

APPLICABLE STANDARDS – BALL & PLUG VALVES

Australian Pipeline Valve valves are manufactured in accordance with API, ANSI, ASME and BS standards. This list contains the most important related standards for ball and plug valves. Australian Pipeline Valve valves may be designed, manufactured and tested in accordance with other international standards on request. The below standards dictate all facets of design, firesafe testing, wall thickness, testing, end connections, inspection and numerous other associated requirements.

API - American Petroleum Institute

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| Spec. 6A | Specification for wellhead & christmas tree equipment |
| Spec. 6D | Specification for Pipeline valves |
| Spec. RP6F | Recommended practice for fire testing of valves |
| Spec. 6FA | Specification for fire testing of valves |
| Std. 598 | Valve inspection and test |
| Std. 605 | Large diameter carbon steel flanges |
| Std. 607 | Fire test for soft seated quarter turn valves |

ANSI - American National Standards Institute

ASME - American Society of Mechanical Engineers

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|---------------|--|
| B16.11 | Forged steel fitting socket-welding and threading |
| B16.5 | Steel pipe flanges and flanged fittings |
| B16.10 | Face to face and end to end dimensions of ferrous valves |
| B16.25 | Butt welding ends. |
| B16.34 | Steel valves – flanged and butt welding ends |
| B31.3 | Chemical plant and petroleum refinery piping systems |
| B31.4 | Liquid petroleum transportation piping systems |
| B31.8 | Gas transmission and distribution piping systems |

ASTM - American Society for Testing Materials

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|--------------|---|
| 01.01 | Steel piping, tubing and fittings |
| 01.02 | Ferrous castings; Ferro alloys |
| 02.01 | Copper and Copper alloys |
| 02.04 | Nickel and Nickel alloys |
| 03.01 | Metals – mechanical testing; elevated & low temperature test; metallography |

NACE - National Association of Corrosion Engineers

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|-----------------|---|
| MR-01-75 | Sulfide stress cracking resistant metallic materials for oilfield equipment |
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MSS - Manufacturers Standardisation Society

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|-------------|---|
| SP06 | Standard finishes for contact faces of pipe flanges and connecting-end flanges of valves and fittings |
| SP25 | Standard marking system for valves fittings, flanges and unions |
| SP44 | Steel pipeline flanges |
| SP45 | By-pass and drain connection standard |
| SP55 | Quality standard for steel castings – visual method |
| SP61 | Hydrostatic testing of steel valves |
| SP72 | Ball valves with flanged or butt-welding ends for general service |

ISO - International organisation for Standardisation

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|----------------------------|--|
| ISO 9001 | Quality systems – Model for quality assurance in design/development, production, installation and servicing |
| ISO 5208 | Pressure testing of valves - Industrial |
| ISO 5752 | Metal valves for use in flanged pipe systems - Face-to-face and centre-to-face dimensions |
| ISO 7121 | Flanged steel ball valves |
| ISO 10423 (API 6A) | Wellhead and christmas tree equipment Specification |
| ISO 10497 (API 607) | Testing of valves - Fire type-test requirements (Fire Test for Soft-Seated Quarter-Turn Valves) |
| ISO 14313 (API 6D) | Specification for Pipeline Valves |
| ISO 15156 | NACE MR0175, Petroleum and natural gas industries - Materials for use in H2S-containing environments in oil and gas production |
| ISO 15848-1 | Industrial valves - Measurement, test and qualification procedures for fugitive emission Part 1: Classification system and qualification procedures for type testing of valves |
| ISO 17292 | Metal ball valves for petroleum, petrochemical and allied industries |

BS - British Standard

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|----------------|--|
| BS 1560 | Steel pipe flanges and flanged fittings |
| BS 2080 | Face to face, centre to centre, end to end, and centre to end dimensions of flanged and butt-welding end steel valves for the petroleum, petrochemical and allied industries |
| BS 4504 | Flanges and boltings for pipe valves and fittings. |
| BS 5146 | Inspection and test of steel valves for the petroleum, petrochemical and allied industries. |
| BS 5351 | Steel ball valves for the petroleum, petrochemical and allied industries. |
| BS 6755 | Testing of valves |

For technical references and ASTM/ASME cross reference information on stainless, duplex, chrome-moly and alloy steel used in valves & piping systems in the petrochemical and refining go to our website: <http://www.australianpipelinevalve.com.au>

MAIN DESIGN STANDARDS BALL & PLUG VALVES

Australian Pipeline Valve pipeline ball and plug valves are manufactured to the following API and ASME Standards which dictate all facets of design, firesafe testing, wall thickness, hydrostatic testing, end connections, etc.

American Petroleum Institute - API



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|---------|---------|---------|
| API 6D | API 6FA | API 598 |
| API 599 | API 607 | API 607 |

American Society of Mechanical Engineering - ASME

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|--------------|--------------|--------------|
| ASME B 16.5 | ASME B 16.10 | ASME B 16.25 |
| ASME B 16.34 | ASME B 31.3 | ASME B 31.8 |
| | ASME B 46.1 | |

STANDARD MATERIALS

Standard Valve Materials Grades

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|------------|--------------|--------------|-------------|-------------|
| - A105 N | - AISI 4140 | - A 182 F6A | - A 564 630 | - A 182 F53 |
| - A350 LF2 | - A694 F60 | - A 182 F304 | - A 182 F44 | - A 182 F55 |
| - A350 LF3 | - API 6A 60K | - A 182 F316 | - A 182 F51 | |

For other ANSI, ASME, ISO, API, BS, API valve related technical cross reference charts and tables relating to standards, codes, pressure, temperature, application, suitability, equivalents, body & trim materials, valve manufacturing & test standards, etc., go to the technical section of our website.

We manufacture valves in API600, API602, API6D, BS1868, API603, API6A and numerous other standards including Ball, Butterfly, Check, Gate, Globe, Needle and Plug valves.

~ AUSTRALIAN PIPELINE VALVE IS A VALVE SPECIALIST. WE CAN MANUFACTURE IN SHORT DELIVERY TIME. SELLING WORLD WIDE ~

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ASME API Ball Plug Valves R5 - AS