

The American Petroleum Institute-API Valve standards

• API SPEC 6D

Specification for Pipeline Valves. API Specification 6D is an adoption of ISO 14313: 1999, Petroleum and Natural Gas Industries-Pipeline Transportation Systems-Pipeline Valves. This International Standard specifies requirements and gives recommendations for the design, manufacturing, testing and documentation of ball, check, gate and plug valves for application in pipeline systems.

• API 526

Flanged Steel Pressure Relief Valves. The standard is a purchase specification for flanged steel pressure relief valves. Basic requirements are given for direct spring-loaded pressure relief valves and pilot-operated pressure relief valves as follows: orifice designation and area; valve size and pressure rating, inlet and outlet; materials; pressure-temperature limits; and center-to-face dimensions, inlet and outlet.

• API 527

Seat Tightness of Pressure Relief Valves R(2002). Describes methods of determining the seat tightness of metal- and soft-seated pressure relief valves, including those of conventional, bellows, and pilot-operated designs.

• ANSI/API STD 594

Check Valves: Flanged, Lug, Wafer and Butt-welding. API Standard 594 covers design, material, face-to-face dimensions, pressure-temperature ratings, and examination, inspection, and test requirements for two types of check valves.

• API 598

Valve Inspection and Testing. The standard covers inspection, supplementary examination, and pressure test requirements for both resilient-seated and metal-to-metal seated gate, globe, plug, ball, check, and butterfly valves. Pertains to inspection by the purchaser and to any supplementary examinations the purchaser may require at the valve manufacturer's plant.

• ANSI/API 599

Metal Plug Valves - Flanged, Threaded and Welding Ends. A purchase specification that covers requirements for metal plug valves with flanged or butt-welding ends, and ductile iron plug valves with flanged ends, in sizes NPS 1 through NPS 24, which correspond to nominal pipe sizes in ASME B36.10M. Valve bodies conforming to ASME B16.34 may have flanged end and one butt-welding end. It also covers both lubricated and non lubricated valves that have two-way coaxial ports, and includes requirements for valves fitted with internal body, plug, or port linings or applied hard facings on the body, body ports, plug, or plug port.

• ANSI/API 600

Bolted Bonnet Steel Gate Valves for Petroleum and Natural Gas Industries - Modified National Adoption of ISO 10434:1998.

• API 602

Compact Steel Gate Valves - Flanged, Threaded, Welding, and Extended-Body Ends. The standard covers threaded-end, socket-welding-end, butt-welding-end, and flanged-end compact carbon steel gate valves in sizes NPS4 and smaller.



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• ANSI/API 603

Corrosion-Resistant, Bolted Bonnet Gate Valves - Flanged and Butt-Welding Ends. The standard covers corrosion-resistant bolted bonnet gate valves with flanged or butt-weld ends in sizes NPS 1/2 through 24, corresponding to nominal pipe sizes in ASME B36.10M, and Classes 150, 300, and, 600, as specified in ASME B16.34.

• ANSI/API 607

Fire Test for Soft-Seated Quarter Turn Valves. The standard covers the requirements for testing and evaluating the performance of straightway, soft-seated quarter-turn valves when the valves are exposed to certain fire conditions defined in this standard. The procedures described in this standard apply to all classes and sizes of such valves that are made of materials listed in ASME B16.34.

• API 609

Butterfly Valves: Double Flanged, Lug- and Wafer-Type. The standard covers design, materials, face-to-face dimensions, pressure-temperature ratings, and examination, inspection, and test requirements for gray iron, ductile iron, bronze, steel, nickel-base alloy, or special alloy butterfly valves that provide tight shutoff in the closed position and are suitable for flow regulation.

API 6FA

Specification for Fire Test for Valves. The standard covers the requirements for testing and evaluating the performance of API Spec 6A and Spec 6D valves when exposed to specifically defined fire conditions.

API 6FC

Fire Test for Valve with Automatic Backseats. The standard covers the requirements for testing and evaluating the performance of API Spec 6A and Spec 6D valves with automatic backseats when exposed to specifically defined fire conditions.

• API 6RS

Referenced Standards for Committee 6, Standardization of Valves and Wellhead Equipment.

• API 11V6

Design of Continuous Flow Gas Lift Installations Using Injection Pressure Operated Valves. The standard sets guidelines for continuous flow gas lift installation designs using injection pressure operated valves.

• ANSI/API RP 11V7

Recommended Practice for Repair, Testing, and Setting Gas Lift Valves. The standard applies to repair, testing, and setting gas lift valves and reverse flow (check) valves.

• API 520-1

Sizing, Selection, and Installation of Pressure-Relieving Devices in Refineries: Part I - Sizing and Selection. The recommended practice applies to the sizing and selection of pressure relief devices used in refineries and related industries for equipment that has a maximum allowable working pressure of 15 psig (1.03 bar g or 103 KPa g) or greater.

• API 520-2

Recommended Practice 520: Sizing, Selection, and Installation of Pressure-Relieving Devices in



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Refineries-Part II, Installation. The recommended practice covers methods of installation for pressure-relief devices for equipment that has a maximum allowable working pressure of 15 psig (1.03 bar g or 103 KPa g) or greater. It covers gas, vapor, steam, two-phase and incompressible fluid service.

• ANSI/API 574

Inspection Practices for Piping System Components. The standard covers the inspection of piping, tubing, valves (other than control valves) and fittings used in petroleum refineries.

• ANSI/API 576

Inspection of Pressure Relieving Devices. The recommended practice describes the inspection and repair practices for automatic pressure-relieving devices commonly used in the oil and petrochemical industries.

• ANSI/API 608

Metal Ball Valves - Flanged and Butt-Welding Ends. The standard covers Class 150 and Class 300 metal ball valves that have either butt-welding or flanged ends and are for use in on-off service.

