



## Capabilities & Facilities

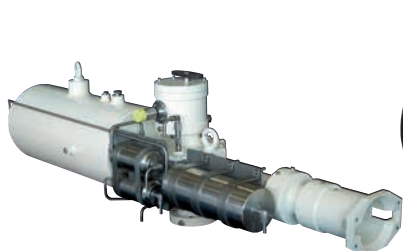
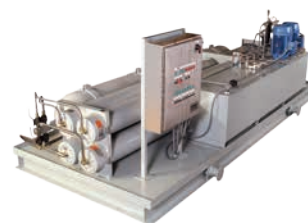
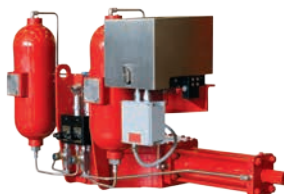
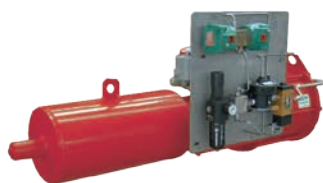


Worldwide Manufacturing Facilities  
International Service and Support  
Innovative Design and Technology  
Industry Leading Reliability

Redefining Flow Control

## Contents

Section	Page
Introduction	3
Manufacturing Facilities	4
Centres of Excellence	6
Quality Assurance	7
Product Range	8



# rotork®

## Fluid Systems

Rotork is a global leader in valve actuation technology. We provide a comprehensive range of valve actuators, controls and associated equipment, as well as a variety of valve actuator services including commissioning, preventive maintenance and retrofit solutions. Rotork Fluid Systems specialises in the production and support of fluid power actuators and control systems. We are dedicated to providing the marketplace with the latest technology, consistently high quality, innovative design, excellent reliability and superior performance.

Rotork Fluid Systems maintains dedicated engineering groups for Applications, Product Improvement and New Product Development so that our customers can gain all the benefits that ever advancing technologies have to offer and to ensure our efforts are in step with the continually evolving needs of our customers.

Most importantly, we have a long-standing commitment to meeting the special needs of a wide range of applications including: oil and gas exploration and transportation; municipal water and wastewater treatment; power generation; and the chemical and process industries.

With over fifty years of engineering and manufacturing expertise, we have tens of thousands of successful valve actuator installations throughout the world.

### Italy

tel +39 0583 93061

email [fluid@fluidsystem.it](mailto:fluid@fluidsystem.it)

### USA

tel +1 (585) 247 2304

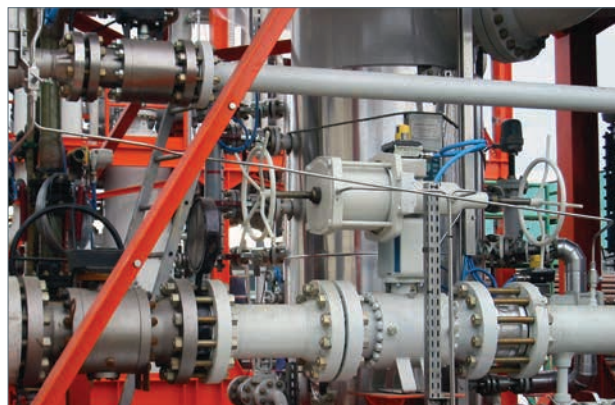
email [rfsinfo@rotork.com](mailto:rfsinfo@rotork.com)

### UK corporate office

tel +44 (0)1225 733200

email [sales@rotorkfluidsystem.com](mailto:sales@rotorkfluidsystem.com)

A full listing of our worldwide sales and service network is available on our website at [www.rotork.com](http://www.rotork.com)



## Manufacturing Facilities – Worldwide Capacity



Rotork Fluid Systems maintains manufacturing facilities in Melle, Germany; Lucca, Italy; Falun, Sweden; Leeds, UK; and in the United States: Dallas, Texas; Pittsburgh, Pennsylvania and Rochester, New York.

In addition to these modern manufacturing facilities, we maintain a network of *Centres of Excellence* strategically located around the world.

These centres hold stock, provide application engineering and packaging of control components as well as providing sales, service, installation and commissioning support.

A vast network of Rotork international sales offices and agents provides even greater global coverage and ensures quick and effective response to customer requirements.



## Manufacturing Facilities – Worldwide Capacity



Lucca, Italy

11,000 metres<sup>2</sup> - 118,400 feet<sup>2</sup>



Rochester, New York USA

5,600 metres<sup>2</sup> - 61,000 feet<sup>2</sup>



Melle, Germany

7,500 metres<sup>2</sup> - 80,000 feet<sup>2</sup>



Falun, Sweden

4,000 metres<sup>2</sup> - 43,000 feet<sup>2</sup>



Pittsburgh, Pennsylvania USA

3,716 metres<sup>2</sup> - 40,000 feet<sup>2</sup>



Leeds UK

4,700 metres<sup>2</sup> - 50,600 feet<sup>2</sup>



Dallas, Texas USA

3,725 metres<sup>2</sup> - 40,100 feet<sup>2</sup>

**rotork<sup>®</sup>**  
Fluid Systems

## Centres of Excellence – Knowledge and Experience

Rotork Fluid Systems' *Centres of Excellence* are stocking centres that serve as hubs in a global support network from which our staff provides support from quote, to contract, to installation and commissioning, to after sale service and support. They are fluid power actuation specialists able to provide solutions to virtually any application requirement.

### Worldwide Locations

- Australia – Melbourne
- Canada – Calgary
- Netherlands – Rotterdam
- Singapore
- Spain – Bilbao
- UAE – Dubai
- United Kingdom – Leeds
- United States – Houston, Texas
- United States – Petaluma, California

### Services

- Sales and contractual support
- Application engineering
- Consulting
- Mounting of control components
- Mounting of actuators on valves
- Preventative maintenance
- Actuator/controls service and repair
- Retrofit
- Installation, commissioning and on-site service (offshore qualified)
- Torque and thrust testing
- Hydraulic flushing and NAS6 capabilities
- Delta P testing of valve packages from 1"-24"; class 150-1500. Higher pressures and sizes can be accommodated.



*All capabilities may not be available from every Centre of Excellence.*

## Quality Assurance

Rotork Fluid Systems is committed to providing internal and external customers with products and services that meet or exceed their expectations. To facilitate these objectives a documented Quality Management System has been established in accordance with ISO 9001. This system embraces every aspect of the company's business and involves all personnel.

We are committed to maintaining compliance with our Quality Management System and to continually working to improve its effectiveness. Quality objectives with measurable outputs are established for relevant functions within the organisation. These are reviewed and monitored for effectiveness at management review meetings and form the basis for implementing improvement measures. Our quality policy, quality manual and procedural documents are periodically reviewed for adequacy and effectiveness. Further tactics employed include the following:

- Effectively communicating the importance of meeting customer needs throughout our organisation.
- Establishing appropriate levels of competency for all personnel.
- Providing products that comply with all statutory and regulatory requirements.
- Actively promoting our quality policy and helping personnel understand and implement the relevant aspects of the policy in their day-to-day responsibilities.

### Test Facilities

We are a global leader in actuation technology that is committed to providing our customers with robust and dependable products. To that end, we have engineered custom test systems to ensure proper operation and functionality of our products as well as assist in our research and product development endeavors.

Our test systems incorporate the following features:

- Static continuous and dynamic analysis on a full range of torques throughout the complete stroke of the actuator.
- Cyclic and repetitive tests, with variable parameters such as load, cycle times and temperature.
- Automatic or manual setting and recording of pressure, position and temperature parameters.
- Hydrostatic testing.
- Hydraulic filtration and flushing capabilities.
- Torque testing up to 350,000 Nm (3.1M lbf-in).
- Thrust testing up to 10,000 kg (22,046 lbf).
- Pneumatic pressures up to 120 bar (1,740 psi).
- Hydraulic pressures up to 360 bar (5,220 psi).



## Product Range

### Scotch yoke actuators

#### CP range



- Pneumatic and hydraulic actuators in double-acting and spring-return configurations.
- Corrosion resistant cylinders.
- Complies with EN60529 (1991) + (A1:2000) for IP67M.
- Actuators certified to ATEX 94/9/EC.
- Actuators certified in accordance with PED 97/23/EC.
- Torque output to 4,500 Nm (39,800 lbf-in).
- Compatible with SVM partial stroke testing.
- Certified suitable for use at SIL3 as a single device in accordance with IEC 61508.

See publication PUB013-001 for further details.

### Compact scotch yoke actuators

#### RC200/ RCI200 range



- Extremely compact scotch yoke pneumatic actuator.
- Double-acting and spring-return configurations.
- Contained spring module for safety and convenience.
- Torque output to 4,400 Nm (38,000 lbf-in).
- Valve mounting dimensions per ISO 5211/DIN 3337.
- Compatible with SVM partial stroke testing.
- Certified suitable for use at SIL2 as a single device in accordance with IEC 61508.
- Actuators certified in accordance with PED 97/23/EC.
- Actuators certified to ATEX 94/9/EC.

See publication PUB014-001 (RC200) and PUB014-002 (RCI200) for further details.

### Scotch yoke actuators

#### GP/GH range



- Pneumatic and hydraulic actuators in double-acting and spring-return configurations.
- Corrosion resistant cylinders.
- Complies with EN60529 (1991) + (A1:2000) for IP67M.
- Actuators certified to ATEX 94/9/EC.
- Actuators certified in accordance with PED 97/23/EC.
- Torque output to 600,000 Nm (5,000,000 lbf-in).
- Compatible with SVM partial stroke testing.
- Certified suitable for use at SIL3 as a single device (IEC 61508).

See PUB011-001 (GP/GH), PUB012-001 (P/H) for further details.

### Rack and pinion actuators

#### RH range



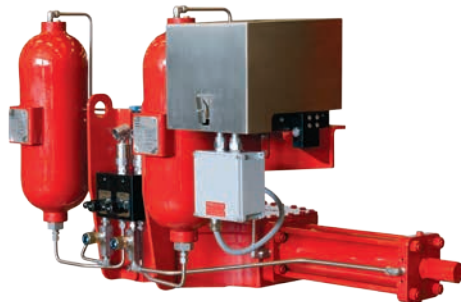
- Double-acting and spring-return configurations.
- Heavy-duty hydraulic actuators with cast iron bodies and torque output to 3,400 Nm (30,000 lbf-in).
- Electroless nickel-plated cylinders for corrosion resistance.
- Valve mounting dimensions per ISO 5211 DIN 3337.
- Compatible with SVM partial stroke testing.
- Complies with EN60529 (1991) + (A1:2000) for IP67M.
- Actuators certified in accordance with PED 97/23/EC.
- Certified suitable for use in SIL3 as a single device in accordance with IEC 61508.

See publication PUB019-004 for further details.

## Product Range

### Gas-oil actuators

#### GO range



- Low- or high-pressure control logic options.
- ASME certified tanks.
- Hydraulic manual override standard.
- Speed control in both directions standard.
- PED or ASME approved gas/oil and power gas storage tanks.
- Complies with EN60529 (1991) + (A1:2000) for IP67M.
- Actuators certified to ATEX 94/9/EC.
- Actuators certified in accordance with PED 97/23/EC.
- Torque output to 600,000 Nm (5,000,000 lbf-in).
- Compatible with SVM partial stroke testing.

See publication PUB017-001 for further details.

### Direct high-pressure gas actuators

#### HPG range



- Hydraulic manual override standard.
- Speed control in both directions standard.
- Complies with EN60529 (1991) + (A1:2000) for IP67M.
- Actuators certified to ATEX 94/9/EC.
- Actuators certified in accordance with PED 97/23/EC.
- Torque output to 600,000 Nm (5,000,000 lbf-in).
- Compatible with SVM partial stroke testing.

See publication PUB016-001 for further details.

### Linear actuators

#### LP/LH range

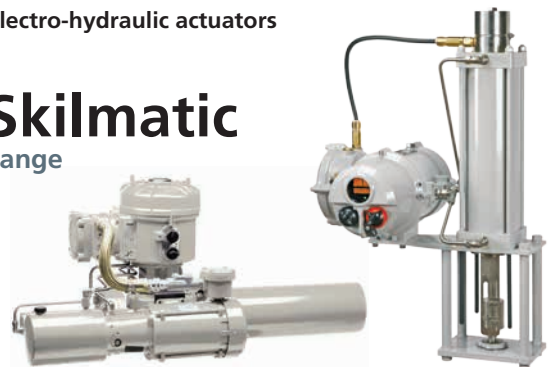


- Pneumatic and hydraulic actuators in double-acting and spring-return configurations.
- Electroless nickel-plated cylinders, chromium-plated piston rods.
- Hammer blow and standard valve stem coupling designs available.
- Thrust up to 5,000,000 N (1,124,000 lbf).
- Compatible with SVM partial stroke testing.

See publication PUB020-001 for further details.

### Electro-hydraulic actuators

#### Skilmatic range



- Linear thrusts: 1.7 to 5,500 kN (382 to 1,230,000 lbf)
- ¼ turn torques: 65 to 600,000 Nm (575 to 5,000,000 lbf.in)
- Two-position, ESD or modulating operation in spring-return or double-acting executions
- Single-phase, three-phase or 24 VDC power supply
- Non-intrusive infrared configuration and *Bluetooth* data transfer
- Optional bus communications via all major protocols
- Partial stroke test capability
- Watertight or explosionproof ATEX, FM, CSA IEC and GOST

See PUB021-001 for further details.

## Product Range

### Subsea actuators

#### GSH GSR GSL GSP ranges



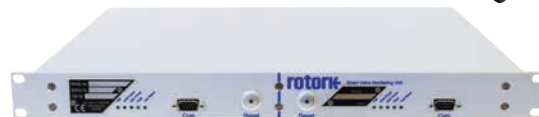
The subsea product range encompasses actuator and gearbox designs for retrievable and non-retrievable applications. We are familiar with supplying subsea product to meet the harsh conditions and stringent demands of subsea applications.

- Subsea & splashzone trims.
- Retrievable and non-retrievable designs.
- Actuator de-clutch system for operation of the actuator independent of the valve.
- Actuator and gearbox de-clutch system allows interchangeability between similar valves.
- Compatible with SVM partial stroke testing.

See publication PUB022-001 for further details.

### Smart valve monitor

#### SVM range



- Compatible with fluid power actuators and valves for on/off service.
- Safe and hazardous area versions available.
- Comprehensive and versatile partial stroke testing – tests all final elements.
- Datalogging of valve performance for diagnostics and preventative maintenance.
- Suitable for use at any SIL rating.
- Can interface with DCS/ESD common system.
- Improves SIL verification performance of final elements.

See publication PUB026-001, PUB026-002 for further details.

### Vane actuators

#### K-TORK range



- Pneumatic actuators in double-acting and spring-return configurations.
- Compact no-sideload, constant-torque design with output to 16,950 Nm (150,000 lbf-in).
- Complies with EN60529 (1991) + (A1:2000) for IP67M.
- Complies with ANSI/AWWA C540-02 and C541-08.
- Conforms to VDI/DE 3485 control accessory mounting standards.
- Modulating accuracy of 0.25% or better.

See publication PUB097-001 for further details.

### Damper drives

#### Type K range



- Direct 'drop-in place' design matches existing damper drive take-out dimensions.
- Torque output up to 28,201 Nm (20,800 ft-lbs).
- High-speed operation as quick as 3-5 seconds full scale.
- Highly accurate and responsive.
- Designed for safety and serviceability in harsh environments.
- Infinite duty cycle.

See publication PUB097-002 for further details.

## Product Range

### Self-contained fail-safe actuators

#### manPOWER range



- Manually energised, spring-return fail-safe operation.
- Cost-effective solution for infrequently operated valves and dampers.
- Watertight or explosionproof construction.
- Highly configurable with a multitude of options.

See publication PUB062-002 for further details.

### Multi-turn fluid power actuators

#### Twin Power range



- Pneumatic or hydraulic versions available.
- Torque output to 800 Nm (7,080 lbf-in).
- Modular system for flexibility.
- Robust design can be supplied suitably trimmed for various severe or hazardous environments.

See publication PUB025-002 for further details.

### Fluid power nuclear applications

#### Hiller range

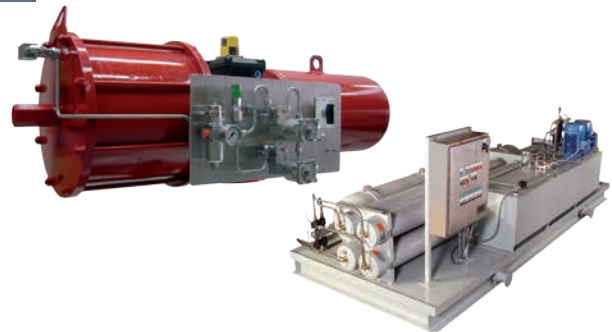


The Hiller range encompasses rotary and linear pneumatic and hydraulic actuators in double-acting and spring-return configurations. The range also includes specialised linear hydro-pneumatic actuators designed to deliver very precise speed control.

Quality assurance for these products conforms to 10 CFR 50 APP B, 10 CFR 21, ANSI N45.2 and has been audited by both NUPIC and NIAC. Environmental and seismic qualifications comprise IEEE 323, 344 and 382.

See publication PUB068-001 for further details.

### Control systems



Control component packages are a part of any actuator/valve installation. Rotork has extensive experience in the design and assembly of all types of fluid power control systems to satisfy any customer requirement for on/off, modulating or ESD (emergency shutdown) service. Packages can be mounted on a panel or in a cabinet and mounted either on the actuator or at a remote location.

Rotork can also supply hydraulic power units. HPU's can be produced to meet any global engineering or manufacturing standards including FM, NEC, ATEX, CSA, ANSI, CE and ASME.

Contact Rotork for further details.



Redefining Flow Control

A dark blue background featuring a stylized world map with white grid lines representing latitude and longitude.

[www.rotork.com](http://www.rotork.com)

A full listing of our worldwide sales and service network is available on our website.

Rotork plc  
Brassmill Lane, Bath, UK  
*tel* +44 (0)1225 733200  
*fax* +44 (0)1225 333467  
*email* [mail@rotork.com](mailto:mail@rotork.com)

Scan with your smart phone  
for more information on  
this product range



PUB010-001-00  
Issue 06/13

Formerly F001E. All Rotork Fluid Systems actuators are manufactured under a third party accredited ISO 9001 quality assurance programme. Published and produced by Rotork Fluid Systems.

Rotork recognises all registered trademarks. As we are continually developing our products, their design is subject to change without notice. POWTG0613