

**HIGH PERFORMANCE BALL VALVES** 

**Customized design for extreme conditions** 

- **Sizes:** DN8 up to DN1000 (½" up to 40")
- **Pressures:** up to 700 bar (10.000 psi)
- Temperatures: 200 up to + 550°C
- **High Cycles:** up to 200.000 cycles/year
- Media: crude oil, natural gas, sour gas, syngas, oxygen, hydrogen, helium, steam, geothermal water, coal powder, slurry, slag & ashes, catalysts, polymers, cellulose, abrasive and degreasing media
- **Functions:** Double Isolation and Bleed (DIB) two independent barriers

  Double Block and Bleed (DBB) valve can be tested while mounted in the pipeline
- Specifications: API 6A, API 6D, ASME, PED, DGRL, DIN ISO; certified for: Fire-safe, TA Luft, SIL and others



#### TWIN BALL VALVE

- double ball valve for double safety
- · up to four barriers in the length of a standard valve
- replacement of existing valves



### **SCRAPER VALVE**

- shut-off valve and scraper launcher/receiver
- space- and cost-saving substitution of expensive scraper launching systems



### **BLOCK DESIGN**

- compact consolidation of single components
- elimination of flange connections reduces size and weight and increases safety

Further information

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# **MAXIMAL TIGHTNESS & MINIMAL WEAR**

Metal-to-metal sealing ball valves for demanding applications

Valves with metal sealing systems are much more resistant against wear than soft sealing systems. The Hartmann metal-to-metal ball valves are additionally characterized by their gas tightness and extremely long service life. Less downtimes and extended maintenance cycles lead to reduced life cycle costs. These benefits especially pay off at high pressures, high temperatures or extreme high cycles.

## **SOFT SEALING BALL VALVES**

Every medium flow entrains debris. When closing the valve, the particles strike the seal at high velocity.

With soft sealing or PMSS systems, this leads to damages on seat and ball. The ball valve starts to leak which results in expensive down times and repairs.



The uncoated ball is damaged at the inlet side.

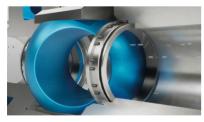


The soft seal is damaged on the downstream side.



Embedded particles lead to scratches on the ball.

## **METAL-TO-METAL SEALING SYSTEM**



Hartmann seals are metal-to-metal.

The metal-to-metal sealing between ball and seat ring prevents damages and leaks. The hard coating protects the ball. In addition, the seat ring is equipped with a sharp edge to whip down the dirt.

Gas tight – even at high cycles a leak rate of A or O is achieved. For lower maintenance costs and a maximum service life of your valves.

SAFE. RELIABLE. LONG-LASTING.

