

INDUSTRIAL CRANES
NUCLEAR CRANES
PORT CRANES
HEAVY-DUTY LIFT TRUCKS
SERVICE
MACHINE TOOL SERVICE

POWER INDUSTRY

KONECRANES®
Lifting Businesses™

POWER INDUSTRY

EQUIPMENT AND SERVICE FOR THE POWER INDUSTRY



WE KNOW THE POWER INDUSTRY

Konecranes serves the power industry with material handling equipment for every type of power plant. From a traditional coal power plant to a massive hydro power plant or a remote wind farm, we have the cranes and service to suit your needs.

LEADING POWER INDUSTRY EXPERTISE

Konecranes has provided customers in the power industry with material handling equipment since the 1930s. We have developed a body of expertise, including a deep understanding of power industry processes, challenges, product and service needs, and technical requirements.

MORE THAN JUST EXCELLENT CRANES

Konecranes has always been committed to supplying customers with lifting equipment that excels in safety and reliability. But we also want to help you save on overall costs. Using advanced technology, we make cranes that are lighter and more compact, with the same high performance.

WE HAVE THE TECHNOLOGY TO HELP YOU IMPROVE OPERATION SAFETY AND PRODUCTIVITY

Smart Features are Konecranes-designed add-ons that work together or individually to improve safety, cycle time and load positioning. They add intelligence to your crane with purpose-built software and hardware. These features assist the operator in controlling the crane by performing certain repetitive actions or compensating for misalignment and erratic movements.

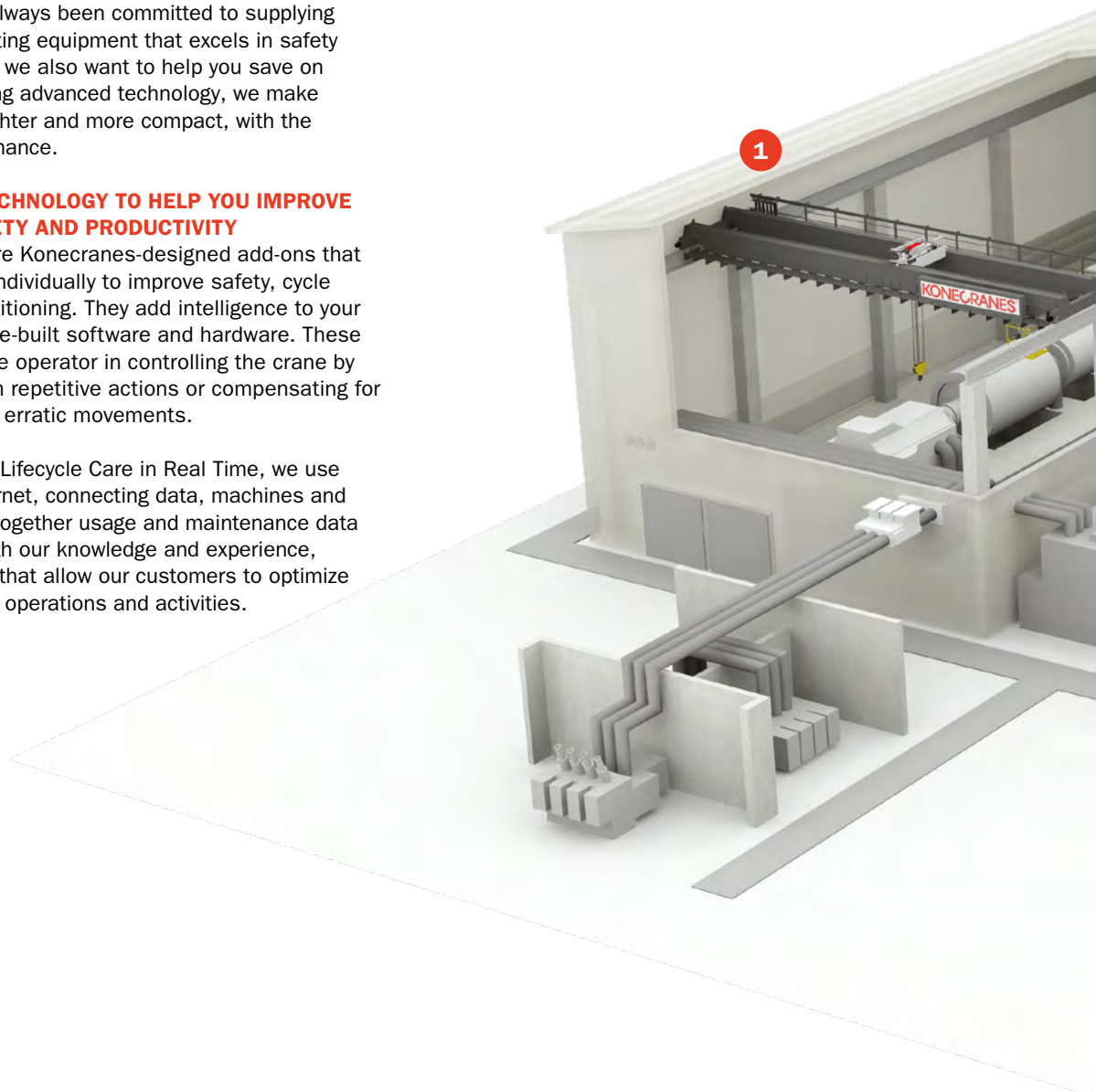
In order to deliver Lifecycle Care in Real Time, we use the Industrial Internet, connecting data, machines and people. We bring together usage and maintenance data and combine it with our knowledge and experience, providing insights that allow our customers to optimize their maintenance operations and activities.

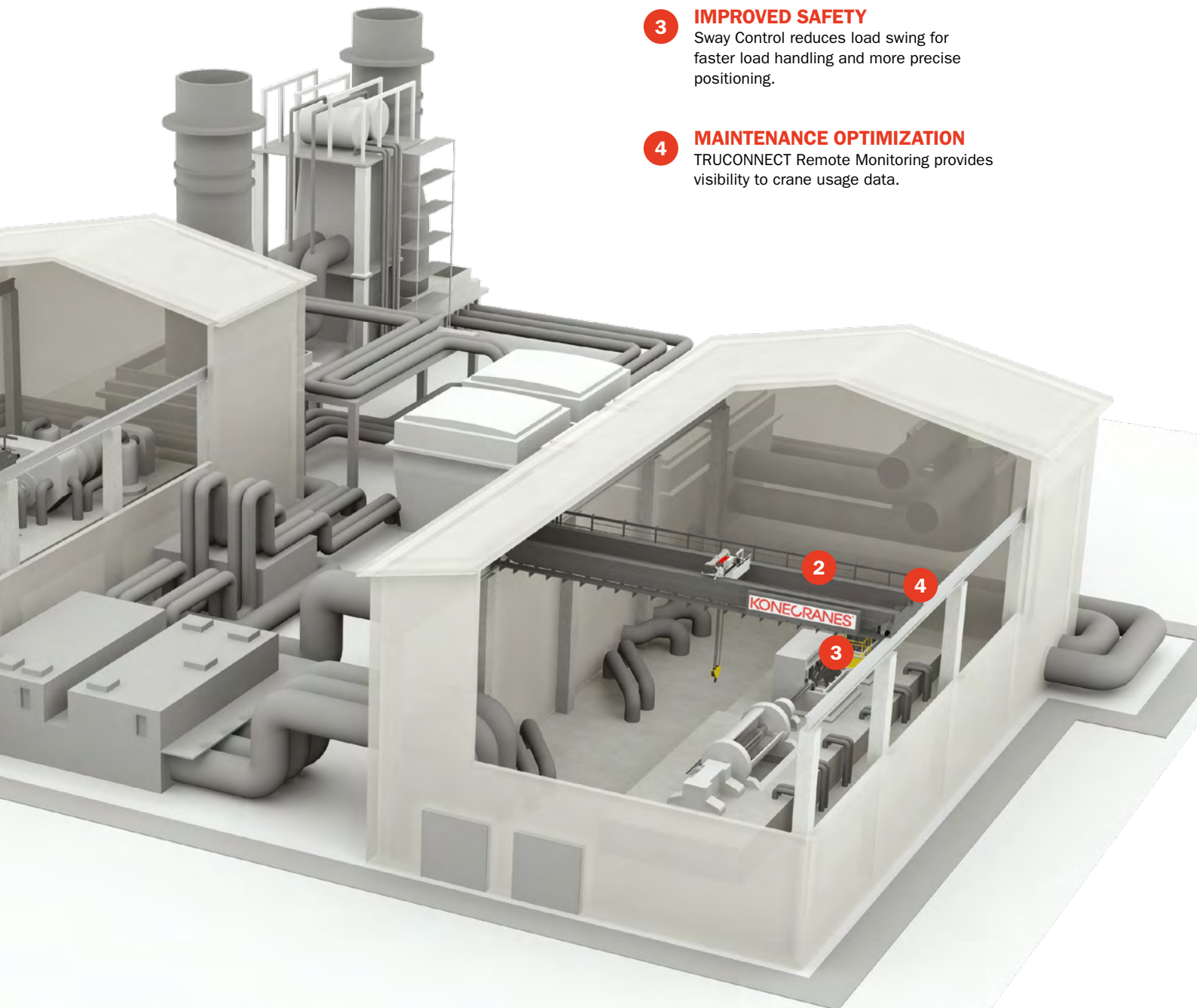
SUPPORTING YOUR ENTIRE PROCESS

We offer inspections and preventive maintenance, as well as modernization and consultation services that can help you increase crane reliability, reduce downtime and extend equipment service life.

EXPERTISE THAT MAKES A DIFFERENCE

By working closely with customers, Konecranes has developed a body of experience in the power industry. By applying our expertise, advanced technology and service offerings, we can make a difference in the safety and productivity of your operation.



**1****THE RIGHT DIMENSIONS**

Lifting equipment that provides the right dimensions for power industry requirements.

2**HIGH ACCURACY**

Speed controls give the utmost accuracy in positioning, and the correct speed and movement for every lift.

3**IMPROVED SAFETY**

Sway Control reduces load swing for faster load handling and more precise positioning.

4**MAINTENANCE OPTIMIZATION**

TRUCONNECT Remote Monitoring provides visibility to crane usage data.

TECHNOLOGY FOR THE POWER INDUSTRY

Power industry cranes need to have exceptionally responsive controls to handle extremely heavy and valuable loads. There is no margin for positioning errors when installing heavy turbines and generators in a power plant. Our cranes can be equipped with Smart Features to help operators move loads more safely, quickly and accurately.

Sway Control limits load swing to aid in handling and reduce risk of load collisions. And since a load doesn't sway during lift, travel and slowdown, you don't have to wait for a stopped load to stabilize before lowering it into place. This lets you move loads more safely, quickly and precisely.

Hoisting Synchronization helps a single operator move two or more hoists together without compromising safety, load control or speed, helping to improve efficiency in operations requiring multiple cranes or multiple hoists on a single crane.

Microspeed turns large joystick movements into slow and exact load movements for more accurate and precise load handling.





PROVEN TECHNOLOGY FOR SIEMENS

SEVERN POWER CCGT POWER STATION, USKMOUTH, UK

Konecranes has completed several projects for Siemens Energy Sector within the UK, Benelux, India and areas of the Middle East. Every crane project has included a service contract for the duration of the construction period.

THE CHALLENGES OF LIFTING EQUIPMENT IN POWER PLANTS

In the power industry, the focus of lifting equipment is turbine building cranes. They are a key component during the erection stage of the plant and further on in the maintenance of the turbines and generator over the lifetime of the power plant.

The operation of these types of cranes is completely different from that of a typical industrial environment. For industrial cranes, high performance and shift operation are required, whereas the lifting equipment in power plants is used intensely in the erection stage, but can then be idle for long periods, which are broken by short phases of use during major plant overhaul.

WE BRING EXPERIENCE TO THE PROJECT

Our experience with Siemens 300t and higher capacity cranes gave us understanding of the project and helped us deliver material handling equipment that exceeded specification requirements.

The main turbine hall cranes were rated at 370t to handle the turbines and generator from the loading dock to the assembly bases. After the main heavy lifts were done, the cranes were then rated back to 140t for their day-to-day work, until there is a need to lift out a turbine or generator.

The cranes are equipped with Konecranes inverter controls, radios, limit switches and other accessories for smooth operation. The Extended Speed Range allows speed variations to suit the process when the load changes from 140t to 370t.

SMOOTH PROJECT FROM START TO FINISH

Siemens chose Konecranes because of our cost efficient products and services, excellent delivery record and our capable UK installation team.



MATERIAL HANDLING FOR A WIDE RANGE OF NEEDS

HYDRO POWER PLANTS

We offer hydro power station cranes with lifting capabilities up to 1000 tons and 1 to 80 tons for maintenance and workshop use.

Applications for hydro power plants include:

- Spillway gate gantry crane
- Turbine hall crane
- Spillway gate gantry crane
- Draft tube gantry crane
- Intake gate gantry crane
- Maintenance shop hoists and jibs
- Maintenance hoists
- Wind mill hoist

THERMAL POWER PLANTS

Konecranes provides cranes for all kinds of thermal power plants, such as turbine hall cranes, boiler room cranes and hoists, and maintenance and workshop cranes and hoists.

WIND POWER

Electric chain hoists are used to carry out maintenance work on windmill machinery and for lifting spare parts. The hoist can be mounted to a jib crane within the nacelle of the turbine. Using the hoist for service allows maintenance staff to safely raise and lower turbine appliances for repair or replacement through the hub, as opposed to accessing the nacelle through the hatch or along the tower.

Workshop cranes can be used for manufacturing windmills. These cranes include wall console cranes, bridge cranes, jib cranes and manual hoists.



SERVICE TO FIT YOUR NEEDS

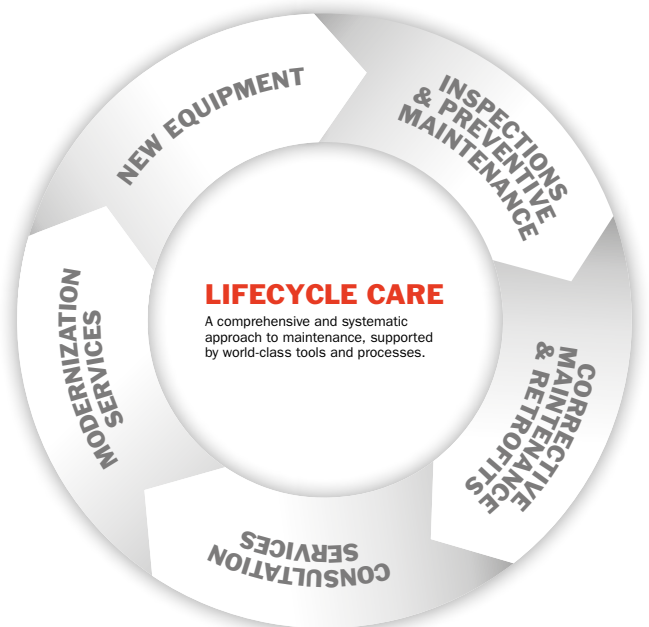
We provide specialized maintenance services and spare parts for all types and makes of industrial cranes, hoists, machine tools and port equipment from a single piece of equipment to entire operations. Our objective is to improve the safety and productivity of our customers' operations.

OUR APPROACH TO CRANE MAINTENANCE

Lifecycle Care is a systematic, consistent, comprehensive and professional approach to maintenance, supported by world-class tools and processes. Highest lifecycle value results from maximizing the productivity of uptime in addition to minimizing the cost of downtime. We believe merely keeping your cranes running is not sufficient. We must also help you achieve the highest productivity during every shift.

PREVENTIVE MAINTENANCE FOR IMPROVING SAFETY AND PRODUCTIVITY

An active preventive maintenance program is recommended for your lifting equipment. We can create a maintenance plan based on your equipment, operating environment, manufacturer recommendations and statutory requirements. The CARE Preventive Maintenance Program is our most popular service offering and includes preventive maintenance inspections and routine maintenance. If you need less, the CONDITION Inspection Program will help you comply with local statutory requirements and support your in-house maintenance.



GET INSIGHTS INTO MAINTENANCE OPERATIONS

TRUCONNECT Remote Monitoring provides you with crane usage and operating information that is accessible on demand in the yourKONECRANES.com customer portal. TRUCONNECT data includes safety-related issues, such as over-temperatures, attempted overloads and emergency stops. It also includes operating statistics, such as work cycles and running hours, and estimates of remaining Design Working Period of selected components such as the hoist and hoist brake. Safety alerts are delivered automatically by email or text to designated contact personnel.



INDUSTRIAL
CRANES



NUCLEAR
CRANES



PORT
CRANES



HEAVY-DUTY
LIFT TRUCKS




SERVICE



MACHINE
TOOL
SERVICE



Konecranes is a world-leading group of Lifting Businesses™ offering lifting equipment and services that improve productivity in a wide variety of industries. The company is listed on Nasdaq Helsinki Ltd (symbol: KCR1V). With approximately 12,000 employees at 600 locations in nearly 50 countries we have the resources, technology and determination to deliver on the promise of Lifting Businesses™.

© 2016 Konecranes. All rights reserved. 'Konecranes', 'Lifting Businesses',  and 'TRUCONNECT' are either registered trademarks or trademarks of Konecranes Global Corporation.



**LEARN ABOUT KONECRANES
EQUIPMENT AND SERVICE
FOR THE POWER INDUSTRY.**

konecranes.com/industries/power



konecranes.com