

KONECRANES E-VER

Electric forklifts for Your World



Forklifts go electric

Konecranes has more than six decades of experience in designing and building forklift trucks for your world. In all that time, technology has come a long way, and now the first electric Konecranes forklift is here.

The Konecranes E-VER electric lift truck combines the long-lasting, heavy-duty Konecranes machinery you know with the latest eco-efficient features to enhance your productivity, reduce energy consumption, and prevent exhaust emissions.



KONECRANES
ecolifting™

ECOLIFTING 2.0

In recent years, Konecranes has been developing Ecolifting solutions to reduce fossil fuel emissions without losing on performance.

A brand-new addition is now available: the E-VER has a fully electric driveline. More efficient than a diesel engine, it can eliminate fossil fuels from your operation and cut your energy consumption by up to 70%.

With outstanding operator performance and maintenance-friendly design, this electric forklift is a future-proof concept in lifting equipment for your world.

Zero Emissions – Outstanding Performance



No emissions from the machine

– zero CO₂ into the atmosphere



Superior driving experience

– fast, powerful and easily maneuverable, with easy to use controls and low noise



Easy maintenance

– fewer mechanical components and common electrical modules



Safe

– new electrical system to address functional and safety critical aspects

Driven by electrical efficiency

Your world just got a little bit better.

With zero fossil fuels, zero emissions from the truck and low noise level, the Konecranes electric forklift E-VER significantly decreases your energy costs and reduces your environmental impact while providing you with excellent performance.

It uses a lithium-ion battery that powers a 110 kW electric drive motor and an 80 kW motor for hydraulics and lifting. The battery can be recharged in approx. 45 minutes – as short as the average lunch break.

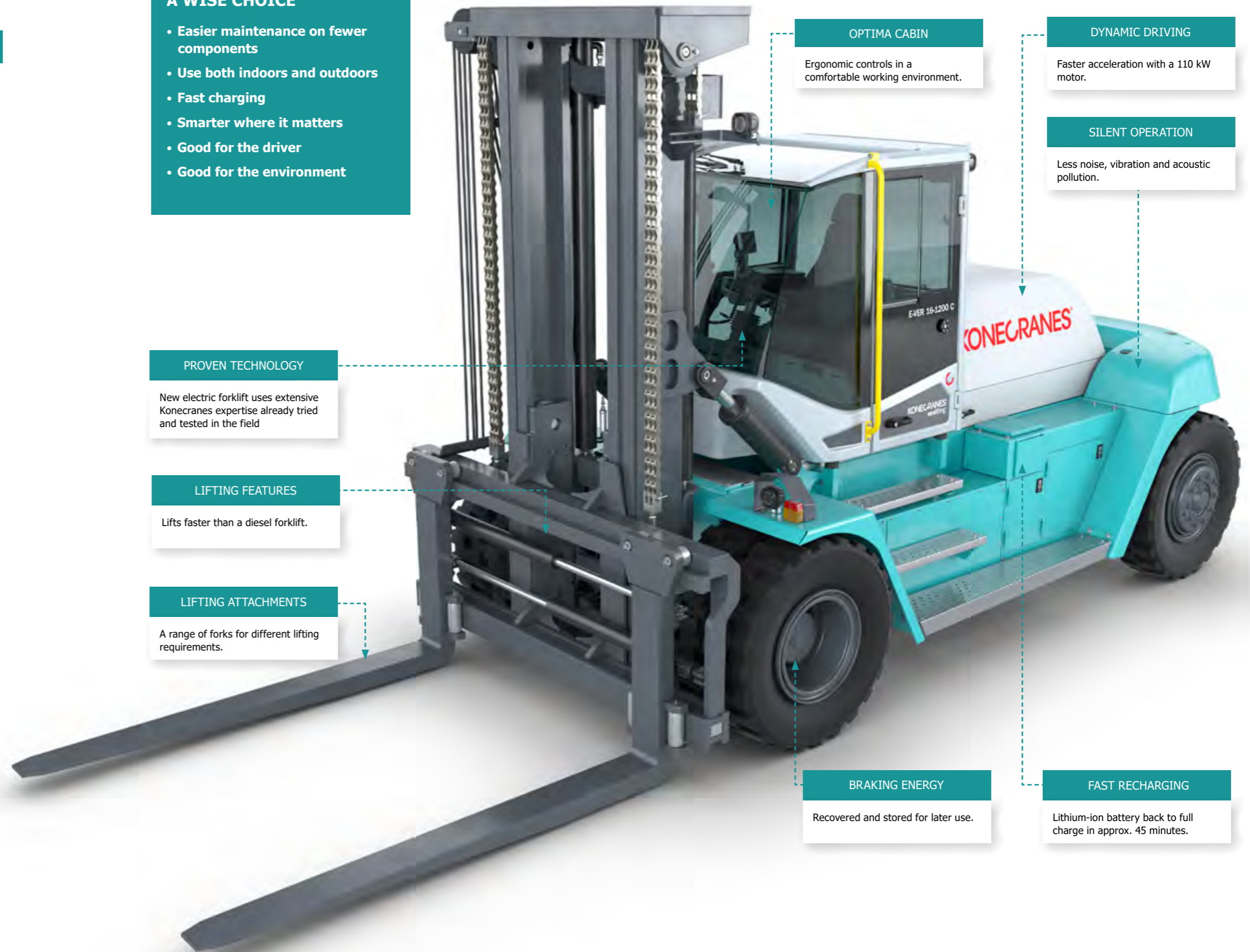
Built in easy-access modules with the same sturdy frame design, steer axle and lifting mechanisms as a diesel forklift, but with fewer moving parts and no gearbox, maintenance costs you less time and money.

The Konecranes E-VER is new, but its core technology is well-established. Konecranes has a line of all-electric Automated Guided Vehicles (AGVs) and an industry-leading development team. You can be sure that these new forklifts are as reliable as ever.

A well-used forklift operates for an average of 2,000 hours a year. Make it electric, and you just removed exhaust emissions equal to 15 combustion cars driving 9,320 miles a year each.

A WISE CHOICE

- Easier maintenance on fewer components
- Use both indoors and outdoors
- Fast charging
- Smarter where it matters
- Good for the driver
- Good for the environment



OPTIMA CABIN

Ergonomic controls in a comfortable working environment.

DYNAMIC DRIVING

Faster acceleration with a 110 kW motor.

SILENT OPERATION

Less noise, vibration and acoustic pollution.

PROVEN TECHNOLOGY

New electric forklift uses extensive Konecranes expertise already tried and tested in the field

LIFTING FEATURES

Lifts faster than a diesel forklift.

LIFTING ATTACHMENTS

A range of forks for different lifting requirements.

BRAKING ENERGY

Recovered and stored for later use.

FAST RECHARGING

Lithium-ion battery back to full charge in approx. 45 minutes.



An enhanced driving experience

The Konecranes E-VER forklift is both enjoyable and efficient to operate. Your drivers can go from stand-still to full motor torque instantly, with a smooth acceleration and lift. Independently powered functions ensure no mechanical delays, so peak performance is always available, whenever you need it.

Whether traveling or lifting, the new electric forklift makes much less noise and vibration than a diesel lift truck. A quieter

and steadier vehicle means less stress and fatigue for your drivers.

The cabin is spacious, featuring high visibility and outstanding driver comfort. Ergonomic controls include a touch screen, easy-access instrumentation, and an adjustable HVAC environment powered by an electric compressor. A preset cabin climate adjusts while charging without reducing battery reserves.

Safety-first culture

The Konecranes E-VER battery doesn't release any emissions during operations and features three different control systems to maximize safety when in use:

Automatic disconnection cuts electric current while the vehicle is charging;

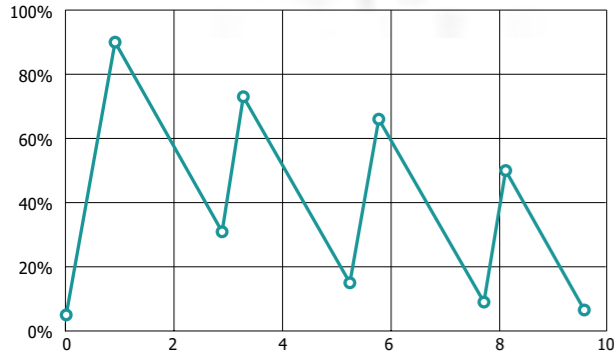
Battery cell balancing and management maximize battery efficiency;

Remote control with automatic warnings when issues arise.

A Li-ion battery usage is safer thanks to its chemical composition, that does not generate hydrogen nor uses electrolyte. In addition, a protective cage around the battery and a lack of hot ignition surfaces make it even safer against collision and accident.

With a better battery, control options and automatic warning signals, the Konecranes E-VER electric forklift maximizes safety for drivers, nearby personnel and the loads it carries.





ONE BATTERY

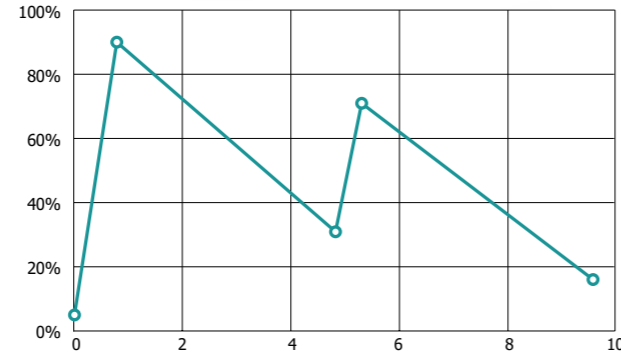
Power needed for fast charging: 75 kW*

Charging time: approx. 45 mins

Operational cycle:
shorter operation time before charging is needed

Suggested for single shift operation

*might be reduced at high and low temperature



TWO BATTERIES

Power needed for fast charging: 150 kW*

Charging time: approx. 45 mins

Operational cycle:
can operate longer between charging stops

Strongly recommended in case of multiple-shift operation

Battery technology

The Konecranes E-VER electric forklift is powered by one or two Li-ion battery packs. Thanks to the fully modular design of the truck, if you choose one battery, you can easily retrofit a second battery later. The main advantages of the Li-ion battery are its high energy density in terms of kWh per kg and cubic meter and its ability to be fast-charged.

Each battery has a lifetime of around 4000 charge cycles. Under average conditions, this is about five to six years of operation. Opportunity charging reduces the need for a full charge and extends battery life.

HOW IS A LI-ION BATTERY DIFFERENT FROM LEAD ACID?

- Fast charge option
- Significantly longer lifetime
- Almost flat discharge curve, with full power available until the battery is empty (around 20%)
- Virtually no maintenance
- Charge stations can be outside

Charging infrastructure

You must build a charging infrastructure before buying an electric lift truck. You need charging stations equipped with CCS2-charge plugs and 150 kW DC (recommended) for fast charging capability. This is an established standard for charging electric cars and trucks not only in European countries.

Add battery charging to your daily operations

Charging a battery takes longer than filling a fuel tank with diesel. However, once you have connected the charging cable, it's fully automatic, leaving the driver free to do other things. Fast charging is one of the main advantages of Li-ion batteries. From an empty battery, a full charge takes approx. 45 minutes. To optimize battery usage and lifetime, you can use opportunity charging in work hours during the day and charge more slowly in slow periods at night.

WHERE SHOULD CHARGERS BE LOCATED?

Li-ion battery chargers can be anywhere convenient in your yard, once you have determined the traveling paths and working areas of your electric forklifts.

The Konecranes Path Tracker function, available with TRUCONNECT Remote Monitoring can help you plan your charging locations.





Considering just the engine and transmission, the electric forklift is up to 23% cheaper to service than a diesel lift truck.

The Lifetime Advantage

Owning the right lift truck for your world is not only about the machine itself. It's about maintaining consistently high performance over many years, with services such as quality spare parts, preventive maintenance, tailored training for your in-house technicians, and any other support when you need it.

Through Konecranes Lifetime Advantage, we make sure that your Konecranes Lift Trucks are maintained and improved through equipment upgrades, knowledge services, and ongoing customer support.

COMMITTED TO YOUR NEEDS

Long before you place an order, our commitment to you starts when you contact us and we listen carefully to your needs. Our dedication stays firm throughout the lifecycle of your equipment, long after you receive it.

Less parts, more uptime

With fewer moving parts, your Konecranes E-VER costs far less money and time when you need spare parts or service.

Fewer mechanical components and common electrical modules make service on an electric forklift easy. Since no heat comes from the engine and there is less vibration, some components will last longer. When you have automatic diagnostics, a maintenance-free battery

and no need to dispose of engine or transmission oil, you reduce waste, you don't have to train your technicians in high voltage electrics and you don't need to replace the battery. You can use the time you save to keep your forklifts productive.

The electric driveline adds even more efficiency through a regenerative system that collects and adds braking energy to the battery as it slows the vehicle.

As a result:

- braking is more efficient,
- there is less wear and tear,
- brake discs require less maintenance.



Smart Connected Lift Trucks

Things can change rapidly in a busy operation, so you need to know what's happening right now. Smart Connected Lift Trucks help you keep up to date and get maximum value from your Konecranes E-VER electric forklifts.

Using the truck's sensors and a high-speed modem, you will gain insights into your equipment to guide your actions and boost your operational efficiency and productivity. From a better forecast and schedule maintenance, to discover weaknesses in safety and efficiency, or enhance driver performance for a more economical and ecological driving, and much more.

MONITOR THE KEY PARAMETERS

- Battery status and charging time
- Energy consumption and utilization per running hour
- Energy recovered from braking per running hour
- All data transfer is fully secure following ISO 27001
- Real-time data 24/7 on every truck in the fleet, with analytics on demand and integration capability from other systems

Return on your investment

In the short term, your outlay for an electric forklift is offset by big savings in fuel consumption – in other words, the cost of energy. Both economically and environmentally beneficial, maintenance is also easy. With no diesel engine and power-shift transmission in need of oils and filters, there are fewer complex mechanical components to service, so you have less downtime and lower operating expenses.

In the long term, it's worth making your entire forklift fleet electric, because as efficiency goes up, costs go down and the size of your carbon footprint shrinks. Ask your distributor how Konecranes can provide extensive support for the necessary operational changes.

The E-VER electric forklift – your next step into the future with Konecranes.

ELECTRIC MOTORS' REAL BENEFITS

- About 90% of electrical energy is converted to usable work
- Give off less heat and have less mechanical complexity – reducing the need for maintenance

22000 TO 39600 LBS



MODEL NAME	CAPACITY	WHEELBASE
E-VER 10-600 C	22000 lbs at 23 inches	118 inches
E-VER 12-600 C	26400 lbs at 23 inches	118 inches
MODEL NAME	CAPACITY	WHEELBASE
E-VER 10-1200 C	22000 lbs at 47 inches	127 inches
E-VER 13.6-600 C	29900 lbs at 23 inches	127 inches
MODEL NAME	CAPACITY	WHEELBASE
E-VER 12-1200 C	26400 lbs at 47 inches	137 inches
E-VER 16-600 C	35200 lbs at 23 inches	137 inches
E-VER 16-900 C	35200 lbs at 35 inches	137 inches
MODEL NAME	CAPACITY	WHEELBASE
E-VER 15-1200 C	33000 lbs at 47 inches	147 inches
E-VER 16-1200 C	35200 lbs at 47 inches	147 inches
E-VER 17-1200 C	37400 lbs at 47 inches	147 inches
E-VER 18-600 C	39600 lbs at 23 inches	147 inches
E-VER 18-900 C	39600 lbs at 35 inches	147 inches

Attachments

The Konecranes E-VER electric forklift can utilize a wide range of lifting attachments for your needs. You can choose anything from different masts and fork/carriage combinations, to fork/shaft systems, coils and clamps.



MAST AND CARRIAGE ALTERNATIVES



Duplex, 2-stage, no freelifit



Duplex, 2-stage with freelifit



Triplex, 3-stage with freelifit

FORK AND CARRIAGE COMBINATIONS



Standard carriage with integrated forks, sideshift, and fork positioning



Carriage with kissing forks for steel handling



Carriage with reinforced forks for round cargo



Carriage with one leveling fork (up/down) for sensitive cargo like sawmill products



Carriage with center leveling (2 forks) for sensitive cargo



Carriage with fork shaft system (multi-function), pintype and hook-type versions

FORKS AND FORK SHAFT SYSTEMS (fss)



Different cross-sections, lengths, tapering, and reinforcements



Fork shaft system hook-type



Fork shaft system, pin-type

ATTACHMENTS - ENGINEERING TO ORDER



Different container spreaders with inverted forks and fork shafts



Multiple paper roll clamp (single or double)

COIL RAMS



Single coil ram with fork shaft



Double coil ram with fork shaft



Single coil ram, integral version



Fork rotator carriage



Concrete tube clamp (different versions)

ENGINEERING TO ORDER

Please contact your sales representative to discuss any special lifting requirements you may have. If you can't find what you need in the catalog, Konecranes can customize a forklift attachment for the unique conditions of your world.

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 2021, Group sales totaled EUR 3.2 billion. The Group has around 16,500 employees in 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (symbol: KCR).

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