

Intelligent material handling





A reliable partner for the aviation industry

Crane systems play an important role in aircraft construction and maintenance. They are used for the production of components and for the internal transportation of sub-assemblies, including entire aircraft fuselages. These overhead transport and handling systems are designed to serve various work areas, connecting the different stages of assembly for efficient operations.

We know that aircraft parts need to be handled with care so we leverage our deep industry knowledge and process understanding to design crane systems that can move these delicate components safely and accurately. We've used our decades of

experience to develop advanced applications and systems utilizing a combination of sensors, software and connectivity to help increase uptime, reduce costs and improve efficiency.

To keep your cranes running in top shape, we provide industry-leading lifecycle services that are designed to improve the safety and productivity of your operations. We have the largest and most extensive service network in the industry, servicing hundreds of thousands of assets each year in all kinds of industrial applications. You get the advantage of local inspectors and technicians with access to a wealth of knowledge from around the globe.

Cranes for safe handling and precise positioning

The transport of fuselage skins and sections places high demands on both the operators and the crane systems. The handling and assembly of individual fuselage sections requires maximum precision. These highly sensitive components have to be picked up with great care, gently moved and positioned exactly.

Synchronized hoist units help eliminate load twisting so large parts can be lifted smoothly and precisely. Fuselage sections can be safely turned from vertical to horizontal and then back again—then placed direct into assembly jigs.

Thirteen motion axes provide maximum positioning accuracy for moving large-volume parts such as fuselage sections or even complete fuselages safely and precisely to minimize the risk of damage.

Frequency-controlled drives give you smooth travel motions and help minimize load sway and vibrations. To protect highly sensitive parts, additional safety brakes in the rope hoists and collision-monitoring systems are integrated into the crane.



Core of Lifting: Experience in action

Our cranes are built around key components that we design and manufacture in-house. Our gears, motors and controls are made specifically for crane use and lifting motions and are fully integrated into the core of our crane technology. We don't just design the components, but also the interactions between them making them work seamlessly together as the Core of Lifting.





Interlink your processes for maximum efficiency

Aircraft assembly requires the movement of large, heavy, and often delicate components such as fuselage sections, wings and engines over vast areas of production. Suspension cranes, spanning over 100 meters with multiple suspensions, allow for better use of overhead space, freeing up valuable floor space for other operations. This is particularly useful in large assembly hangars where multiple aircraft are being built simultaneously.

Maximize productivity

Interlocking suspension cranes can transport components smoothly across large areas within the manufacturing facility, reducing the need for multiple handling steps. The interlocking feature enables crane systems to move parts from one crane rail to another without needing to disassemble or reposition the part, for smooth and continuous operations.

Precise load handling

Aircraft components are not only large but also fragile and costly. Our interlocking suspension cranes are designed to handle these materials with precision, reducing the risk of damage. The synchronized control of multiple cranes provides stability when handling awkward or oversized loads.

Flexibility for different processes

Interlocking suspension cranes can be tailored to meet the specific requirements of various airplane models, adapting to different assembly processes and stages. This flexibility is important in an industry where production lines often shift between different aircraft designs.



High-performance tandem operation

Handling wings presents a significant challenge due to their dimensions. A single hoist unit alone simply cannot manage these loads. So we provide cranes and hoists that can reliably handle long components in tandem mode for smoother lifting operations.

To safely handle aircraft wings, two cranes can be coupled to form a tandem unit operated by radio control. Synchronized control functions with bi-directional signal transmission provide safe and reliable handling of these large parts. And when it's time for the next step in the process, the wings can be transferred to neighboring bays with interlocking cranes.

Save capital outlay and operating costs

Our crane systems feature low crane deadweight for reduced load transmission to the roof superstructure. Low headroom hoists have a favorable hook approach dimension allowing you to further maximize your workspaces. New facilities considering the crane system in the planning stage can allow for construction savings.



Streamline operations with automation

The introduction of automated processes in aircraft manufacturing has significantly enhanced safety, precision and efficiency. By automating the lifting and movement of heavy components, it can streamline assembly processes, speed up production timelines and improve overall output.

Aircraft parts are often large and heavy, and can pose a safety risk during manual lifting and positioning. Automation reduces the involvement of human operators in potentially hazardous situations, minimizing the risk of accidents and improving overall workplace safety.

Automated cranes can operate continuously with minimal downtime, reducing the need for manual intervention and speeding up processes. They can also perform complex lifts and movements simultaneously, allowing for more efficient assembly sequences and quicker turnaround times.

Flexibility in handling different components

Aircraft assembly involves a wide range of components with varying sizes, shapes, and weights. Automated cranes can be programmed to handle different loads with minimal setup changes, increasing flexibility and reducing delays caused by reconfigurations.



Semi-automated operation

In semi-automation the operator maintains manual control with various features assisting. This allows processes to be accelerated and safety improved for repeated operations where parts need to be picked up, transported and deposited. Up to 1,000 positions can be stored and then approached by using position measuring devices in all axes giving you high precision.

Full automation

On a fully automated crane, the operator defines the settings and the crane functions without further human input. Parts are gently handled and staged in line with cycle time requirements. Redundant secondary monitoring systems provide a high level of installation efficiency and storage operations can be served by the Konecranes Warehouse Management System.

Flexibility meets speed

Aircraft are large, complex structures with many curves, angles, and hard-to-reach surfaces. Our teleplatform provides easy access to these areas, so workers can reach every part of the aircraft for a thorough and uniform paint job and minimizing the need for touch-ups.

Increased efficiency and productivity

Our teleplatforms can be transferred from one suspension crane to another allowing workers to be quickly and precisely positioned around the aircraft, speeding up the painting process and helping you meet tight schedules.

Reduced risk of surface damage

A convenient control panel on the working platform gives you precise control for long and cross travel as well as for lifting, lowering and turning motions. Traditional methods like scaffolding can sometimes lead to accidental surface damage during the painting process. Our teleplatform's careful control minimizes the risk of unintended contact with the aircraft which helps maintain the integrity of the surface during painting.

Consistent quality of application

Precision is critical in aircraft painting, as uneven application can result in aerodynamic inefficiencies and visual imperfections. With our teleplatform workers can maintain a consistent distance and angle from the aircraft surface, leading to a more uniform paint application and higher overall quality.



Material handling for a wide range of needs

We not only offer process cranes for the aviation industry but also standard cranes and hoists that can be tailored to your specific applications. Our field-proven designs feature the latest lifting technology to provide equipment that is fit for the task at hand.

Konecranes KBK workstation lifting systems

Lifting capacity up to 2,000 kg
Modular design with tons of options to fit your exact needs.



CXT wire rope hoist crane

Lifting capacity up to 80 tons
Basic or advanced, adaptability is one of its greatest strengths.



Konecranes S-series rope hoist crane

Lifting capacity up to 20 tons
Synthetic rope, Smart Features and inverter hoisting bring usability to a whole new level.



Konecranes X-series rope hoist crane

Lifting capacity up to 20 tons
A lean, state-of-the-art electrical architecture and smart, connected components give you a crane that adapts to your needs, now and in the future.



SMARTON assembly duty crane

Lifting capacity up to 250 tons with one trolley and 500 tons with two trolleys
Developed specifically for the accuracy and smooth movements needed in assembly and maintenance.



Maximize crane reliability and performance

An active service program is vital for the safety and productivity of your cranes. 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.



Committed to sustainable lifting solutions


Our ambition is to provide our customers with sustainable solutions and services while preventing and minimizing emissions and waste. We design our products with their complete lifecycle in mind. Usability, eco-efficiency, and safety are our guiding principles in product design, along with lifecycle thinking.

Our aim is to maximize the lifecycle value of our products. We do this through innovative product design and by offering preventive maintenance as part of our Lifecycle Services concept, supported by TRUCONNECT Remote Service.





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 16,700 professionals in over 50 countries, Konecranes is trusted every day to lift, handle and move what the world needs. In 2024, Group sales totalled EUR 4.2 billion. Konecranes shares are listed on Nasdaq Helsinki (symbol: KCR).

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