

# PROCESS VALVES

High Performance Valves for the Petroleum, Petrochemical, Pharmaceutical and Allied Industries

Ashworth Process Valves
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#### INTRODUCTION

Ashworth has long been recognised as a competitive, reliable and efficient supplier of manual and actuated valves to a diverse spectrum of the industry.

At our purpose-built head office and national distribution centre in Manchester, we carry extensive stocks of high quality, fully certified ball, gate, globe, and check valves, high performance butterfly valves and diaphragm valves.

At Ashworth customer service is paramount, so we have regionally focused, highly skilled sales teams. Both of our internal and external sales personnel are process valve specialists with many years of experience. Our team of specialists provide an overnight delivery service to customers anywhere in the UK.

We also offer an in-house actuation/instrumentation package which is monitored in accordance with our ISO9001:2000 quality assurance plan.

A wide range of specialist valves can be supplied to suit a multitude of extreme applications such as:

- Cryogenic Service
- High Temperature Service
- Abrasive Media Service
- Slurry Isolation
- High Cycling Duties
- Vacuum Applications
- Degreased Products for Oxygen Service
- NACE Specification Valves for Sour Gas Service
- High Purity Valves for Pharmaceutical Applications





#### **BALL VALVES**

- Reduced and full-bore ball valves are available in soft-seated and metal-seated designs.
- Three-piece units are manufactured to Class 600 and are available with NPT, SW and BW end connections.
- The product range includes fire-safe, anti-static design valves, and
   NACE MR 01.75 specification valves are available for sour gas applications.
- Valves conform to BS 5351, BS 6755: Parts 1 and 2, ISO 5211, API 607 and API 598, and T.A. Lüft inspection and test specifications.
- Flanges conform to ASA Class 150, 300 and 600, BS 4504, PN 16 and PN 40.
   Non-standard flanges can be machined to order.
- All ball valves may be actuated, using pneumatic, electric or electro-hydraulic actuators, at our in-house facility.
- Carbon steel or stainless steel body materials.
- Top entry soft-seated and metal-seated valves are also available in a variety of materials to suit any application.
- 1/2" to 10" nominal bore.
- Trunnion mounted API 6D pipeline ball valves can also be supplied.
- Optional extras can include: cavity filled seats, electro-polishing, steam jacketing, locking devices, gearbox operators and pipe lagging stem extensions.







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SUPPLYING MECHANICAL SERVICE

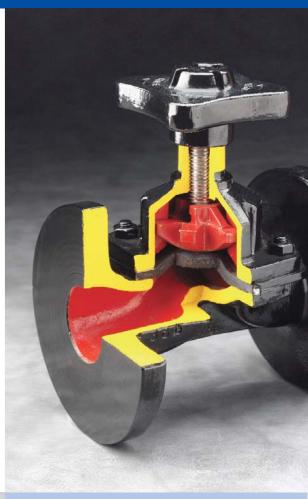
#### **BALL VALVES LINED**

- Full ported ball valves provide maximum flow capacities to reduce pressure losses and improve system performance. The standard on/off valve utilises a unique live-loaded packing design to curb stem leakage. An optional V-ported ball allows this design to double as a control valve providing equal percentage control characteristics. Available in 1/2" (15mm) to 6" (150mm) sizes, 150 ANSI class design.
- Standard port ball valves offer tremendous value in a plastic-lined design with live-loaded stem sealing and a corrosion resistant epoxy body coating. Sizes range from 1/2" (15mm) to 8" (200mm) with ANSI Class 150 flanges.
- Other valves available within the range include ball control valves, sampling valves, bellows-type globe control and shut-off valves, pressure gauges, safety and pressure relief valves, and bottom drain valves.



#### **DIAPHRAGM VALVES**

- Diaphragm valves are available in weir or straight-through designs.
- With cast iron body construction, they are supplied lined or unlined, screwed or flanged.
- Stainless steel versions are available for hygiene-sensitive applications.
- Flanges conform to ANSI Classes 125 and 150, and BS 4504 PN 16. BS10.
- Unique anti-overclosure device, fitted as standard, prevents damage to the diaphragm.
- 1/2" to 12" nominal bore.
- Valves can be supplied with modifications such as locking device, extension stems, alternative flange drillings and various paint finishes.
- Certification is available to DIN 52049.3.1.
- Valves may be pneumatically or electrically operated.



## GATE, GLOBE & CHECK VALVES

- Forged or cast carbon steel body construction.
- Gate, globe and check valves are available in reduced and full bore body types.
- Products conform to API 600, API 602, BS 1873 and BS 1868.
- Flanges conform to ANSI Classes 150, 300 and 600, BS 4504, PN 16 and PN 40.
- Forged steel valves are also supplied with Class 800 NPT, SW and BW end connections.
- 1/2" to 24" nominal bore.
- Other products offered include stainless steel gate, globe and check valves in accordance with API 600 or API 603.
- Metal-seated or soft-seated cryogenic valves can be supplied.
- Alternative bonnet designs include bellows sealed, pressure sealing or fully welded.
- All valves are certified in accordance with DIN 50049 3.1B NACE MR 01.75 sour gas duty products carried in stock.
- Manual gearbox mounting and automation facility available in-house.







#### **BUTTERFLY VALVES**

- Valve bodies can be manufactured from cast iron, ductile iron, carbon steel, stainless steel or aluminium.
- Liners can be manufactured from EPDM, Nitrile, Viton, NBR, FPM, White NBR, FEP or PFA.
- Discs can be manufactured from ductile iron, carbon steel, stainless steel or aluminium bronze. Discs can be coated with Nylon, PTFE or Epoxy and can be supplied polished or hard chrome plated.
- Valves incorporate a wafer or lugged pattern, and are available in lever operated, gear operated or actuated designs.
- Conform to BS 5155, ISO 5211, ANSI Classes 150 and 300, PN 10 and PN 16.
- 2" to 24" nominal bore.



#### **WAFER CHECK VALVES**

- Swing Type sprung, lined and full bore.
- Sprung Disc ANSI and DIN, high performance, lined.
- Twin Plate short pattern, retainerless and long pattern.
- Common materials are: bronze, carbon steel, stainless steel, monel, titanium and hastelloy.
- Flange alignments include PN 6-40, BS 10 table D-F, ANSI 125/150-2500.
- Valves are available metal seated or with soft seats manufactured from Viton,
   PTFE, EPDM, etc.
- Operating temperatures up to 1000°C.



### **Added Value Engineered Products**

- The Ashworth Process Valves Engineering Division offers a vast range of quarter-turn and multi-turn, pneumatic, electric actuators to suit all types of process applications.
- Not just a competitive, efficient source of supply, we offer a world class technical support team to advise on all aspects of valve and actuator specification.
- Our goal is to provide support for the total package requirement.
   Our team have many years' experience in the design, assembly and test of actuated valve packages.
- Rack and pinion, scotch yoke, quarter-turn and multi-turn pneumatic actuators can
  be supplied either double or single acting, for any application.
   We can modify pneumatic actuators for quick opening, slam shut or low air
  pressure applications.
- Pilot solenoid valves are available to suit all voltages and specifications including 24V DC, 110V AC, 240V AC. Solenoid valves can be supplied to all electrical specifications including certified intrinsically safe and explosion proof.
   Options include, direct mounting, nipple mounting, manual override and low power coils. Solenoid valves can be assembled in various configurations to provide alternative control options such as fail position, compliant with ATEX.
- Switchboxes are available with mechanical switches in an IP67 housing as standard.
   We can also supply more complicated items with high visibility beacons, proximity sensors, multi conduit entries, integral solenoid valves, Eexd explosion proof housings and multiple switch units.
- Valve positioning and control can be provided by 3-15 PSI and 4mA to 20mA positioners.







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SUPPLYING MECHANICAL SERVICE

AND PROCESS CONTRACTORS