

The Rotork logo consists of the word "rotork" in a bold, red, lowercase sans-serif font. A registered trademark symbol (®) is located at the top right of the letter "k".

rotork[®]

Keeping the World Flowing
for Future Generations

Mining Industry Overview





Mining Industry

Working with process industries for more than 60 years, we have partnered with mining companies and legislative bodies to improve efficiency, reduce energy consumption, maximise uptime and minimise pollution.

Our products and flow control solutions are important components in mining operations.

- Actuators for all valve and damper operations including use in areas of high temperature and vibration
- Fail-safe systems specified on safety critical processes such as mine ventilation and mine water extraction
- Precision instrumentation is used in applications such as ore processing and refining systems
- Network control systems are used in on-site utilities such as water and power plants

Rotork products are known for accuracy and reliability, reducing process waste and increasing efficiency. Equipment reliability delivers longer product lifespans, reducing plant maintenance and increasing profitability. Rotork products deliver reduced cost of ownership over their extended lifetimes.

This is why Rotork is specified as the flow control partner of choice for the global mining industry.

Understanding Your Challenges

Working closely with mining industry partners allows us to understand your business and know the challenges that you face.

We are aware of the environmental, societal and legislative pressures that mean the mining industry has to change and improve the efficiency of its operations.

Demand for rare metals and minerals such as those used in electronics, solar panels and batteries is increasing due to acceleration of global decarbonisation strategies.

Operational costs

Accelerating digitisation and automation of processes improves efficiency, reduces operational costs and positions manufacturers more competitively in changeable markets.

With more than 10,000 valves on an average minerals processing plant alone, small efficiency gains have a large impact on an operation's profitability.

Remote locations

Mining has to operate in less hospitable and more remote locations to secure minerals and metals required by industry. We understand the challenges involved in delivering and removing resources to and from these locations.

Effluent treatment

Effluents such as tailings water, Acid Mine Drainage (AMD), seepage and process acid streams need to be controlled, collected and treated to neutralise or remove hazardous elements, extract useful elements and recycle water.

Water management

Water is a valuable resource and commodity, used in many mining processes. Eliminating water waste and recycling is especially important in remote and arid locations.

Moving to zero emissions

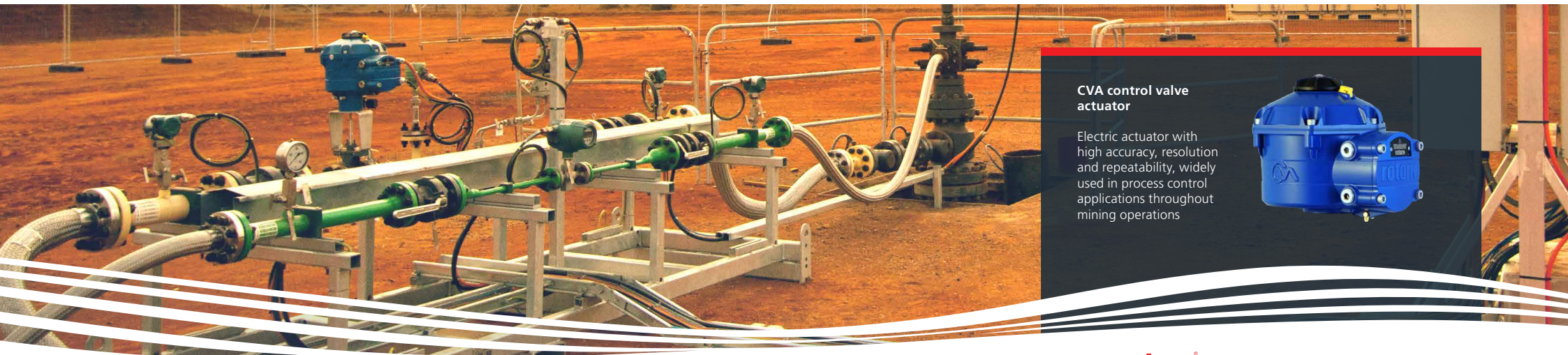
We can help you reduce your emissions and achieve your targets. Zero emission targets for industry are approaching – The EU (2050), China (2060).

Environmental footprint

We know that reducing energy consumption, capturing CO₂, and reducing pollution is vital; Rotork products help you achieve this without compromising safety or reliability.

Life cycle management

Plant designers and managers can reduce the risk of equipment failure and obsolescence by utilising Rotork's advanced technologies and asset management systems.



CVA control valve actuator

Electric actuator with high accuracy, resolution and repeatability, widely used in process control applications throughout mining operations



The Importance of Flow Control

Correctly specified flow control equipment can provide a safe working environment, increase process efficiency, reduce emissions and increase your profitability.

Flow control equipment is used in underground and surface mining processes. The reliable control of fluids and gases is achieved using valves, actuators and associated equipment.

Whether you are installing tail pond level control systems, refitting existing processes or setting up a new operation, your flow control solutions should be carefully considered and specified.

Process efficiency

The ability to move quickly and precisely to a set position will make your process more efficient, minimise waste and reduce energy consumption.

Repeatability

Many operations require valves and dampers to move repeatedly between set positions. Rotork electric actuators provide precise operation, with repeatability and resolution.

Reliability

Flow control equipment should be specified correctly to operate in the chosen process environment. Our products are certified for operation in mining applications including water-tight, dust-tight, high temperature, toxic and explosive atmospheres.

Safety

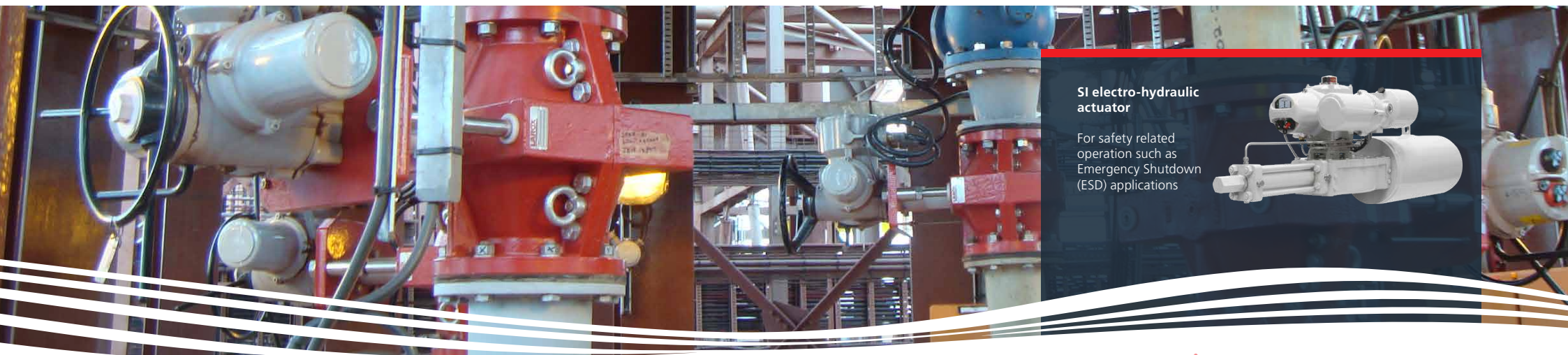
Nothing can compromise the effectiveness of air quality, flood prevention systems, and the de-watering of mines. Rotork safety related actuators can operate isolation valves within 0.5 secs when called upon.

Reduced maintenance

Installing correctly specified and highly engineered solutions will reduce unplanned maintenance and plant downtime. Our intelligent diagnostics work with asset management systems to maximise plant uptime.

Cost of ownership

Rotork products are designed and engineered to very high performance levels. They pay for themselves many times over during their life cycles.



SI electro-hydraulic actuator

For safety related operation such as Emergency Shutdown (ESD) applications

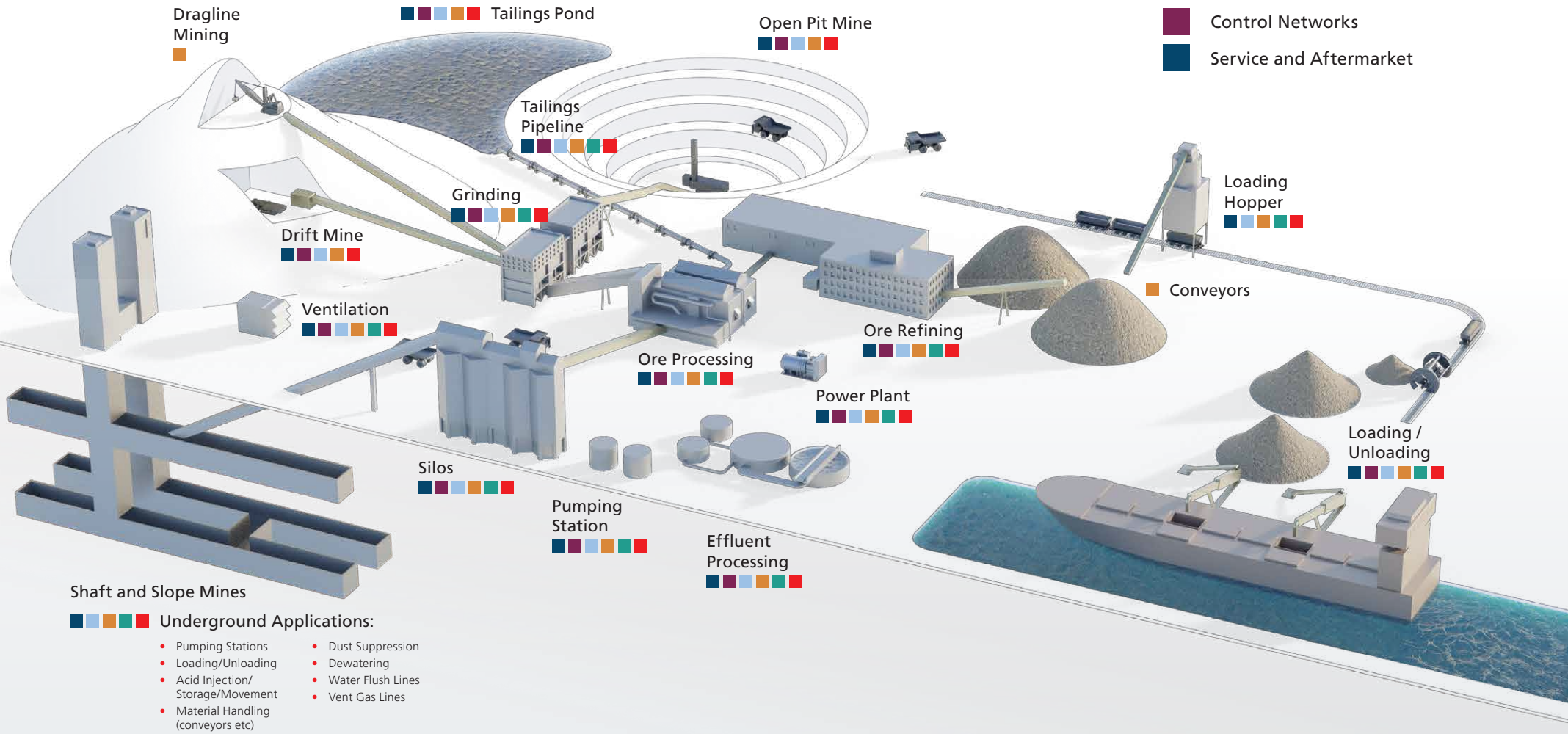


Mining Industry Processes

Rotork has extensive knowledge and experience in all aspects of mining.

Our products can be found in almost every process control application found in mining operations, including the on-site utilities of water supply and power generation.





















- Electric Actuators
- Fluid Power Actuators
- Instrumentation and Control
- Gearboxes and Valve Accessories
- Control Networks
- Service and Aftermarket



Product Solutions for Mining Applications

Rotork design engineers work with plant managers, network systems engineers, legislative bodies and government environmental groups to specify and supply the correct solutions for your requirements.

Our extensive product range allows us to meet all your requirements and help you achieve your goals. For detailed application information see our Application Focus documents available on rotork.com

<p>Electric Actuators</p>	<p>Fluid Power Actuators</p>	<p>Instrumentation and Control</p>	<p>Gearboxes and Valve Accessories</p>	<p>Service and Aftermarket</p>
<p>IQ Range – Multi-turn and part-turn actuators for arduous environments</p>	<p>RHQ Range – Extreme-duty rack and pinion actuators</p>	<p>Limit Switch Boxes – High visibility position indication and control feedback</p>	<p>Hand Operated – Part-turn and multi-turn worm gear operators</p>	<p>Lifetime Management</p>
				
<p>CK Range – Modular design electric valve actuators</p>	<p>CP / GP / GH Ranges – Scotch yoke actuators</p>	<p>Valve Positioners – Precision valve control for pneumatic and hydraulic actuators</p>	<p>Motorised – Part-turn and multi-turn worm, bevel and spur gear operators</p>	<p>Intelligent Asset Management</p>
				
<p>CVA / CMA Ranges – Linear, part-turn and multi-turn precision modulating actuators</p>	<p>RC Range – Compact scotch yoke actuators</p>	<p>Piston Actuated Valves (PAV) – Pneumatically actuated on/off valves</p>	<p>Control Networks</p>	<p>Spares</p>
			<p>Network connectivity</p> 	
<p>SI / EH Ranges – Electro-hydraulic actuators</p>	<p>HPU Range – Hydraulic power units</p>	<p>Air preparation – Filters, regulators, lubricators and accessories</p>	<p>Rotork <i>Master Station</i> – Supervisory plant control</p>	<p>Life Cycle Services</p>
				



Trusted Partner

Rotork is a market-leading provider of flow control and instrumentation solutions. We have served global industrial actuation and flow control markets for more than 60 years, delivering results in all regions and in all environmental situations.

Our reliability record is second to none. Rotork products are designed with safety and performance at their core and are put through vigorous testing by international safety institutes. Our products are certified for use in the world's most dangerous, and hazardous areas.

Partnering with Rotork provides the following:

- Assured safety and reliability
- Industry leading accuracy and efficiency
- Proven technology that works with all control systems
- Product range with solutions to suit every application
- Assistance with plant planning, development and maintenance through our local support services

History shows we are a company to do business with:

- Established in 1957, we have always been innovators and leaders in flow control technology
- Safety is a core value of our business and products
- We have innovative research and development centres throughout the world
- With 3,400 employees globally and 85 sites, we provide local service on a global scale
- We are embracing a more diverse workforce
- We are committed to reducing our own environmental impact, reducing water and power usage year-on-year

Our service engineers work with industrial partners to design, update and maintain their plant and equipment.



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

www.rotork.com

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PUB000-253-00
Issue 07/21

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