Rotork Instruments has production facilities throughout the world, complemented by a large network of distribution and support centres.

**Worldwide Industry and Application Experience**

With nearly 60 years of extensive knowledge and experience, Rotork has provided products and services worldwide for virtually every industrial actuator application.

Rotork Instruments offers a range of precision control and valve accessory products from Fairchild, YTC, Soldo®, Midland ACS, Bifold® Fluidpower, M&M International and RI Wireless companies:

- Isolation valves
- Pressure regulators and boosters
- Relief valves
- Pilot and manual valves
- Solenoid valves
- Field instrumentation
- Cylinders
- Subsea solenoids
- Ancillary products
- Controls
- I/P transducers
- V/P transducers
- Switchboxes
- Pneumatic positioners
- Electronic positioners and controllers
- Wireless valve monitoring

Rotork Instruments is proud to offer a diverse range of products which serve many different duties in a wide variety of applications. We also offer a factory customisation service, to create one-off units to meet specific needs.

Specialist products for control and measurement of flow and pressure.

Trusted wherever there is a need for high precision and reliability, including oil & gas, pharmaceutical, biomedical, and manufacturing industries.
**Precision Control and Indication**

### Pneumatic Solenoid Valves

- Designed and constructed of 316 stainless steel, our ranges of pneumatic components are ideally suited for both hazardous areas and industrial use.
  - Up to 500 psi / 35 bar working pressure
  - 316L stainless steel body construction with conduit, flying lead and NAMUR interface
  - Manual reset and manual override options
  - Low power consumption version available
  - Normally open, normally closed and diverting

### Hydraulic Solenoid Valves

- Up to 20,000 psi / 1,380 bar working pressure
- 316L stainless steel body construction
- Manual reset and manual override options
- Low power consumption version available
- Normally open, normally closed and diverting

### Industrial Solenoid Valves

- Direct-acting compact valve design - ¼” to 8” sizes
- Zero pressure rated
- Exd options
- Suitable for vacuum applications

### Piston Actuated Valves

- ¾” to 2” sizes
- 316 stainless steel, brass and bronze body construction
- Thread, flange and clamp connections
- Normally Open, Normally Closed and Bi-directional options
**Precision Control** and Indication

### Pneumatic and Hydraulic Spool Valves

**Pilot and manual valves**
- ¼” to 1” sizes with mechanical, air and solenoid operator options
- 3/2 and 5/2 configurations
- 316L stainless steel body construction

### Filters, Filter Regulators, Regulators, Flow Control, Volume Boosters and HIPEX Valves

**Pressure regulators and boosters**
- Precision pneumatic regulators including pressure reducing, back pressure and vacuum models.
- Volume boosters meet all the requirements of a precision device including accuracy, sensitivity, fast response, stability, drift-free settings, low output droop, Supply pressure effect immunity, high forward and exhaust flow capacity.
  - ¼” to 2” sizes
  - 316L stainless steel and aluminium body materials

### Hydraulic and Pneumatic Thermal, Check and Precision Relief Valves

**Relief valves - gaseous & liquid service ranges**
- Hydraulic range up to 1,380 bar working pressure
- Pneumatic range up to 12 bar working pressure
- Pneumatic range includes ¼” to 1” NPT / BSP pressure relief valves
- Pressure control from 0.8 to 1,200 bar
- Working temperature:
  - Nitrile -20°C to +80°C
  - Viton 20°C to +150°C

### VDMA Pneumatic Cylinders

**Cylinders**
- VDMA range pneumatic cylinders. A range of double-acting, fully adjustable cushioned metric cylinders to VDMA 24562 and BS ISO 6431 standards. Profile barrels (MP range) or with conventional round barrels (MR range).
  - 32 mm to 125 mm bore
  - Ports ¼” to ¾” BSP
  - Simple reliable design
  - Meets international and European standards
  - Magnetic piston option
  - Customer’s required stroke supplied as standard
  - Adjustable air cushioning
  - Lube free
  - Full range of mounting accessories
  - Customised designs available
Precision Control and Indication

Pressure Transmitters

Instrumentation Ball and Needle Valves

Field instrumentation
- Intrinsically Safe (IS) and Exd ATEX & IECEx certification
- Digital display and pipe mounting options
- IP67 and 316L stainless steel body material
- 0 to 2,200 bar pressure ranges
- 0.25% full scale accuracy

Motor Pumps

Instrument Pumps

Instrumentation Ball and Needle Valves

Field instrumentation
One piece body construction ¼” to 1” NPT 414 bar up to 10,000 psi / 690 bar. Medium pressure range available from 10,000 to 20,000 psi / 1,380 bar.

- Ball valves:
  - State of the art design to reduce potential leak paths with a standard pressure ranging from 1,000 psi / 70 bar up to 10,000 psi / 690 bar, ¼” to 2” NPT.
- Double block and bleed monoflange and piping valves:
  - Combining piping and instrument valves in a single assembly provides weight and space savings as well as reduction in potential leak paths. Up to and including Class 2500. Available in ¼", 3/8", 9/16", 3/4", 1".

Motor Pumps

Chemical injection motor pump unit

- Chemical metering hydrodrive motor pump unit
- Water and oil based fluids pump / motor pump unit
- Water pumps and motor pumps units
  - Hydraulic pumps for water based fluids
  - 316 stainless steel external components
- Type TW:
  - High Pressure – up to 1,000 bar
  - Standard version for intermittent operation
  - Water cooled version for continuous operation
- Type SW:
  - For use with limited power availability – 0.5 to 0.75 kW
  - 24 VDC motor
  - High pressure up to 690 bar

- Water glycol pumps and motor pump units
- Type XW up to 1,040 bar
- Oil pumps – Type MPU / M / S / XH up to 690 bar with special high pressure version up to 1,000 bar

Ancillaries

Full range of ancillary products in 316L stainless steel specifically designed for severe environments with low temperature options available at -50 °C, to include:

- Check valves:
  - 13 bar up to 11 Cv
  - 828 bar up to 190 lpm
  - 690 bar, 51 lpm velocity check
- Quick exhaust valves:
  - Up to 12 bar pneumatic, ¼” to 2” options available
  - Ambient temperature range -20 to +70°C
- Flow regulators:
  - Up to 1” NPT uni-directional and bi-directional flow options
- Air pressure switches:
  - Latch lock manual reset option
  - 3/2 or 5/2 options
  - Thermal fuses – ½” NPT up to 200 °C
Electro-Pneumatic Transducers

Accurate, compact I/P, E/P, D/P & P/I electro-pneumatic transducers with extensive combinations of inputs and outputs carry standard FM, CSA, ATEX or IECEx agency approvals and maintain accuracies up to 0.15% and feature proportional pressure regulation.

- Accuracy: As low as + 0.15% full scale
- Repeatability: As low as + 0.1% full scale
- Max supply pressure: 1,380 kPa (200 psi)
- Max output pressure: 1,050 kPa (150 psi)
- Flow capacity: 15.3 to 1,189 m³/hr (9 to 700 SCFM)
- Pipe sizes NPT: ¼” to 1”

Electronic Controls

Explosion-proof (Ex) and intrinsically safe (IS) range provides – control of electro-hydraulic actuators. Incorporating:

- HART protocol
- Remote control options
- 316L stainless steel option
- Suitable for Zone 0, 1 & 2 hazardous environments

Pneumatic Positioners

YT-1200, YT-1200L positioners are used for pneumatic valve actuators by means of a pneumatic controller or control systems with an output signal of 3 to 5 psi or split ranges.

- The product can operate normally in a very extreme environment, such as vibration and temperature
- Durability testing for a minimum of 2 million cycles
- Response time is very short and accurate
- Simple part change can set 1/2 split range
- It is economical due to less air-consumption
- Direct / reverse action can be set easily
- Zero and span adjustment processes are simple
- Feedback connection is easy

Limit Switchboxes and Sensors

- General purpose and intrinsically safe switchboxes
  Polymer, aluminium or stainless steel enclosures
  Corrosion resistant enclosures NEMA 4/4X (IP65)

- Explosion proof limit switchboxes
  Aluminium or stainless steel enclosures
  Explosionproof certification; Certification options: UL, ATEX, INMETRO, CCOE, GOST, IECEx, SIL

- Integral solenoid valve limit switchboxes
  Aluminium enclosure – designed to meet NEMA 4/4X (IP65)
  AS-i interface or DeviceNet capable

- BOLT proximity sensors
  Threaded body proximity switch for remote electrical indication of linear and rotary valve / actuator position
Precision Control and Indication

Keeping the World Flowing

Wireless Valve Monitoring

Pneumatic and Hydraulic Manifolds

Specialist Freight Rail Wagon Door Systems

Subsea Valves and Controls

### Controls

- Self-powered sensors
- Wireless redundant mesh network
- Hand-held configurators
- Interface to SCADA/PLC/DCS

### Controls

- Compact manifold
- Axis stacker manifold

Hydraulic manifolds

- High flow rates up to 200 l/min (45 gpm)
- Low cost
- 316L stainless steel
- ¼", ½", ¾", & 1" thread milled NPT
- Offering reduction in cost and weight and an increase in performance

### Controls

- Double-acting, fully adjustable cushioned metric cylinders to VDMA 24562 and BS ISO 6431 standards

### Subsea

- Shuttle valves – up to 690 bar
- Pilot operated valves – Ball seated and slide up to 1,035 bar
- Pilot operated valves (shear plane sealing) – up to 690 bar
- Solenoid valves – up to 690 bar

- Special valve products
- Control pod products

- Valves for operation directly immersed in sea water to 3,000 m / 1,035 bar / -40 to +121 °C
- Extensive qualification test programmes
- 1 million cycles operation
- Option of seawater as operating medium
- Up to NAS 1638 Class 12
- Leakage 0 to 0.2 cc/min
- 18 to 28 VDC, 15 Watt

Photo credit: Drax Biomass