Polyguard INDUSTRIES

Unit 2, 18 Colin Jamieson Drive,
Welshpool, WA, 6106
Phone: (08) 9350 5920
Email:WWW.polyguardindustries.com

Ball Valve



Ball Valve — Design Description

Ball valves deliver fast quarter-turn operation for on/off control and flow regulation in slurry, chemical, and high-purity fluid systems. The spherical closure element provides a tight, bubble-proof seal and full-bore flow, making them well suited for applications where minimal turbulence and quick shutoff are critical.

Polyguard ball valves made to resist abrasion and chemical attack in aggressive environments such as mineral processing, tailings transfer, and acid handling. Their streamlined flow path reduces wear and prevents solids accumulation inside the valve body.

Compact and lightweight, ball valves are easy to automate and require minimal maintenance. They are available in floating and trunnion-mounted designs across a wide range of sizes and pressure classes to match diverse pipeline requirements.

Technical Specifications

Valve Size Range: DN15 – DN 1200

Design Codes: EN 1171 / EN 1074-2, API 600, API 602, ASME B16.34, As per Design requirement

Pressure Rating: PN 10, PN 16, PN 25, PN 40, Class 150#- 2500 #

Typical Valve Temperature ranges

RESILIENT SEATED – EPDM:	- 10 to +120 °C
PTFE SEATED:	-20 to +120 °C
METAL SEATED CARBON STEEL:	-20 to +425 °C
STAINLESS STEEL METAL SEATED:	-46 to +538 °C
GRAPHITE PACKED HIGH TEMP:	UP TO 550 °C

Material Specifications

Component	Typical Materials
Body	Cast iron, ductile iron, carbon steel, stainless steels & suitable alloys
Ball	Ductile iron, carbon steel, stainless steel, bronze; coated with various elastomers to suit design applications.
Stem	Stainless steel, carbon steel, bronze
Seat rings	Bronze, stainless steels, or elastomers
Packing	Graphite, PTFE, or other approved packing
Handwheel/ Lever	Cast iron, ductile iron, steel.
Actuator	Manual, air, electric and hydraulic