

The background features a close-up of several large rolls of steel coil on the left side. A series of parallel, wavy lines in shades of grey and blue flow from the top left towards the right, creating a sense of movement and industrial process. The overall aesthetic is clean and professional, emphasizing the industrial nature of the company.

rotork[®]

Keeping the World Flowing
for Future Generations

Steel Manufacturing Overview



Steel Manufacturing

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

Our products and flow control solutions are important components in all areas of steel manufacturing.

- Valve actuators are used for valve and damper operations including use in high temperature blast air applications
- Fail-safe flow control solutions are specified on safety critical systems such as top pressure turbines
- Precision instrumentation are used in applications such as steel finishing quenching 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. Our reliability delivers longer product lifespans, reducing plant maintenance and increasing profitability. Rotork products pay for themselves many times over during their life cycles.

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

Understanding Your Challenges

Working closely with steel 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 steel industry has to change its operational processes.

Operational costs

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

Raw material usage

We understand the need for accurate process control in coke and sinter operations to reduce raw material wastage which leads to better consistency of manufactured steel.

Reducing plant downtime

Unplanned maintenance is costly and disruptive. Rotork products have diagnostic systems that can monitor process performance and create planned maintenance schedules.

Moving to zero emissions

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

Energy consumption

Using Rotork products within a steel works will improve plant efficiency and reduce energy consumption without compromising safety or reliability.

CO₂ reduction

We work with steel producers to reduce CO₂ output by replacing inefficient equipment and re-using CO₂ in ancillary processes, such as hydrogen production. This not only reduces CO₂ but creates new revenue streams.

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.



IQ electric actuator

Used widely in steel plants for reliable operation in arduous conditions



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.

Whether you are refitting an existing steel works, planning a new blast furnace or developing a new steel production method, 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 deliver reliable operation, detailed feedback and are certified for use in steel works applications including dusty, high temperature and toxic atmospheres.

Safety

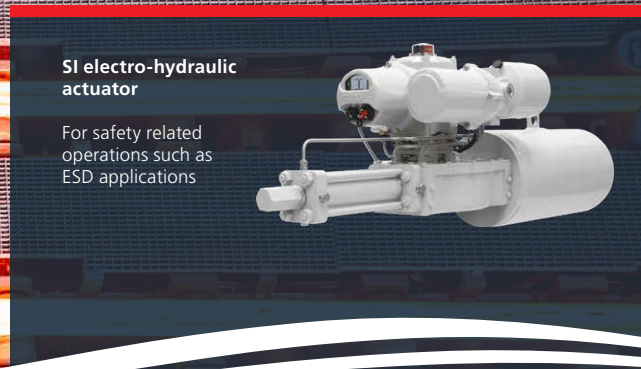
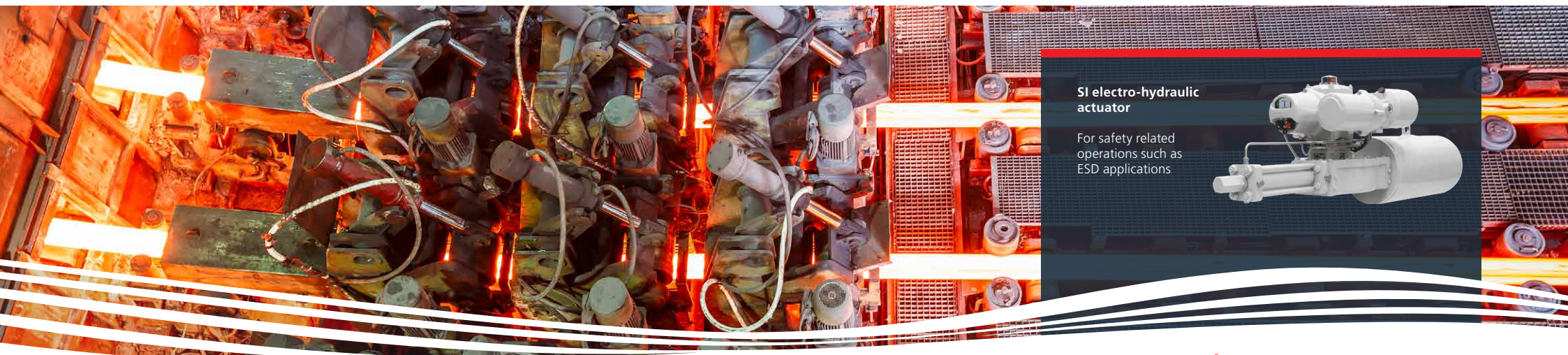
Steel plants have areas requiring Emergency Shutdown (ESD) procedures to stop chain reactions and save equipment. Rotork safety related actuators operate within 0.5 secs to close valves when called upon.

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

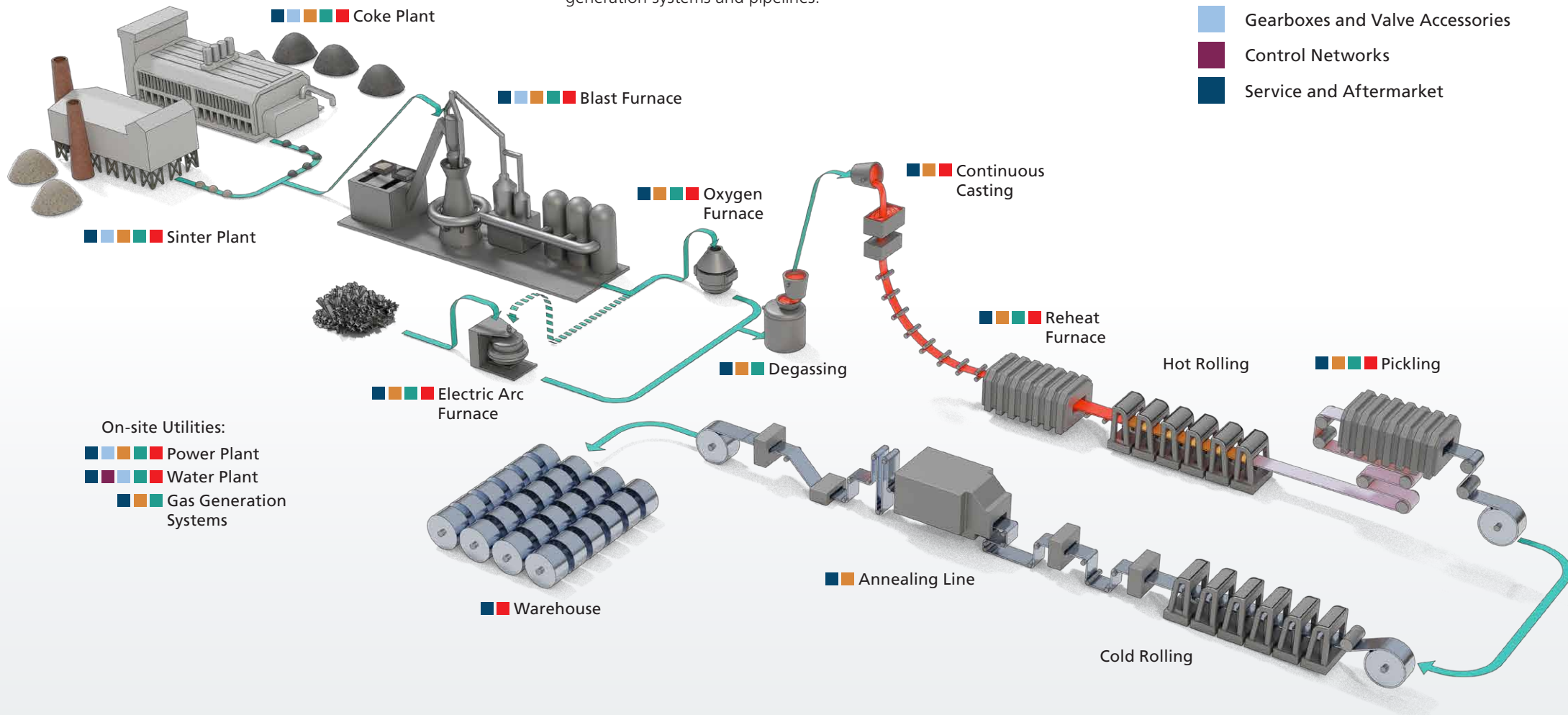
For safety related operations such as ESD applications

Steel Industry Process

Rotork has extensive knowledge and experience in all aspects of steel manufacturing.

Our products can be found in almost every process control application found in a steel works, including the on-site utilities of water treatment, desalination plant, power generation, waste treatment/recovery, various gas generation systems and pipelines.

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



Product Solutions for Steel Manufacturing

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>CP / GP / GH Ranges – Scotch yoke 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>RC Range – Compact 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>GT Range – Rack and pinion actuators</p>	<p>Piston Actuated Valves (PAV) – Pneumatically actuated on/off valves</p>	<p>Control Networks</p> <p>Network connectivity</p> 	<p>Spares</p>
			<p>Rotork <i>Master Station</i> – Supervisory plant control</p> 	
<p>SI / EH Ranges – Electro-hydraulic actuators</p>	<p>K-TORK Range – Pneumatic vane actuators</p>	<p>Air preparation – Filters, regulators, lubricators and accessories</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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