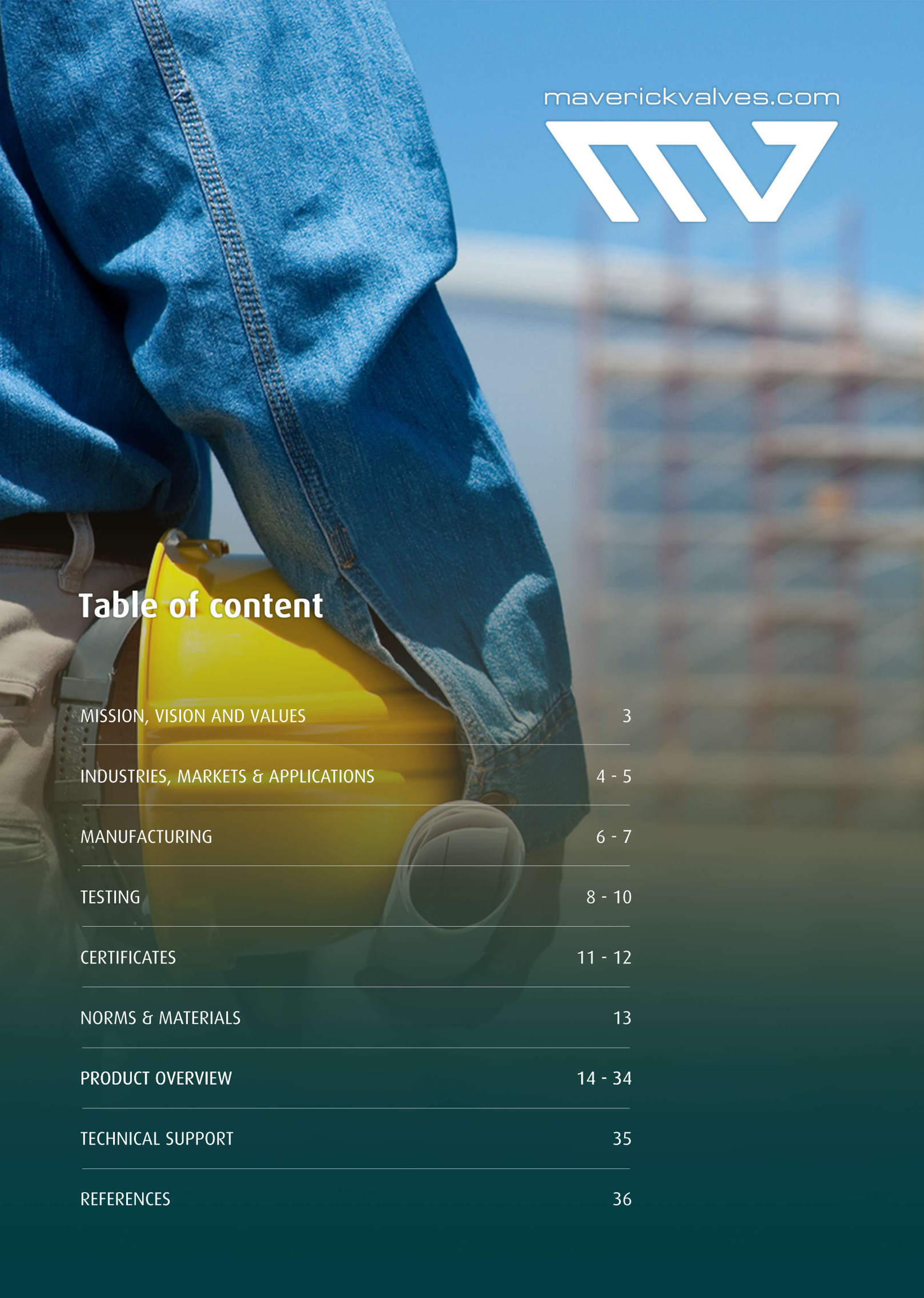
ADDRESS

CONTACT INFO

SOCIAL



maverickvalves.com

Table of content

Mission, Vision & Value

Mission

We provide the needs in the valve industry, by manufacturing and supplying valves in all types. We offer standard valves and custom made valves, all in good quality, to deliver only reliable products to our customers and have a large stock of valves. Maverick Valves exceeds client expectations and provides total care for our valuable customers. We work with dedication and excellence to meet the demands in the (Petro) Chemical, Offshore and Oil and Gas Industries.

Vision

Maverick Valves wants to be the company in the valve industry where people know exactly who we are, what we do and most important what we can do. We move along with the world, the industries, and the people. A high priority for us is that we will book continuous successes driven by our values and keep the focus on technical innovations and (brand) development while we remain committed and dedicated to our customers, value good quality and ensure we continuously achieve for excellence.

Value

Dedication, Flexibility, Innovation, Reliability, Involvement, Discipline

Industries & Applications

INDUSTRIES

- Oil & Gas
- Exploration & Production
- Pipelines & Processing Plants
- Refining & Petrochemical
- Onshore Receiving Terminals
- Metering and Gate Stations
- FPSO & Shipbuilding
- LNG
- Power

Our valves are suitable for onshore, offshore and subsea installations for upstream, midstream or downstream for both standard and special services and applications.

APPLICATIONS

- Low Temperature/ Cryogenic Down to -196°c
- High Temperature +220 Deg to 500 Deg C.
- Wellheads and Christmas Trees
- Blow-down
- ESD
- Riser
- Isolation
- Hipps
- Control
- Subsea
- Sequencing Service
- Abrasive Fluids
- Manifolds / Flowlines

Applications

Offshore
Liquified natural gas
Powergeneration
Refining
Midstream

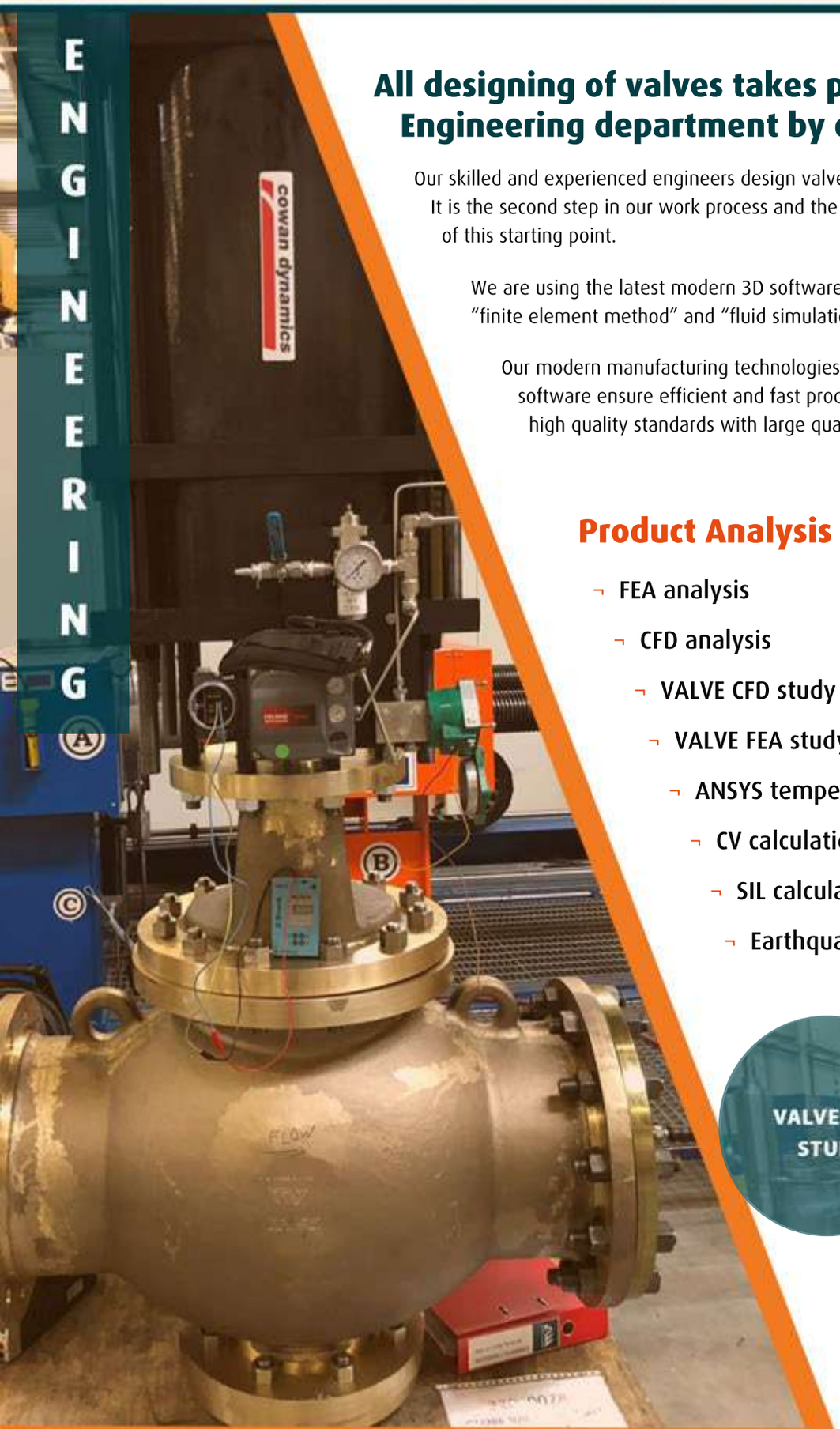
Manufacturing

Using the latest techniques, advanced technology and specialized equipment.

Maverick Valves Manufacturing HQ BV is an independent company and sister company of Maverick Valves (MV Nederland BV) and completely specialized in the in-house manufacturing of standard and custom made valves. This means that our state of the art production facility occupies not with sales or commercial activities but with the Engineering, development, production, and testing of high-quality valves.

We produce special valves in various materials, such as high alloyed steels and titanium which are designed and edited by our team of specialists. All material combinations can easily be adapted. Our valves are made on demand according to client's specifications.

Engineering
Facilities & Operations
Project Management
Warehouse & Assembly
and more...



All designing of valves takes place at our Engineering department by certified engineers.

Our skilled and experienced engineers design valves according to client's specifications. It is the second step in our work process and the entire production process is at the service of this starting point.

We are using the latest modern 3D software which is supported by "finite element method" and "fluid simulation" software.

Our modern manufacturing technologies, quality management methods and 3D software ensure efficient and fast production processes resulting in consistently high quality standards with large quantities of valves.

Product Analysis

- FEA analysis
- CFD analysis
- VALVE CFD study
- VALVE FEA study
- ANSYS temperature simulation
- CV calculation
- SIL calculation
- Earthquake resistaNCE DESIGN

MAVERICK VALVES
Pressure & Functional Testing

Maverick Valves has its own in-house testing department, all inspections and tests are performed by qualified and experienced personnel in line with project specifications and data sheets in order to satisfy our Customers and their Commitments expectations.

A Quality Control Plan (QCP) and an Inspection and Test Plan (ITP) appropriate to the scope of supply can be issued for Client approval before starting of production activities.

All Test Are continuously monitored by our internal Quality Control department to offer a high-performance product and a Customized Service in line with the most important International Standards or in accordance to project specific requirements and Customer expectations.

Non-Destructive Testing (NDT)

The following tests can be performed by II level qualified personnel in accordance with EN473-ISO9712 / SNT-TC-1A:

- **VT (Visual testing)**
- **UT (Ultrasonic testing)**
- **PT (Penetrant testing)**
- **MT (Magnetic particle testing by Joke)**
- **PMI (Positive Material Identification)**
- **Hardness test**
- **Ferrite test**

MAVERICK VALVES
Testing Processes

Hydrostatic Testing

Is the most common method employed for testing valves using a test fluid, to observe whether there is a pressure loss in the valve.

Low pressure gas seat testing is usually performed with air or inert gas and it might be used to detect leaks not observed with standard hydrostatic testing. Cryogenic and low temperature valves are often pneumatically tested as hydrostatic testing is not recommended for such applications.

Leak rates as per ISO 5208:
Soft seat: RATE A
Metal seat or PMSS: RATE B, C, D

High Pressure & Cryogenic Gas Testing

High pressure gas testing has potential hazards and appropriate safety precautions are taken during gas testing performance:

1. Testing area has a suitable bunker type protection.
2. Equipped with control panels and cameras to allow the operator to perform the test in safety conditions.

Fugitive Emission Testing

1. Production test at ambient temperature in accordance to ISO 15848-2 or Shell SPE 77/312.
2. Type test approval in accordance with ISO 15848-1 or Shell 77/300

Vacuum Testing

Maverick has a dedicated area and vacuum pumps to perform Vacuum testing, a specific leak testing that simulates operative conditions as described above, internal pressure variation is then detected according to customer specific requirements or according to the applicable standard (i.e. ASME V art. 10).

Fire Testing

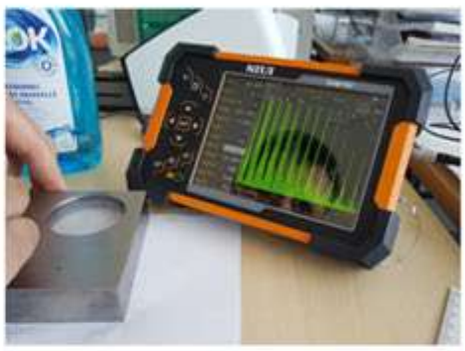
These tests determine the resistance of re-safe-valves to a burn under controlled conditions as defined in common industry standards like: ISO 10497, API 607, 6FA, 6FB, 6FD.

Test report and certification After each test a detailed test report will be provided including a Fire Safe Certificate when the tested valve meets all requirements. In this certificate all other qualified valve classes and sizes are specified.

MAVERICK VALVES
Testing Processes

DPI | Dye Penetrant Inspection

Also called Liquid Penetrant Inspection (LPI) or Penetrant Testing (PT), is a widely applied and low-cost inspection method used to locate surface-breaking defects in all non-porous materials (metals, plastics, or ceramics). The penetrant may be applied to all non-ferrous materials, but for inspection of ferrous components magnetic-particle inspection is preferred for its subsurface detection capability. LPI is used to detect casting and forging defects, cracks, and leaks in new products, and fatigue cracks on in-service component.



UT | Ultrasonic testing

Ultrasonic testing is often performed on steel and other metals and alloys, though it can also be used on concrete, wood and composites. It is used in many industries including steel andaluminium construction, metallurgy, manufacturing, aerospace and automotive industry.

VT | Visual testing

Is one of the most widely used test method to investigate the surface aspect and observe potential discontinuities or failures, which should be detected under proper lighting conditions, monitored by an instrument able to measure the light intensity, the light meter.

PMI | Positive Material Identification

Is the elemental identification and quantitative determination in percentage of metallic alloys, without regard toform, size and shape, performed by highly sophisticated portable X-Ray Fluorescence (XRF) Spectrometer in our possession.

Ferrite testing

Is the ferrite content analysis performed on austenitic stainless steel and duplex valve components to allow eval-uation of material corrosion susceptibility, mechanical properties, service suitability and reliability. It can be per-formed by portable digital Feritscope as, for example, our Fisher FMP30, for rapid and accurate analysis.

Certificates

CNR Certificate

ISO 9001

CU TR 010

Marking 3.2

Achilles FPAL

CU TR 012

PED Module H

ISO 3834-2

CU TR 032

Certificates

API-6DSS-DD82

API 609 0185

API 600 0334

API 6A 2152

API 6D 1896

JSRS

Normative References

Our valves can be designed, manufactured and tested according the following international standards:

American Petroleum Institute
(API): API 6A, API 6D, API 6DSS, API 607, API 598, API 17D, API 600

American Society of Mechanical Engineers
(ASME): ASME B16.5, ASME B16.10, ASME B16.11, ASME B16.25, ASME B16.34, ASME B16.47, ASME B31.3, ASME B31.4, ASME B31.8, ASME IX, ASME VIII (divisions 1 & 2)

Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.
(MSS): MSS SP25, MSS SP44, MSS SP45, MSS SP53, MSS SP54, MSS SP55, MSS SP6, MSS SP61, MSS SP72, MSS SP82, MSS SP9

British Standards Institute (BS):
BS 1503, BS 1504, BS 1560, BS 2080, BS 4504, BS 5146, BS 5351, BS 6364, BS 6755, EN 558, EN1503, EN1626, EN1983, EN5211, EN12266, EN12516, EN12567, EN12570, EN12627, EN12982

International Organization for Standardization (ISO):
ISO 5208, ISO 10423, ISO 10497, ISO 14313, ISO 14723, ISO 15156-3, ISO 15607, ISO 15609, ISO 15614-7, ISO 15848 (parts 1 & 2), ISO 17292

American Society for Testing and Materials (ASTM):
ASTM E94, ASTM E142, ASTM E165, ASTM E280, ASTM E446, ASTM 562, ASTM E709, ASTM G48

National Association of Corrosion Engineers-Corrosion Resistant (NACE):
NACE MR0175, NACE MR0103, NACE TM0187, NACE TM0284

Non-standard Valves according customer request/specification

Materials

ALLOY | C276 321H NICKEL ALLOY 904L INCOLOY | 625 (SUPER) DUPLEX FERRALIUM | TITANIUM GR3 254 SMO ALLOY 20 INCOLOY | 800 ALLOY 59 MONEL | 400 TITANIUM GR5 INCOLOY | 600 HASTELLOY | B3 TITANIUM GR2 ZIRCONIUM | 702 347H INCOLOY | 825 INCOLOY | 625 (SUPER) DUPLEX FERRALIUM | TITANIUM GR3 HASTELLOY | C276 321H NICKEL ALLOY | 904L INCOLOY 625 (SUPER) DUPLEX FERRALIUM | TITANIUM GR3 254 SMO | ALLOY 20 INCOLOY | 800 ALLOY 59 MONEL | 400 TITANIUM GR5 INCOLOY | 600 HASTELLOY | B3 TITANIUM GR2 ZIRCONIUM | 702 HASTELLOY | C276 321H | NICKEL ALLOY 904L INCOLOY 625 (SUPER) DUPLEX FERRALIUM | TITANIUM GR3 254 SMO ALLOY 20 INCOLOY | 800 ALLOY 59 MONEL | 400 TITANIUM GR5 INCOLOY | 600 HASTELLOY | B3 TITANIUM GR2 ZIRCONIUM | 702 347H | INCOLOY | 825 INCOLOY | 625 (SUPER) DUPLEX FERRALIUM | TITANIUM GR3 | HASTELLOY | C276 321H NICKEL ALLOY 904L INCOLOY | 625 (SUPER) DUPLEX | FERRALIUM | TITANIUM GR3 254 SMO ALLOY 20

MAVERICK VALVES
Manufacturing

We manufacture, supply and hold stock

Maverick Valves Manufacturing HQ BV is specialized in the manufacturing and delivery of standard and custommade valves in high alloyed steels and titanium.

We manufacture and deliver specially designed valves according to client speci cations in various grades of high alloy materials. Sizes range from ½" to 56" (DN15-DN1400), class rating from 150lbs to 4500lbs (PN16-PN420)

If you need custom made valves our engineers are any moment ready to help and discuss your requirements and find a solution.

For urgent deliveries, we have excellent possibilities to directly supply valves from our vast valve stock, which provide our customers with short delivery times within 24 hours if requested. The valves we have in stock are ½" to 24" and class rating from 150lbs to 1500lbs. For specific product information regarding our valves, please refer to our product overview on the left.

Mud Valve

Casting Valve

Check Valve

Valves

- Ball Valves
- Butterfly Valves
- Ceramic Valves
- Check Valves
- Control Valves
- Choke Valves
- Gate Valves
- Globe Valves

MAVERICK VALVES
Manufacturing

- BUTTERFLY VALVES
- BALL VALVES
- CHECK VALVES
- SAFETY RELIEF VALVES
- API6A VALVES & FITTINGS
- CERAMIC VALVES
- CHOKE VALVES
- CONTROL VALVES
- CRYOGENIC VALVES
- PLUG VALVES
- GATE VALVES
- GLOBE VALVES
- KNIFE GATE VALVES
- MULTI SELECTOR VALVES
- RISING STEM BALL VALVES
- PIG VALVES
- SPECIAL SERVICE VALVES

BUTTERFLY VALVES
Maverick Valves Manufacturing

Maverick Valves offers a complete butterfly valve line to provide optimal performance MVM's complete range of butterfly valves extends from general purpose to severe service models used for isolation and throttling applications.

It includes resilient seated valves for long service life and bubble tight shutoff; high performance valves capable of temperatures from cryogenic to as high as 815°C and pressures to ASME Class 1500 (PN 260); double flanged valves in sizes up to NPS 72" (DN 1800) and lined valves suitable for highly corrosive liquids, gases and slurries.

With a robust construction and a high cycle life, these valves will lower your total cost of ownership.

For a normal Butterfly, a Dual Offset, Triple offset or a Cryogenic BF, just try Maverick Valves.

Variants

- **Double Offset**
- **Triple Offset**
- **Triple Offset Top Entry**

Size:	NPS 2"- 72"
Pressure:	Class 150 - 2500
Structure Type:	Flanged, Lug, Water, Long and short pattern, with inspection port
Face to Face Std:	BS 5155, API 609, MSS SP-67, MSS SP-68
Test Standard:	ISO5208, BS 6755, API 598

DOUBLE OFFSET

TRIPLE OFFSET

TRIPLE OFFSET TOP ENTRY

BALL VALVES

Maverick Valves Manufacturing

Variants

- Trunnion ball valves side entry split body
- Trunnion ball valves fully welded body
- Trunnion ball valves side entry modular body (dbb)
- Trunnion ball valve top entry
- Cage ball control valve model lowcav / lownoise
- Trunnion ball valve multiple way
- Floating ball valves
- Pig launcher ball valves

Size:	Two or Three piece bolted body ½" - 56"
Pressure:	Class 150 -2500
Port:	Reduced bore, full bore or fully piggables
Stem retention:	Anti blow-out stem
Leakage rate:	ISO 5208 rate A soft seated, rate D metal seated
Pressure relief:	Automatic cavity relief to prevent overpressure in body cavity (self-relieving seats)
Drain	Drilled and threaded connections for all sizes
Stem extension:	Not foreseen for this model

TRUNNION BALL VALVE MULTIPLE WAY

TRUNNION BALL VALVE SIDE ENTRY

TRUNNION BALL VALVE FULLY WELDED

CHECK VALVES
Maverick Valves Manufacturing

Our Check Valves are offered in various versions to meet the application specifications.

MVM's Check Valve versions include swing check valves, piston check valves, dual plate check valves, Axial check valves, and tilting disc check valves.

Check valves are designed to meet requirements of ANSI B16.34, BS-1868, ANSI B16.5, ANSI B16.10, API 602, API 6D and/or API 6A.

Variants

- **Swing Check Valve**
- **Tilting Disc Check Valve**
- **Dual Plate Check Valve**
- **Axial Flow Check Valve**

Size:	NPS 1/2"- 36" and from 1 13/16" to 13 5/8"
Pressure:	Class 150 – 2500 and from 2000Psi to 15000Psi
Structure Type:	Regular Pattern, Pressure Sealed Pattern, Damping Pattern , Full bore
Face to Face Std:	API 6D, API 6A, ASME B16.10, DIN 3202
Test Standard:	IISO5208, API 6D, API 6DSS, API6A, API 598

SWING CHECK VALVE

DUAL PLATE CHECK VALVE

AXIAL FLOW CHECK VALVE

SAFETY RELIEF VALVES
Maverick Valves Manufacturing

Maverick Valves manufactures a full range of full nozzle, full lift safety relief valves, including spring loaded safety valves and pilot operated valves.

A comprehensive range of high performance pilot operated safety valves and spring loaded safety relief valves to protect plant and equipment by relieving excess pressure.

MV-SPLSV Series spring loaded

full nozzle spring loaded safety relief valve with a full lift and full nozzle to safely relieve excess pressure in a variety of process vessels, including pumps, pipes, tanks, calorifiers and gas and oil separators. The MV-SPLSV Series conforms to API526 pressure/temperature and dimensions.

MV-POSV 000 pilot operated

Self contained pilot operated safety relief valves that independently control valve opening and closing without the need for additional energy sources. MV-POSV-2000 valves have a unique full nozzle design and conform to API 526 pressure/temperature ranges and dimensions and are also available as pop and modulating pilots to suit both gas and liquid duties.

API 6A VALVES & FITTINGS

Maverick Valves Manufacturing

- Check Valves
- Mud Valves
- Spools & Fitting
- Choke Valves
- Gate Valves MVTCD
- Gate Valves MVTFC01
- Tubing Head/Adapter
- Tubing Header

Maverick manufactures a complete line of quality API 6A valves and can provide the exact valve and actuators to meet the most demanding application requirements.

Maverick API 6A Valve design is developed using the latest software based analysis tools. At the design stage, all projects are analysed using 3D solid modeling tools. Benefits include reduction of development time and costs, improved product quality, and ability to solve field problems for customers.

Product flexibility and accuracy is assured.

CERAMIC VALVES

Maverick Valves Manufacturing

MV has a professional R&O technical team, who has rich experience in design, production and application of ceramic Valves, V port ceramic control ball valve, ceramic butterfly valve, ceramic segment ball valve, ceramic double disc gate valve, ceramic knife gate valve, ceramic wedge gate valve, ceramic globe valve and ceramic check valve, ceramic pipe fitting and so on. Meanwhile MV can offer professional anti-abrasive, anti-corrosive and high-temperature fluid control solutions.

MV ceramic Valves and pipefitting have been exported to North America, South America, Europe, Middle East, South-east Asia, etc. Product application field covers coal-fired power plant, steel mill, metallurgy, minlng, coal-chemical industry, polysilicon, paper & pulp, lithium battey, petrochemical and so on.

Quality is the life of enterprise! MV always put quality at first place and adhere to technical innovation. Welcome all new and old customers to continue to cooperate with us for win-win purpose.

Variants

- **CBUT - Butterfly Valves**
- **CDGV - Double Gate Valves**
- **Ceramic Fittings and Spools**
- **CGGCV - Gate, Globe, Check**
- **CKVG - Knife Gate Valves**
- **CSBV - Segment Ball Valve**
- **MCBV - Ceramic Ball Valves**
- **CDGV - Double Gate Valves**
- **MCEBV - Casted Ball Valvess**

Size:	NPS 2"- 72"
Pressure:	Class 150 – 2500
Structure Type:	Flanged, Lug, Wafer, Long and short pattern, with inspection port
Face to Face Std:	BS 5155, API 609, MSS SP-67, MSS SP-68
Test Standard:	ISO5208, BS 6755, API 598

CBUT - BUTTERFLY VALVES

CKVG - KNIFE GATE VALVES

MCBV - CERAMIC BALL VALVES

CHOKE VALVES
Maverick Valves Manufacturing

Choke Valve Technical Summary

The Maverick Valve External Sleeve Choke type MVES is designed to provide precise flow control throughout its entire operating range. This choke has a cage and an external sleeve trim and is suitable for single or multiphase liquid and gas service. Typical applications include Christmas trees, manifold, water injection and gas lift. The standard flow characteristic is equal percentage, but upon request can be supplied also the linear characteristic. These valves can be easily converted from manual to actuated valves using an adapter flange and electric, hydraulic & stepping actuator etc.

- Pressure rating up to 15000 psi
- Temperature range from -50°F to 350°F (-46°C to 177°C)
- Trim sizes from 64/64" to 512/64" (1" to 8") with controllable Cv from 1 up to 1000.
- Meet or exceed API 6A / 17D, NACE MR-01-75/ ISO 15156 and NORSOK requirements.

Standard Features

The Cage with external sleeve design configuration directs flow through various sized ports opposite one another, forcing the flow to impinge upon itself within the nozzle, thus dissipating the fluid energy onto itself. With this design the turbulence and jetting are dissipated before flow enters the outlet, thus eliminating the typical problem of wear in the choke outlet. The Cage is the hardest component of the valve and typically is made from various grades of tungsten carbide. However, for less severe applications, other materials are available.

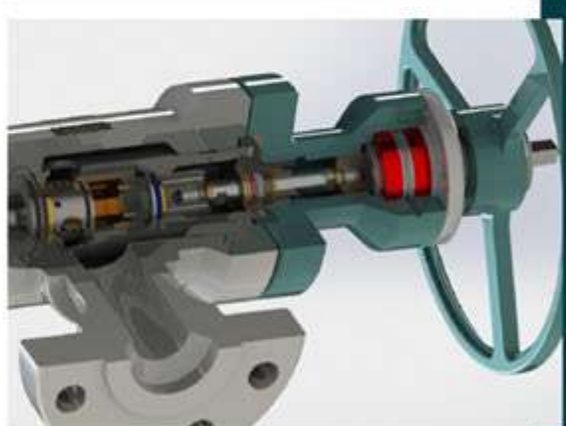
Trim Design Features

Available of both plug and cage and external sleeve trims provides maximum flexibility and lower cost over the life of the field.

- Trim ports geometry design reduces wear, tear and noise, maximizes flow and controls pressure throughout the operation range.
- Pressure balance stem and thrust bearing reduce torque, allowing minimized stem loads and actuation requirements.
- Thickness section of tungsten carbide resistance and reduced wear
- Robust metal outer cage protects internal components from slugged flow or impact from entrained solids

ROTATING DISC

CAGE



PLUG

CONTROL VALVES
Maverick Valves Manufacturing

Maverick Valves manufactures high-quality control valves, with a focus on Globe Valves, Eccentric Plug Valves, and High-Performance Butterfly Valves.

Maverick products have found a multitude of niches to fill in the world of industrial control. While the skilled crafting traditions of the past determine their quality, Maverick Valves are fully equipped with the technology of today and tomorrow.

CRYOGENIC VALVES
Maverick Valves Manufacturing

Variants

- Ball Valve
- Check Valve
- Gate Valve
- Globe Valve
- Triple Offset Butterfly Valve

LIQUEFIED NATURAL GAS

LNG is exactly what it says: the liquid form of natural gas. The process of liquefying is performed to reduce the volume for purposes of transporting the fuel: LNG reduces volume by 600 times, making it much more economical to transport.

CRYOGENIC APPLICATIONS

When it comes to temperatures below -162° C the industry talks about cryogenic applications. We find these temperatures in different applications like air separation plants, chemical plants or LNG plants.

MATERIALS

The cooperation with primary quality European suppliers of gaskets and seals allow to keep FE levels to the highest standards, with a wide range of certification for all gasketing material (SHELL MESC 85-103, 85+200, 85-203, 85-204, API 622, LI TP PVA 001, ISO 15848): For cryogenic service the material selection is ranging basically between austenitic stainless steel up to CRAs. Refer to our catalogue for a wide material listing and related allowable wotking pressure

CRYOGENIC-BALL VALVES

CRYOGENIC-CHECK VALVES

CRYOGENIC-GLOBE VALVES

PLUG VALVES

Maverick Valves Manufacturing

A Plug Valve is a quarter-turn rotational motion Valve that use a tapered or cylindrical plug to stop or start flow. In the open position, the plug-passage is in one line with the inlet and outlet ports of the Valve body. If the plug 90° is rotated from the open position, the solid part of the plug blocks the port and stops flow.
Plug valves are similar to Ball valves in operation.

Types of Plug Valves

Plug valves are available in a non-lubricated or lubricated design and with several styles of port openings. The port in the tapered plug is generally rectangular, but they are also available with round ports and diamond ports.

Variants

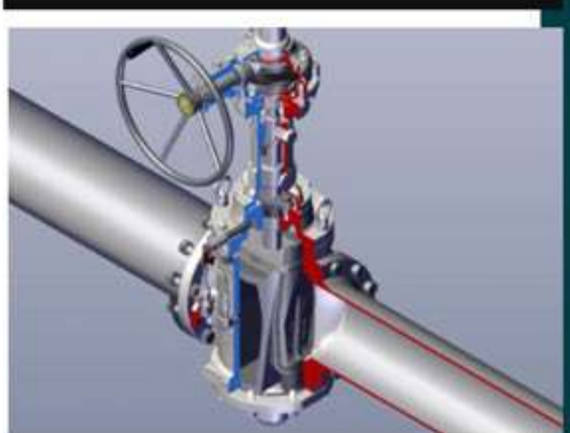
- **Inverted Lubricated Plug Valve**
- **Dual Expanding Plug Valve**

Size:	NPS 1/2" 32" and from 1 13/16" to 9"
Pressure:	Class 150 – 2500 and from 2000Psi to 15000 Psi
Structure Type:	Short Pattern, Regular Pattern, Venturi Pattern, Full Bore Pattern
Face to Face Std:	API 6A
Test Standard:	ISO5208, API 6D, API 598

INVERTED LUBRICATED PLUG VALVE

DUAL EXPANDING PLUG VALVE

PLUG VALVE



GATE VALVES
Maverick Valves Manufacturing

A gate valve is a bi-directional valve, as the fluid may flow in either direction. The installation of this type of valve creates a modest pressure drop in the pipeline, lower than globe valves. Gate valves in general have forged bodies for bore sizes below 2 inches (API 602/BS 5352), and cast bodies for larger sizes (API 600, API 603, API 6D).

Maverick Valves can offer also the larger sizes in Forged execution if required.

Variants

- **Gate Valve**
- **Wedge Gate Valve**
- **Fabricated through conduit Gate Valve**

Size:	NPS 1/2"-36" and from 1 13/16" to 9"
Pressure:	Class 150 – 2500 and from 2000 Psi to 15000 Psi
Structure Type:	Parallel slide, expanding, dual expanding, slab, through condiut, bolted bonnet, pressure seal
Face to Face Std:	API 6D, API 6A, ASME B16.10,
Test Standard:	ISO5208, API 598, API 6D, API 6A

GATE VALVE

WEDGE GATE VALVE

THROUGH CONDUIT GATE VALVE

GLOBE VALVES
Maverick Valves Manufacturing

This type of valve is used to throttle (regulate) the fluid flow. Globe valves can also shut off the flow, but for this function, gate valves are preferred. A globe valve creates a pressure drop in the pipeline, as the fluid has to pass through a non-linear passageway. Nonetheless, a large number of variations exist, depending on the following factors:

- body material: cast (BS 1873) and forged (API 602/BS 5352)
- bonnet design: standard or pressure seal type (for high-pressure applications)
- bonnet to body connection: bolted or welded
- valve end connections type: flanged (as shown in the image), buttweld, socket weld/threaded (forged bodies)
- disc type
- stem type (rising/non-rising)
- seal type: conical or flat
- specification: BS, API, EN
- type of actuation: manual, with a gearbox, with an actuator

Variants

- **Globe Valve**
- **Globe Dual Seat**
- **Control Globe Valve**

Size:	NPS 1/2"- 36"
Pressure:	Class 150 – 2500
Structure Type:	S-Pattern, Oval Pattern, Throttle Pattern, Y pattern, bolted bonnet, pressure seal
Face to Face Std:	ASME B16.10, DIN 3202, BS2080
Test Standard:	ISO5208, BS 6755

GLOBE VALVE

GLOBE DUAL SEAT

CONTROL GLOBE VALVE

KNIFE GATE VALVES
Maverick Valves Manufacturing

Maverick Valves Knife gate valves are specially designed and manufactured according to MSS SP 81, MSS SP148 standards as well as customized design to meet the worst working conditions in Oil & Gas, Chemical, Water and sewage treatment plant, Metal and mining, Paper and pulp to handle very critical medias and abrasive slurries.

RANGE OF MATERIAL OF CONSTRUCTION

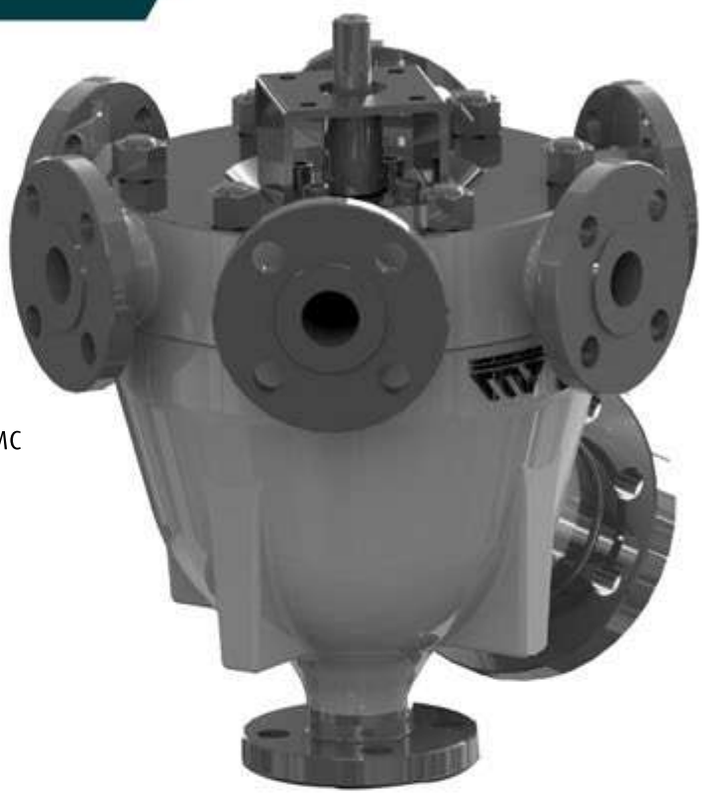
- CAST IRON
- DUCTILE IRON
- WCB
- CF8
- CF8M

RANGE OF SEAT MATERIAL

- EPDM
- VITON
- NATURAL RUBBER
- PTFE
- CFT

MULTI SELECTOR VALVES

Maverick Valves Manufacturing



- Soft seat and metal to metal
- Up to 10000PSi
- Design as per B16.34
- Available in WCC, LCC, CF3M, CF8M, 4A, 5A, 6A, CW6MC
- Single piston effect or double piston effect
- Custom made according customer spec.

A ManiFlow Selector Valve (MSV) is, in essence, a pipe manifold with an internal selector tube, giving the operator the ability to select and test a single flow line at a time, while collectively outputting the remaining flow lines through a single production outlet.

The selected flow line medium is then diverted within the MSV to a test pipe, where it is commonly analysed at a remote facility. Once testing of the initially selected production line is finished, the operator can then select and test another production inlet, until the periodic testing is complete.

Typically designed for on-shore and off-shore oil field production, each MSV is designed to consolidate upwards of 100+ pieces of manually-operated piping equipment and meters of piping into a single valve. This solution offers a very big advantage, especially considering the overhead costs and manual labor associated with the operation and maintenance of all that equipment.

RISING STEM BALL VALVES
Maverick Valves Manufacturing

Maverick Valves non-contact Rising Stem Ball Valves have a single-seat non-friction design that is able to operate and has proven an exceptional long life span under extreme conditions.

Friction free opening and closing/Low maintenance
Specially designed for Molecular Sieve application it can be used effectively in dirty services. The ball movement off the seats allows a cleaning action of the ball surface thus eliminating the friction during opening/closing actions and allowing for reduced torque/thrust during operation

Unique designed helix stem
The helix shaped stem design ensures absolutely no stem rotation

Single seat design
Optimal performance in high temperature service and services with continuously fluctuating temperatures and pressures (thermal expansion). No problems of trapped pressure between seals

Metal to metal sealing
Suitable for almost all temperatures. Fire safe design.
Increased lifetime of the valve.

Advantage
- Helix stem ensures low maintenance due to non-contact, friction free opening and closing, which is excellent for frequent cycling.
- Anti-blowout stem design
- Backseat allows adjustable stem packing while valve is in service
- Self-cleaning of sealing area due to immediate flow before rotation.
- No rubbing/friction between sealing surfaces which is the primary cause of valve failure
- Standard design with Outside Screw and Yoke for easy gland packing adjustment.
- Top-entry design for in-line service or maintenance.
- Heavy wall thickness according API 6D/API600 provides extra corrosion allowance to reduce wear and extend the valve lifetime
- Extended lifetime due to the selection of high quality materials which help prevent against wear and corrosion.
- Corrosion and wear resistant materials (Stellite 6) are used as closure members (ball/seat)
- Mechanically energized sealing.
- No weak points to obtain sealing like: - springs, - soft seals, - coupling cam constructions with pins, lubricated seals.

Options
Bellow seal construction for critical and lethal services
Soft seal designed seat
Extended stem for underground installed valves
Extended bonnet for cryogenic or low temperature service

RSBV specifications
Design: API 6D
Range: Size 2" -24"
Pressure rating: ANSI Class 150-2500
Face To Face: ANSI B16.10, manufacturer standard or special customer request
Valve bore: Full bore or reduced bore
Flow direction: preferred flow towards seat. Bi direction at request

Actuation:
Hand wheel/gearbox
Electrical actuation
Pneumatic actuators

CLOSED POSITION

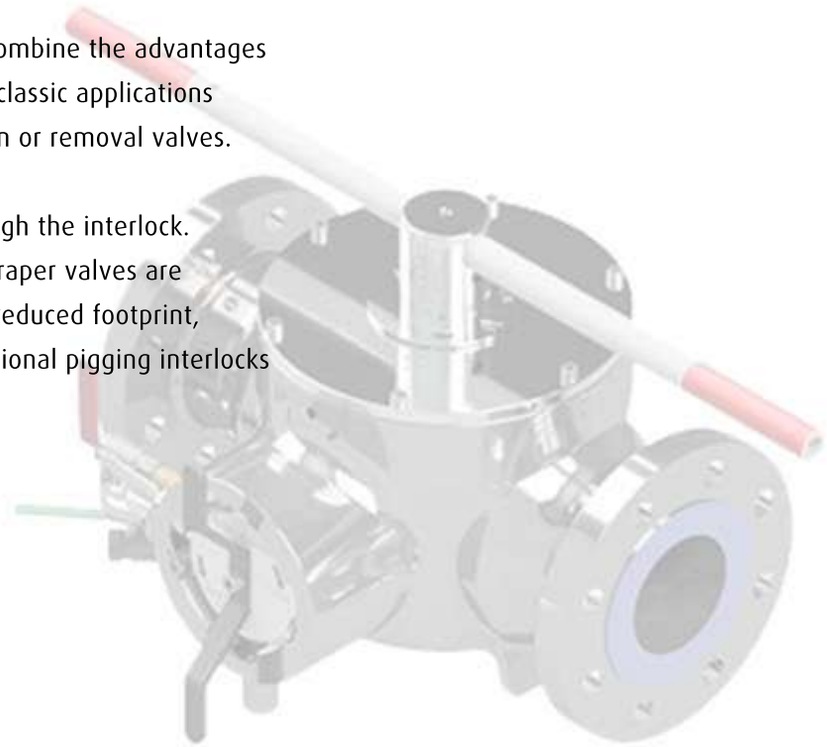
TILTING

ROTATING

PIGGING - SCRAPER VALVES
Maverick Valves Manufacturing

MAVERICK VALVES PIGGING – SCRAPER Valves combine the advantages of the Top Entry Ball Valve, and in addition to classic applications function as shut-off valves for pigging insertion or removal valves.

The pig can now be inserted or removed through the interlock. The advantages of the Maverick Valves Pig/Scraper valves are primarily: Simpler operation, secure handing, reduced footprint, lower investment costs in comparison to traditional pigging interlocks



Size:	2" - 16"
Design & Manufacurer std:	Class 150 – 2500
Structure Type:	ASME B16.5, ASME B16.25
Face to Face Std:	Manufacturer standard
Test std:	ISO5208, API 6D, API 598

SPECIAL SERVICES & APPLICATIONS
Maverick Valves Manufacturing

SUBSEA BALL AND GATE VALVES – API 6DSS

- Additional Environmental Sealing at Body to Closure and Body to Stem.cra Overlay on Sealing or Process Wetted Areas.
- Rov Interface to Api 17h/iso 13628-8 (Optional).
- More Stringent Requirements for Material Selection.
- Advanced Inspection and Testing Requirements (I.e. Hyperbaric Testing, Cycling).as Per Api 6dss Standard

METAL-SEATED BALL VALVES (API 6D)

- High Temperature (<+500°c)
- Low Maintenance (Subsea, Underground)
- High Demand (Frequent Cycling)
- Hard Facing on Ball and Seats (Enp, Tcc, Ccc)
- Higher Torque
- More Robust Top Work Design
- More Powerful Actuator
- Leakage Rates to Api 598 or Iso 5208:1993, Rates a, B

CLADDED BALL VALVES (API 6D – API 6DSS)

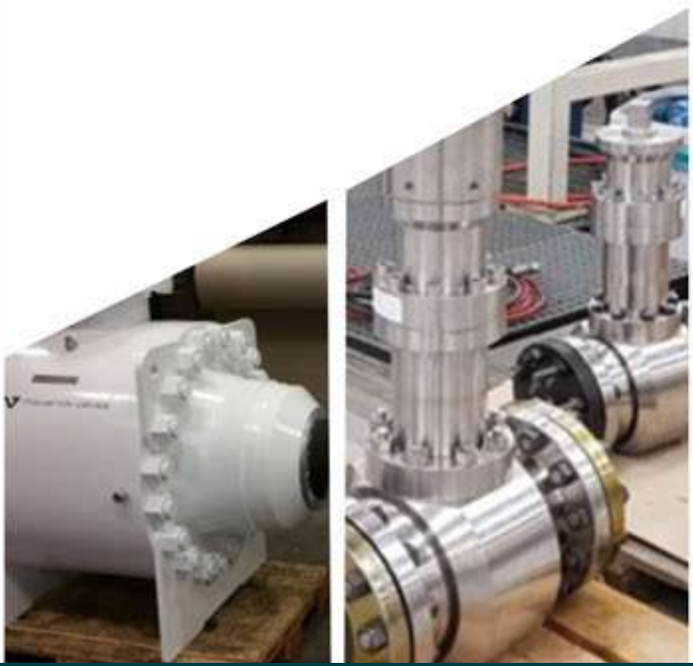
- Low Maintenance
- Corrosion Resistant,
- Long Life,
- High Reliability

SPECIAL SERVICES & APPLICATIONS
Maverick Valves Manufacturing

Maverick Valves Manufacturing HQ manufactures complete integrated units of subsea valve, actuator and ROV receptacle tool.
With a very strong Quality Assurance and Engineering Dept., MVM HQ is able to design and manufacture the most specific and customized actuated valves according to the project requirements.

TYPE OF APPLICATIONS

- Pipeline subsea valves
- Subsea Manifolds
- Line tees for future tie-ins
- Jacket flooding valves
- SSIV (Sub Sea Isolation Valves)
- PLEM ESDV and On/Off Valves
- Semi-submersible Buoy and Turret



MAIN STANDARDS

- API 17D/ISO 13628-4
- API 17A/ ISO 13628-1
- Norsok –U-001
- Norsok – L-001
- Norsok – M-001
- Type of applications
- Main standards

Ceramic Butterfly Valve

Choke Valve

Cryogenic – Globe Valve

Tubing head/
Adaptor

Tubing header & spool

Cryogenic – Ball Valve

Ceramic Ball Valve

Subsea Valve

MAVERICK VALVES
Technical Support

You can count 24/7 on our technical support!

Maverick's service engineers are available for support during start-up and commissioning to make sure your assets function as desired for the longest possible duration after installation.

Service & Technical support!

Maverick Valves can offer you technical support. We have a dedicated team with expertise, who would like to support you in situations where help is needed.

Our highly experienced service engineers can educate your maintenance personnel on how to correctly install, service, clean, ush, lubricate and paint the valves during planned stops.

After Sales

After Sales controls the whole supply chain and the highly skilled team is supported by an efficient and fully equipped Enterprise ResourcePlanning (ERP) system.

Our after sales department is in the driver seat at any time of the whole process.

References

Shell

ASSALA ENERGY

BAKER HUGHES a GE company

Tüpraş

Karachaganak

OXY

LUKOIL OIL COMPANY

SAIPEM

MA'ADEN معادن

سابك sabic

REPSOL

ExxonMobil

شركة غاز البصرة Basrah Gas Company

YAMAL LNG

SIBUR

KNPC

gasunie crossing borders in energy

Chevron

COFELY GDF SUEZ

FLUOR

Nord Stream 2

LOTTE bp

MODEC