

METAL TO METAL SEAT BALL VALVES

Australian Pipeline Valve manufacture severe and critical service ball valves. True full bore metal seated top entry plug valves are also available for slurry and dirty service. Applications include high temperature and abrasive service. Valves can be manufactured in class IV, V and VI shut off. Special resilient and metal seated high performance ball valves with 'cam action seats' are also available. This seat design lifts off the ball/disc during opening and closing to avoid seat damage. The design also protects the seat from high velocity and abrasion damage during initial opening. Composite triple seats can also be supplied with nylon/Teflon/metal.



The production of a zero maintenance, high performance metal seated valve has been the goal of many engineers. For certain applications such as abrasive media or high temperature, soft seated ball valves are not suitable and the ultimate solution is to use a top quality metal seated valve but at a reasonable price. Australian Pipeline Valve's range of METAL SEATED BALL VALVES provides a high performance, zero maintenance, high quality standard production ball valve with a competitive price and relatively short delivery time. HIGH TEMPERATURE & ABRASIVE SERVICE floating ball and trunnion mounted bi-directional metal seated valves have been developed by Australian Pipeline Valve for customers looking for a reliable valve at a competitive price. Refer to our "Special Service Ball Valve Catalogue".

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Proprietary mate-lapping is available which produces the tightest, most reliable seal available. All metal seated ball valves rely on continuous, unbroken contact between the ball and metal seat to create an isolating seal. 360° mate-lapping of the entire ball and seat produces optimal roundness, producing 100% ball to seat contact, regardless of the positioning. Traditional cup-lapping methods mate only the sealing band of the ball to seat surfaces creating ridges that distort the balls roundness and compromise the coating thickness. The sealing "sweet spot" is much smaller and a leak path may develop if even slightly misaligned resulting in reduced valve life, more maintenance and higher actuation costs.

360° Lapping

- Automated lapping of the entire spherical surface
- · Consistent 100% roundness
- · Uniform coating thickness
- · Seals in any position
- 100% ball to seat contact
- Smooth surfaces reduce friction for lower torques

Traditional Lapping

- · Laps only a sealing band
- · Distorts roundness
- · Compromises coating thickness
- · Creates ridges around "sweet spot"
- Surface irregularities cause higher torques



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