

# Compact and versatile open winch crane



# High performance for demanding lifting needs

Konecranes SMARTON is a compact open winch crane developed specifically for the accuracy and smooth movements needed in assembly and maintenance.

The SMARTON compact open winch crane lifts loads from 6.3 tons all the way up to 250 tons. 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.

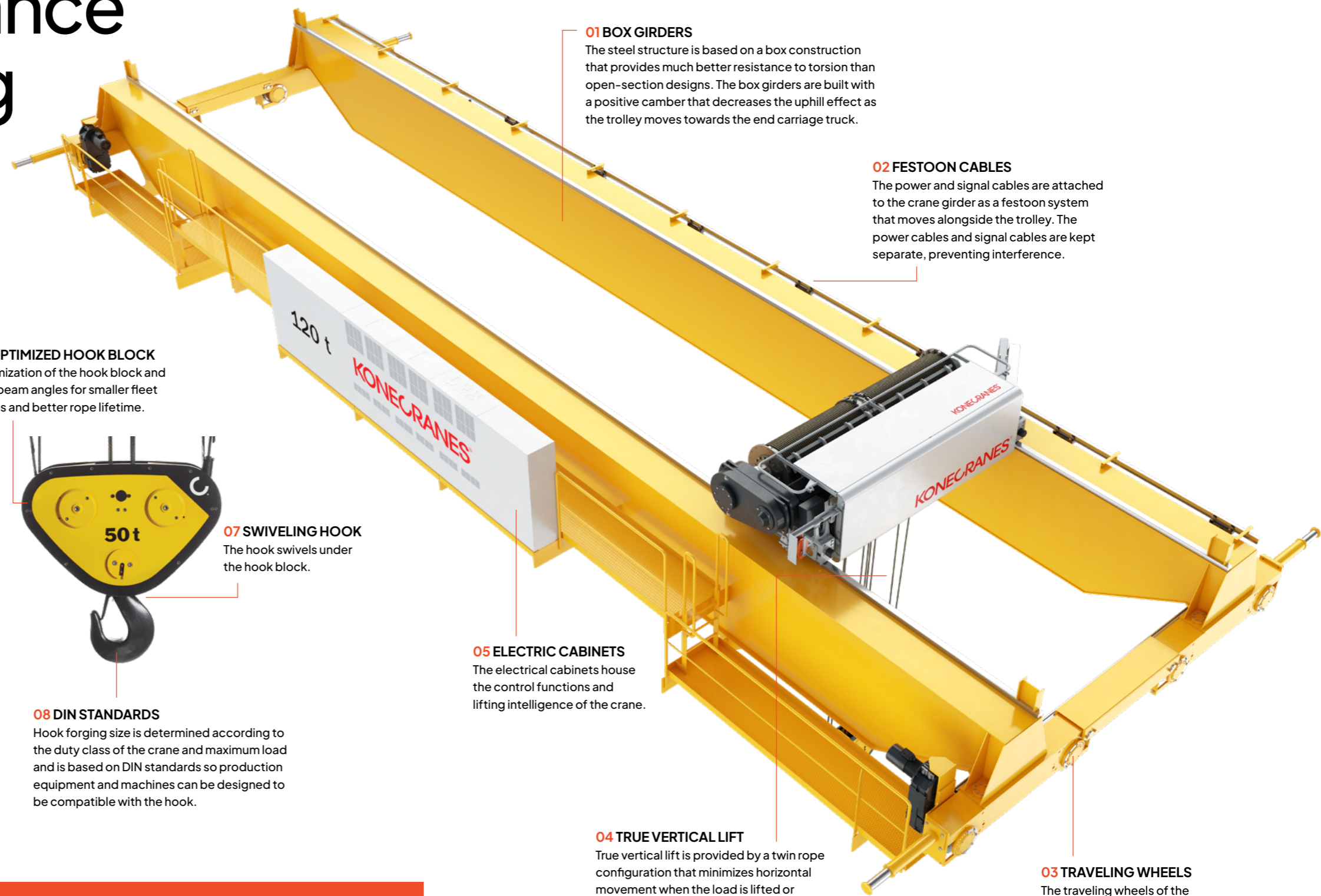
## The power of data

The SMARTON comes with TRUCONNECT Remote Monitoring to provide real-time crane condition and usage information giving you the visibility you need to fully understand the day-to-day use of your cranes.

Your TRUCONNECT data combined with inspection and maintenance information can help you make informed decisions on maintenance, safety concerns, productivity, training, and service and equipment investments.

## Core of Lifting: Experience in action

The design of the SMARTON crane is backed by more than 80 years of crane and industry expertise. We design and manufacture the key components of our equipment—gears, motors and controls—specifically for crane use and lifting motions. These components work seamlessly together as the Core of Lifting.



### 01 BOX GIRDERS

The steel structure is based on a box construction that provides much better resistance to torsion than open-section designs. The box girders are built with a positive camber that decreases the uphill effect as the trolley moves towards the end carriage truck.

### 02 FESTOON CABLES

The power and signal cables are attached to the crane girder as a festoon system that moves alongside the trolley. The power cables and signal cables are kept separate, preventing interference.

### 06 OPTIMIZED HOOK BLOCK

Optimization of the hook block and load beam angles for smaller fleet angles and better rope lifetime.



### 07 SWIVELING HOOK

The hook swivels under the hook block.

### 08 DIN STANDARDS

Hook forging size is determined according to the duty class of the crane and maximum load and is based on DIN standards so production equipment and machines can be designed to be compatible with the hook.

### 05 ELECTRIC CABINETS

The electrical cabinets house the control functions and lifting intelligence of the crane.

### 04 TRUE VERTICAL LIFT

True vertical lift is provided by a twin rope configuration that minimizes horizontal movement when the load is lifted or lowered. This increases load positioning accuracy and decreases wear on the ropes, rope sheaves and rope drums.

### 03 TRAVELING WHEELS

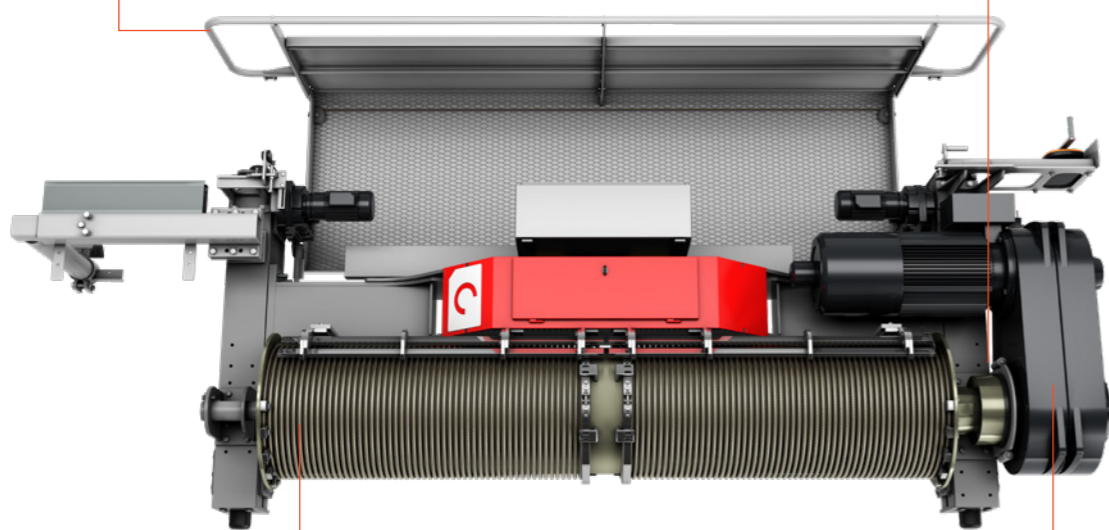
The traveling wheels of the crane are easily realigned with the runway rails if misalignment occurs. This reduces wear on both the trolley wheels and runway rails.

**01 FOLDABLE SERVICE PLATFORM**

The compact trolley with optional foldable trolley platform provides better approach dimensions. When the service platform is folded over the trolley it protects the trolley components.

**02 UNIQUE SUSPENSION**

Unique hoisting machinery suspension provides improved component lifetime, better alignment and performance.



**03 INNOVATIVE ROPE REEVING**

Rope reeving with two separate ropes and tilted rope sheaves helps extend rope life.

**04 HOISTING SAFETY FEATURES**

Features include: Overload protection, hoist over speed supervision, hoisting brake slip supervision, and hoisting brake opening supervision.

**SMARTON crane specs**

If you're planning to build a new facility, a SMARTON crane can help you 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
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

FEATURES	SPECIFICATIONS
Certifications	CE, RoHS, (CSA)
Temperature range	-20°C to +60°C
Environment	Indoor or outdoor
Integrated safety functions	<ul style="list-style-type: none"> <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 (with SCM)</li> <li>• Hoist brake slip supervision (with SCM)</li> <li>• Brake Monitoring Unit for hoisting (with SCM)</li> </ul>
Integrated Smart Features	<ul style="list-style-type: none"> <li>• Extended Speed Range (ESR)</li> <li>• Load Floating for hoisting</li> <li>• Shock Load Prevention</li> </ul>

# Advanced user interfaces and controls

With an extensive range of intelligent features and sophisticated user interfaces, you can be sure that SMARTON leads 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 in all kinds of environments.

**Radio control**



The user-friendly Human to Machine Interface (HIM) radio features joystick controllers for all the main motions 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.

**Cabin**



Konecranes cabins provide a comfortable, ergonomic, 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 breathe. It provides a wide field of vision and simple, intuitive controls.

**Remote Operating Station**



A Remote Operating Station features the same controls as a cabin but allows the crane to be controlled away from its operating area, without a direct line of sight to the crane structure. It provides a fully-functional and ergonomic work area to help improve safety, work conditions and overall efficiency.





“We chose SMARTON cranes because of Smart Features such as Sway Control, but particularly the End Positioning speeds up work processes. We were able to predefine twelve different positions. This means that the transport of tools from storage to the press line can be easily executed.”

MAGNA Heavy Stamping, Austria

Target Positioning

# Lift smart on every lift

Smart Features are software-based add-ons that can help improve safety, cycle time and load positioning through partial automation.

With Smart Features operators become more efficient due to shorter load cycle times, helping increase productivity. And because the control system optimizes crane movement, your crane and its components wear more slowly, extending the life of the crane. Most importantly, though, safety improves because there is much less chance of human error.

### Load control features

Smart Features help the crane maintain steady, smooth movement for maximum load control. This means more efficient and productive crane operations as well as increased safety for your operators and work environment. Load control features include Sway Control, Snag Prevention, Load Floating, Microspeed and more.

### Area control features

Smart Features also give you more control over the working area of the crane, improving the efficiency and accuracy of load positioning by adapting the available space to the physical layout of your production line. Area control features include Protected Areas, Working Limits, Target Positioning and End Positioning.



Snag Prevention

## Integrated Smart Features on the SMARTON

**Extended Speed Range (ESR)** allows the hoist to run at up to double nominal speed, improving cycle times by up to 20% and boosting overall production volume.

**Load Floating** keeps the load in position after hoisting movement stops, so the brake is applied less frequently and experiences less wear. It also allows faster and smoother hoisting restart and better load control.

**Shock Load Prevention** gives you smooth load pickups and reduces mechanical stress by automatically reducing hoist speed if a load is picked up too fast.



[bit.ly/4dtbtRU](https://bit.ly/4dtbtRU)

Learn more about Konecranes Smart Features

# The power of data

Crane, brake and wire rope condition info at your fingertips.

SMARTON cranes come with TRUCONNECT Remote Monitoring for real-time crane condition and usage information. And if your SMARTON crane is critical to your process the addition of Brake Monitoring and Wire Rope Monitoring can further boost your safety and even save you time and money.

**TRUCONNECT Brake Monitoring** provides valuable information for brake maintenance planning. It gives you visibility into brake condition between normal inspection visits and helps you avoid unnecessary brake disassembly for inspection. Most importantly - it helps minimize the risk of load drop with the detection of brake faults.

Brake Monitoring data can indicate brake maintenance needs in advance and shows if air gap adjustment is proper after installation. The data also provides a clear picture of brake overhaul intervals and replacement history, especially with unexpected brake problems.

**TRUCONNECT Wire Rope Monitoring** provides a continuous view of rope condition through the use of sensors installed on the wire rope and reveals both visible exterior defects as well as internal defects that are not detectable with a visual inspection.

There's no need to shut down to inspect rope condition because rope safety can be monitored remotely without interrupting crane operations. Knowing the condition of your wire ropes can help reduce the risk of load drop or other safety risks related to wire ropes.






Top: TRUCONNECT Brake Monitoring data on Konecranes Portal. Bottom: TRUCONNECT Wire Rope Monitoring data on Konecranes Portal.

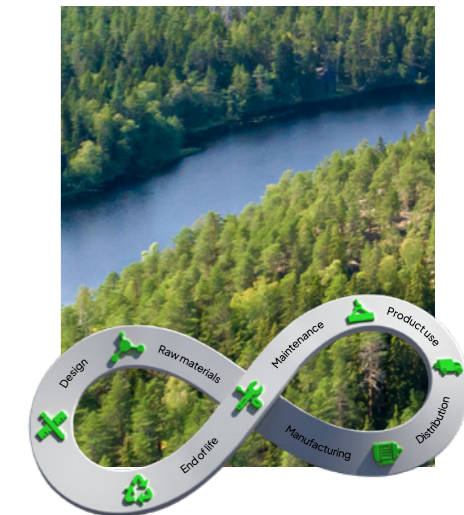
All your TRUCONNECT data is made available on the **Konecranes Portal** in easy-to-read graphs, and alerts via email allow you to promptly investigate issues and take corrective actions. The portal is also home to crane maintenance information when you have a service program with us. The data on the portal can be viewed, analyzed and shared quickly helping you make informed maintenance decisions.



# An agile crane for a wide range of industry applications

The SMARTON crane features intelligent mechanical design combined with inbuilt safety functions and a wide range of Smart Features, making it the perfect choice for a wide range of applications—especially in demanding high-capacity assembly and maintenance work that requires smooth and accurate movement of the lifted load.

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**General manufacturing**  
 Perfect for demanding assembly line and maintenance use, SMARTON is a reliable, high-quality crane with the durability and flexibility to meet your specific lifting needs.
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**Metals production**  
 Metals production requires lifting equipment that can handle a demanding and dynamic environment. SMARTON is well suited for metals applications and smart technologies give a boost to safety and productivity.
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**Paper mills**  
 SMARTON cranes can be used as a wet end maintenance or back up crane; and lift parent rolls from the winding station for storage, transfer or further processing on the dry end. Smart Features can help improve safety, cycle time and load positioning through partial automation.
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**Automotive**  
 SMARTON is a high capacity and reliable crane for die handling and the stamping line. Area control Smart Features such as Protected Areas and Target Positioning improve the efficiency and accuracy of load positioning for increased safety and productivity.



## Sustainability at every stage of the crane's lifecycle

We are committed to providing sustainable 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.

### Reduced energy consumption through braking

The SMARTON crane can be 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.

# Maximize crane reliability and performance

You can maximize the lifecycle value of your SMARTON crane with a service program that is tailored to your requirements. Regular inspections and preventive maintenance help identify risks and opportunities for improvement while supporting compliance with safety regulations.

### Service programs tailored to your operations

Preventive maintenance conducted at regularly scheduled intervals can often be the most effective way to maintain and potentially extend the lifespan of

your cranes. Our experts can help you build a service program—from basic inspections to a comprehensive maintenance program—tailored to your operations.

### The right parts at the right time

Keeping parts in inventory, especially in process-critical operations, can further reduce downtime when performing maintenance or repairs. Our parts experts can provide you with a comprehensive parts package specifically designed according to your application and usage requirements.


### Why choose Konecranes as your crane service provider?

We have the largest and most extensive service network in the industry, servicing hundreds of thousands of assets each year of all different makes and models. You get the advantage of local inspectors and technicians with access to a wealth of knowledge from around the globe.

We take a comprehensive, systematic and collaborative approach to managing your assets throughout their lifecycle. We take time to share our findings with you, provide recommendations based on our industry-leading expertise and discuss how each action impacts your operations and the entire health of your business.



Konecranes is a global leader in material handling solutions, serving a broad range of customers across multiple industries. We consistently set the industry benchmark, from everyday improvements to the breakthroughs at moments that matter most, because we know we can always find a safer, more productive and sustainable way. That's why, with around 16,600 professionals in over 50 countries, Konecranes is trusted every day to lift, handle and move what the world needs. In 2023, Group sales totaled EUR 4.0 billion. Konecranes shares are listed on Nasdaq Helsinki (symbol: KCR).

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**KONECRANES** Moves what matters.