

COMPANY



MEGATRENDS



BUSINESS OPPORTUNITIES



CUSTOMER OFFERING



LIFTING YOUR BUSINESS

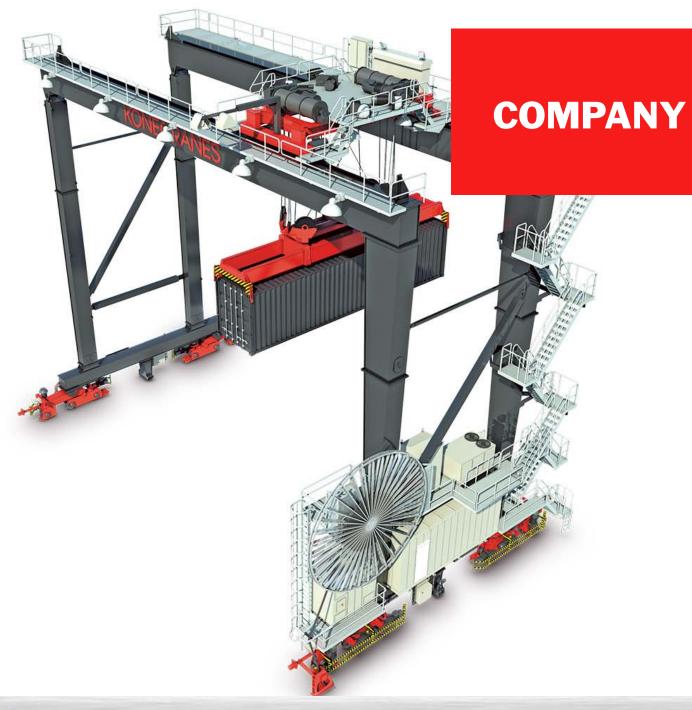


PRODUCT PORTFOLIO



SETTING THE BENCHMARK





COMPANY

Konecranes is a global industryleading group of lifting businesses. Everything we do is targeted at one goal: improving the safety and productivity of our customers' operations.

When you choose Konecranes, you acquire a trusted source of global experience and knowledge combined with local know-how to empower your material handling.





DRIVERS

Our Mission

We're not just lifting things, but entire businesses.

Our Vision

We know in real time how millions of lifting devices and machine tools are performing. We use this knowledge around the clock to make your operations safer and more productive.



OUR VALUES

Our values lay the cultural foundation for how we operate as a company.

Trust in people:

We want to be known for our great people.

Total service commitment:

We want to be known for always keeping our promises.

Sustained profitability:

We want to be known as a financially sound company.

COMPANY IN NUMBERS

11,800 **EMPLOYEES**

600 **LOCATIONS WORLDWIDE** **ACTIVE IN ALMOST**

COUNTRIES

EQUIPMENT IS

60% **OF TOTAL SALES**

SERVICE IS

40%

OF TOTAL SALES

MILLION ANNUAL

SERVICE CALLS

1.75 5,000 **REMOTE** CONNECTIONS

OVER

MAINTENANCE CONTRACTS COVERING MORE THAN

430,000

EQUIPMENT OF DIFFERENT **MAKES**

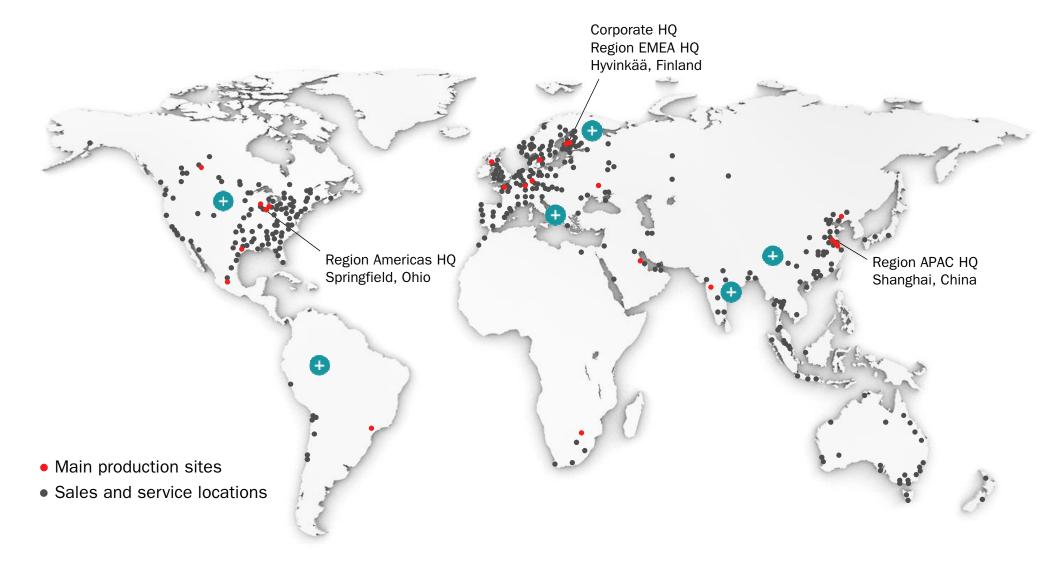
€2,100 MILLION IN SALES

IN 2013

STRONG TRACK RECORD OF GROWTH



COMPANY ON THE MAP



FINLAND



HYVINKÄÄ FACTORY Products:

Components and trolleys for heavy duty industrial cranes and port cranes



HÄMEENLINNA

Products:

Hoists and components for industrial cranes

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REST OF EUROPE, MIDDLE EAST AND AFRICA











VERNOUILLET, FRANCE Products: Chain hoists, jib cranes

MARKARYD, SWEDEN Products: Lift trucks

LIEBENGRUN, GERMANY

ZAPOROZHJE, UKRAINE

OTHER FACTORIES

- Glasqow, UK
- · Jubail Industrial City, Saudi Arabia
- · Johannesburg, South Africa

CHINA









SHANGHAI
Products:
Crane
components

Products:
Heavy-duty
container
handlers, reach
stackers, and
fork lift trucks

Products:
RTG and RMG
cranes,
industrial crane
components

Products:
Wire rope hoists
and cranes
(100% ownership)

INDIA





JEJURI 1
Products:

Components for industrial cranes

JEJURI 2
Products:

Industrial cranes

NORTH AMERICA









SPRINGFIELD, USA

Products:

Industrial cranes, jib cranes, work station cranes, wire rope hoists and crane components, electric chain hoists, manual chain hoists

HOUSTON & FRANKLIN, USA

Products:

Heavy duty cranes

WATERTOWN & GURNEE, USA

Products:

Standard duty cranes, semigantry cranes, freestanding crane systems, jib cranes

EDMONTON, CANADA

Products:

Standard duty cranes, jib cranes, runways

LATIN AMERICA





BRAZIL, SAO PAULO (SOROCABA CITY)

Products:

Industrial cranes

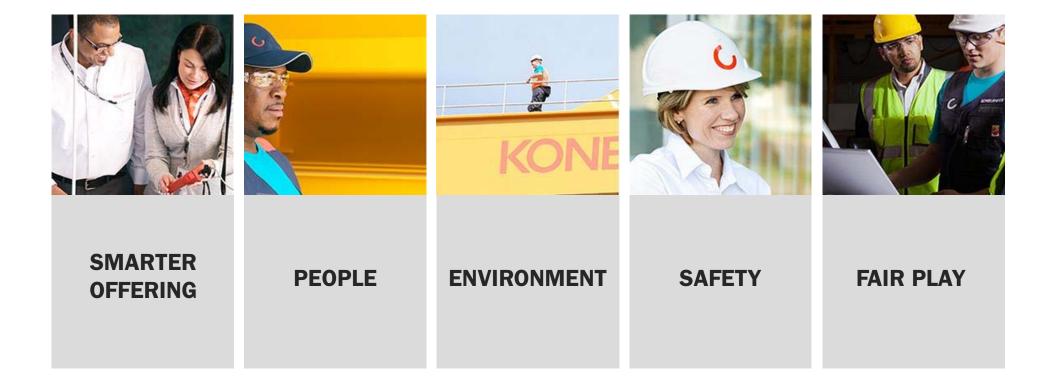
MEXICO CITY

Products:

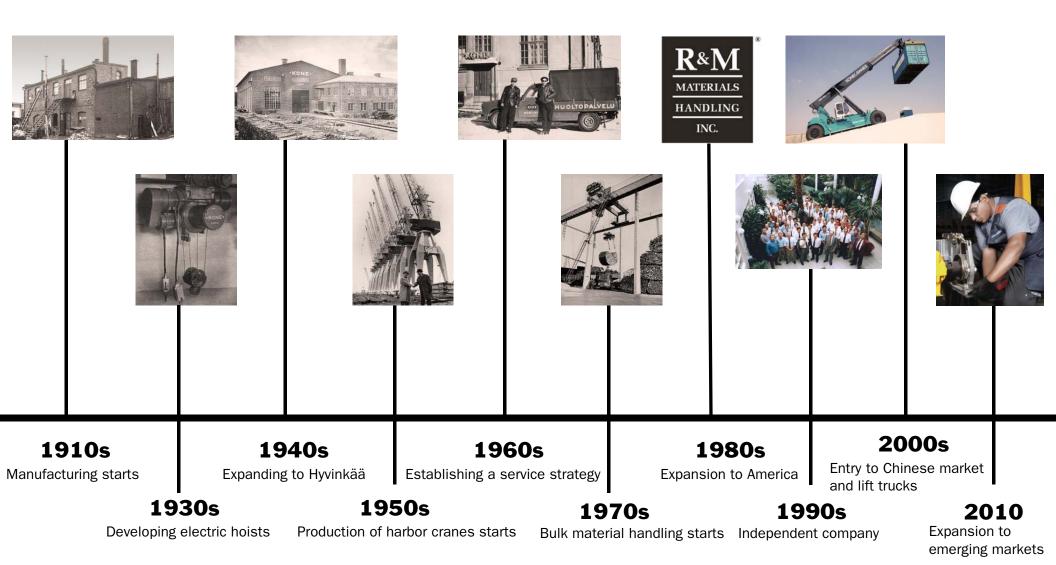
Industrial cranes

CORPORATE RESPONSIBILITY

Konecranes intends to be here for the long run. We are committed to lifting our customers' businesses responsibly.



COMPANY HISTORY



MEGATRENDS



- PEOPLE AND SOCIETY
- **WORLD DEMOGRAPHICS**
- **TECHNOLOGY**
- **ENERGY AND ENVIRONMENT**

22/10/2014

PEOPLE AND SOCIETY

- Generation Y behaves
 differently. They are IT savvy,
 and may seek a different
 work/life balance, challenge
 leaders of companies and
 countries and expect ethical
 behavior, including good
 governance and workplace
 safety.
- New types of activism and movements, e.g. the rise of new media, both in Western and emerging markets.
- Increased governmental pressure, rules and regulations.



"As the social, political and technological environment has developed, some have already begun to explore new options, seizing new chances for digital activism — and more will soon join in. It is time for the rest of the world to understand why."

- The Anonymous (activist group)

WORLD DEMOGRAPHICS

- Urbanization, new megacities, reverse brain drain with talent returning to emerging countries. The age pyramid favors emerging countries over Western countries. Emerging markets will represent a major part of the world's growth.
- The increase in population put pressure on infrastructure, logistics, waste handling and energy supply.



There are more people living inside this circle than outside of it.

TECHNOLOGY

- Advances in data analytics, automation, sensors, wireless networking and nanotechnology are enabling intelligent "self-aware" machines.
- The ones affecting Konecranes are automation, smart manufacturing, smart warehousing and improved safety & productivity.



"Engineering and science can change the world."

- The Royal Institution's prospectus, 1799

Image: Petrochemical plant in Thailand

ENERGY AND ENVIRONMENT

- The need to save energy, find new sources, control emissions and develop clean energy. Environmental awareness also growing in emerging markets; waste of any kind is increasingly unacceptable
- Leaders are becoming more aware of environmental issues, which is seen as new rules and regulations promoting safer and more ecoefficient techology.



Image: A fracking rig sits in an farmers field in Colorado.

KONECRANES BUSINESS OPPORTUNITIES



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MEGATRENDS CREATE BUSINESS OPPORTUNITIES

TECHNOLOGY CHANGES

Advances in data analytics, automation, sensors, wireless networking and nanotechnology are enabling intelligent "self-aware" machines.

→ opportunities for smarter machines that open up the way for new service concepts such as real-time condition monitoring and advanced service. New business opportunities and concepts through data mining.

ENERGY AND ENVIRONMENTAL CHANGES

The need to save energy, find new sources, control emissions and develop clean energy. Environmental awareness also growing in emerging markets; waste of any kind is increasingly unacceptable.

→ opportunities in improving safety and productivity in customers operations, and in developing ecoefficient products.

WORLD DEMOGRAPHIC CHANGES

Urbanization, new megacities, reverse brain drain with talent returning to emerging countries. The age pyramid favors emerging countries over Western countries. Emerging markets will represent a major part of the world's growth.

→ growth potential from customer segments such as steel, cement, logistics, water, power, waste management and consumer product manufacturing.

PEOPLE AND SOCIETY CHANGES

Generation Y behaves differently. They are IT savvy, and may seek a different work/life balance, challenge leaders of companies and countries and expect ethical behavior, including good governance and workplace safety.

→ change in company cultures, ways of working, digital working environment, transparency and open dialog.



Automation saves time and is designed to keep your processes running safely and smoothly, helping you to

MAXIMIZE THE PRODUCTIVITY AND LIFECYCLE VALUE OF YOUR INVESTMENT.





CUSTOMER OFFERING



22/10/2014

CUSTOMER OFFERING



CONTAINER HANDLING





CONTAINER TERMINALS

We offer a complete portfolio of worldclass container cranes and container lift trucks:

- Ship-to-shore quay gantry cranes
- Rubber tired gantry cranes (RTGs)
- Automated rubber tired gantry cranes (ARTGs)
- Rail-mounted gantry cranes (RMGs)
- Automated rail-mounted gantry cranes (ARMGs)
- Empty and laden container lift trucks
- Reach stackers
- Straddle carriers.

We are leading the way in the automation of container cranes, giving our customers the benefits of increased productivity, predictability, and safety.





CONTAINER TERMINALS: SPOTLIGHT ON AUTOMATION

Automation is the key trend in the container handling business.

We are leading the way with automated container handling systems:

- Automated RMG systems, of which we have excellent references
- Our new Automated RTG system (at right).

In both cases we provide the complete system, including the yard infrastructure and interfacing to the terminals's operating system.



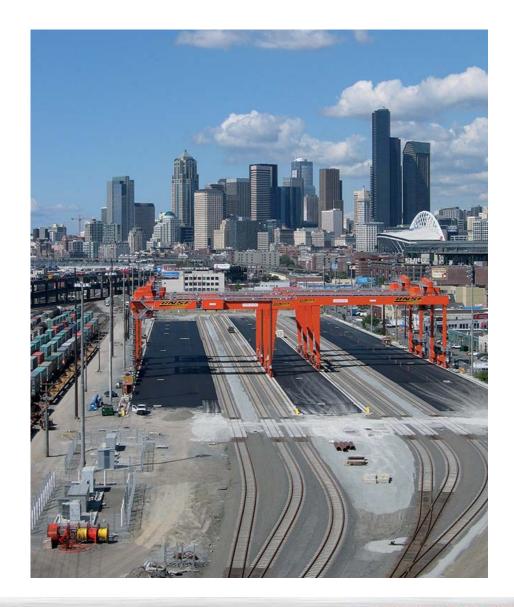
INTERMODAL TERMINALS & RAIL

Intermodal cranes are critical to the global shipping network

Konecranes is a leading provider of container handling equipment to intermodal terminals and rail yards.

We offer

- Rail-mounted gantry cranes (RMGs)
- Rubber tired gantry cranes (RTGs)
- Straddle carriers
- Lift trucks.



SHIPYARDS





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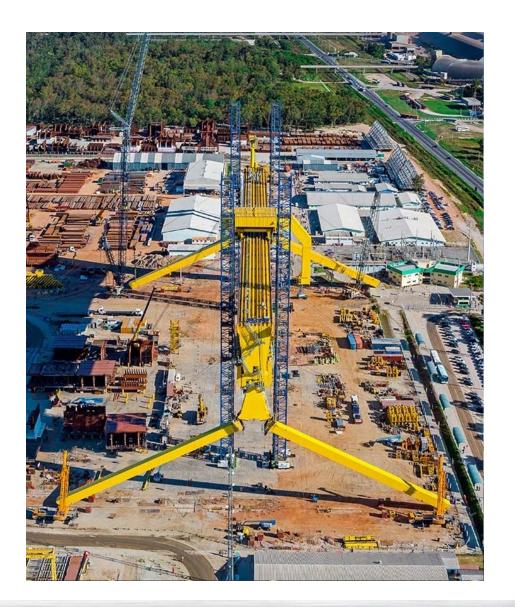
SHIPYARD LIFTING EQUIPMENT

We have delivered cranes to over one hundred **shipyards around the world,** to the Arctic north, to desert environments, and everything in between.

Our offering of lifting equipment for shipyards covers:

- Small chain hoists lifting a few dozen kg
- Plate unloading cranes
- Block handling cranes
- Single and double boom outfitting cranes
- The Goliath Gantry Crane lifting up to 2,000 tons with a 210-meter rail span.

Safety and reliability are paramount. The uniqueness of the shipyard's production process guides the choice of solution. We are experts at finding solutions that fit the customer's process perfectly.



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BULK HANDLING

Our AGD Grab Unloader is in use at leading bulk terminals around the world.

It represents the most modern grab unloading technology on the market today, providing:

- Excellent unloading efficiency
- Reduced energy consumption
- Dust prevention
- Noise reduction.



22/10/2014

WASTE-TO-ENERGY



WASTE-TO-ENERGY

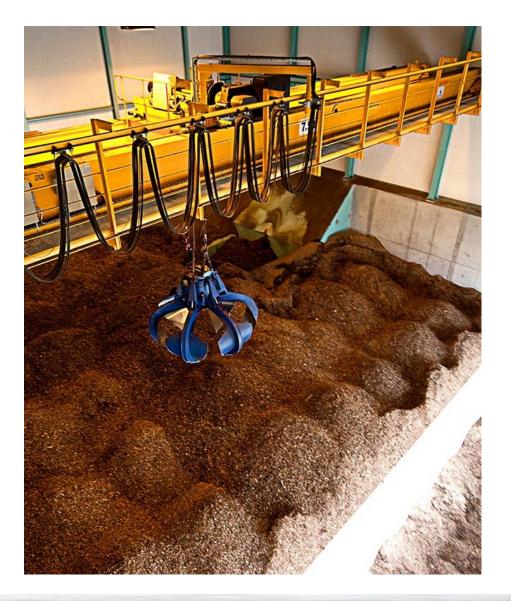
Burn waste, not money

High-capacity cranes able to mix waste, thoroughly help you to increase output and maintain efficiency.

Konecranes can provide fast, safe, and reliable lifting solutions designed for waste and biofuel handling, e.g.

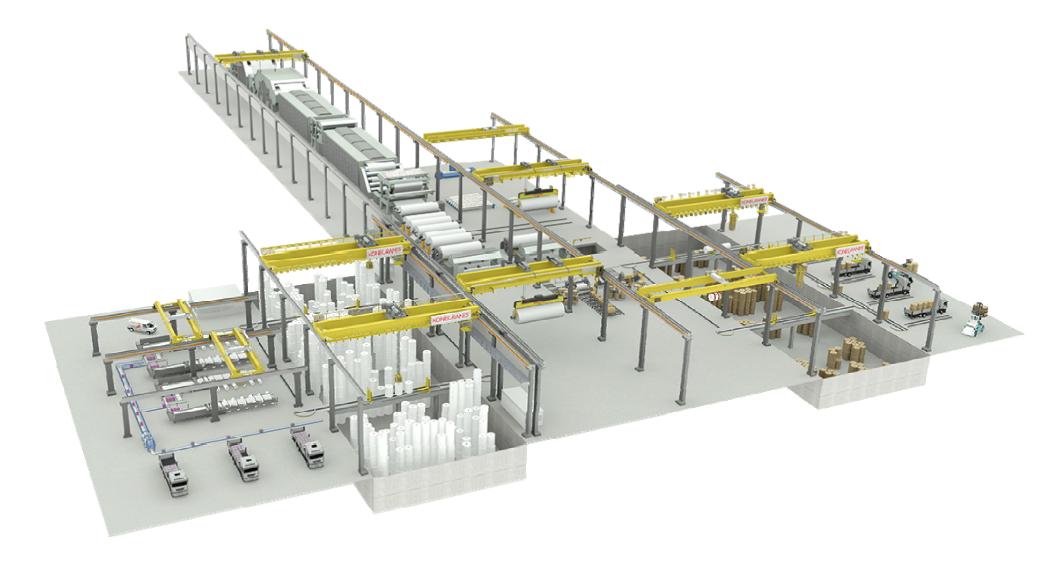
- Waste handling cranes
- Biomass handling cranes
- Slag handling cranes
- Sludge handling cranes
- Automated lifting systems
- Tailored cranes.

Intelligent crane technology such as anticollision systems, sway control of grab, and flexible automation options make our cranes easy and safe to use.



22/10/2014

PULP & PAPER





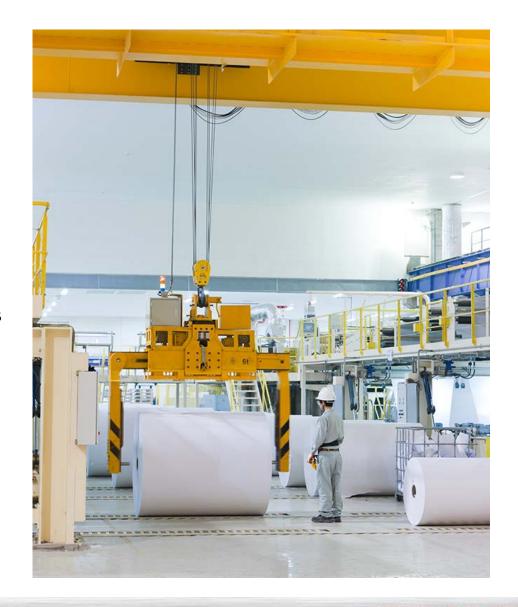
PULP & PAPER

We have every stage of the process covered

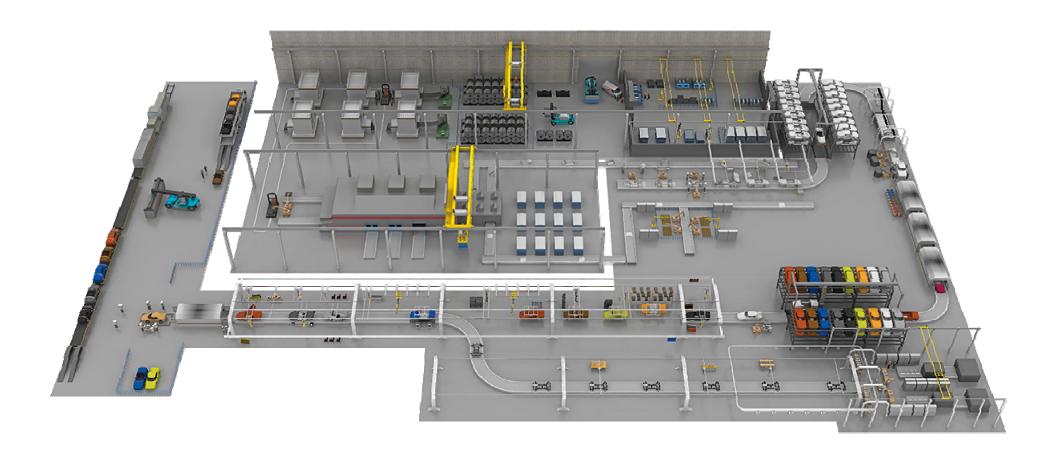
We offer a complete portfolio of cranes specifically designed for paper and paperboard manufacturing, converting, warehousing, and shipping.

- Paper mill cranes for auxiliary handling, maintenance cranes, parent roll handling cranes, workshop cranes
- Paper roll storage solutions for unpacked rolls storage and for wrapped rolls storage.

Semi-automation of jumbo roll handling makes the operator's work safer and easier. Full automation in storage and shipping make the operation more productive while cutting costs. Brake energy feedback to the network is the trend of the day in process duty cranes.



AUTOMOTIVE



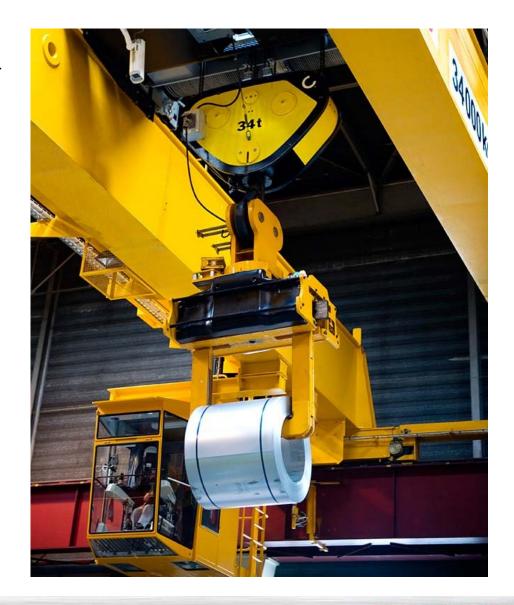
AUTOMOTIVE

Easy lifting for every situation

Whether you are moving steel coils, pressing car body parts, manufacturing engines, or assembling automobiles, we have the lifting equipment for the job.

- CXT cranes supply coils for unreeling
- SMARTON® cranes feed dies to stamping line
- Chain hoists for your workshops
- Jib cranes with an AirBalancer for your subassembly workstations
- Workstation cranes and XA crane with ATL Vertical Lifter for your assembly and final assembly lines
- Lift trucks and reach stackers for handling of steel plates, coils, tools, machinery, or containers.

With our Smart Solutions such as Sway Control, Micro Speed, and Target Positioning, your load goes exactly where you want it to go.





POWER - coal, gas, hydro, wind, and nuclear





POWER – coal, gas, hydro, wind, and nuclear

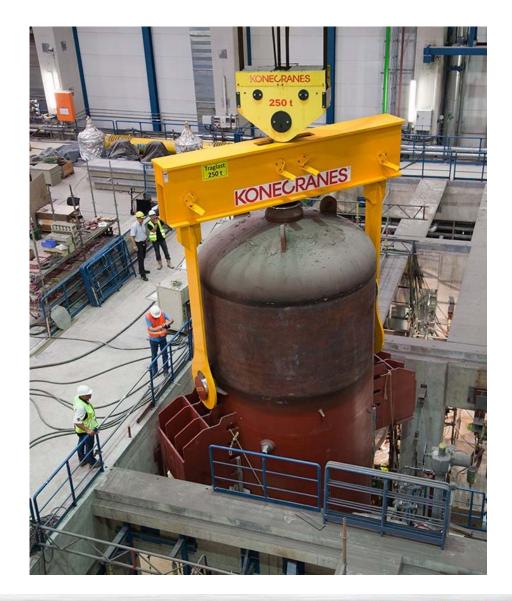
Reliable cranes for power industry

We have a wide range of lifting solutions for power plants. We can meet most needs with our standard solutions from manual winches to turbine hall cranes lifting up to 1000 tons in tandem operation.

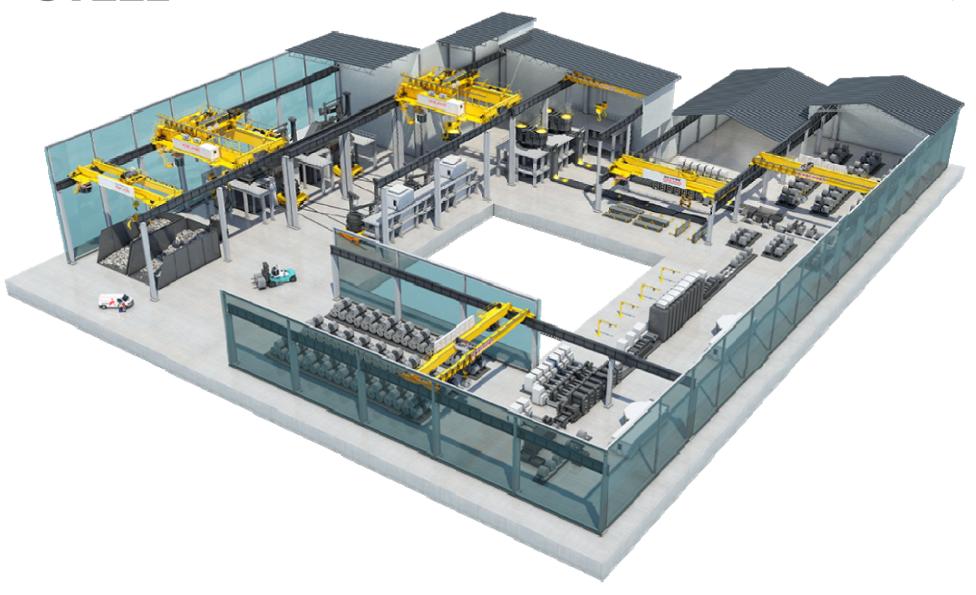
Our special products for this segment include:

- Our tXN electric chain hoist, designed for wind turbines
- For nuclear power plants we offer cask handling cranes and transporters, fuel handling cranes, polar cranes, and turbine hall cranes.

The micro speed, inching, and sway control features enable very accurate lifting of heavy, valuable process equipment like turbines and generators.



STEEL



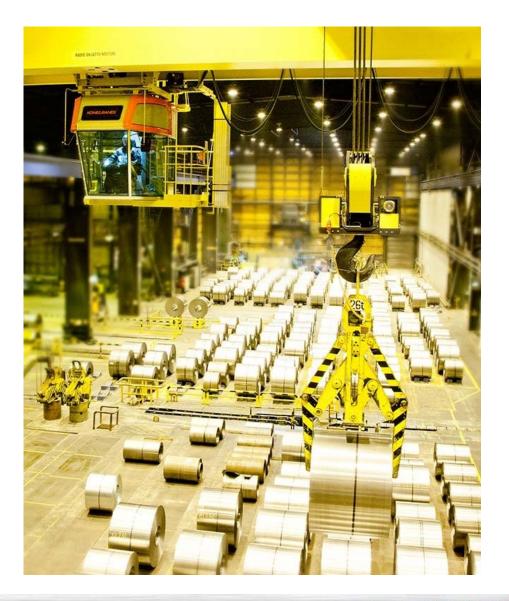
STEEL

Lifting equipment and service for the steel industry

We understand the harsh environment of the steel-making process and we engineer our lifting and control equipment to meet the challenges of flame heat and high temperatures.

- For steel-making, we offer several products: ladle cranes, charge cranes, cranes for the rolling and shipping areas, slab and billet handling cranes, and bar, plate, and coil handling cranes
- For steel warehousing we offer coil handling, tube and plate handling cranes, workstation cranes, wall console cranes, and lift trucks.

Automation and redundancy features allow one single crane to do the job of two, making backup cranes obsolete and reducing the length of the runway and the overall footprint of the facility by up to 30%.



MANUFACTURING



MANUFACTURING

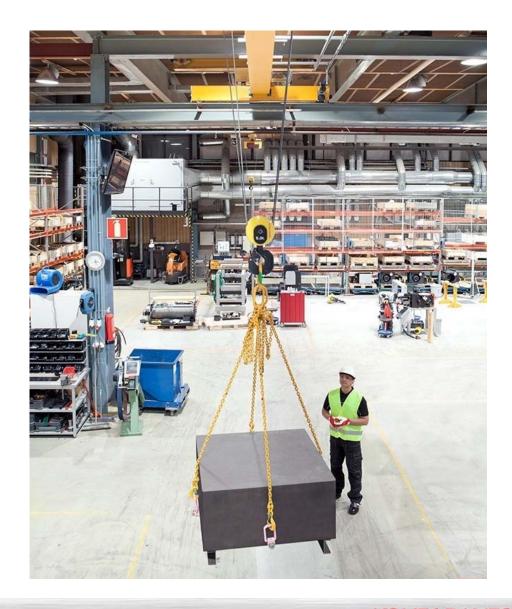
Lifting equipment for lean production processes

We offer the following products, among others:

- Wire rope hoist cranes
- Chain hoists
- **Vertical lifters**
- Belt and manual hoists
- Jib cranes
- Workstation cranes.

We also offer many of our industrial cranes as explosion-proof versions.

Our unique real-time TRUCONNECT® remote monitoring and reporting service together with our service programs enables predictive maintenance to ensure your equipment stays safe and operational, and downtime is minimized at all times.





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MINING

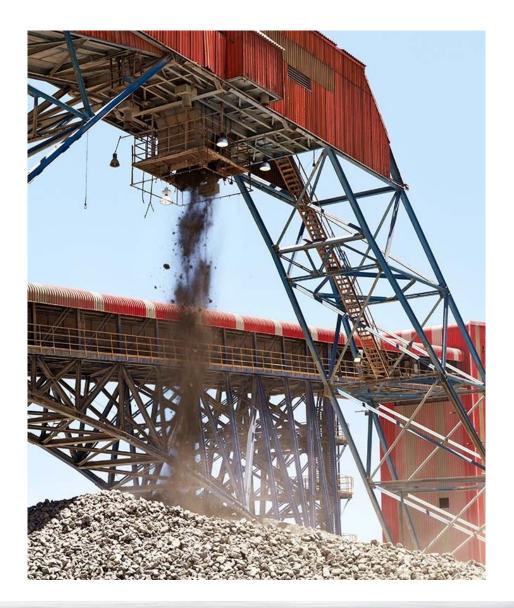
Durable and safe equipment to support your mines

Heavy-duty process cranes need to be able to carry extra-heavy and dangerous loads, and they must also be protected against corrosion from heat, dust, moisture, and constant use.

We offer cranes for demanding environments:

- Explosion-proof hoists
- Service duty cranes
- Electric chain hoists
- Manual hoists
- Above and underground cranes.

Our automated load control features make operating our cranes simple and easy. With advanced Smart features your load is always exactly where you want it to be.



22/10/2014

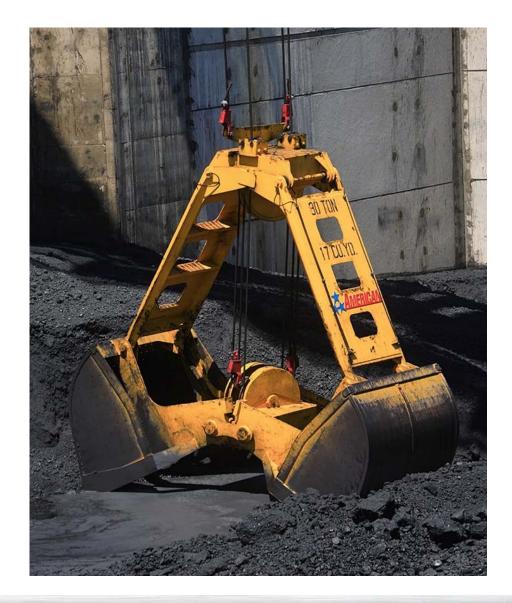
PETROCHEMICAL

Heavy-duty cranes always need tailoring for their specific circumstances. All cranes in the demanding production areas must be protected against corrosion from heat, dust, moisture, and wear from constant use. Konecranes makes a range of coker cranes for moving coke.

For petrochemical we offer the following types of cranes:

- Electric overhead travelling (EOT)
- Semi-gantry
- Gantry
- Semi-gantry and gantry types with cantilevers
- All crane types that are needed to fit coke pit/pad layouts and to accommodate hoppers and conveyors.

Our automated load control features make operating of our coker cranes simple and easy. With advanced features such as DynAGrab, Sway Control, and Semi-Automation, your load is always safely in the right place.





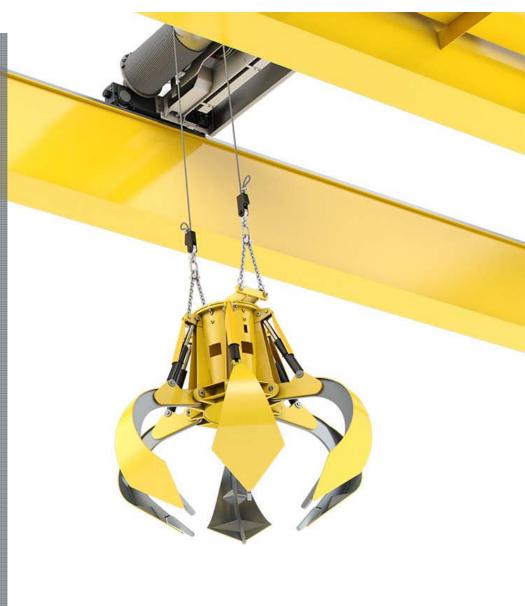
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LIFTING YOUR BUSINESS

Konecranes is an industry-leading group of lifting businesses that offers a complete range of advanced lifting solutions to different industries worldwide.

Regardless of your lifting needs, Konecranes will provide you with lifting equipment and services that increase the safety, productivity, and value of your business.





MEGATRENDS



PEOPLE AND SOCIETY Generation Y behaves differently. They are IT savvy, and may seek

a different work/life balance, challenge leaders of companies and countries, and expect ethical behavior, including good governance and workplace safety.



WORLD DEMOGRAPHICS Urbanization, new megacities, reverse

brain drain with talent returning to emerging countries. The age pyramid favors emerging countries over Western countries. Emerging markets will represent a major part of the world's growth.



TECHNOLOGY Advances in data analytics, automation, sensors, wireless

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ENERGY AND ENVIRONMENT The need to save energy, find new

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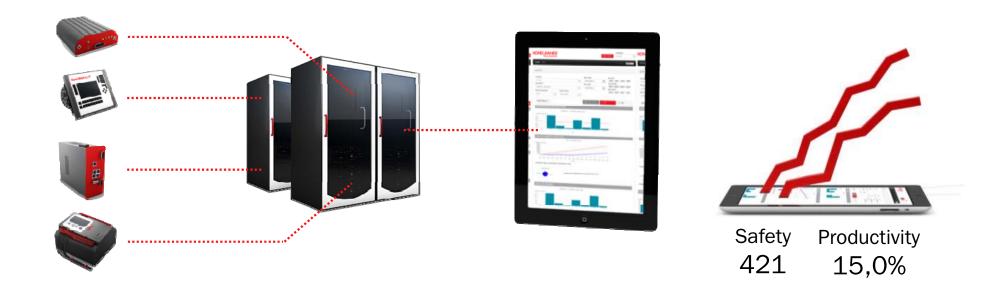
KEY STRATEGIC INITIATIVES – HOW WE GET THERE

Key strategic initiatives form a clear and highly focused path to reach our goals.



INDUSTRIAL INTERNET

We develop our service and equipment offering to enable real-time visibility to equipment usage and condition, and for advanced predictive maintenance. We want to be our customers' partner for **safety and productivity**.



We deliver a unique customer experience, enabled by new technologies, that differentiate us from competition.

SEGMENT-BASED OFFERING

We meet our customers' needs across the world through a segmentbased offering of products and services.



oneKONECRANES

We streamline our way of working and modernize our information systems to boost productivity and lower operational costs.

- Implementing Konecranes' vision, also for our own operations
- 360° view on our customers
- Real-time visibility to demand and supply
- Improved punctuality, quality and lead times
- Higher scalability, lower transaction cost
- Common tools.



PRODUCT PORTFOLIO



SMART CRANES WITH SMART SERVICE

SERVICE

- Preventive approach
- Service programs based on customer needs
- Services for lifting equipment of every make
- 4,000 well-trained technicians in 600 locations servicing a contract base of 430,000 items of equipment.

TECHNOLOGY

- Increased R&D investment
- Focus on digital controls, software, automation, and serviceenabling technologies
- High attention to quality, usability, ergonomics, and environment
- Smart solutions to improve customers' safety and productivity.

MAXIMIZING THE PRODUCTIVITY OF UPTIME MINIMIZING THE COST OF DOWNTIME



OUR PRODUCTS AND SERVICES



WORKSTATION LIFTING SYSTEMS



INDUSTRIAL CRANES -**PRODUCTS**



INDUSTRIAL CRANES -**SOLUTIONS**



NUCLEAR CRANES



YARD CRANES



STRADDLE CARRIERS



SHIP-TO-SHORE **CRANES**



GOLIATH SHIPYARD CRANES



REACH STACKERS



FORKLIFT TRUCKS



COMPREHENSIVE SERVICE



WORKSTATION LIFTING SYSTEMS

We offer a wide range of lifting equipment for production workstations.

- Improved maintainability, shorter downtime
- Optimized workflow
- Improved productivity, thanks to the extended speed range
- Capacity up to 7,500 kg.



ELECTRIC CHAIN HOISTS

22/10/2014

INDUSTRIAL CRANES - PRODUCTS

Meeting a wide range of lifting needs in various industries e.g. general manufacturing and steel warehousing:

- Improved productivity and safety
- Compact design saves space and maximizes working area
- Smart Features increase the efficiency and safety of load handling
- CXT crane lifts up to 80 tons.



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INDUSTRIAL CRANES – SOLUTIONS

For heavy process use and demanding service applications.
Used in many industries e.g steel, pulp & paper, power, and energy-fromwaste:

- Scalable product offering to fulfill a wide variety of requirements
- Crane grows with the customer's needs
- SMARTON® crane lifting up to 250 tons with one trolley and up to 500 tons with two trolleys
- Tailored cranes: even higher capacities.



NUCLEAR CRANES

We offer a complete portfolio of lifting equipment for nuclear material handling, as well as services and modernizations for nuclear power plants or related facilities:

- We have been supplying lifting equipment to the nuclear industry for over 50 years
- Complete portfolio of lifting equipment covering all the lifts needed in nuclear power plants
- Global service network to support nuclear projects around the world.



TURBINE HALL CRANE



CONTAINER CRANES

RTGs, ARTGs, RMGs, and ARMGs are used for container handling at container ports. RMGs are also used at intermodal terminals. These cranes usually have a lifting capacity of around 50 tons and can stack 1-over-5 containers high and 6 plus truck lane wide.

- Low total cost of ownership
- High performance with top technology
- Higher reliability, less downtime, and lower maintenance costs
- Automation.



A SMARTER CABIN



STRADDLE CARRIERS

Container handling machine for general purpose container handling at straddle terminals. Typical lifting capacity up to 50 tons, stacking up to 4 high.

BOXRUNNER

"Short and fast" version for quayside-to-yard operations in automated container yards:

- Stable and safe drive experience
- Reliable: high uptime
- Fast return on investment.



66

SHIP-TO-SHORE CRANES

Ship-to-shore (STS) cranes are used for loading and unloading container ships. Konecranes' STS cranes have a lifting capacity of up to 65 tons and an outreach of up to 61 meters.

 Greater productivity thanks to BoxHunter technology, a combination of Konecranes AC drives and Active Load Control.



GOLIATH SHIPYARD CRANES

Biggest Goliath shipyard crane ever delivered has a rail span of 215 m and a lifting capacity of 2000 tons.

Used to assemble ship hulls in the dry dock phase of ship construction:

- Unique single-girder design is the key to providing very large Goliaths that make full assembly very efficient
- Efficiency through 2 Goliaths working in tandem
- Superior engineering for greater reliability.



REACH STACKERS

PREMIUM PERFORMANCE IS WITHIN YOUR REACH

Lifting capacities:

10–45 tons (container handling)

41–45 tons (intermodal handling)

10-80 tons (industrial handling)

- Modern and durable lifting spreaders
- Smart load-sensing hydraulics
- Powerful engine
- ErgoCab, probably the best cabin on the market
- Intelligent Electronic Machine control, EMC Master
- Heavy-duty box-type chassis
- Maintenance-free brakes
- Excellent stability.



FORK LIFT TRUCKS

THE WORLD'S WIDEST RANGE OF HEAVY-DUTY LIFT TRUCKS

Lifting capacities: 10–65 tons

- Quick-change fork system
- Maintenance-free brakes
- Heavy-duty box-type chassis
- Powerful engine
- Smart load-sensing hydraulics
- ErgoCab, probably the best cabin on the market
- Intelligent Electronic Machine control, EMC Master.



CONTAINER LIFT TRUCKS

TAKING CONTAINER HANDLING TO A HIGHER LEVEL

- Very fast lifting and lowering
- Powerful engine
- Smart load-sensing hydraulics
- Single and double stacking
- ErgoCab, probably the best cabin on the market
- Intelligent Electronic Machine control, EMC Master
- Excellent stability.



INDUSTRY-LEADING SERVICE

Specialized maintenance and modernization services for all types of industrial cranes and machine tool equipment.

Applied to a single piece of equipment or across your entire operation, boosting the productivity and safety of industrial processes.



SERVICING THE GLOBE

6,200 **MAINTENANCE PROFESSIONALS**

HIGHLY SKILLED SERVICE TECHNICIANS

MORE THAN 4,000 2,400 **SERVICE VANS**

TRUCONNECT® REMOTE SERVICES LAUNCHED IN

> 25 **COUNTRIES**

1.75 **MILLION ANNUAL SERVICE CALLS**

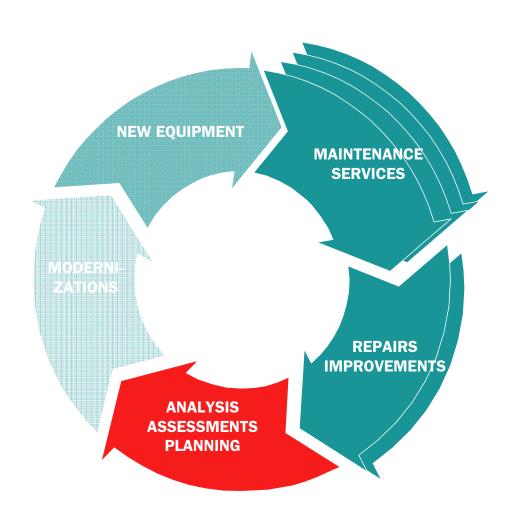
SERVICE IS 40% **OF TOTAL SALES**

MAINTENANCE CONTRACTS COVERING MORE THAN 430,000 **EQUIPMENT OF DIFFERENT** MAKES

100 **REMOTE SUPPORT CASES PER MONTH**

OUR FOCUS, YOUR BENEFITS

- Improved safety, higher performance and availability, resulting in higher productivity
- Lower total costs of maintenance and downtime
- Prolonged equipment service life.



SERVICE PROGRAMS BASED ON YOUR NEEDS

CONTACT

CONDITION

CARE

COMMITMENT

COMPLETE



Any single maintenance or repair work on a needs basis.



Periodic and scheduled inspection services.



Periodic inspections and preventive maintenance.



Wide scope maintenance partnership with common KPI's.



Full responsibility of equipment, maintenance and personnel.

ADVANCED DIAGNOSTICS AND NEW SERVICES

RailQ Runway Survey

Faster, safer and more accurate.

RopeQ Wire Rope Inspection

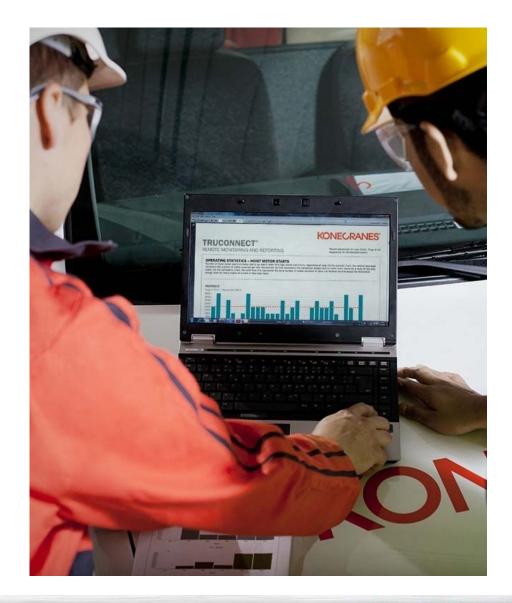
Inspecting what you cannot see.

AGILON® Material Handling

The right parts, in the right place, at the right time.

TRUCONNECT® Remote Services

The future of maintenance.



TRUCONNECT® REMOTE SERVICES OFFERING

TRUCONNECT® REMOTE MONITORING AND REPORTING



TRUCONNECT® REMOTE DIAGNOSTICS AND TECHNICAL SUPPORT



TRUCONNECT® REAL-TIME PRODUCTION EFFICIENCY MONITORING



INDUSTRIAL DESIGN PHILOSOPHY

1

DEVELOP PRODUCTS THAT ARE CLEAR AND INTELLIGENT 2

EASY-TO-USE PRODUCTS ARE SAFER FOR USERS 3

USER-FRIENDLINESS LEADS TO BETTER BUSINESS FLOW AND PRODUCTIVITY

WHEN DEVELOPING NEW TECHNOLOGIES, WE TALK WITH OUR CUSTOMERS AND STUDY HOW PEOPLE INTERACT WITH THE EQUIPMENT.

KONECRANES DNA































INDUSTRY LEADERSHIP

- Securing lifting in industrial processes since the 1930s: over 80 years of experience.
- Constantly shaping the lifting industry by striving to make our customer's operations safer and more productive.
- Continually setting the benchmark in technology, automation and real-time services in the lifting industry.



GROWTH IS STRENGTH

WE ARE HERE TO STAY

- With the technologies and knowhow to lift you well into the future.
- With a customer focus that puts your business at the center of ours.
- With an entrepreneurial attitude that drives growth.
- With a commitment to the wellbeing and competence of our people.
- A dedication to developing your business as your long-term partner and single-source supplier.

GROWTH IS STRENGTH WE CONTINUE TO STRENGTHEN **OUR POSITION** AS THE WORLD'S LEADER IN LIFTING SOLUTIONS.



NOT JUST LIFTING THINGS, BUT ENTIRE BUSINESSES