

rotork[®]

Power Industry Solutions



Keeping the World Flowing

rotork®

Keeping the World Flowing



**RELIABILITY
IN FLOW CONTROL
CRITICAL
APPLICATIONS**



RELIABLE OPERATION WHEN IT MATTERS

Assured reliability for critical applications and environments. Whether used 24/7 or infrequently, Rotork products will operate reliably and efficiently when called upon.

QUALITY-DRIVEN GLOBAL MANUFACTURING

Products designed with 60 years of industry and application knowledge.

Research and development across all our facilities ensures cutting edge products are available for every application.

CUSTOMER-FOCUSED SERVICE WORLDWIDE SUPPORT

Solving customer challenges and developing new solutions. From initial enquiry through to product installation, long-term after-sales care and Client Support Programmes (CSP).

LOW COST OF OWNERSHIP

Long-term reliability prolongs service life. Rotork helps to reduce long term cost of ownership and provides greater efficiency to process and plant.

Power Industry Solutions

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COMPREHENSIVE PRODUCT RANGE SERVING MULTIPLE INDUSTRIES

Improved efficiency, assured safety and environmental protection.

Rotork products and services are used in the Power, Oil & Gas, Water & Wastewater, HVAC, Marine, Mining, Food & Beverage, Pharmaceutical and Chemical industries around the world.

GLOBAL PRESENCE LOCAL SERVICE

Global company with local support.

Manufacturing sites, offices and *Centres of Excellence* throughout the world provide unrivalled customer services and fast delivery.

MARKET LEADER TECHNICAL INNOVATOR

The recognised market leader for 60 years.

Our customers have relied upon Rotork for innovative solutions to safely manage the flow of liquids, gases and powders.

CORPORATE SOCIAL RESPONSIBILITY

A responsible business leads to being the best business.

We are socially, ethically, environmentally responsible and committed to embedding CSR across all our processes and ways of working.

rotork®

Keeping the World Flowing



**GLOBAL
EXPERIENCE
STRATEGIC
INDUSTRIES**

Active in every industry and market sector around the world.

Serving customers and working with partners.

Improving efficiency, assuring safety and protecting the environment.

INDUSTRY KNOWLEDGE

Our engineering and application knowledgebase, built over 60 years, allows us to provide innovative and reliable solutions for all flow control applications.

We work across the globe, servicing a diverse range of markets and critical applications.

Our experience of flow control is second to none.



POWER

Rotork products are found in traditional power stations, including nuclear power stations where its products are certified for use both inside and outside containment. They are also used for renewable energy generation systems such as thermal solar plants, and emission reduction processes such as flue gas desulphurisation.

- Conventional fuels
- Nuclear energy
- Concentrating solar power
- Geothermal and other renewables



OIL & GAS

Rotork products are used on upstream, midstream and downstream activities, ranging from offshore production facilities, to refining and processing, to transportation, storage and distribution.

- Onshore and offshore production
- Refining and petrochemicals
- Distribution and storage
- Pipelines
- LNG liquefaction and regasification
- Unconventional oil and gas



WATER

Rotork products are used on modern state-of-the-art water treatment and distribution processes, which maximise existing resources such as, desalination plants and water re-use projects, together with conventional water and wastewater plants.

- Sludge and sewage treatment
- Water treatment, desalination and re-use
- Environmental control
- Dams, reservoirs and irrigation



OTHER INDUSTRIES

- Marine
- Pharmaceutical
- HVAC
- Mining
- Biomedical
- Rail
- Paper & Pulp
- Food & Beverage

Power Industry Experience

A market and technology leader with worldwide presence

Rotork flow control products and services contribute to some of the most significant power stations worldwide.

Reducing cost of electricity

Rotork products help power companies compete successfully in the marketplace and provide affordable electricity to consumers. We help you reduce the cost of electricity through efficient and highly reliable precision products that reduce forced outages.

Increasing reliability

We help you maintain an aging installed base and adapt to the challenges of changing market conditions. Our low power products are certified for ingress protection and reduce outage and maintenance time.

Lowering environmental footprint

We help you meet and exceed regulations and environmental standards with Rotork innovation. Rotork is experienced in all areas of power generation, pollution control, emissions reduction and reducing plant energy consumption.

Innovative technology

We are addressing social and environmental challenges through our strong commitment to developing technologies for power generation. Our products withstand high temperature and vibration and incorporate intelligent systems for fast setup and easy access to plant data.

Comprehensive product portfolio

You can have one partner for a full and balanced portfolio of proven solutions for coal, gas, oil, nuclear, hydro, wind, solar, geothermal and biomass.

Services and lifecycle management

We support your lifecycle management needs with solutions, cutting edge technologies and global-local presence. Regional *Centres of Excellence* provide local solutions to solve in-depth challenges. Rotork have 100s of service engineers worldwide in over 100 countries.

Increase safety and reduce unplanned shutdowns

Rotork products help control everything that happens in a power plant from valve and actuator status and performance reporting to highly reliable emergency shut-down solutions required in the event of boiler emergencies.



Rotork specialise in designing and manufacturing actuators and related equipment for every part of the power industry. We have over 50 years' experience in serving the industry, and we understand the challenges of the power industry. Rotork valve actuators are widely recognised as being the most technically advanced, reliable, long life, watertight, and user-friendly actuators available.

Our operations are backed by huge resources, and our service is exceptional, always meeting our customers' deadlines whatever the circumstances.

Products

We have a full range of actuators, instruments and ancillary products, all designed to meet the stringent requirements of the power industry. They are accurate, robust and efficient, and provide the exacting levels of durability and reliability that you require.

They also provide a number of unique cost saving benefits that particularly help power industry customers.

So you have precise control, lower costs, lower emissions, and a safe environment.

Support

Rotork actuators are backed by full service support, including retrofit and maintenance. Rotork products and services are available worldwide, wherever you are located.

Power Solutions

Rotork is helping you meet the challenges of the power generation. Rotork's offering is based on decades of experience and commitment to improving infrastructures and solutions.

That's why **the power industry**
worldwide **specifies Rotork**

Flow Control Solutions for Power Industries

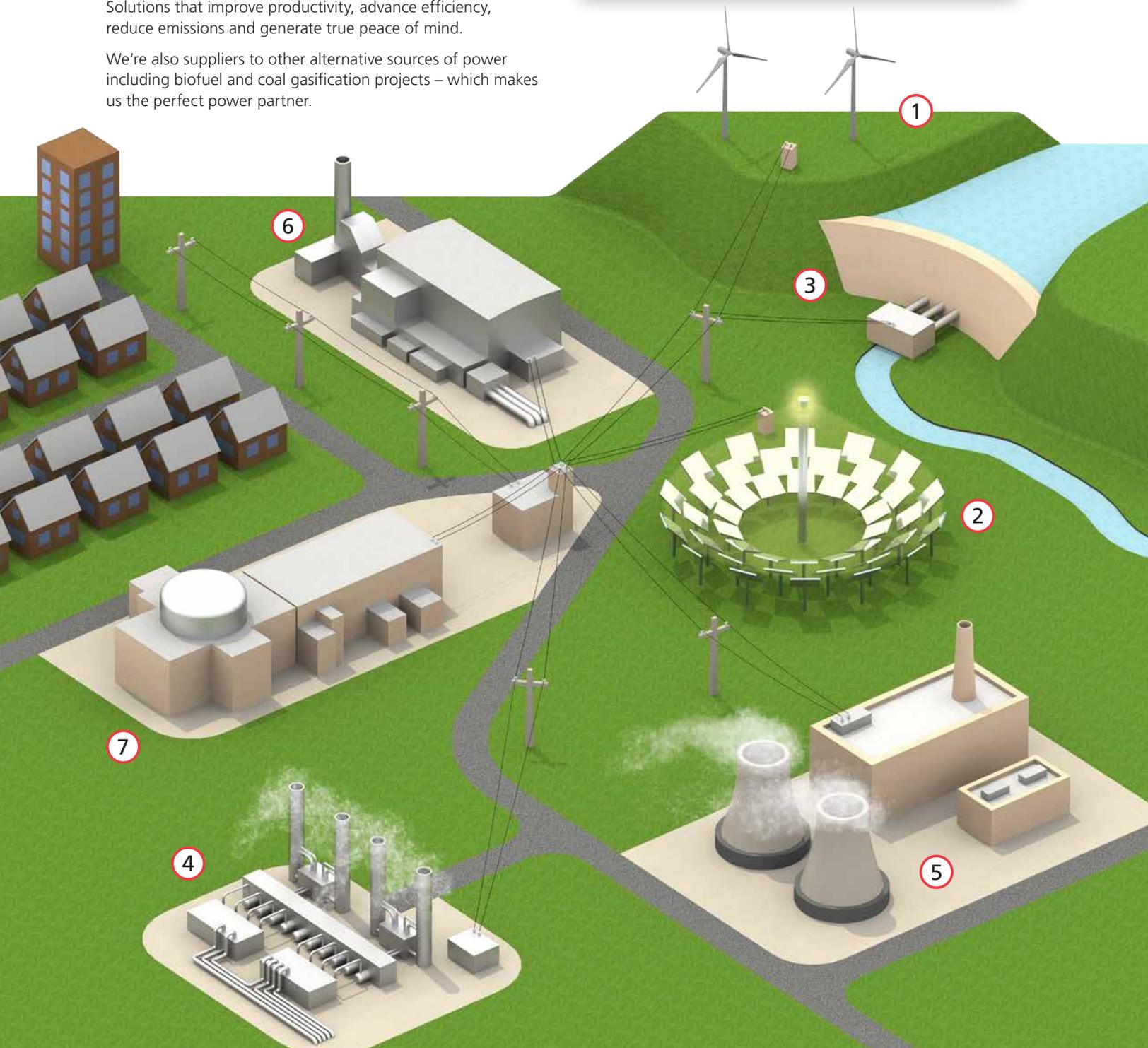
Generating Experience

Wherever there's coal, natural gas, nuclear, solar, biomass or geothermal power being generated worldwide, you'll find Rotork's specialist power team at work, helping plant designers and operators to optimise performance, reliability and above all, safety.

Solutions that improve productivity, advance efficiency, reduce emissions and generate true peace of mind.

We're also suppliers to other alternative sources of power including biofuel and coal gasification projects – which makes us the perfect power partner.

Power generation is the one sector where all fuels compete and will play a major role in how global fuel usage evolves.



Flow Control Solutions for Power Industries

Renewable Power

Renewables are the fastest growing sector in the power industry. Rotork is keeping pace with solutions that help keep power flowing for applications at wind farms, hydroelectric and biomass plants worldwide. Renewables will continue expanding globally as developing countries seek carbon-neutral power sources.

Wind (1)

Around the world, leading OEMs and international energy providers rely on Rotork solutions to keep their offshore and onshore wind operations running safely and reliably. Our products benefit wind turbine operation from rotor blade regulation to ventilation damper control in the nacelle to opening the emergency lubricating system to hatch automation.

Offshore wind turbines usually generate and transmit energy through a collection system to a dedicated transformer/transmission platform. Our products help cool the transformer with filtered seawater in a heat exchanger, firefighting systems and seawater extraction.

Solar (2)

Rotork is already meeting the challenges for concentrated solar power (CSP) and photovoltaic solar technologies with an extensive range of key products specifically suited to the thermal transfer and high temperature applications required for this rapidly expanding sector of the power industry. All of our products are proven in critical high temperature applications, molten salt, steam, feed and circulation water processes.

Hydro (3)

Modernising hydroelectric or pump storage plants, constructing new sites, and retrofitting flood control facilities for efficient power production affords many benefits, but each has their own challenges with cost, performance, and risk. Rotork solutions can help reduce outages, promote consistent and safe equipment operation and improve plant performance.

Geothermal (4)

Heat stored in the earth will play a major part in the generation of power in the decades to come. Geothermal power has the benefits of being cost effective reliable and sustainable. Because no major fuel source is required other than for pumping, it is also immune to fluctuations in cost and supply.

Whether your plant utilises a flash steam, binary or combined cycle system, we can provide you with solutions to optimise and control your operation, reducing your costs and increasing your uptime. Rotork products are designed and engineered with reliability in mind and experienced in managing the most aggressive fluids and have developed solutions for corrosive, saline and abrasive environments.

Traditional Fuel

From coal to natural gas fuels, fossil fuel power generation is the leading source of power around the globe. Rotork provides solutions in pressure management, steam and water isolation and control valves and dampers to meet the most stringent requirements and keep our customers power generation facilities running smoothly and safely.

Rotork's products meet the needs of traditional coal powered technology, we are also playing a key role in developing supercritical and ultra-supercritical power stations. These operate at increasingly higher temperatures and pressures, resulting in higher efficiencies and significant CO₂ reductions.

Coal (5)

Coal fired power stations are still in operation all over the world and there is a requirement for them to be made cleaner to meet ever-tightening emissions regulations.

Rotork are experts in replacing older equipment with modern, energy efficient and cost effective flow control solutions that help plants meet and exceed modern regulations. Working with our partners we are able to extend the viable operational life of coal fired power stations.

CCGT Combined-cycle power plant solutions (6)

Natural gas fired power generation is growing in popularity due to its higher energy conversion efficiency and reduced pollutants. As plants burn cleaner, carbon dioxide emissions become more manageable. Rotork is ideally positioned to help you improve output and reliability even further with an exceptional range of high quality products and solutions, backed by expert service and support.

Combined-cycle power plants face a tough combination of challenges where productivity demands are high, operating conditions are harsh, and staff sizes are small. To achieve and maintain profitability, operators are looking for smart, innovative ways to operate and maintain equipment like feedwater systems, circulating water systems, condensate and make-up water systems, gas and steam turbine auxiliaries and support systems.

Rotork optimises systems in every area of the plant from fuel supply equipment to turbines and generators, Rotork offers a single-source for solutions that can help drive plant productivity and reduce maintenance and operating costs.

Nuclear (7)

Nuclear power is an increasingly critical power source for the world, demanding safety, reliability and efficiency from power plants and distribution networks. Rotork supplies a comprehensive range of flow control products for use in nuclear power plants, both inside and outside containment areas. Our products have been used in nuclear facilities for over 50 years. See PUB000-104 for more information.

Helping to Meet Your Challenges

As a specialist in the power generation industry, Rotork is dedicated to meeting these seven core needs with the products that we design and manufacture, and the services we provide.

Durability and Reliability

- All our products are designed to withstand the harsh environments and operating regimes of the power industry
- Designed to survive extreme conditions of temperature, vibration and dust
- Long operating life with very low maintenance requirements – Depending on their usage, many of our products are still operational after 30 years or more, even in the most demanding environments and with minimal or no maintenance

Providing you with...
robust, long lasting equipment with minimal maintenance even in extreme environments

Flexibility and Efficiency

- Fast, fine and accurate changes to the air feedwater and steam circuits, to quickly achieve the desired output with minimal wastage
- Fine control of fuel and air flows enhances the combustion efficiency and reduces power losses
- Very fine controls result in less thermal shocks and a reduction in downtime

Providing you with...
efficient operation, fast changes and perfect control

Protecting the Environment

- Precise control of dampers reduces gas emissions
- Accurate control of valves to reduce process waste

Providing you with...
reduced emissions and waste

Safety

- Information on status of valves and actuators is usually available centrally and locally
- Full data capture of history of valve and actuator, for diagnosis and management
- Valve torque profiles and events log to help diagnose valve and control problems
- Valve and actuator information to guide maintenance plans

Providing you with...
safe operation of every part of your plant

Operational Costs

- Full diagnostics enable planned maintenance and avoid unplanned emergencies
- Costs reduced through reliable and accurate operation, increasing efficiency and reducing downtime

Providing you with...
strict control of costs, and reduced expenditure on maintenance

Information and Management

- Our actuators and instruments interface with any plant control system
- Accurate data is readily available from all our products
- Our easily accessible diagnostics provide full management information
- Full information on settings, operational accuracy, feedback and history
- Password protection of all information

Providing you with...
complete information, secure yet easy to access

Maintenance and Support

- We can install and commission, and provide complete integration into your plant
- We can provide a full service during your plant outage, including inspection of all actuators, removal, overhaul and replacement
- We can support all of your legacy actuators
- We have a full asset management programme, including health checks and preventative maintenance

Providing you with...
complete technical support, backed by expert staff

Rotork Products for Power Applications

Rotork has been involved in the power generation market for over 60 years. Our knowledge of actuation and flow control solutions is second to none and we have developed a range of product offerings tailored for power industry applications:

Electric Actuators

Heavy-duty valve actuators are Rotork's core business. Since 1957 Rotork has grown to be the world's largest independent manufacturer. In addition to our traditional multi-turn and part-turn actuators, Rotork also manufactures highly accurate rotary and linear actuators for process control applications as well as a range of HVAC actuators and network control systems.

Fluid Power Actuators

Rotork manufactures a comprehensive range of high quality fluid power actuators and control systems. We are dedicated to providing superior performance actuators for use on general purpose (on / off), modulating and protective service and special valve applications.

Gearboxes, Gear Operators and Valve Accessories

Rotork delivers innovative solutions to individual valve gearbox and valve accessory requirements, drawing on an unrivalled range of quality products. Valve accessories capabilities include mounting kits, spools, pedestals, extension spindles, switchboxes, positioners, handwheels and chainwheels, offered with comprehensive packaging, assembly and test services.

Precision Control Instrumentation

Rotork are specialist manufacturers of products for flow and pressure measurement and control. Rotork offers a range of precision control and valve accessory products from the Fairchild, Young Tech, Soldo®, Midland ACS, Bifold® Fluidpower, M&M International and RI Wireless companies.

Our range of actuators are all robust and durable, and there's a wide range of specifications to suit many different types of application, from On-Off to continuous modulation.



Electric Actuators

IQ range



IQ₃ Range linear, part-turn and multi-turn actuator

Damper drive operation must be reliable and safe. The Rotork IQ₃ range are designed to meet the toughest valve and damper applications including combustion air and flue gas and engineered for a lifetime of uninterrupted service in watertight and hazardous area environments.

See PUB002-038 for more details.

IQ Range performance data

- Multi-turn direct drive: 14 to 3,000 Nm (10 to 2,200 lbf.ft)
- Multi-turn with IS or IB gearbox: up to 43,000 Nm (31,715 lbf.ft)
- Part-turn direct drive: 20 to 3,000 Nm (14.8 to 2,200 lbf.ft)
- Part-turn with IW gearbox: up to 1,000,000 Nm (737,561 lbf.ft)
- Linear thrust range with linear output: up to 86 kN (19,333 lbf)

CK range



CK modular design electric valve actuators

The CK range provides several options to meet actuation requirements from simple, robust actuators (CK Standard) with separate starters for harsh environmental conditions, to intelligent Centronik control module (CKc) equipped actuators for applications that require enhanced actuator status, feedback and control. Modular design allows easy upgrading to any control configuration through plug-in technology.

See PUB111-001 for further details.

CK Range performance data

- Multi-turn direct drive: 10 to 500 Nm (7 to 369 lbf.ft)
- Multi-turn with IS or IB gearbox: up to 10,800 Nm (8,000 lbf.ft)
- Part-turn with IW gearbox: up to 205,500 Nm (151,569 lbf.ft)

Electric Actuators

CVA and CMA ranges



Control valve actuators

The CVA and CMA ranges are ideal for power stations where process control is critical. The CVA and CMA ranges deliver a series of sizes suitable for linear, quarter-turn and rotary control valve and pump applications requiring precise position control and continuous modulation.

These electrically powered process control operators are suitable for many applications including boiler feedwater, water treatment, and variable flow systems as well as spray water, cooling water and steam control.

See PUB-042-001 for further details.



CVA Range performance data

- CVL Linear: Thrust range 890 to 22,241 N (200 to 5,000 lbf)
- CVQ Part-turn: Torque range 54.2 to 271 Nm (480 to 2,400 lbf.in)

CMA Range performance data

- CML Linear: Up to 5,004 N (1,125 lbf) seating thrust
- CMQ Part-turn: Up to 124 Nm (1,100 lbf.in) seating torque
- CMR Multi-turn: up to 45 Nm (400 lbf.in) rated torque with GB3

SM-6000 range



Heavy-duty rotary actuators

The SM-6000 S2 Series of heavy-duty rotary actuators are internally geared to produce up to 26,000 lbf.ft (35,251 Nm) of torque at unrestricted, continuous modulating duty. These actuators are ideally suited for dampers, vanes, valves and other applications requiring high speed, high torque and exact positioning control.

See PUB052-001 for further details.

- Up to 313° rotation
- Torque range up to 35,256 Nm (26,000 lbf.ft)

LA-2000 range



Ideal for combustion controls

The LA-2000 Series are bi-directional linear actuators offering continuous modulating duty up to 2,000 starts per hour. A variety of speeds, thrusts and motors are available which make the LA-2000 Series ideally suited for reliable positioning of dampers, combustion controls, gates, diverters, variable speed drives or other linear positioning applications.

See PUB045-002 for further details.

- Stroke distance from 6" to 30" (152 to 762 mm)
- Thrust range up to 27,335 N (6,150 lbf)
- Modulating duty: 2,000 starts per hour

Pneumatic and Hydraulic Actuators

GP/GH

range



For large quarter-turn valve and dampers

- Scotch yoke actuators
- Double acting or spring return
- Corrosion resistant cylinders
- Torque output to 600,000 Nm (5,000,000 lbf.in)

See PUB011-001 for further details.

TYPE K

range



For rotary and linear pneumatic damper drives

The Type K Range for rotary and linear pneumatic damper drives for utility power plants that require precise combustion air and flue gas handling solutions.

- Torque output up to 28,201 Nm (250,000 lbf.in)

See PUB000-062 for further details.

SI

range



For critical small to medium size valve and damper applications (remotely operated shut-off valves)

- Self contained electro-hydraulic failsafe actuator
- Linear or quarter-turn
- Non-intrusive set-up and interrogation
- LCD position and diagnostics display
- Isolating or modulating duty
- Linear thrusts: 1.7 to 5,500 kN (382 to 1,236,000 lbf)
¼ turn torques: 65 to 500,000 Nm (575 to 4,425,000 lbf.in)

See PUB021-001 for more details.

RC200

range



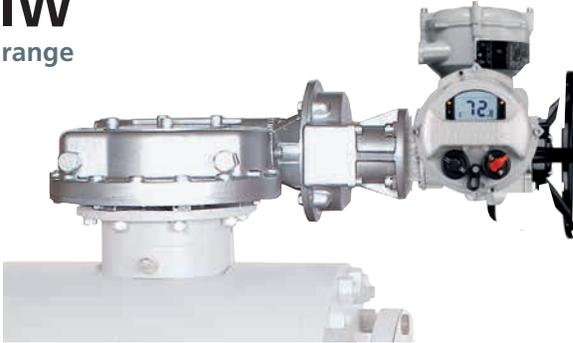
Ideal for emergency failsafe on gas turbine and blow off valves

- Extremely compact scotch yoke pneumatic actuator
- Double-acting and spring-return configurations
- Contained spring module for safety and convenience
- Speed control
- Partial stroke testing

See PUB014-001 for further details.

Gearboxes and Gear Operators

IW range



For quarter-turn and damper applications

- Worm gearbox
- Manual handwheel option
- Ratios from 40:1 to 25200:1
- Modulating option
- Multi-turn option
- Lever drive arm option

See PUB028-001 (metric) and PUB028-002 (imperial) for further details.

ABM range



For quarter-turn and damper applications

- Worm gearbox
- Manual hand wheel option
- Ratios from 34 to 55:1
- For low torques and duty service

See PUB123-001 (metric) and PUB123-002 (imperial) for further details.

IB and IS ranges



For general valve applications

- IB Bevel gearbox
- IB Ratios from 1:1 to 120:1
- IS Spur gearbox
- IS Ratios from 1:1 to 360:1
- Manual handwheel option
- Modulating option

IB – See PUB030-001 for further details.

IS – See PUB031-001 (metric) and PUB031-002 (imperial) for further details.

Handwheels, Chainwheels & Levers



Optional lever chainwheel and handwheel features are available:

- Levers are used on dampers to transfer quarter-turn operation from the gearbox to the damper spindle
- Valves aren't always situated in easy to access locations. Roto Hammer® line of chainwheels provide an easy, inexpensive way to ensure employee safety and effective valve operation.
- Handwheels in various coatings, drives and designs are available for operating the actuators during commissioning or power failure

See PUB063-034 for further details.

Instruments

Valve Positioners

range



Highly Accurate Valve Positioners

For all rotary and linear valve applications

- Pneumatic-pneumatic
- Electro-pneumatic
- Electro-hydraulic
- HART and Foundation Fieldbus protocol
- Partial Stroke Testing (PST)
- Valve diagnostics

Converters and Controllers

range



I/P Converters and Controllers

For demanding applications requiring high accuracy and precision control

- Current (A) and voltage (V) inputs
- Voice coil, feed & bleed and piezo-ceramic technology
- Field reversible
- Explosionproof and intrinsically safe versions
- Hydraulic pump control

See PUB108-001 for further details.

Position Measurement

range



Valve Position Measurement

Hardwire, SMART and wireless feedback for valve position.

- Mechanical, inductive and magnetic technology
- HART and Profibus protocol
- Redundant mesh wireless network
- Zigbee Pro and ISA 100.11a
- Real-time data

Solenoid Valves

range



High Efficiency Solenoid Valves

For all types of power generation applications

- 1/2" to 8" range
- All material types
- SIL certification
- Low power
- High pressure

Nuclear Industry Capabilities

Nuclear Certified Products



Rotork provides pneumatic, hydraulic and electric valve actuators, gearboxes and instrumentation products to the nuclear industry. Rotork nuclear actuators are qualified for safety related duty in nuclear reactor installations.

- Total environmental sealing
- Designed for active and passive duty
- Inside and outside containment capability

Rotork has developed nuclear capabilities over 60 years, positioning the company as a well-established, global supplier with an extensive installed base in both safety related and non-safety related applications.

See PUB000-104 (Nuclear Power Products), PUB004-001 (NA range) and PUB068-001 (Rotork Hiller) for further details.

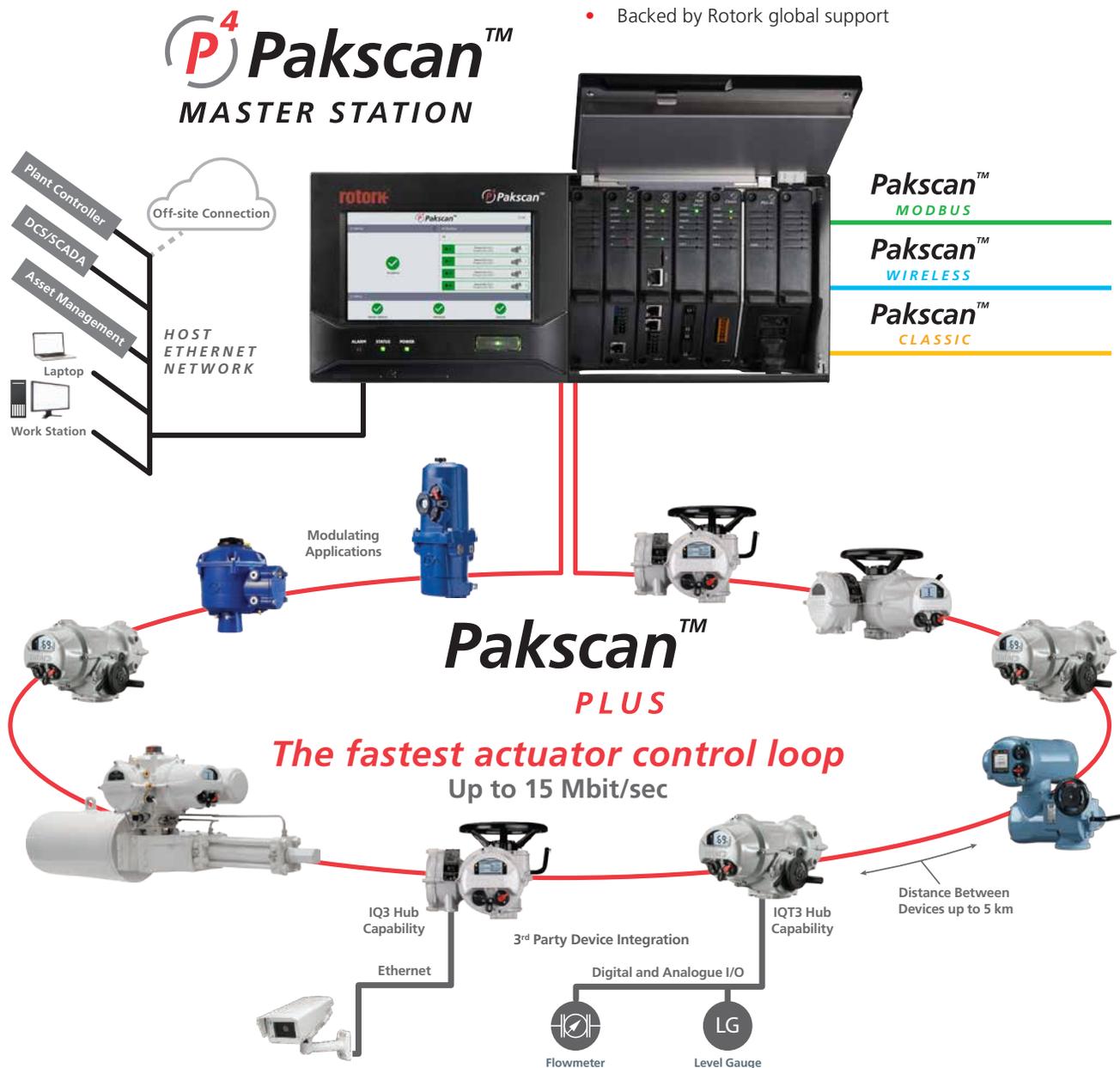


Pakscan – Superior Plant Control

Rotork introduces a new *Pakscan P4 Master Station*, capable of operating four separate field networks simultaneously. Compatible with *Pakscan Wireless*, *Pakscan Classic* and open Modbus networks as well as the new *Pakscan Plus* high-speed field network.

The new *Pakscan Plus* field network is based on the highly noise immune industry standard telecoms protocol, SHDSL, and is capable of delivering speeds of up to 15 Mbit/sec, on a network that can contain up to 300 nodes with up to 5 km between devices resulting in network lengths which can extend over hundreds of kilometres.

- The largest and fastest copper-based 2-wire network loop for actuator control
- High-availability Seamless Redundancy (HSR)
- P4 Master Station with intuitive touch screen user interface
- Up to four field networks on one P4 Master Station
- Multiple host connectivity
- Asset management and datalogging
- Existing *Pakscan* systems upgradeable to P4 Master Station
- All field networks open to 3rd party devices
- Efficient low cost install with minimum cost of ownership
- 3rd party device hub connectivity
- Backed by Rotork global support



Networks – Bus Network Compatibility

In addition to Rotork's own *Pakscan*[™] network system, Rotork actuators are compatible with most industry standard fieldbus systems via network cards that are fitted in the main electronics enclosure.

Integration of the plant controls by use of network connectivity has been a hallmark of Rotork's actuator products for many years. The use of proprietary and open systems makes the commissioning of the plant and the subsequent control and monitoring a simple and reliable task.

All Rotork actuators are compatible with a wide range of communication and process controls systems by including the appropriate option card. The actuator reports status feedback, via the field highway, to the overall plant control system (DCS or PLC) and valve control commands are actioned.

Our own *Pakscan*[™] system complements the open systems from Foundation Fieldbus[®], Profibus[®], Modbus[®], HART[®] and DeviceNet[®]. Innovative technology together with expert bus system knowledge ensures that Rotork can always provide the ideal solution for the control system.

Modern facilities require up to date communications 24 hours a day, right down to plant level.



Profibus[®] is a leading international network protocol for Rotork's Profibus DP module uses DP-V0 cyclic comms and extended actuator diagnostics and configuration is included in the DP-V1 acyclic data. EDD and DTM files allow the Rotork device to be incorporated into asset management systems, whilst the GSD file guarantees device interoperability.

See *PUB088-001* for further details.



The HART[®] signal consists of two parts, the analogue 4 to 20 mA current loop and a superimposed digital variable frequency signal. Traditionally the 4-20 mA loop is used for control and the superimposed digital signal for feedback, diagnostics and configuration. Configuration and feedback using the HART digital signal can be achieved using the host connected to the actuator to select the parameters required.

See *PUB092-001* for further details

Modbus[®]

Rotork's Modbus[®] module allows actuators to be connected to a 2-wire RS485 network for direct communication to a PLC or DCS using Modbus RTU protocol.

See *PUB091-001* for further details.



FOUNDATION

The Rotork Foundation Fieldbus[®] module connects directly onto the standard Foundation H1 bus system. The ability to report extensive actuator feedback within a single input block as well as system diagnostic information makes Rotork the first choice for use with a Foundation Fieldbus system.

See *PUB089-001* for further details.



Rotork's DeviceNet[®] module Electronic Data Sheet description file is used to set up the actuator parameters to allow the systems performance to be optimised. The Rotork module has been certified by the Open DeviceNet Vendor Association.

See *PUB090-001* for further details.

Client Support and Site Services

rotork® Site Services

Rotork actuators are recognised as the best in the world for reliability and safety in the most demanding applications. To maintain this hard-earned leadership position, Rotork Site Services is committed to helping clients to maximise the continuous, fault-free operation and working life of all their actuators.

With established operations and worldwide service centres we are able to offer same-day or next-day service to all our customers. Our Rotork factory trained engineers have skills in both multi-purpose and industry specific applications and carry with them spare parts and specialist test equipment. Our operations utilise a documented Quality Management system established in accordance with ISO9001.

Rotork Site Services aims to be your number one choice for taking care of fault diagnosis, service repairs, scheduled maintenance and system integration needs.

Rotork has expertise and specialist knowledge of every aspect of flow control.

Our service solutions increase plant efficiency and reduce maintenance costs.

Workshop services return equipment to as-new condition.



Client Support and Site Services

Global Service and Support

Rotork understand the value of prompt and punctual customer site services and aim to supply our customers with superior flow control solutions, by providing high quality, innovative products and superior service – **on time, every time.**

Whether you have an actuator requiring on-site servicing, a custom design service requirement or a new actuator installation, we can deliver the fastest turnaround with the least plant disruption.

Accreditation and Assurance

Rotork Site Services is accredited with all major safety authorities around the world, providing our clients with reassurance and peace of mind.

Rotork's engineering teams are experts in the design and implementation of actuation solutions for all circumstances and environments. Our knowledge base draws upon previous installations and environmental situations from all around the world.

Our track record of undertaken engineering projects is second to none. Rotork is trusted by major utility and industrial companies throughout the world to design, install and maintain their actuation stock. We keep their plants operating at peak efficiency, helping them to be more profitable and at the same time meet ever tightening industry watchdog requirements.

We have the knowledge and expertise to design, build and install any standard or custom installation for you, anywhere throughout the world.

Asset Management

Rotork is a corporate member of the Institute of Asset Management, the professional body for whole life management of physical assets.



**Giving You Peace of Mind,
Guaranteed Quality and
Improving Your Site Efficiency**



Actuator Workshop Overhaul

- Supporting all Rotork and non-Rotork products
- Workshop facilities including torque testing and re-coating
- Large OEM stock in all workshops
- Fully trained and experienced service engineers
- Fleet of well stocked service vehicles
- Loan actuator facilities

Field Support

- Site repairs
- Commissioning
- Upgrades-Retrofit
- Fault finding
- Maintenance
- Call-out
- Fully equipped service vehicles

Rotork Client Support Programme (CSP)

- Enables users to select a level of service precisely tailored for their individual asset management requirements
- Designed to provide the maximum reliability and availability of actuators over the life of the product – thereby improving production throughput
- Designed to reduce the cost of maintenance year on year
- Designed to allow customers to manage the problem of 'Risk vs Budget' in maintenance operations
- Designed to be flexible – you choose the level of cover you want
- Reports generated on agreed frequency to demonstrate **cost savings** and **performance improvements**

Turnaround, Shutdown and Outage Support

- Preventative maintenance
- Full on-site overhaul and testing facilities
- OEM spares and support
- Support for Rotork and non-Rotork products
- Commissioning support to achieve shutdown time targets
- Project management and supervision of your plant overhaul and return to service dates

Valve Automation Centres

- On Site – Manual Valve Automation
- On Site – Actuator Replacement
- Off Site – New Valve Automation

See PUB056-013 for further details.



Our customers are leading the way in innovation and technology.

Significant Customers

Rotork products have been installed at 1000's of power stations worldwide where our customers are making significant contributions to the future of power generation.

Wherever there's coal, natural gas, nuclear, solar, biomass or geothermal power being generated worldwide, you'll find Rotork's specialist power team at work, helping plant designers and operators to optimise performance, reliability and above all, safety.





DolWin2, the world's most powerful offshore converter station in the North Sea helping convert clean energy in the German grid.

Talimarjan Power Project, Republic of Uzbekistan, providing energy efficiency and savings through clean power generation.

Incineration emission reduction at Chengdu Xiangfu Domestic Garbage Incineration power plant, China.

Shuqaiq Steam Power Plant in Saudi Arabia, considered one of the largest steam power plants globally.

The biggest solar panel producer in the Middle East, Yanbu Polysilicon Plant in Saudi Arabia.

Sabiya, Kuwait's largest power plant.

The single largest geothermal plant in the world from a single site, Kenya's 280 MW Olkaria IV.

Dongducheon LNG combined cycle power plant in South Korea, one of the largest in its capacity of two units of 858 MW.

Pha Lai 2 Power Plant, the largest coal-fired plant in Vietnam.

Mundra Ultra Mega Power Project using supercritical boiler technology for the first time in India.

Eskom's upgrades to Matla and Majuba power stations in South Africa.

Tallawarra, the most efficient gas-powered, fossil-fired power station in Australia.

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

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