

Retrofits for cranes





Maximize safety and productivity in real time

Lifecycle Care is our comprehensive and systematic approach to managing customer assets; connecting data, machines and people to deliver a digitally-enabled customer experience in real time. Lifecycle Care is designed to maximize the productivity of uptime and minimize the cost of downtime, thereby achieving the highest lifecycle value for our customers' equipment.

A consultative approach to help guide decision making

Our consultative approach can help guide your decision making. We share our findings and provide recommendations based on our industry-leading expertise.



Improve safety and productivity by applying the latest crane technology

Retrofits are an efficient option to replace components or add current technology to your existing overhead crane. Common retrofits include components, electrics and/or controls, the addition of new features, and/or technology upgrades and updates. Retrofits typically require minimal downtime, engineering and pre-planning.

- Upgrade older equipment for a fraction of the cost of complete replacement.
- Can improve crane safety and ease-of-use with improved control interface options and safety components.
- Helps improve availability and ease of installation of replacement components and parts.

Benefits of a retrofit

- Can bring aged equipment up to date to match current or changing production demands.
- Can be an alternative to repairing an aged or worn out component.
- Swapping out components can reduce maintenance spending.
- A relatively easy and economical way to add current features and technologies to a crane.



Learn more about [Konecranes Retrofits](#)

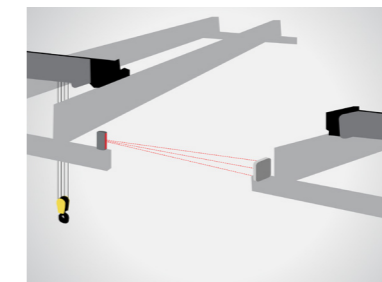
Cost-effective retrofits that deliver value

There is no need to invest in a new crane technology to enjoy the latest features and advancements. Simple budget-friendly upgrades can make a big difference in enhancing your safety, productivity, and cost-effectiveness of your current crane- even if it is decades old.



LED lighting

Safety advantage: Because light distribution in LED lights is more focused, the crane operator is less likely to get blinded by the light when looking at the load. Plus, the light is directed where it is needed: on the load and on the workstation or facility.



Collision avoidance

Safety advantage: These systems are designed to help prevent collisions between cranes or their loads by either slowing down or stopping crane movements when the crane or its load comes within a pre-determined distance of another moving or fixed object.

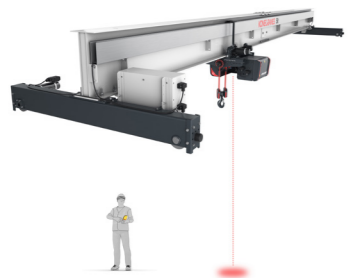


2-Step and hook operated limit switches

Safety advantage: These effective warning signaling and protective devices enable safe operation of the lifting equipment and can help prevent accidents.

Retrofits to improve safety

At Konecranes, safety is our highest priority. We offer different retrofit packages designed to help improve the safety of your crane and your operations.



Safety lights

Equipping your crane with Konecranes Safety Lights are more than just illumination – they significantly improve safety in your facility. By clearly marking the trolley's location, they reduce risk of accidents and ensure a safer working environment for operators.

Safety LED lights can transform your facility space. They are ideal for mounting at heights of up to 15 meters, these lights not just offer improved safety but also offer a top-notch performance.

Make your crane better with Safety Lights

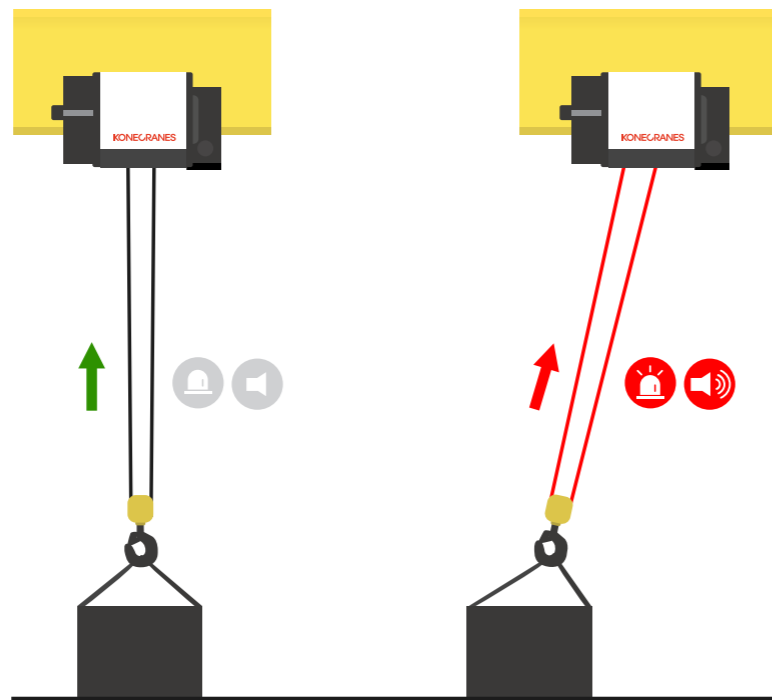
- Strong and durable LED lights with low energy consumption.
- Ensures focused and effective illumination.
- Control voltage transformer or a more extensive setup using multiple lights.

Side pull prevention

Overhead cranes are designed to lift objects vertically. A side pull occurs when the hoist lifts something that has not been placed directly beneath it.

Side pull can cause hazardous load swing and in the worst case – load drops. Side pull can also cause damage to the drum, rope and rope guides and is a common cause of breakdowns.

Konecranes Side Pull Prevention has been designed to stop hoisting motion when side pulling is detected. It uses an inclinometer to measure rope angle during load lifting. If the angle goes over four degrees, the system stops hoisting, sounds a horn and gives a light signal. When the rope angle is back to less than four degrees, hoisting continues normally.



Side Pull Prevention stops hoisting motion and gives horn and light signals when it detects side pull.

and productivity

Retrofits can also help improve your productivity. New technologies and improved ergonomics can help make significant improvements in the efficiency and productivity of your operations.



Variable frequency drives

Replacing outdated motor controls with a new Konecranes variable frequency drive (VFD) allows you to take advantage of technology that is designed to address requirements for safety in lifting.

Equipping your crane with the latest technology helps it run more smoothly, endure stress and last longer. VFDs not only improve operator safety, maximize crane reliability and saves energy costs, but they also minimize mechanical stress on components. VFD control offers smoother travelling motion which means better load control compared to contactor controls. VFDs also give you smooth programmable acceleration and deceleration rates resulting in easier load positioning.

The precise and infinitely variable speed selection reduces jerking and load swing for enhanced operator efficiency and productivity.



Load display

Safety advantage: A load display provides visual confirmation of the load to help prevent overloads. Lifting loads beyond the rated capacity can cause damage to the crane or hoist components which increased the risk of accidents.

Production advantage: Having a load display can give quick indication that you are lifting what you intended to lift. For example, lifting a mold from a press, if the load is heavier than expected it can indicate that the mold didn't release from the press.



Radio control

Safety advantage: A radio control offers operators a safer working environment, reducing the risk of injury as they have the ability to walk around and view the load from various angles.

Production advantage: Improved user ergonomics reduces strain for the operator helping to increase productivity in your process. Radio controls can also save the operator time eliminating the need to walk from a pendant to the load to rig countless times in a shift.

Modern transmitter-receiver packages available as replacements for outdated radio models that are not longer in use.

Address safety and productivity issues and capitalize on improvement opportunities by making timely repairs, replacing components and/or adding new technology to your crane



Retrofits to enable predictive maintenance

Konecranes offers a variety of retrofit packages to enable the latest technology for remotely monitoring your crane. Konecranes TRUCONNECT Remote Monitoring will also give you access to our digital customer portal yourKONECRANES.com.

Upgrading your crane with TRUCONNECT Remote Monitoring provides condition, usage and alerts that can be used in maintenance planning and in predicting possible component or equipment failure. It also provides alerts of certain anomalies and enables predictive maintenance.

Collected data varies depending on asset make and model but typically covers condition and expected service life of critical components, running time, lifted

loads, motor starts, work cycles and emergency stops.

TRUCONNECT Remote Monitoring with alerts based on the equipment/application is required in order to effectively implement predictive maintenance. Remote Monitoring data combined with inspection and maintenance data provided by the maintenance program gives a comprehensive view of equipment maintenance needs and performance.

TRUCONNECT Brake Monitoring

TRUCONNECT Brake Monitoring uses a condition monitoring device to collect the status of brake air gap, mechanical and electrical faults from the electromagnetic disc brakes. The service provides visibility into current brake condition, estimates remaining service life and indicates brake faults. Brake Monitoring information is used in predictive maintenance and can also be used for brake maintenance planning.



TRUCONNECT Wire Rope Monitoring

TRUCONNECT Wire Rope Monitoring is designed to provide real-time insight into the condition of a wire rope. It reveals both visible exterior defects as well as internal defects that are not detectable with a visual inspection. Specialized and patented sensors continuously monitor the wire rope while the crane is in normal operation and alerts via text or email occur when rope condition deteriorates below set limits. Wire rope condition information helps you plan for maintenance and repair, or wire rope replacement.



Control unit

The Control Unit allows for the addition of features such as overload protection and TRUCONNECT Remote Monitoring. This package is available as a retrofit for most cranes, regardless of type, brand or age.

TRUCONNECT modem

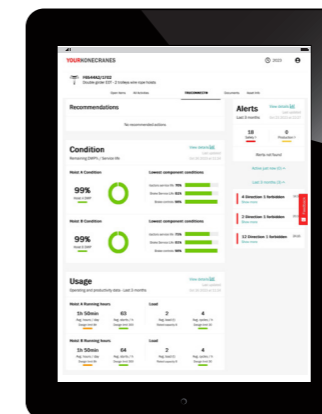
A TRUCONNECT modem can be installed on cranes with ControlPro or PLC controls to provide connection capability for TRUCONNECT Remote Monitoring.

Cranes not manufactured by Konecranes

A TRUCONNECT Retrofit Kit is available to equip a crane not manufactured by Konecranes with the hardware required for TRUCONNECT Remote Monitoring.

Demag cranes

The TRUCONNECT Retrofit for Demag Cranes allows Demag SafeControl controlled cranes to be equipped with the necessary hardware needed for TRUCONNECT Remote Monitoring.



yourKONECRANES.com

TRUCONNECT data is viewable at any time on our cloud-based customer portal – yourKONECRANES.com.

TRUCONNECT data is presented in easy-to-read graphs with thorough explanations including common or likely causes, what you should be concerned about and recommended actions.



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 2022, Group sales totalled EUR 3.4 billion. Konecranes shares are listed on Nasdaq Helsinki (symbol: KCR).

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