



SUPREME ENTERPRISE

Industrial Valves

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| Doc. No. | SV-DATA-2026-CAST_ALLOY_STEEL_WC6_GLOBE_VALVE_CLASS_2500_BUTT_WELD_ENDS | | Cast Alloy Steel (WC6) Globe Valve, Class 2500# Butt Weld Ends -- Technical Datasheet | Page | 1 OF 1 |
| Rev. | A | | | Date | 13-Jun-2026 |
| R | REFERENCES & RELATED DOCUMENTS | | | | |
| R1 | P&ID / Process Diagram | N/A -- Product Datasheet | Piping Material Spec. | N/A -- Product Datasheet | |
| R2 | Project Standard / Spec. | BS 1873, ASME B16.34, ASME B16.25, API 598 | | | |
| 1 | GENERAL | | | | |
| 2 | P&ID No. / Tag No. | N/A -- Product Datasheet | Piping Class | ASME Class 2500 | |
| 3 | Valve Tag / Item No. | N/A -- Product Datasheet | Quantity Required | As required | |
| 4 | Design Standard | BS 1873, ASME B16.34, ASME B16.25, API 598 | Pressure Class / Rating | ASME Class 2500 | |
| 5 | Valve Size, Inlet x Outlet | 2" to 12" (DN50 – DN300) | End Connection | Butt Weld per ASME B16.25 | |
| 6 | Valve Type / Model | Cast Alloy Steel (WC6) Globe Valve, Class 2500# Butt Weld Ends | Operation Mode | Cr-Mo alloy steel (WC6) OS&Y globe valve, Class 2500 butt-weld -- engineered for high-pressure superheated steam and hot hydrocarbon mains in power and refinery service | |
| 6A | Service / Application | High Pressure Steam, Power Plant Boilers, Refineries, Petrochemical | Fluid State | Liquid / Gas / Steam (as applicable) | |
| 7 | DESIGN CONDITIONS | | | | |
| 8 | Design Pressure | ASME Class 2500 | Design Temp. Min / Max | -10°C to +550°C (HT steam) -- per project | |
| 9 | Operating Pressure | ASME Class 2500 | Operating Temp. | Saturated / superheated steam -- project-specific | |
| 10 | Set / Relief Pressure | N/A -- Product Datasheet | Back Pressure | N/A -- Product Datasheet | |
| 11 | Fluid Handled / Service | High Pressure Steam, Power Plant Boilers, Refineries, Petrochemical | Corrosion Allowance | As per project specification | |
| 12 | Required Capacity / Flow Rate | As per valve size and pressure class | Location / Installation | Indoor / Outdoor / Offshore / Marine (as applicable) | |
| 13 | VALVE OPERATION REQUIREMENT | | | | |
| 14 | Type of Valve Operator | Cr-Mo alloy steel (WC6) OS&Y globe valve, Class 2500 butt-weld -- engineered for high-pressure superheated steam and hot hydrocarbon mains in power and refinery service | Actuator Specification | ISO 5211 pad (actuated) -- Electric / Pneumatic / Hydraulic on request | |
| 15 | Fail-Safe Position | As per project / application requirements | Accessories Required | Limit switches, positioners, solenoid valves, manual override -- on request | |
| 16 | VALVE MATERIAL SPECIFICATION (EQUIVALENT OR SUPERIOR) | | | | |
| | Valve Part | Specified Material | Proposed Material (Supreme Valves India) | | |
| | Body | As per project specification | ASTM A217 WC6 (1.25Cr-0.5Mo Cast Alloy Steel) | | |
| | Bonnet / Cover | As per standard | As per standard / matching body grade | | |
| | Trim (Disc / Seat) | As per standard | A217 WC6 + Stellite 6 hardfacing, integral seat | | |
| | Stem / Spindle | As per standard | ASTM A182 F6a / F22, OS&Y rising | | |
| | Gasket / Packing | As per standard | RTJ ring / spiral wound SS316 + graphite | | |
| | Bolting / Nuts | As per standard | ASTM A193 B16 / A194 7 | | |
| | Gland Packing | As per standard | Flexible graphite | | |
| 17 | TESTING, INSPECTION & CERTIFICATION REQUIREMENTS | | | | |
| 18 | Hydrostatic Shell Test | Hydrostatic 63.8 MPa (9255 psi) | Seat / Pneumatic Test | Hydrostatic 46.8 MPa (6790 psi) | |
| 19 | NDT Requirements | 100% MPI / DPT on machined surfaces (if specified) -- Radiography / Ultrasonic on request | | | |
| 20 | Required Certificates / MTC | EN 10204 3.1 MTC (standard) -- EN 10204 3.2 / third-party inspection on request | | | |
| 21 | Witness / Inspection Agency | Client / TPI representative (if specified) | Third Party Inspection | TUV / SGS / BV / Lloyds Register (client cost) | |
| 22 | PAINTING, PRESERVATION & PACKING | | | | |
| 23 | Painting / Coating Specification | Standard: one coat primer + two coats synthetic enamel (colour per client spec) -- special coatings (epoxy, PTFE, rubber lining) on request | | | |

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| 24 | Packing Requirement | Wooden cases / pallets with VCI protection -- sea-worthy packing for export on request |
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| 26 | NOTES |
| <p>1. This datasheet covers standard specifications for Cast Alloy Steel (WC6) Globe Valve, Class 2500# Butt Weld Ends.</p> <p>2. Design Standard: BS 1873, ASME B16.34, ASME B16.25, API 598.</p> <p>3. Application / Service: High Pressure Steam, Power Plant Boilers, Refineries, Petrochemical.</p> <p>4. Size Range: 2" to 12" (DN50 – DN300). Pressure Rating: ASME Class 2500.</p> <p>5. All valves are manufactured new and unused by an ISO 9001 compliant foundry.</p> <p>6. Material Test Certificates (MTC) per EN 10204 3.1 provided as standard; EN 10204 3.2 available on request at additional cost.</p> <p>7. Testing performed per ISO 5208 / API 598: shell test at 1.5x rated pressure, seat test at 1.1x rated pressure -- bubble-tight zero leakage.</p> <p>8. Face-to-face dimensions per ASME B16.10 / BS 2080 / manufacturer standard unless otherwise specified.</p> <p>9. Marking per MSS SP-25: Size, Pressure Class, Material, Heat Number, Tag Number, Serial Number, Flow Direction.</p> <p>10. Alternative / upgraded materials: A217 WC9 (2.25Cr-1Mo) / A182 F91 for higher temperatures on request.</p> <p>11. Actuated valves (electric, pneumatic, hydraulic) supplied with ISO 5211 mounting pad and position indicator.</p> <p>12. Third-party inspection by TUV, SGS, Bureau Veritas, or Lloyds Register available on request at client cost.</p> <p>13. This datasheet is for general reference. Firm specifications to be confirmed upon receipt of confirmed Purchase Order with technical requirements.</p> <p>14. For specific project requirements, deviation forms, or material substitutions, please contact our engineering team.</p> | |

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| RH | REVISION HISTORY |
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| Rev. | Date | Description of Change | Prepared / Reviewed / Approved |
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| A | 13-Jun-2026 | Initial issue -- Product datasheet generated from standard catalogue | Supreme Valves India -- Technical Department |

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| AP | DOCUMENT APPROVAL |
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| PREPARED BY Supreme Valves India -- Technical Department, Ahmedabad _____ Signature / Date | REVIEWED BY _____ Name / Signature / Date | APPROVED BY _____ Name / Signature / Date |
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