

PROCHEM

Product solutions for a world of difference

VALVES

BSM



PIPING PRODUCTS



INSTRUMENTATION



VALVES



MANUFACTURING



INDENT & PROJECT SERVICES



HYDRAULIC



A **pen** company

The World of Prochem



PIPING PRODUCTS



INSTRUMENTATION



VALVES



MANUFACTURING



INDENT & PROJECT SERVICES



HYDRAULIC



Certified Quality
Management System
(Australia)



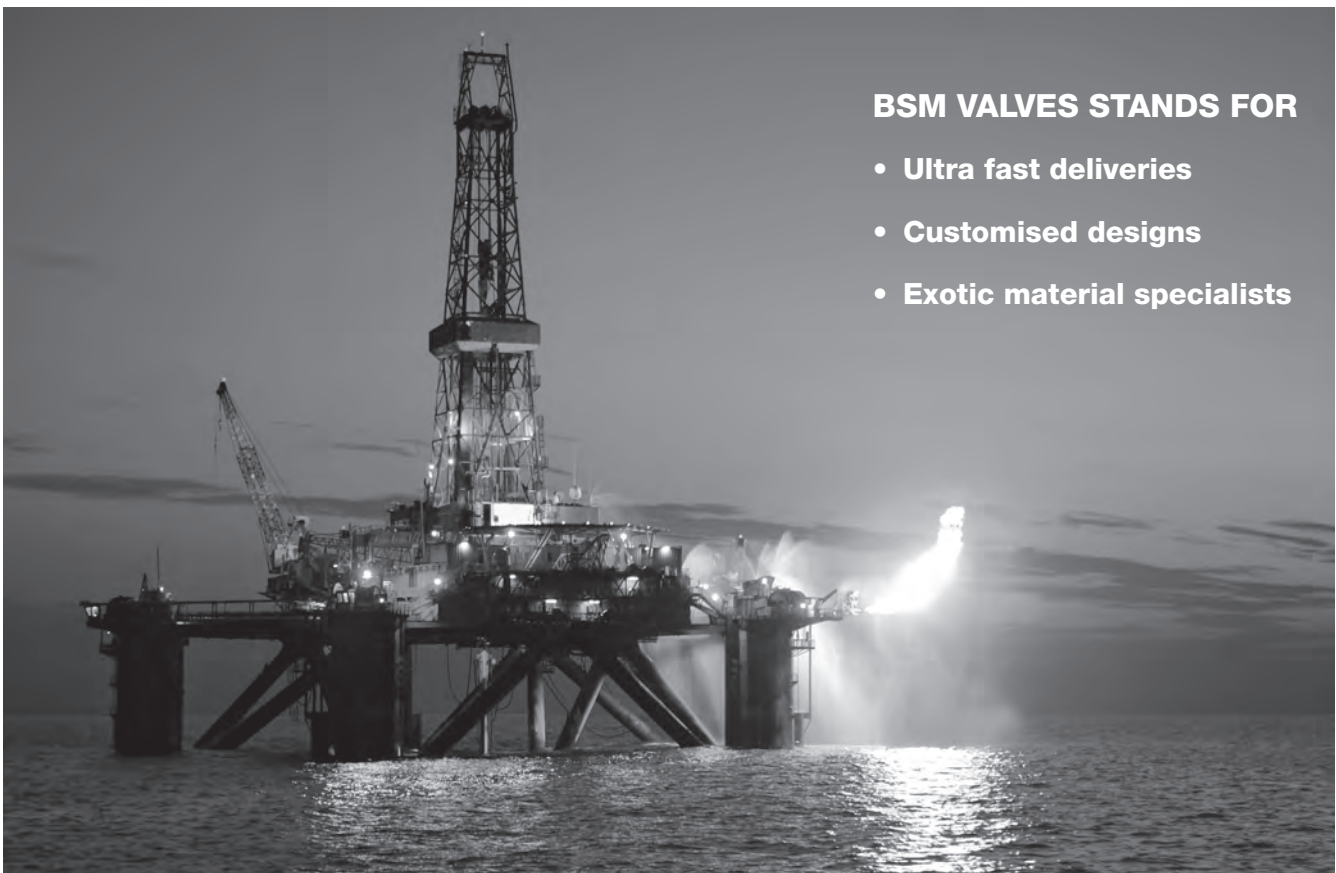
A **pen** company

BSM

Valving Solutions

Emergency Delivery Specialists

Industry leading manufacturer
of ultra fast-track, high quality
valving solutions.



BSM VALVES STANDS FOR

- Ultra fast deliveries
- Customised designs
- Exotic material specialists

Specialists in the Oil & Gas Industry

BSM Valves is one of the world's most important fast-track valve producers. At their state-of-the-art production facilities in Breda, The Netherlands, BSM manufacture hard to obtain valves in a wide range of exotic materials. BSM's valves are made to order and to tight specifications, and the company is specialised in working from custom-made designs, producing high-quality valves, quickly and efficiently.

BSM's dedicated and experienced team works hard to provide customers with specialty valves to suit even the most extreme conditions. They pride themselves in their ability to offer tailor-made valves with short lead times. To make this happen, they maintain fast and effective communication with customers, use the latest in design and manufacturing technologies and dedicate themselves to innovation and product development.

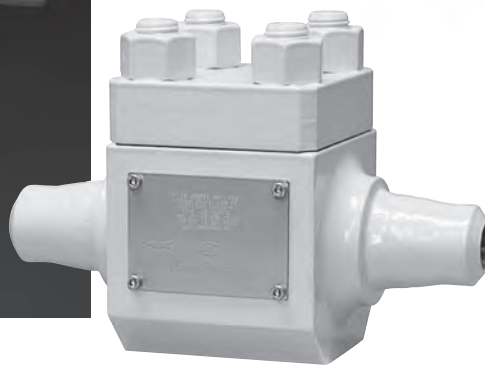
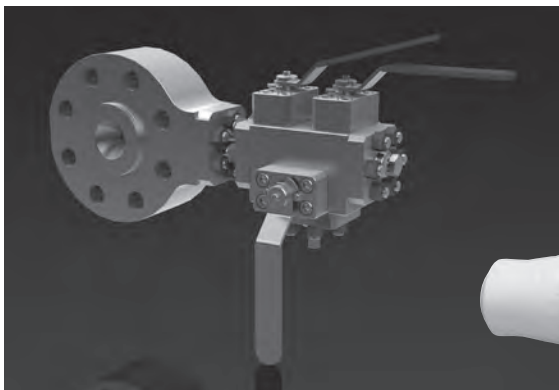


High Quality Products

BSM's specialty valves are all manufactured from forged bar or forgings in their state-of-the-art production facilities. With the newest equipment, they can guarantee the highest quality and the shortest of lead times.

BSM's range includes:

- Ball
- Gate
- Check
- Globe
- DBB
- Cryogenic
- Subsea
- Needle
- Metal Seated
- Through Conduit
- Special Designs



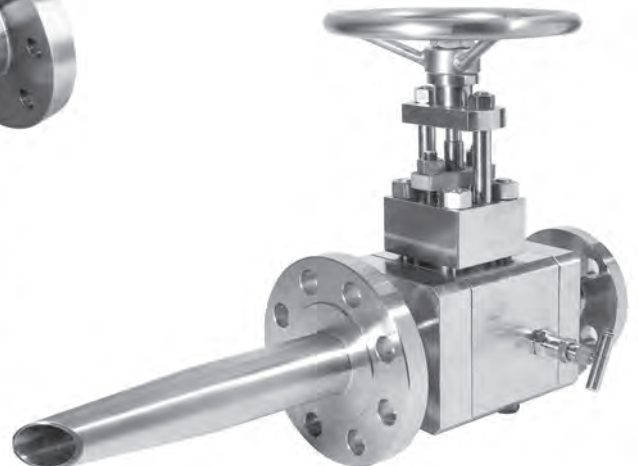
SPECIAL VALVES

Sizes 15 (1/2") – 500 (20")
 ANSI Class (lbs) 150 – 4500
 API Rating (psi) 3000 – 10000
 DIN Rating (PN) 10 – 400

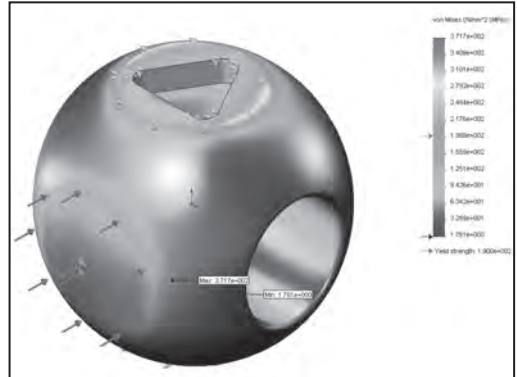
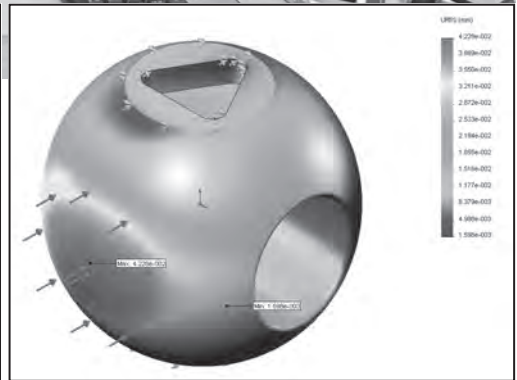
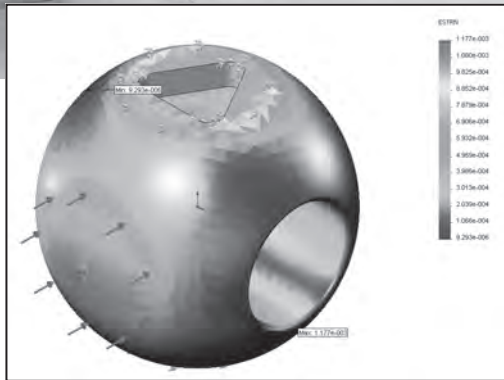
Temperature range:
 -196 to 550°C

Construction
 No limitations

Standards
 No limitations



All valves comply with European Legislation PED 97/23/EC
 NOTE: Larger sizes available on request



Engineering at its Best

BSM Valves' manufacturing facilities in Breda include a well-equipped, state-of-the-art engineering department. All technical staff and engineers are highly qualified and fully up to date on the latest in design and production technologies. With the best equipment at their fingertips, they are able to handle even the toughest specifications.

Research and development is an important part of the company strategy and BSM pride themselves in their ability to provide you with modern and effective design solutions. Depending on your needs, BSM's engineers will work with you to design the right valves for your specific situation.

The company's highly experienced team of engineers and technical staff are all experts in their field; in design, materials selection, welding and testing and of course interpreting and implementing our customers' specifications. Whether it is a new application, new combination of valve types or unusual materials, BSM's experienced engineers are always on the look out for a new challenge.

Static strain, displacement and stress shown using Finite Element Analysis (FEA)

PROCHEM SOLUTIONS: Super-fast Delivery

Prochem facilitated a lightning fast delivery from BSM Valves, when one of our North West Shelf clients had an emergency requirement for special, large diameter check valves. Whilst the standard industry delivery is over 30 weeks, BSM offered delivery in just two weeks, and that is exactly what they delivered.



In-house Valve Testing

An in-house testing department at BSM Valves ensures they meet the high standards. Every valve manufactured or supplied undergoes extensive testing before being dispatched for delivery.

BSM's testing capabilities include:

- Low pressure and High pressure seat tests
- Shell (body)
- Fugitive Emission (FE)
- Cryogenic
- Ultrasonic wall thickness measurement
- Positive Material Identification (PMI)
- Liquid Dye Penetrant (LPD)
- Magnetic Particle Examination (MPE)
- High Pressure Gas Tests

BSM can also carry out non-destructive testing, including Eddy current, ultrasonic, x-ray and destructive tests like (hot)-tensile testing, impact, corrosion, micrographic, spectrometric and fire testing.



A Wide Selection of Materials

With a large stock of exotic materials and long-standing relationships with reliable suppliers, BSM can manufacture a broad selection of valves in almost any material. The company always strives to provide our customers with whatever material they require.

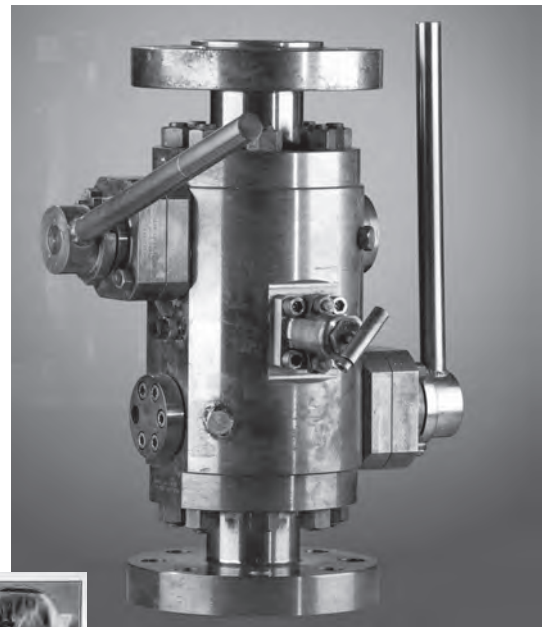
BSM Valves specialise in exotic materials. Their considerable stock consists of forged bar materials and forgings in a variety of materials as well as single valve pieces and semi-finished products.

Materials include:

Stainless steels
 Duplex / Super Duplex
 Titanium
 Nickel
 Monel®
 Incoloy®
 Zirconium

Alloy and Carbon steels
 6Mo
 Cunifer
 Feralium
 Inconel®
 Hastelloy®

Monel, Hastelloy, Inconel and Incoloy are registered trademarks.



Fire Tested 3" 900lb Full Bore Double Block and Bleed Ball Valve Trunnion Mount F51 Duplex. This valve currently in service in the Australian Oil and Gas industry.



Certification and Quality Assurance

The BSM quality system complies with ISO 9001:2000 and the Pressure Equipment Directive (PED) modules H. Lloyd's Register Quality Assurance has accredited BSM, whilst a number of their valves have type approval for fire safe operation. They also carry out regular fugitive emissions, cryogenic and temperature testing.

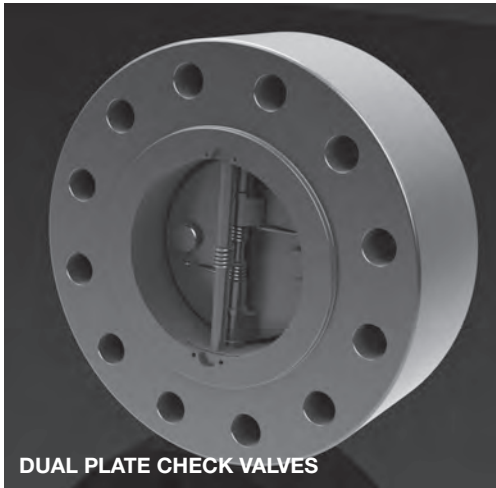
BSM Valves ensure that all of their production processes maintain international safety and quality standards, whilst their products are tested rigorously and certified for quality assurance. You can be guaranteed of excellent quality from BSM Valves.

The company's complete production process from start to finish: design, manufacture and testing, is carried out with the highest quality and safety in mind.

BSM Valves Product Selection Overview

All valves comply with European Legislation PED 97/23/EC

NOTE: Larger sizes available on request



DUAL PLATE CHECK VALVES

DUAL PLATE CHECK VALVES

Sizes 15 (1/2") – 300 (12")
ANSI Class (lbs) 150 – 4500
DIN rating (PN) 10 – 400
API 6A. 5000/10000 psi

Construction

Dual plate, single piece body
retainerless type, retainer type, spring loaded
Wafer type, solid lug, flanged, hub ends, BW ends
integral seats, renewable seats, screwed-in,
Stellited disc
Stellited seat and disc

Standards

BS 1868 ASME B16.34, ASME B16.5, BS 5352,
ISO 14313, ISO 17292, API 6A, API 594, MSS SP-44,
API 598

BALL VALVES

Sizes 15 (1/2") - 450 (18")
ANSI Class (lbs) 150 - 4500
API Rating (psi) 3000 - 10000
DIN Rating (PN) 10 - 400
Temperature range: -196 to 500°C

Construction

Soft and metal seated
Floating/trunnion mounted ball
One piece, three piece, split body
Top entry
Side entry
Wafer type

Standards

BS 5351, ISO 14313, ISO 17292, API 6A,
API 6D ASME B16.34

GLOBE VALVES

Sizes 15 (1/2") – 300 (12")
ANSI Class (lbs) 150 – 4500
API Rating (psi) 3000 – 10000
DIN Rating (PN) 10 – 400
Temperature range: -196 to 850°C

Construction

Bolted bonnet, OS&Y, back-seated
Screwed-in seal-welded bonnet, OS&Y, back-seated
Pressure seal bonnet, OS&Y, back-seated

Standards

BS 1873 API 602, ISO 14313, ISO 17292,
BS 5352 ASME B16.34, API 6A, API 6D

GATE VALVES

Sizes 15 (1/2") – 250 (10")
ANSI Class (lbs) 150 – 4500
API Rating (psi) 3000 – 10000
DIN Rating (PN) 10 – 400
Temperature range: -196 to 850°C

Construction

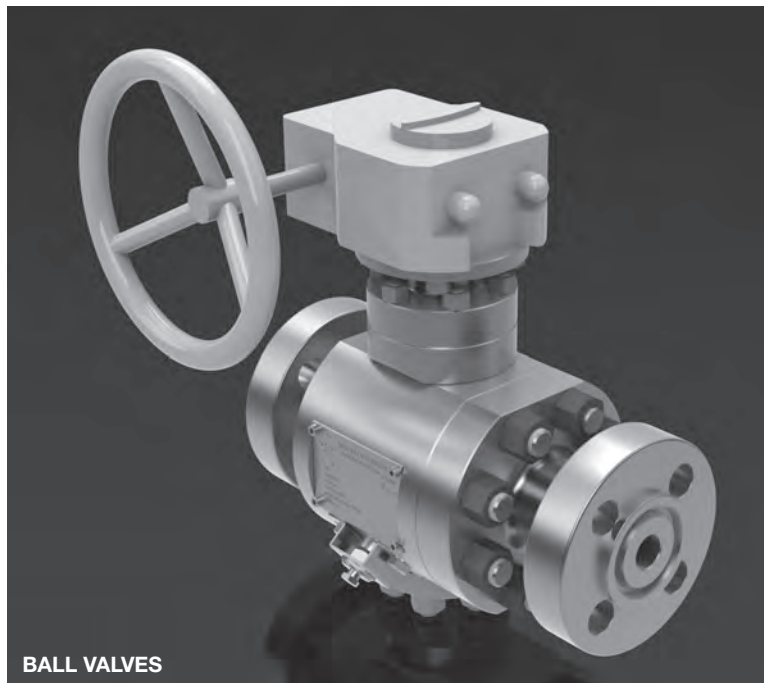
Bolted bonnet, OS&Y, back-seated
Screwed-in seal-welded bonnet, OS&Y, back-seated
Pressure seal bonnet, OS&Y, back-seated
Welded bonnet OS&Y, back-seated
Bellow sealed
Through conduit, double expanding

Standards

BS 1414 API 602, BS 5352, ASME B16.34, API 6A,
ISO 14313, ISO 17292, API 6D, API 600

Deviations

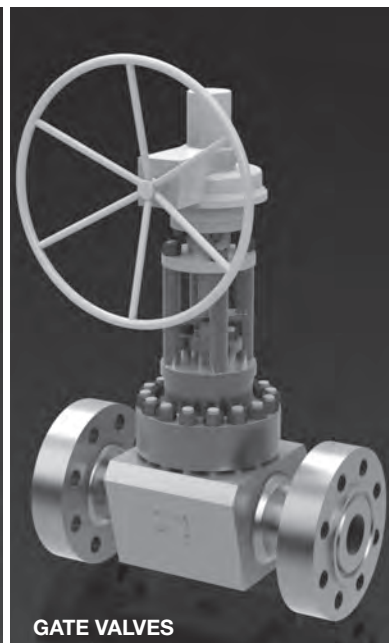
Solid flex wedge and solid wedge



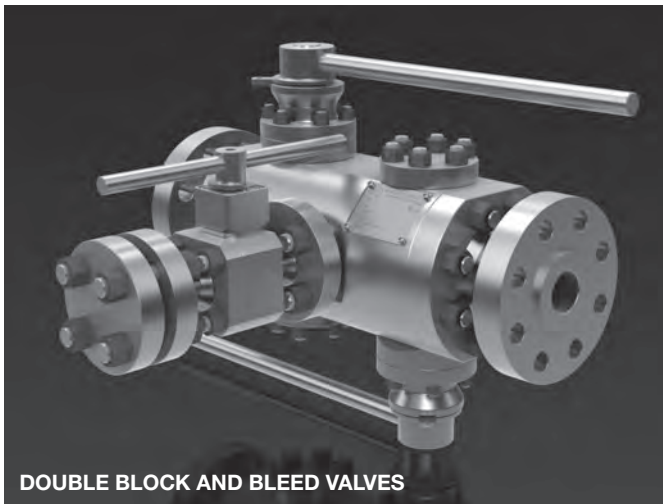
BALL VALVES



GLOBE VALVES



GATE VALVES



DOUBLE BLOCK AND BLEED VALVES

DOUBLE BLOCK AND BLEED VALVES

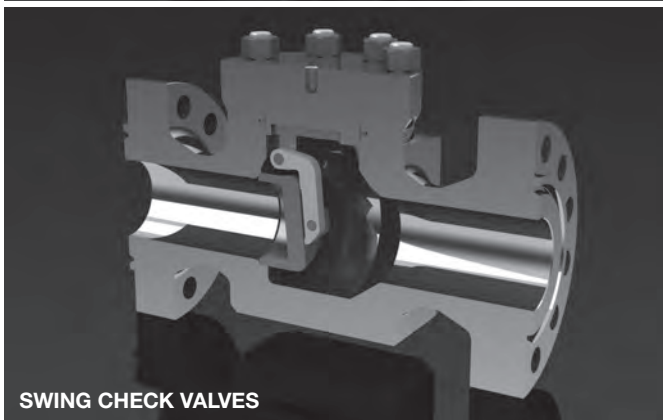
Sizes 15 (1/2") – 450 (18")
 ANSI Class (lbs) 150 – 4500
 API Rating (psi) 3000 – 10000
 DIN Rating (PN) 10 – 400
 Temperature range: -196 to 500°C

Construction

Three piece body
 Cartridge body
 Injection/sample quill
 Integral check valve

Standards

BS 5351
 API 6A
 API 6D ASME B16.34
 API 17D DIN 3840



SWING CHECK VALVES

SWING CHECK VALVES

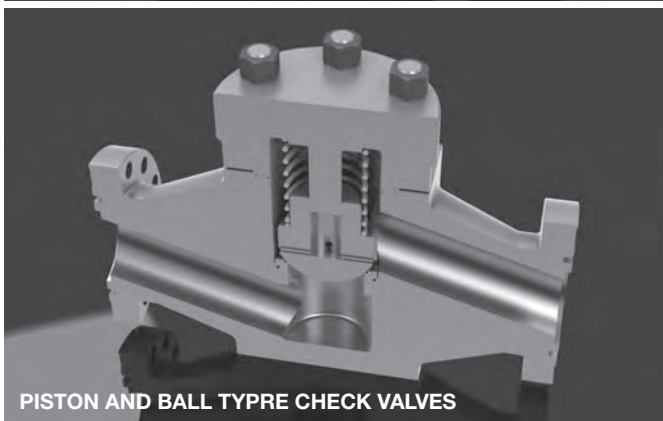
Sizes 15 (1/2") – 250 (10")
 ANSI Class (lbs) 150 – 4500
 DIN rating (PN) 10 – 400
 API 6A. 5000/10000 psi

Construction

Swing check valve, bolted cover, internal hinge construction
 Outside hinge construction
 Pressed-in seat, screwed seat,
 Sealweld seat.
 Stellite seat and disc
 Leakrate A according to EN 12266
 Part 1/2 2003 (BS 6755)

Standards

BS 1868 ASME B16.34, BS 5352,
 ISO 14313, ISO 17292, API 6A



PISTON AND BALL TYPE CHECK VALVES

PISTON AND BALL TYPE CHECK VALVES

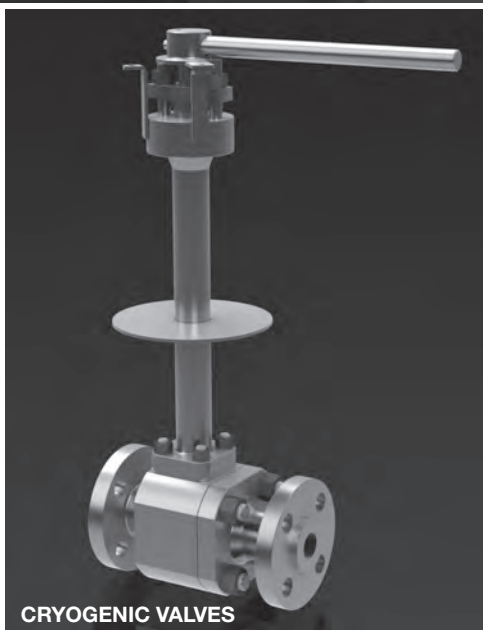
Sizes 15 (1/2") – 300 (12")
 ANSI Class (lbs) 150 – 4500
 DIN rating (PN) 10 – 400
 API 6A. 5000/10000 psi

Construction

Piston type, bolted cover, loose disc and spring loaded
 Ball type, bolted cover and spring loaded
 Non-slam type
 Renewable, screwed-in, integral seats
 Stellite disc
 Stellite seat and disc
 Leakrate A according to EN 12266 Part 1/2 2003 (BS 6755)

Standards

BS 1868 ASME B16.34, ISO 14313,
 ISO 17292, BS 5352, API 6A



CRYOGENIC VALVES

CRYOGENIC VALVES

Sizes up to 200 (8")
 ANSI Class up to 2500
 Operable/non-operable
 Temperature down to -196°C

Construction

Ball, globe, gate, swing and piston check, double block and bleed (DBB)

Standards

ISO 17292, BS 1873, ISO 15761

*All valves comply with European Legislation PED 97/23/EC
 NOTE: Larger sizes available on request*



A **psn** company

FOR FURTHER DETAILS PLEASE CONTACT YOUR LOCAL PROCHEM OFFICE

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