

SMARTON® CRANE

# A compact, robust and versatile open winch crane





# High performance for demanding lifting

Konecranes SMARTON is a compact open winch crane developed specifically for the accuracy and smooth movements needed in assembly and maintenance. An outstanding achievement of advanced mechanical and electrical engineering, SMARTON has been adopted by many of the world's leading industrial companies because it offers the right mix of mechanical excellence, lifting intelligence, and service support.

# **Optimized for your lifting needs**

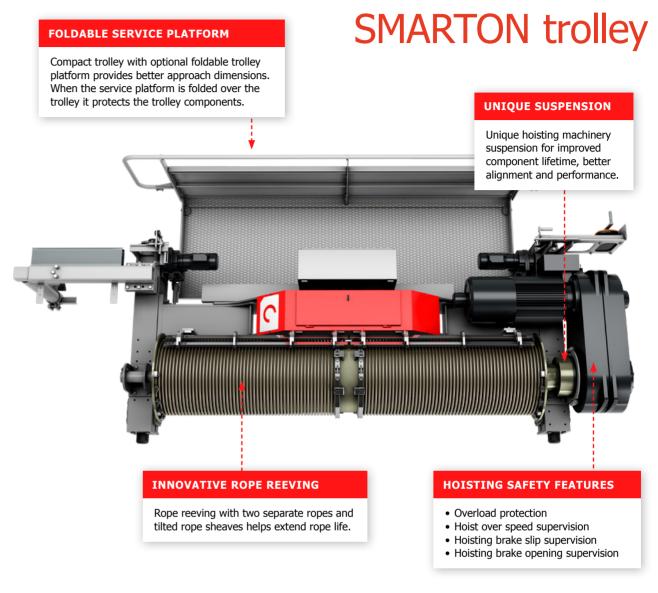
Each SMARTON is specially configured for its specific operating conditions, giving you a tough, easily adaptable crane for your lifting needs. You can choose almost every aspect of its design: various controller alternatives for crane operators, application-specific hoisting trolley layouts, a range of hook options, and a wide selection of safety features adapted to your particular facility.

# **CORE OF LIFTING IN SMARTON**

Our cranes are built around key components that we design and manufacture in-house. Konecranes gears, motors and controls are made only for use in cranes and are fully integrated into the core of our crane technology. We don't just design the components, but also the interactions between them. This approach gives us the flexibility to find the right solution for your lifting needs.



Scan the QR code and read more about each key component



# Reduced energy consumption through braking

The SMARTON crane can fitted with a regenerative network braking unit that can help reduce your energy consumption. The regenerative braking system feeds the energy generated during lowering and decelerating back to the supply network and this energy can also be used by the other machineries and components of the crane.

Regenerative network braking can help reduce energy consumption by up to 30%. Network braking also eliminates the need for dynamic braking resistors and stabilizes the crane supply against network disturbances.



# **Committed to sustainable lifting solutions**

Konecranes is committed to providing sustainable lifting solutions and services while preventing and minimizing emissions and waste. Lifecycle thinking combined with usability, eco-efficiency and safety guide us in the design of our products and services. Our aim is to maximize the lifecycle value of our products.

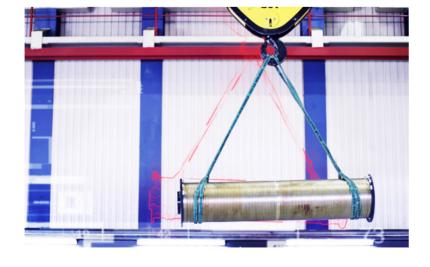
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# Heavy lifting with intelligence

The SMARTON compact open winch crane lifts loads from 6.3 tons all the way up to 250 tons. Featuring intelligent mechanical design combined with inbuilt safety functions and a wide range of Smart Features, it is the perfect choice for a wide range of applications—especially in demanding high-capacity assembly and maintenance work that requires accurate and smooth movement of the lifted load.

Konecranes Smart Features are software-based addons for your SMARTON crane that can help improve safety, cycle time and load positioning through partial automation. Smart Features give you precision movement and lower the risk of collision with personnel or equipment.



## **ACTIVE SWAY CONTROL**

Limits load swing by controlling acceleration and deceleration of the bridge and trolley. It also allows faster load handling and more precise positioning, and prevents damage to the load, crane, and surrounding area.

### **HOOK CENTERING**

Eliminates side pull during lifting by automatically positioning the bridge and trolley directly over the load which means less wear and tear on the crane's components, faster load cycle times, and ease of operation.

### **SNAG PREVENTION**

Stops all crane movement if the hook, sling, or load accidentally gets caught on something. This reduces the risk of hazardous situations while moving loads and helps to prevent damage to the load, crane and surrounding area.



# **SMARTON** specifications



If you're planning to build a new facility, SMARTON can help cut structural costs. It has low headroom requirements, a compact trolley design and better hook approaches for a more efficient and cost-effective use of space.

FEATURES	SPECIFICATIONS
LIFTING CAPACITY	Up to 250 tons (1 trolley) Up to 500 tons (2 trolleys)
SPAN	Up to 45 meters
LIFTING HEIGHT	Up to 30 meters
RUNWAY LENGTH	No limitation
HOIST SPEED CONTROL	Inverter hoisting with Extended Speed Range (ESR)
CRANE CONTROL OPTIONS	Radio remote control with tablet, cabin or Remote Operating Station (ROS)
GIRDER DESIGN	Box girder
TROLLEY SUPPLY	Flat cables or energy chain
COMPLIANCE	FEM 1Bm to 3m ISO M3 to M6 CMAA class B to D
CERTIFICATIONS	CE, RoHS, (CSA)
TEMPERATURE RANGE	-20°C to +60°C
INTEGRATED SAFETY FUNCTIONS	<ul> <li>Hoisting safety limit switch</li> <li>Overload protection</li> <li>Hoisting motor thermal protection</li> <li>Rope guides, rope over wrap protections</li> <li>Hoist over speed supervision</li> <li>Hoist brake opening supervision</li> </ul>

- (with SCM)
- Hoist brake slip supervision (with SCM)
- Brake Monitoring Unit for hoisting (with SCM)

### INTEGRATED **SMART FEATURES**

- Extended Speed Range (ESR) Load Floating for hoisting
- Shock Load Prevention

**ENVIRONMENT** 

Indoor or outdoor

# Advanced user interfaces and controls

With an extensive range of intelligent features and sophisticated user interfaces, you can be sure that SMARTON is leading the way in modern crane technology. SMARTON has controls designed with both safety and simplicity in mind. Radio controls, computer tablets, cabins, and the Remote Operating Station provide ergonomic options for operators.



### Radio controls

The user-friendly Human to Machine Interface (HIM) radio features joystick controllers for all the main motions and necessary and pushbuttons and switches to activate the other crane functions. The SMARTON tablet can be mounted to the radio controller and used by the operator as an assisting tool. The tablet shows load display and position coordinates for all hooks, inputs for Smart Features, and has optional camera views.





# Cabins

Konecranes cabins provide a comfortable, ergonomically seated, temperature and humidity controlled environment for the crane operator. A cabin is a good option for exceptional ambient conditions, like very high or low temperatures, outdoors or applications where the air is not clean enough to breath. It provides a wide field of vision and simple, intuitive controls.



# **Remote Operating Station**

Remote operation means that cranes are driven from a control room away from the crane operating area and without direct line of sight to the crane. The operating method is the same as a traditional operator's cabin, but the crane is operated with the help of monitors showing real time camera views as well as crane and process related information.

# Service to maximize the lifecycle value of your crane

Konecranes Service can help you maintain your SMARTON crane—as well as any other crane in your fleet. We have the largest and most extensive service network in the industry giving you the advantage of local inspectors and technicians with access to a wealth of knowledge gained from servicing hundreds of thousands of assets of all makes and models in a wide range of industries.

You can maximize the lifecycle value of your cranes with a Konecranes service program that is tailored to your requirements. A program of regular inspections and preventive plus predictive maintenance supports compliance and helps identify risks and opportunities for improvement.

At Konecranes we take a comprehensive and systematic approach to managing customer assets throughout our Lifecycle Services. We don't just drop off a report on the way out, we consult with you to help guide your decision making. We share our findings, provide recommendations based on our industryleading expertise and discuss how each action impacts your operations and the entire health of your business.

# **Ouick and easy access** to crane information

When you have TRUCONNECT Remote Monitoring and/or a maintenance agreement with Konecranes you get access to the vourKONECRANES customer portal. The portal lets you quickly and easily see your crane maintenance information, asset condition and usage data, as well as an overview of findings in your fleet.

The data on yourKONECRANES can be viewed, analyzed and shared quickly helping you make informed maintenance decisions. TRUCONNECT safety alerts and condition status is available any time, any place and the information can help you act quickly on potential safety issues and plan your maintenance with minimal disturbance to production.





Konecranes is a world-leading group of Lifting Businesses, serving a broad range of customers, including manufacturing and process industries, shipyards, ports and terminals. Konecranes provides productivity enhancing lifting solutions as well as services for lifting equipment of all makes. In 2022, Group sales totaled EUR 3.4 billion. The Group has approximately 16,500 employees in around 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (symbol: KCR).

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## **Konecranes industrial cranes**

From light lifting to heavy-duty process cranes—we have lifting equipment that fits just about any application in a wide variety of industries.