineers

ASME Boiler and Pressure Vessel Code	
Section IX:	"Welding and Brazing Qualifications"
	- Requirements for qualification of welders and procedures employed in welding. ASME Code for Pressure Piping, B31
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B31.3:	"Chemical Plant and Petroleum Refinery Piping"
	- Requirements for material, design, fabrication, and testing of piping, including valves and specialty components

NACE - National Association of Corrosion Engineers

MR0175:	"Standard Material Requirements-Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment"
	- Material requirements for components exposed to sour environment (H ₂ S-bearing hydrocarbon service)
	- Selected material and limited hardness.