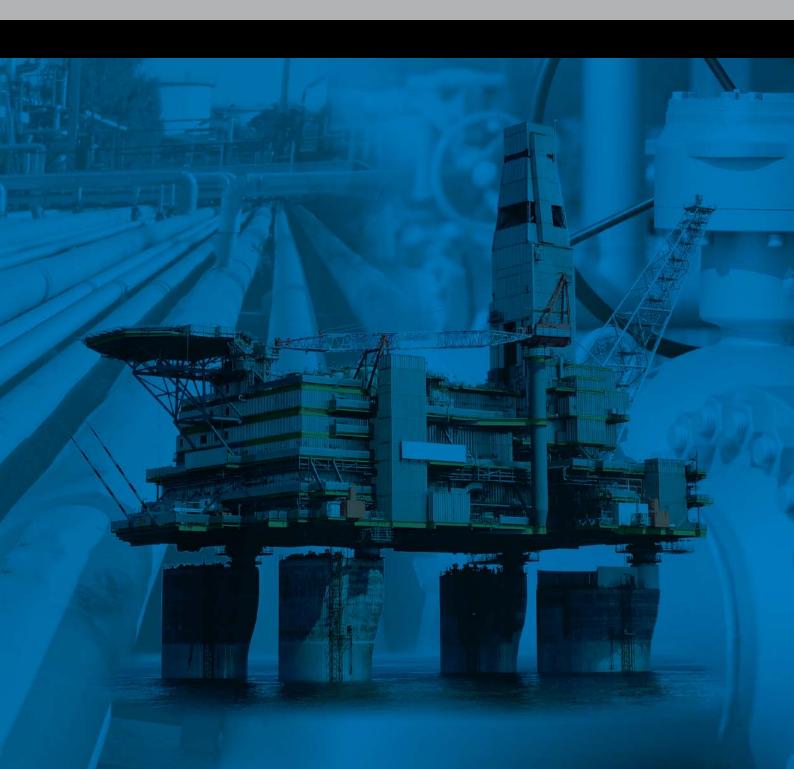


The Fast-track manufacturer for valves









Introduction



BSM Valves are specialists in the design and production of hard to obtain valves in special materials such as duplex/superduplex, titanium and nickel alloys.

All valve are custom-made and made from forgings, bar material and centrifugal castings.

Advantages of these production methods:

- no cracks of porosity
- homogeneous materials
- increased strength and wall thickness safety factor

The valves are intended for a wide range of applications, such as oil and gas, chemical, petrochemical, energy and process industry. BSM Valves designs and manufactures valves in the company's own engineering and production facilities.

By making parts of the valve in-house, we have control over product quality and lead times.

BSM Valves proposes flexible and competitive solutions.



We currently manufacture the following products:

Ball Valves
Floating Ball / Trunnion mounted / Metal Seated / Soft Seated /
Top entry / One piece body / Split body / Three piece body /
3-way / Wafer type / Subsea

■ Gate Valves Flexible Wedge / Solid Wedge / Through Conduit / Double expanding / Extended bonnet / Screwed-in seal-welded bonnet / Pressure sealed

bonnet / Bellow sealed

■ Globe Valves

Regulating type / Straight type / Y-type / Angle-type / Extended

bonnet / Screwed-in seal-welded bonnet / Pressure sealed bonnet /

Bellow sealed

Check Valves
Ball type / Piston type / Swing type / Dual Plate / Single type / Nozzle /
Wafer type / Lugged type

Double block and Bleed Valves Modular design / Ball type and Gate type

■ Monoflange process to instrument valves Integral design

■ Tailor Made Valves

Designed, calculated, produced and tested according to customer's requirements.





Delivery program



We produce valves in sizes from $\frac{1}{2}$ " up to 24" and in pressure ratings of 150lbs up to API 15.000.

Temperature ratings range from -196°C up to +550°C.

Valves can be supplied with any kind of actuator, such as electric, pneumatic and hydraulic.

Depending on the application, BSM Valves provides a wide variety of trim materials.



Materials and stand



We can supply our valves in all type of materials, for each particular service condition

A105/N

A350 LF2 - LF3

A182 F5 - F11 - F22 - F91

A182 F304/L - F316/L - F321/H

A182 F44 (6Mo)

A182 F51 (Duplex)

A182 F53 - F55 (Super Duplex)

Monel®

Inconel®

Incoloy®

Hastelloy®

Ferralium®

Nickel alloys

Alloy 20

Tantalium

Zirconium

Titanium

Cunifer

Bronze

AISI 4130 - 4140

In case of unlisted material, please contact BSM Valves.



ards

Standards and design codes

API American Petroleum Institute

ANSI - American National Standard Institute

American Society of Mechanical Engineers ASME -ASTM -American Society of Testing and Material

BSI **British Standards Institution**

International Organization for Standarization IS0

DIN **Deutsches Institut vor Normung**

NACE -National Association of Corrosion Engineers



BSM Valves are able to do all valve testing in house. Due to the rapid growth of turn over by BSM Valves the need to be able to test in house and so greatly reduce turnaround on testing became apparent which lead to the development of the BSM Valves test department. Having an in house testing department also gives us the opportunity to speed up our R&D efforts and is such used as a very effective engineering tool.

To guarantee effectiveness BSM Valves has attracted, assembled and developed the following: Trained and experienced staff - Internal training and education program. This is also available for other companies or third parties - State of the art equipment for helium sniffing - High pressure testing equipment, including a safety bunker

General safety procedures include constant air sampling and alarming when oxygen levels drop below a safe level, as is mentioned in Dutch labor laws BSM Valves, through the years, has gathered experience with API, BS, ASME, ISO (5208, 15848-1 and 2), Shell SPE, TA Luft, customer or project specific specifications and many more....

BSM Valves are able to assist in developing test specifications for specific jobs and specific projects.

Focal points in the BSM Valves test array are:

Cryogenic testing - Helium sniffer testing - High
pressure gas testing - Mechanical Endurance
testing

Besides physical valve tests BSM Valves can also perform: PMI (Positive Material Identification) - LDE (Liquid Dye-penetrant Examination) - MPE (Magnetic Particle Examination) - Hardness measurement (Portable) - Surface Roughness measurements - Coating thickness measurements



Test Department



Hydraulic testing



Cryogenic tested valve Fire Safe test



Sniffer test and booster pump



Cryogenic testing



Quality assurance



BSM Valves is totally committed to quality and an optimal integration of all departments.

With the Quality Assurance and Quality Control procedures we follow, all our products are designed, manufactured and delivered in accordance with customer requirements

Research and development

Research is an important part of our company strategy and we pride ourselves in our ability to provide our customers with modern and effective design solutions.

With customer requirements changing frequently, we and our customers strongly benefit from our expertise.

As a result, we develop new products and make product improvements.





EC CERTIFICATE OF CONFORMITY

lagement System of:

x III, Module H of the Pressure le H of the Pressure Equipment

or the products shown below:

quality system in accordance

y Identification Number in and Regulations in relation

and Strainers

In accordance with the requirements of the Pressure Equipment Regulations Directive 97/23/EC and the Precent quipment Regulations 001 and SI 2002 No. 120



CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

BSM Valves B.V. Breda, The Netherlands

has been approved by Lloyd's Register Quality to the following Quality Managem

FIRE TEST QUALIFICATION CERTIFICATE ves

Double Block & Bleed Valve (Needle Valve not tested) 1" Full Bore

600

Item

Size

No Data INS 531803 er Verification

