

PROCHEM

Stainless Steel Specialists

Product solutions for a world of difference

VALVES AND ACTUATORS

PACSON



PIPING PRODUCTS



INSTRUMENTATION



VALVES AND ACTUATORS



MANUFACTURING



INDENT SERVICE

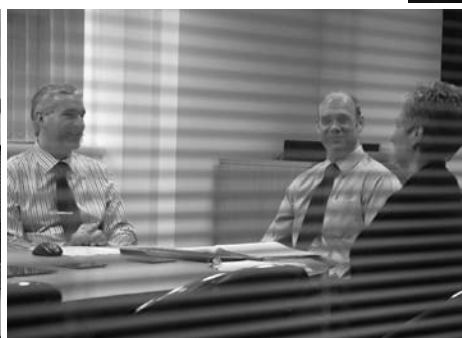


HYDRAULIC



Pacson Valves

**World leading onshore
and offshore valve applications.**



A key supplier of high integrity valves to the world oil & gas market, Pacson Valves is a leading developer for severe service and highly critical applications. A privately owned Scottish company, with its 4,650 m² headquarters in a modern manufacturing facility based in Dundee, Scotland, the company has a global presence with sales offices in every major oil and gas producing country in the world. Pacson Valves pride themselves on the quality of products and services with a total in-house capability for the design and manufacture of surface valves, subsea valves and pressure control products up to 400 mm (16") NB, or up to 172 MPa (25,000 psi) working pressure.

Meeting the needs of the Oil, Gas, Petrochemical and Process Industries worldwide.

Whether you require a 8 (1/4") NB isolation valve or a 250 (10") NB 100 MPa (15,000 psi) rated isolation valve, Pacson Valves have a total solution from design and manufacture, through to testing.

- Ball Valves:** single isolation valves, double block and bleed valves.
- Gate Valves:** hydraulically actuated valves, and manual valve products.
- Needle Valves:** ROV operated 3/4 turn and manual multi-turn valves.
- Check Valves:** swing valves, and inline piston valves.





Committed to Continual Improvement – the Key to Quality Performance.

Quality Assurance

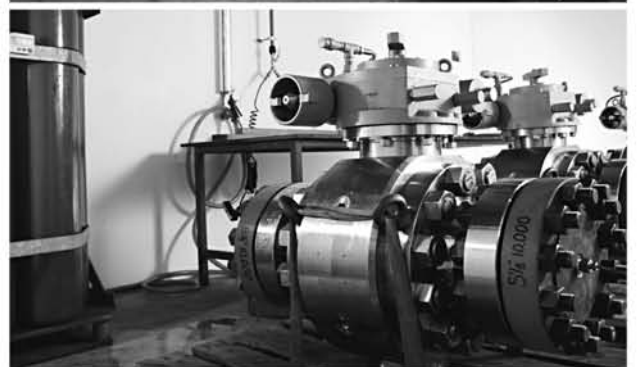
Pacson recognises the importance of quality to their customers and to the company's continued success. The independent Quality Assurance and Quality Control departments monitor product and process compliance.

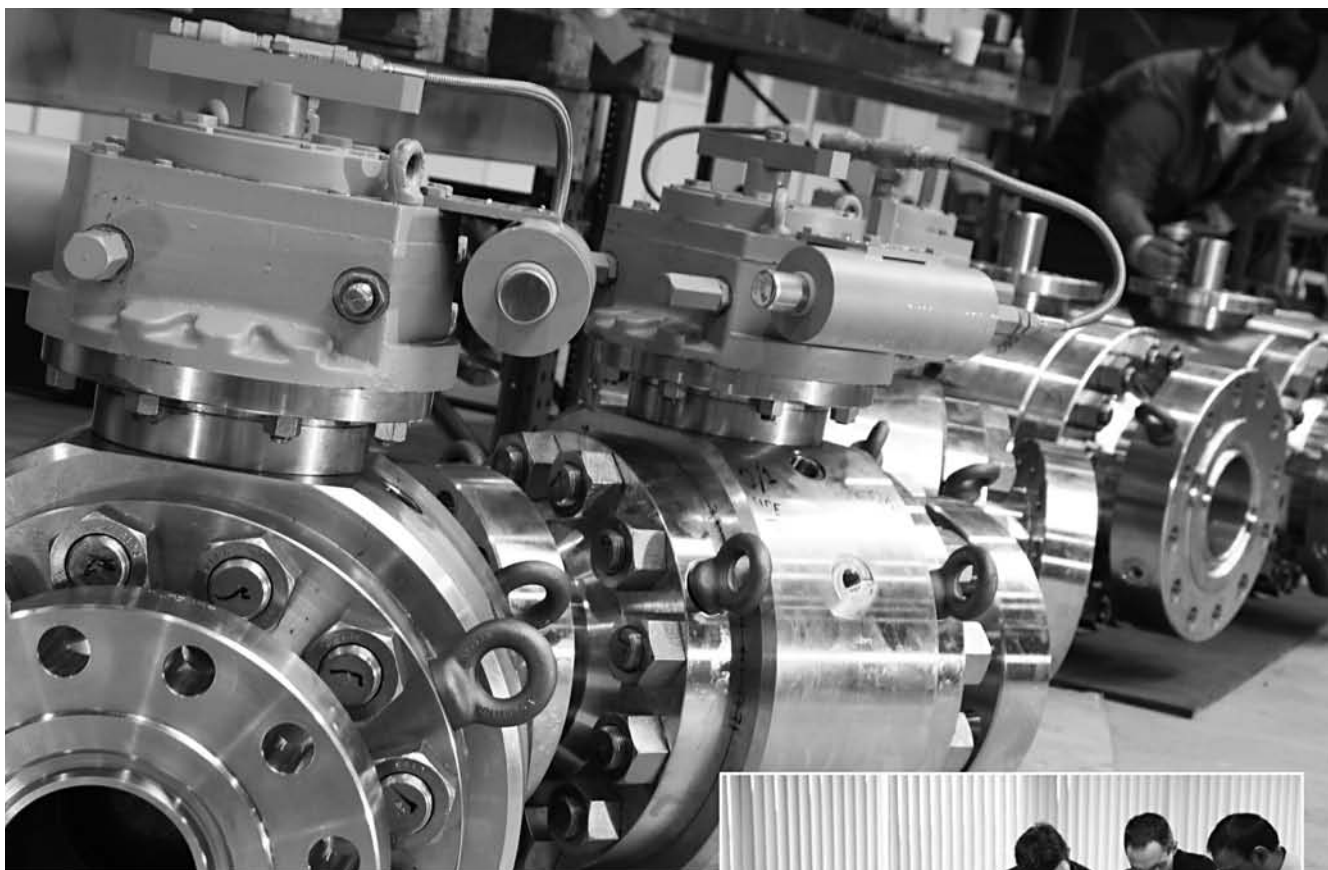
Expectations of quality are set to meet and exceed all specified requirements and relevant standards. These include, as a minimum, the requirements of EN ISO9001:2000 and the European Council Directive 97/23/EC Module H of the Pressure Equipment Directive, as per the Pressure Equipment Regulations S1 1999. No 2001.

Valves designed to comply with: API 6A, API 6D, API 17D, ASME B16.34, ASME B16.5, B16.10 and B16.25, ASME II, V, VIII, X, NACE MR0175

ISO STANDARDS

- ISO 5208 Industrial Valves Pressure testing
- ISO10497 Fire Testing
- ISO10423 Wellhead & Christmas Tree Equipment
- ISO10433 Underwater Safety Valves
- ISO 13628-8 Remotely Operated vehicle (ROV) Interfaces
- ISO 14723 Subsea Pipeline Transportation Systems
- ISO 9001:2000 Quality Systems
- ISO 4406 Hydraulic Fluid Cleanliness





Engineering and Design

Pacson Valve's engineering and design capability has been developed through significant investment in manpower, training, hardware and software. The company can provide extensive technical support to customers, whilst ensuring that products and systems are at the cutting edge of product design. All designs are validated by extensive performance testing programs, covering extremes of temperature, pressure, endurance and process fluids, giving total confidence in Pacson Valves' products.



- 3D solid modeling
- Finite element software
- CAD 2D drafting
- Unique parametric design methods
- Fluid Dynamics

Manufacture and Finishing

The in-house machining facility has the capability to process a wide range of valve and equipment components in standard or exotic materials. Pacson's expertise in machining has been built up over many years within the oil & gas industries. The CNC machine operate with the latest tooling technology, and this allows Pacson Valves to stay at the forefront of machining techniques, resulting in the highest quality components and the most cost effective machining techniques.



Materials of Construction

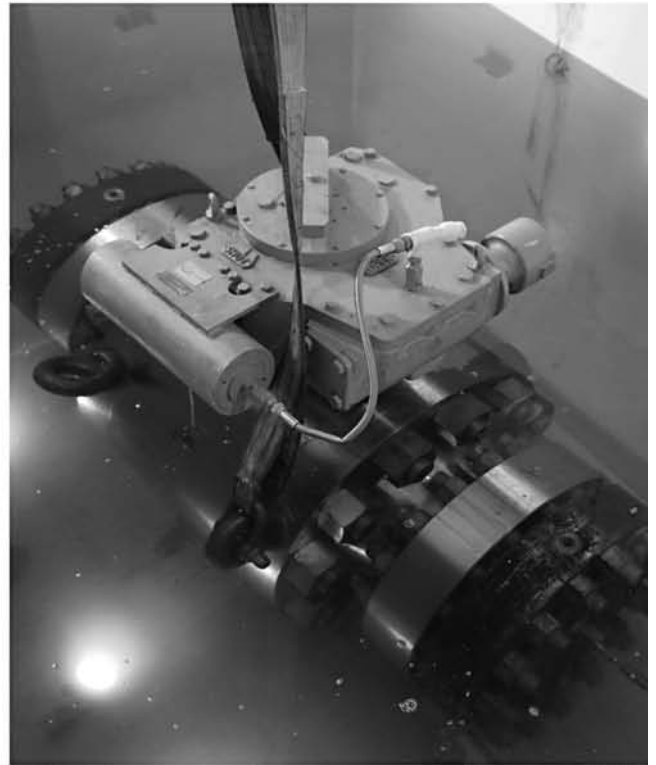
Carbon Steel, Stainless Steel, Duplex and Super Duplex Stainless Steels, Inconel, Hasteloy and Titanium.

Testing Facilities

Wide Ranging and Dedicated Assembly and Testing Facilities.

Safety is always Pacson's first concern, and all pressure testing is carried out in safety cells. These are compliant with all current safety legislation and with the latest recommendations set out in the H.S.E. guidance note GS4, Safety in Pressure Testing. Each test cell is equipped with computerised data logging equipment for the continuous monitoring and performance analysis of the product being tested. Pacson Valves' test facilities also have the capability to operate multiple pressure-channel recording, including temperature, for total valve signature mapping.

Performance and qualification testing, API 6A PR2, environmental and hyperbaric testing can all be carried out on site with specialised testing equipment. Testing can be carried out up to pressures of 345 MPa (50,000 psi) and temperature ranges from -70 to 180°C.



PACSON valves

BALL VALVES: Single Isolation

Product Features:

- Onshore and offshore (subsea) options available
- Top entry and side entry options
- Bolted bonnet
- Body cavity self relieving seats (Double piston effect seats optional)
- Double barrier PTFE stem seals
- Spring energized seats
- Soft and metal seated options
- Metal to metal static body seals
- Floating and trunnion

BALL VALVES: Single Isolation

Design Benefits:

- Full bore
- Fail safe design
- Anti blow out stem
- Bi directional sealing
- Compact design
- Low operating torque
- Double block and bleed (Single ball)
- No lubrication and no maintenance required
- High strength robust design
- All end connection options available

BALL VALVES: Double Block and Bleed

Design Benefits:

- 3 independent valves in one body
- Compact design
- Lightweight
- Improved pipeline security
- Reduced costs
- All end connection options available



NEEDLE VALVES: Single Isolation

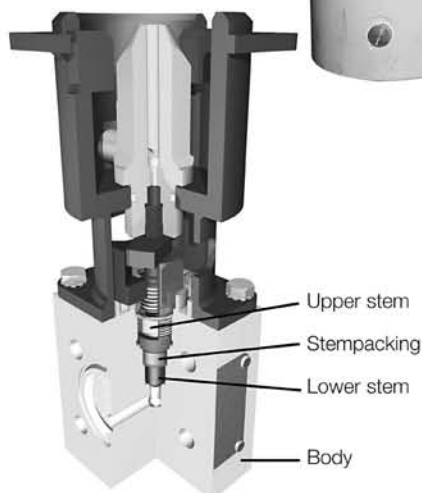
Product Features:

- Onshore and offshore (subsea) options available
- Non rotating stem
- Bolted bonnet
- Multi turn and 3/4 turn options
- Double barrier PTFE stem seals and metal to metal
- Clear position indication
- Design Benefits
- Full bore flow path
- Fail safe design
- Patented design
- Compact design
- Low operating torque
- No lubrication and no maintenance required
- High strength robust design
- All end connection options available

NEEDLE VALVES: Double Block & Bleed

Product Features:

- 3 independent valves in one body
- Compact design
- Lightweight
- Improved pipeline security
- Reduced costs
- All end connection options available
- Pacson Unique Patented Design No - 2,304,175



SLAB GATE: Manual actuated

Product Features:

- Onshore and offshore (subsea) options available
- Top entry and side entry options
- Bolted bonnet
- Through conduit
- Double barrier PTFE stem seals
- Spring energised seats
- Metal to metal static body seals

SLAB GATE: Hydraulic actuated

Product Features:

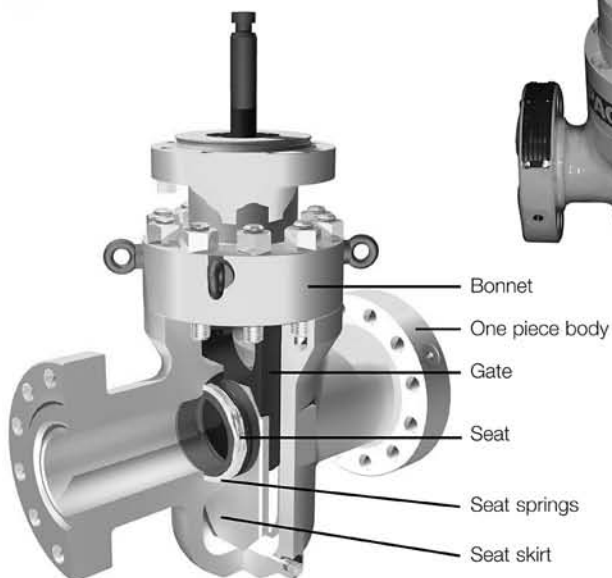
- Onshore and offshore (subsea) options available
- Top entry and side entry options
- Bolted bonnet
- Solid Slab
- Double barrier PTFE stem seals
- Spring energised seats
- FSC/FSO/FAI Linear actuators
- Metal to metal static body seals
- Fully compensated
- Direct mechanical position indication



SLAB GATE: Manual actuated

Design Benefits:

- Full bore
- Fail safe design
- Bi directional sealing
- Compact design
- Low operating torque
- No lubrication and no maintenance required
- High strength robust design
- All end connection options available
- Double block and bleed (Single gate)



CHECK VALVES: Swing

Product Features:

- Onshore and offshore (subsea) options available
- Bolted bonnet
- Soft and metal seated options
- Metal to metal static body seals
- Non slam
- Lockable open

Design Benefits:

- Full bore
- Compact design
- No lubrication and no maintenance required
- High strength robust design
- All end connection options available
- Piggable



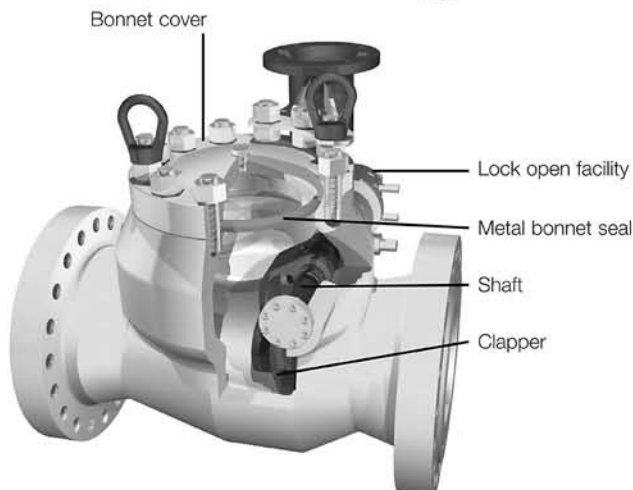
CHECK VALVES: Inline piston

Product Features:

- Onshore & offshore (subsea) options available
- Soft and metal seated options
- Metal to metal static body seals
- Non slam
- Lockable open





Design Benefits:

- Full bore flow path
- Compact design
- No lubrication and no maintenance required
- High strength robust design
- All end connection options available
- Piggable



STAINLESS STEEL
FLANGES
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TUBE
VALVES
PYPLOK
FITTINGS
TWT
TUBE-MAG
PIPING TECHNOLOGIES

GYROLOK[®]
 **CIRCLE SEAL CONTROLS**
HOKE
GO REGULATOR
 **ANDERSON GREENWOOD**
INSTRUMENT TUBE
Classic FILTERS
CIRCOR
INSTRUMENTATION TECHNOLOGIES
 **BuTech**
MILTON ROY
KING

 **AMPO**
POYAM VALVES
 **BSM**[®]
ATC
ACTUATOR TECHNOLOGY COMPANY
PACSON valves
 **ANDERSON GREENWOOD**
 **HABONIM**
Industrial Valves & Actuators



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