KONECRANES®

ANNUAL REVIEW 2019



R&D

A QUARTER-CENTURY **OF AMBITION AND GROWTH**

STRATEGY

2019 marked the 25th year of Konecranes' operations as an independent company. From our modest beginnings in the town of Hyvinkää in the early 1990s, Konecranes has grown to become a leading lifting equipment solution provider on a global scale.

The global material handling market continues to evolve rapidly, driven by increasing digitalization, the introduction of productivity-enhancing technologies and the need for more sustainable operations, and Konecranes is well-placed to benefit from these trends. Through intelligent design and the implementation of digital solutions that make our products smarter, we ensure our customers' operations are safer and more efficient.

The integration of MHPS, where we made good progress in 2019, means we are now stronger and better-equipped to anticipate and meet future challenges while also able to seize new business opportunities. We will do this with strong contributions from all of our three Business Areas - Port Solutions, Industrial Equipment and Service – with the latter to be our growth engine in the years to come.

Add to this a new President and CEO at the helm in 2020, and it's clear that Konecranes is now ready to take the next steps in its strategy, leveraging our many strengths to play an even greater role in the material handling ecosystem of our customers.

Contents

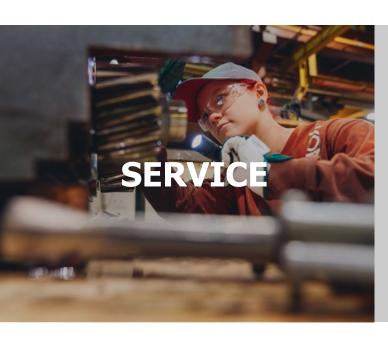
Konecranes in brief	3		
Year 2019 in numbers Highlights of 2019 CEO's review Megatrends	4 6 7 9		
		Strategy	11
		Business area reviews	12
		Research and technology development	19
Sustainability	24		
Konecranes as an investment	27		

Information about Konecranes' Annual Report 2019

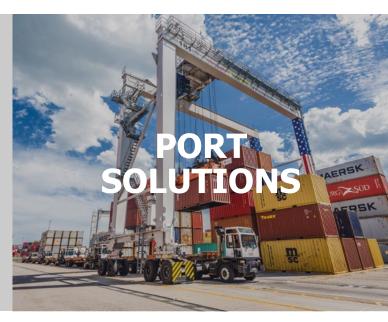
Konecranes' Annual Report 2019 consists of four separate reports: Annual Review, Financial Review, Sustainability Report and Governance document. All documents are downloadable on our Annual Report website at https://investors.konecranes.com/ar2019.

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KONECRANES IN BRIEF

Konecranes is a world-leading group of Lifting Businesses[™], serving a broad range of customers. We are truly a global company: in 2019, we had 16,200 employees in 50 countries. As a leading manufacturer of lifting equipment, Konecranes offers a vast range of advanced lifting solutions and services to different industries worldwide. The solutions provided by our three Business Areas – Service, Industrial Equipment and Port Solutions – complement each other and enable our customers to meet their lifting and material

handling needs through one supplier. In addition to offering a wide range of lifting solutions, we provide specialized maintenance services and spare parts for all types and makes of industrial cranes, hoists and port equipment – from single units of equipment to entire operations.

Our customers operate in fields including the automotive sector, waste to energy and biomass, general manufacturing, mining, nuclear energy,

petroleum and gas, paper and forest, container handling, shipyards, power and metals production. We are a part of our customers' processes, as they do not only invest in equipment and services but look for solutions they can rely on. We constantly strive to improve our performance in product design, service solutions, safety and sustainability to stay ahead of our customers' needs.



YEAR 2019 IN NUMBERS

3,167.3 3,326.9

MEUR (+2.5%) Order intake

MEUR (+5.4%) Net sales

8.3%

Adjusted EBITA

1,824.3

MEUR (+6.3%) Order book

2,300

Number of active and pending patents

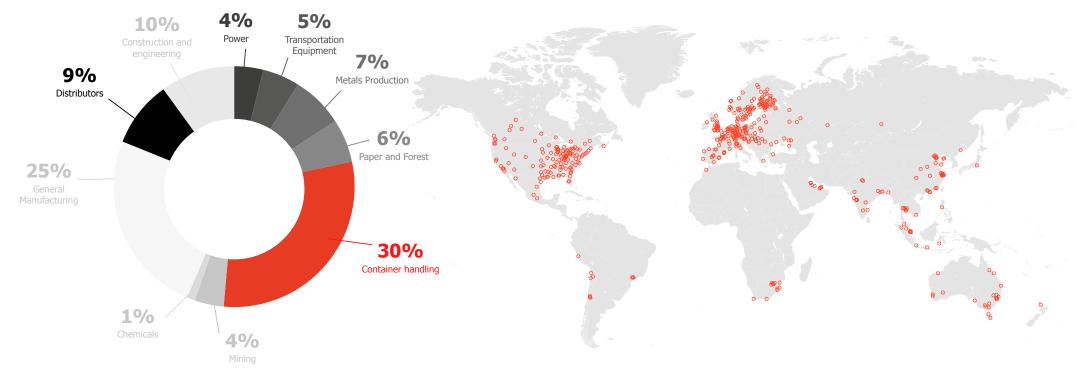
52.6%

Gearing



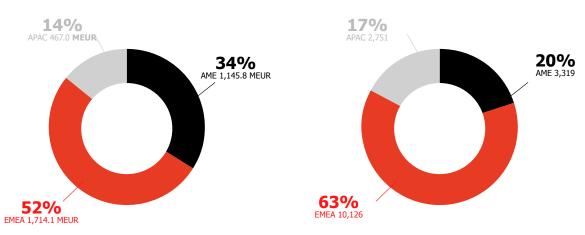
Orders by customer segments, 2019

Being close to our customers through a local presence



Net sales per region, 2019

Personnel by region, 2019





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HIGHLIGHTS OF 2019

Konecranes starts its 25th year as an independent company, having grown from a Nordics-focused company of under 3,000 employees to a global leader in lifting equipment and services with a presence in 50 countries and some 18,000 employees.

Konecranes announces a milestone contract win with the Hadarom container terminal in Israel. The order consists of a complete line of automated container cranes and software intelligence, including Konecranes' own terminal operating system and Equipment Control System.



Konecranes boosts its Service business in Italy by acquiring Italian Trevolution Service SRL.

Konecranes announces the next step in its development by naming Rob Smith as its new CEO effective February 1, 2020.

Konecranes launches three new lifting products – the S-, M- and C-series cranes and electric chain hoists.





Konecranes finalizes diversity goals to ensure it has the most competitive talent pool for the future. By end-2021 the company targets that in business management positions no one gender comprises more than 75% of the total, and no one nationality group can exceed 50%.

The 2,000th Konecranes Gottwald Mobile Harbor Crane is delivered to the Ership terminal in the Mediterranean port of Cartagena in South-eastern Spain. Konecranes invented the Mobile Harbor Crane 64 years ago.



Konecranes signs an agreement to fully acquire MHE-Demag, a leading supplier of industrial cranes and services in Southeast Asia, from joint venture partner Jebsen & Jessen.

Konecranes finalizes its climate change risk assessment to understand how different climate scenarios will impact business and operations. The analysis will be integrated into Konecranes' operations and continuous sustainability work.



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CEO'S REVIEW

Dear shareholders,

Konecranes marked its 25th year of operations with solid financial results and a large acquisition in the Asia Pacific region, underscoring its readiness to embark on its next phase of growth following the successful acquisition and integration of MHPS.

We had many reasons to celebrate in 2019: a healthy order book at year-end; strong profitability in Service; three new product launches from Industrial Equipment: and a stellar showing by Port Solutions including a landmark deal in Israel that highlighted our strengths across software, hardware and services. When you add to this other achievements including the establishment of a data science laboratory in France, it's remarkable to see how much we have grown since our founding in Hyvinkää, Finland in 1994.

Here are some further examples of this progress.

Business Area and integration milestones

In **Service**, full-year sales and profits improved, as did the annual value of our agreement base and orders, reinforcing the business' importance to Konecranes as a whole. In August we strengthened our presence in Italy through the acquisition of Trevolution Service SRL, one of the country's largest independent crane service companies specializing in crane maintenance, repairs, modernizations, spare parts, and hoists and components. We also announced contract wins during the year including a maintenance and consulting services agreement with GE Power in France and an agreement with

Belgium's Luminus to modernize two cranes at a site in Lièae.

In **Industrial Equipment**, it was a year of mixed performance. The launch of the S-, M- and C-series cranes and electric chain hoists in September was a clear highlight, refreshing and reinforcing our industry-leading portfolio and giving a strong push to our platform consolidation program. The launch also showed the innovation that is at the heart of Konecranes: The S-series crane uses synthetic rope to deliver greater lifting performance and longerlasting use, and we have a total of 20 patents either awarded or pending for the three new products. Deliveries of the new cranes have now started, and initial customer feedback has been very positive.

From a financial performance perspective, however, Industrial Equipment struggled. This was due to factors including the streamlining of manufacturing operations in France and Germany; non-recurring costs relating to certain process crane projects; and the effects of the slowing global economy. Earnings fell sharply from a year ago, but we are convinced that the recovery actions now underway in Industrial Equipment, when combined with the boost we expect from the new products, will improve profitability and eventually return the business to clear growth.

In **Port Solutions**, both sales and profits rose in 2019. In addition to the Israeli Hadarom deal mentioned earlier – the fourth-biggest contract

in our history – highlights included an order from Yilport Holding for 18 Automated Rubber Tired Gantry Cranes for three European container terminals, an important step forward for our Path to Port Automation approach. We celebrated some milestones, too, delivering our 2,000th Konecranes Gottwald Mobile Harbor Crane to the Ership terminal in Spain and marking 25 years of Konecranes Lift Trucks, with nearly 10,000 lift trucks sold across 120 countries to date.

These achievements show the robust condition of two of our core business cornerstones: a superior product offering and unmatched service network. The third cornerstone is our digital capabilities, and 2019 highlights included the French data science lab and the renewal of our digital strategy to better target customers and new business opportunities. We strongly believe that the rapid digitalization of our business keeps us ahead of our competitors and thus in excellent shape to grab the business opportunities of the industrial internet era.

We're especially proud that all of this happened while we continued to deliver MHPS acquisition synergies. In July 2019 we announced that the EUR 140 million synergy savings program had ended. This was a great achievement, and we have continued with this work to ensure that our cost structure remains well balanced with our current business, especially in Industrial Equipment.

None of this could have happened without the



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dedication, focus and drive of our people, and warm thanks go to all Konecranes employees. This positive reputation has been noticed outside the company, with Konecranes ranking well, for example, in an external Finnish employer survey from Academic work in 2019.

Strategic steps for 2020 and beyond

While we rightly celebrate successes like these, agile companies are always thinking multiple steps ahead and acting decisively. During 2019 that's what Konecranes did.

In October, we announced that Rob Smith would be Konecranes' next President and CEO effective February 1, 2020. He joins Konecranes from AGCO, where he led the Europe and Middle East business with annual sales of roughly \$5.4 billion. He is a leader who has delivered sales and profitability growth via innovative business strategies, deep expertise in digitalization and strong customer focus.

In December, we agreed to buy the other half of our 50-50 MHE Demag joint venture from Jebsen & Jessen. The final closing price was EUR 143 million in cash. This move significantly improves our market position in fast-growing Southeast Asian markets, creates further opportunities for Service and simplifies the distribution channel for industrial cranes. The deal closed in January 2020 and integration activities are underway.

And, during 2019, we took concrete steps reflecting the growing and strategic importance of sustainability in the years to come. We finalized a 4-month climate change risk assessment study to understand how different scenarios will impact our business and operations, and will incorporate those results into our continuous sustainability work. We

also agreed targets to ensure Konecranes has a more diverse employee base – and thus one that is even more competitive. By end-2021 our goal is that in business management positions no one gender can comprise more than 75% of the total, and no one nationality group can exceed 50%.

These are all critical ingredients for our new corporate strategy, which we will be sharing at our Capital Markets Day in June 2020. We aim to leverage the leadership we have in our core businesses and digitalization to tap growing customer demand for more comprehensive solutions and not just individual products and services.

To close, we extend our deepest thanks to our shareholders, personnel and customers for their support in delivering the successes of the past 25 years. Thanks to you we start our next quartercentury with solid financial foundations, a growing international footprint and an inspired and innovative group of employees. Konecranes has the size and the drive to succeed – and we will.

Warm regards,



Rob Smith





MEGATRENDS



Today, the world is changing at an ever-increasing pace and companies are working hard to tackle the business opportunities that are unfolding alongside the change. At Konecranes, we have identified four megatrends that have a significant impact on our customers and us: digitalization, productivity, sustainability and geopolitics. They provide great opportunities for us to develop our business now and in the future.



Digitalization – the fourth industrial revolution

Digitalization is accelerating at an exponential rate and companies across multiple sectors are thinking how to best exploit the opportunities it brings. Industrial companies are getting ready for the fourth industrial revolution, Industry 4.0, which is profoundly changing production. Robots, augmented reality and production simulations offer ways for smarter automation and operational excellence. Big data and analytics enable more customer-centric design and production, and the production process is continuously improved by these

new technologies. Autonomous equipment such as automated guided vehicles, robots and cobots improve productivity and safety.

Port and terminal operations are also impacted. Planning software and applications model, simulate and optimize the throughput and operations of whole terminals. We are even seeing fully automated terminals in operation. But there is more. Approximately 90% of the goods in global trade are carried by the ocean shipping industry each year. Port authorities, Customs, terminal operators, different logistics players and shipping lines all work their hardest to make the port function as efficiently as possible, still mainly through paper-based processes.

Leveraging digitalization, big data and the internet of things (IoT) provides huge possibilities to automate equipment, processes and total operations in the very near future.

For Konecranes, digitalization will enable more and better-quality data to be collected from our customers' operations. We can use this to, for example, provide better maintenance services where we predict equipment failures before they occur, and optimize service activities according to our customers' production cycles. Digitalization will also bring new ways for our customers to manage and monitor equipment as well as train employees how to use them safely and efficiently.



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Productivity improvement continues to be high on the agenda for all companies, and especially so in capital-intensive industrial production. Research shows that companies with excellent productivity growth also create more value for their shareholders. This is true for us and for our customers. Optimizing the manufacturing process with maximimum uptime and minimum downtime is critical.

Today, we already offer our customers many solutions which improve productivity and profitability through smart, connected equipment and optimized maintenance. Examples include our lift trucks for both ports and industrial clients, our offering in automatic warehouse management, our automated guided vehicles for maneuvering large containers in ports, and our monorail systems employing overhead rails to transport materials within factories, e.g. in the automobile industry. As we proceed, we will place increased strategic focus on the crane as part of the entire material handling ecosystem.



Sustainability is a growing value for customers and society. The safety of our products and services has been in focus for us for many years now. We continuously improve the safety features of our offering and a have a strongly rooted safety culture in the company.

Stakeholders demand that companies do more in areas such as combatting climate change and advancing circularity. We reduce our own carbon footprint by improving the energy efficiency of our factories and services. The carbon handprint, the good we can do, is about how we reduce the emissions from the operations of customers with the help of our eco-efficient products and services. Our goal is not only to comply with the laws, rules and regulations that apply to our business; but also strive to abide by the high standards of ethical business conduct. Companies that have aligned their business growth strategies to their ethics will be a step ahead in future-proofing their business.



In recent years, the world has become increasingly unpredictable. Changes in geopolitics, and especially the increasing protectionism in many markets, are reflected in the operating environment and conditions of businesses across the world.

Asia has become the global manufacturing hub and will likely continue to be so in the future. China is the largest market in the region and has a growing and significant global impact. China has several high-level development programs to strengthen its competitiveness and power in the global arena, such as Made in China 2025 and the One Belt, One Road initiative. These will, however, bring opportunities for other global and local players as well.

Due to trade barriers, there has been some shift of manufacturing closer to more mature markets. There will be good business opportunities for the manufacturing industry in Europe and North America, too, as long as it is leveraging automation that is necessary for cost-effective manufacturing.



R&D

STRATEGY

For the past three years, we have worked very hard to integrate the Terex MHPS acquisition. As we begin 2020, we have made signifigant progress with the integration and we are starting to look at the next steps for Konecranes.

We plan to fully leverage the four global megatrends and our core competencies. We have a strong customer base across industries around the world, a highly competent team, leading technologies and a world-class service approach. This is an

excellent basis for embarking on the next chapter for Konecranes and fulfilling our ambition for profitable growth.

Strategic cornerstones

Our strategy is based on five cornerstones: growth, profitability, customers, people and technology. In the long term, we aim for profitable growth the exceeds market growth. We also want to have the best profitability among our peers. Profitable growth is strongly correlated with

customer satisfaction, employee engagement and an innovative offering. An industry-leading company excelling in profitable growth has the means to invest in innovative products and services, attracts and attains the best talent and consistently delivers a world-class customer experience.

Vision We know in real time how millions of lifting devices perform. Mission We use this knowledge around the clock to make our customers' We are not just lifting things, but entire businesses. operations safer and more productive. **Exceeding** Satisfied **Engaged Innovative Best among** market growth employees offering peers customers **Profitability Technology** Growth Customers **People** STRATEGY EXECUTION THROUGH GROUP AND BA PROGRAMS SERVICE **EQUIPMENT** Lifecycle Care in Real Time Core of Lifting Service for all types and makes of cranes and hoists Direct and Indirect channels in Industrial Equipment Global service network Multi-brand strategy Improve the safety and productivity of our customers' operations Need based customer offering Solution selling Solution selling

What success looks like and how we measure it

Strategic cornerstones

R&D

BUSINESS AREA REVIEWS

Service

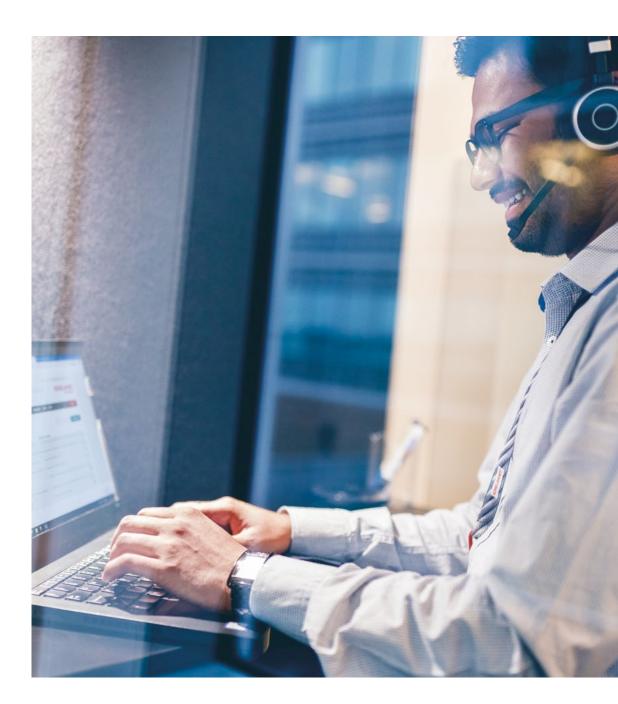
Business Area Service provides specialized maintenance service and spare parts for all types and makes of industrial cranes and hoists, from a single piece of equipment to entire operations. Our objective is to improve the safety and productivity of our customers' operations. Lifecycle Care in Real Time is our comprehensive and systematic approach to maintenance, connecting data, machines and people.

Industrial Equipment

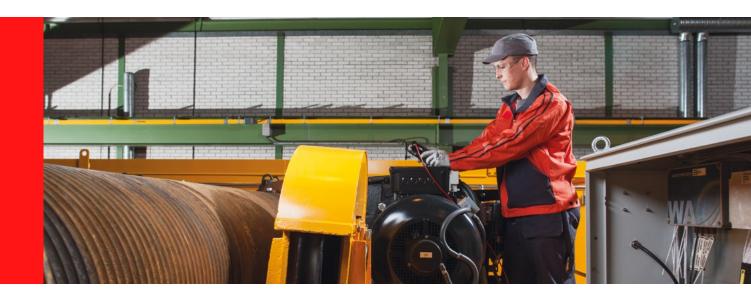
Business Area Industrial Equipment offers hoists, cranes and material handling solutions for a wide range of customers from General Manufacturing to various kinds of process industries like Waste-to-Energy, Paper and Forest, Automotive and Metals Production. Products are marketed through a multi-brand portfolio.

Port Solutions

Business Area Port Solutions offers a full range of container handling equipment and automation technology: equipment for handling bulk, general and project cargo, shipyard handling equipment and heavy-duty lift trucks, all backed by a complete range of services and software.







Growth of service agreements

For 2019, Business Area Service set out to maintain our track record of profitable growth, with a focus on service agreements. These agreements form the basis of our customer relationships and underpin our entire service offering. More specifically, our aim was to improve general agreement profitability and to expand the scope of existing agreements. The annual value of the agreement base in 2019 grew 8.2% year-on-year at comparable currency rates, a good foundation for 2020.

Demag integration

As planned, the integration of the Demag and Konecranes Service organizations in Germany under one legal entity was completed at the end of Q2, and overall 18 out of 19 countries are now integrated with the expected run-rate synergies achieved. Demag service products – e.g. Status Control, Demag hoist retrofits and general overhauls – have been incorporated into the Konecranes service offering,

providing opportunities for growth and helping to secure the Demag legacy.

Digitalization

Industrial companies all over the globe are talking about digitalization and the Internet of Things (IoT). Konecranes Service is not just talking about it, we are transforming the delivery of maintenance services in every aspect of our day-to-day operations.

Our well-established digital transformation continued according to plan in 2019. Spain and India went live with oneKONECRANES tools and systems in Q1, followed by Poland, Hungary and South Africa in in Q2 and Germany's integrated Demag service operations in H2. Preparations are proceeding in other countries. The target of having 90% oneKONECRANES global coverage by the end of 2019 was achieved.

Operational and commercial excellence

Profitability in 2019 also improved due to synergy realization, sales mix and continuous improvement in sales and delivery processes and execution.

The maturity of our transformation can be observed in the sales efficiency and volume growth realized from those product and service segments supported by centralized inside sales call centers located in the US, Canada and UK. We plan to expand these to other major markets. Staffing of these call centers will continue due to the promising signs of sustainable and continued growth in the customer segments they serve.



Other milestones

- In August we acquired Trevolution Service SRL, one of Italy's largest independent crane service companies specializing in crane maintenance, repairs, modernizations, spare parts and hoists and components. The acquisition enlarges Konecranes' field service operations and provides an excellent opportunity to take on even larger projects and agreements in Italy.
- In July, we launched a TRUCONNECT® retrofit that can give customers a comprehensive fleet view by allowing Demag assets to be added to the same remotely-monitored fleet with Konecranes-branded assets. The retrofit equips Demag DMR SafeControl-equipped hoists and cranes with the hardware needed for Konecranes TRUCONNECT® Remote Monitoring.

Order book at the end of 2019, MEUR

215.7

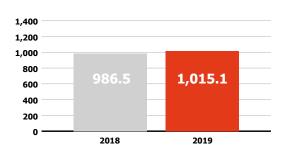
Adjusted EBITA, %

16.6

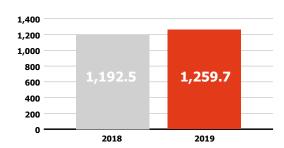
Number of employees at the end of 2019

7,762

Orders received, MEUR



Net Sales, MEUR



Lifting GE Power's business in France

In October 2019, Konecranes won an agreement with **GE Power in northern France to provide service to 264** cranes and jibs.

The agreement included MAINMAN Planned Maintenance, Routine Maintenance, assistance for compliance inspections and Consultation Services. Two Konecranes technicianas will

be on site at GE's Belfort and Bourogne locations for two vears, and Konecranes' TRUCONNECT® Remote Service will be activated for 14 of the cranes to help support GE's maintenance operations and improve safety and productivity.

Konecranes aims not only to keep GE's cranes running sufficiently; we also want to help them maximize productivity

and minimize downtime during every shift, while providing a transparent view of all their crane-related events and activities.

The agreement is the largest for Konecranes' northern France branch and a testament to the Konecranes model of improving customers' business efficiency, safety and performance.



INDUSTRIAL EQUIPMENT



Highlights of 2019: new products and platform consolidation

2019 was a significant year for BA Industrial Equipment: we launched three new innovative products. We also made significant progress in streamlining the combined operations of Konecranes and Demag and in reducing the number of our product platforms. We performed well in various industries including Waste-to-Energy, Paper and Forest, and Automotive. In all these areas, our automated solutions and safety and productivityenhancing smart features were well appreciated by customers. Whatever we develop, it must be part of the increasingly digitalizing world.

Challenging year, focus on strengthening our base for future growth

From a market point of view, 2019 was challenging due to increasing business and political uncertainty in many areas in the world. The activity level by industry and geographic area varied. Demand in General Manufacturing, with its smaller individual opportunities, followed the overall investment activity

level in countries, while opportunities in Wasteto-Energy remained steady or even grew. Paper and Forest remained strong, while the automotive industry declined.

Geographically, the EMEA region showed the first signs of softening demand, although there were variations by sub-region. The Nordic and Southeast European countries stayed reasonably steady, while the large Central European market weakened, especially Germany and the UK. Demand in North America remained fairly strong but continued to be low in South America. Asia's demand was fairly stable.

The market changes impacted volumes of our fast-cycle component business to distributors and independent crane builders during the year; the product mix turned less favorable as the weighting of components declined and the portion of complete heavier industrial cranes increased in our order book and sales, affecting our profitability. Simultaneously, there were temporary, additional cost burdens to our

operations from the ongoing restructuring in Wetter, Germany and in Vernouillet, France; from 25% higher US custom tariffs for the import of crane components from China; from national strikes in Finland at the end of 2019; and from certain process crane projects.

As part of the difficult decisions of the MHPS integration project, 12 production plants have been discontinued globally. Adjustments to the operational set-up and modernization of production facilities in Wetter proceeded, as did the closing process of our chain hoist factory in Vernouillet.

When considering the Demag integration and our ongoing development work in commercial and lean projects, we believe we are on a path towards growth. Our Asian presence and market coverage will substantially increase through the acquisition of full ownership of MHE-Demag, which has a strong position in strategically important and fast-growing Southeast Asia.



YEAR 2019 **BUSINESS AREAS** STRATEGY R&D SUSTAINABILITY KONECRANES AS AN INVESTMENT

Building the framework for future growth

- In 2019, our product families were modernized with the launch of three new core products. The new C-, S-, and M-series represent the next generation in their fields with new technology and innovations.
- The new products enable us to reach our target of reducing the number of product platforms to 14. In 2019, we not only improved cost efficiency, but simultaneously added new product features to our traditional products.
- We have made signicant progress in streamlining our combined operations of Konecranes and Demag. The long-term operational cost base has improved despite the higher-than-expected temporary implementation costs.
- We had continuous success in global projects for the Waste-to-Energy industry. The market has been active, and many high-capacity municipal waste incineration plants globally use our technology. Similarly, several paper industry customers are using our automatic storage and retrieval systems for paper rolls.

Order book at the end of 2019, MEUR

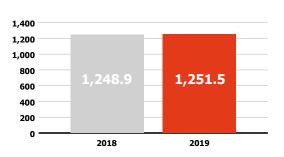
648.9

Adjusted EBITA, %

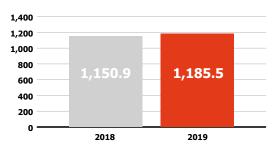
Number of employees at the end of 2019

5,397

Orders received, MEUR



Net Sales, MEUR



Setting the benchmark for precise, smooth and speedy load handling

WD Steelworks is a modern metal works focused on a wide range of marine equipment such as fuel tanks, targa bars and other boat parts for Boomerang boats. With a special set of requirements for precision and process cleanliness, they were looking for a lifting solution to meet all their needs.

"For motor installations, we needed a crane that was very precise and smooth as we are talking about millimeters when it comes to the potential to scratch surfaces. We didn't want any greasy ropes or chains touching the boat," said WD Steelworks Chairman of the Board Wille Törngvist.

The new Konecranes S-series crane met all of WD Steelworks' expectations. An industry-first, geometrically aligned rope drum design and off-set reeving with synthetic rope allows for balanced wheel loads and longer lifetime for all reeving components. In addition to the mechanical intelligence, Konecranes Smart Features bring tangible benefits to everyday work.

"Pulling or pushing the hook takes the crane above the load and automatic Hook Centering takes care of the rest. Snag Prevention makes working a lot safer. We appreciate precision, smoothness, speed and cleanliness. Now we have them all," said WD Steelworks CEO Daniel Tikander.

Digital intelligence does not end there, as Konecranes TRUCONNECT® provides fully transparent and real-time information on crane performance and maintenance needs, allowing for the best possible operational efficiency.

"So far the crane has been excellent, and we have been wondering how we managed before. This definitely creates new opportunities for our future," Tikander said.



PORT SOLUTIONS



Solution selling and automation driving future success

In 2019, Port Solutions focused on further developing its solution-selling business model, better aligning with the customer buying process for equipment, software and services. The model is designed to ensure maximum customer value by minimizing the customer's integration burden when purchasing equipment, software and services as separate categories. The solution approach has already made an impression on customers, one being the Port of Ashdod in Israel.

Another key target area for Port Solutions continued to be tapping the opportunities stemming from increasing automation at customer sites. Container handling equipment such as Automated RMGs, Automated RTGs, Automated Guided Vehicles and Automated Straddle Carriers increase productivity

and predictability, while software-based intelligence optimizes container throughput and the operation of entire container terminals.

There are over 30 highly automated container terminals in the world. Konecranes has supplied automated equipment systems to 65% of these sites. Konecranes has a wide and deep offering of manned equipment, automated equipment, software, and system engineering and integration. This offering covers both greenfield and brownfield sites, where Konecranes Port Services' ability to retrofit Smart Features on existing equipment gives customers the ability to move towards automation to the degree, and at the speed, they desire.

A good example of this is our customer in Turkey, DP World Yarimca, where we have retrofitted remote operation technology on two Konecranes RTGs in

the container yard. We also retrofit Smart Features and automation technology on non-Konecranes equipment.

Port Solutions' expertise in automation is backed up with the world's best in-house container handling knowledge, which lets Konecranes efficiently define the type and amount of equipment needed to meet the customer's required performance level. It means we can integrate equipment, service and software efficiently, as the customer needs, because the expertise and interfaces are in our hands. Regardless of the brand, we can create a turnkey, tailored and modular service environment that boosts data visibility, safety, eco-efficiency and the customer's bottom line.



YEAR 2019 STRATEGY **BUSINESS AREAS** R&D SUSTAINABILITY KONECRANES AS AN INVESTMENT

Year 2019 in numbers

Overall the market sentiment for Business Area Port Solutions remained stable and at a good level in 2019. Full-year net sales totaled EUR 1.12 billion, an annual rise of 10.2%, and adjusted EBITA was up by 21.8%. There was particularly good project execution in 2019 for large ongoing projects which helped boost Port Solutions' EBITA.

Good order intake continued throughout the year for Rubber Tired Gantry Cranes, Lift Trucks and Port Services. Mobile Harbor Cranes, however, experienced a decline in order intake in 2019.

Great progress was made in the harmonization of the Port Solutions product portfolio, integrating container handling management software into the offering in a seamless manner. A number of customers announced large infrastructure investment plans, with an increasing focus on brown field over green field projects.

After a decline in early 2019, global container throughput reached a new all-time high in August before declining again during the last months of the year. At the end of December, global container throughput was approximately 2.5% lower than the year before.

Celebrating important milestones for key products in 2019

- Georgia Ports Authority continued its strategic partnership with Konecranes with an order for a fleet of 20 Konecranes Rubber Tired Gantry (RTG) cranes to support the expansion of the Port of Savannah – bringing the number of Konecranes RTGs there to around 180.
- The 2,000th Konecranes Gottwald Mobile Harbor Crane was delivered to the Ership terminal in the Mediterranean port of Cartagena in south-eastern Spain. Konecranes invented the Mobile Harbor Crane 64 years ago, and Konecranes Gottwald Mobile Harbor Cranes have been sold to over 100 countries.
- Konecranes Lift Trucks celebrated 25 years in of operations. Since the first truck was made in 1994, Konecranes has sold nearly 10,000 lift trucks across 120 countries. Konecranes Lift Trucks are renowned for their advanced technology, excellent build quality and service network.

Order book at the end of 2019, MEUR

959.7

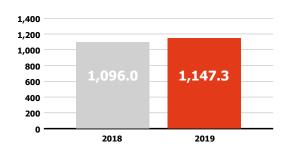
Adjusted EBITA, %

7.8

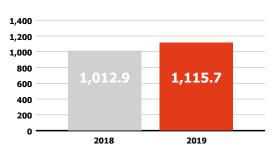
Number of employees at the end of 2019

2,938

Orders received, MEUR



Net Sales, MEUR



A significant strategic win for the Port Solutions business

In the spring of 2019, Port Solutions secured a milestone win with the Hadarom container terminal in the Port of Ashdod, Israel. This customer was looking for an unprecedented degree of integration between container handling equipment and software intelligence for terminal operation and management. Konecranes is delivering a complete solution comprising automated container handling equipment, a Terminal Operating System and an Equipment Control System. The order is one of the largest ever received by Konecranes and a major step forward in the execution of Port Solutions' strategy with its solution-based business model.



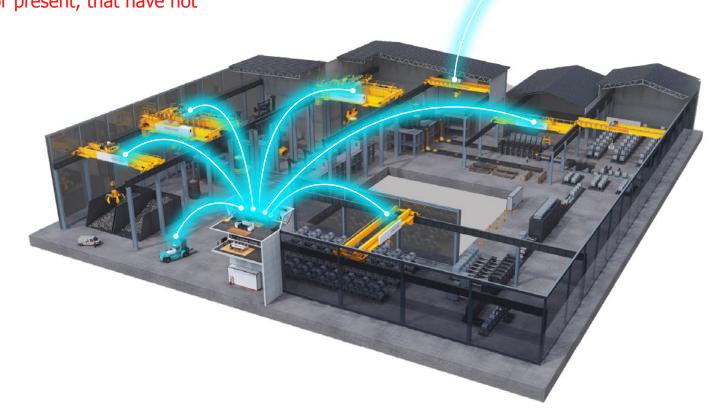
RESEARCH AND TECHNOLOGY DEVELOPMENT

Konecranes invests a considerable amount of money in technology development every year. We do this because we expect a specific payback from this investment: technology leadership is the leading factor for revenue growth among top companies. There are no successful industrial companies, past or present, that have not invested in technology and innovation.

Three new product platforms launched in one go

Years of research and product development were rewarded when Konecranes launched three new product platforms in September 2019: Konecranes S-, C- and M-series. The previous flagship wire rope hoist, Konecranes CXT, was a major innovation of its time and remains one of the most successful wire rope hoists in the market. However, available technologies have changed and brought new ideas for product design.

These products resulted from the Konecranes open innovation culture that turns great ideas into great products, like the Konecranes S-series' synthetic rope. The Konecranes S-series hoist has several unique and patented features visible in the hoist's appearance: reeving arrangement, tilted rope drum and synthetic rope fixing. The innovative design enables lighter structures resulting in improved material usage and lower environmental impact.





The journey from idea to product takes time and involves many people and disciplines. Safety is a top priority and we test the products extensively in our Reliability & Testing Centers. The testing of the synthetic rope began already in 2014.

Digital embedded

Konecranes has developed a digital strategy to support its vision and increase the profitability and growth of the company. The strategy is executed through a portfolio of digital initiatives that improve our current operations and offering, and explore totally new business opportunities. In addition, we established the Digital Accelerator organization to support digital transformation work, fuelling internal projects in the area.

For port customers, Konecranes has expanded its port automation offering by continuing to develop a state-of-the-art Terminal Operating System concept for e.g. automated container terminals. This will work with the Equipment Control System, accompanied by our equipment and service offering. Another milestone in port technology development was the demonstration in Q4 of our capability to retrofit competitor equipment with Konecranes' brand neutral automation solutions. Both solutions enable growth and new business for Konecranes.

For industrial and port customers, the digital customer offering widened with several new digital services, like Konecranes CheckApp for Daily Inspections, TRUCONNECT® Wire Rope Monitoring and Remote Operation Station 2.0. The services address specified customer problems and needs, and we collaborate with multiple industrial companies to ensure the services fit their purpose.

"Participating in the Konecranes CheckApp pilot started with a discussion about our real needs and problems and ended with a **solution to solve them."** Peter Hutchinson, Site Service and Maintenance Manager, Caterpillar, UK

Other digital technologies, such as virtual reality and augmented reality, are used to train service technicians on new products and increase their understanding of maintenance needs and correct operating procedures.

Information technology development at Konecranes now follows agile methodologies, based on iterative work sprints, reviews and nimble communication. This allows the development teams to work more efficiently and with improved quality.

First Data Science Lab established

Konecranes has tens of thousands of connected devices across the world and digital lifecycle records from over 1.1 million customer assets. In order to take advantage of this massive amount of data, Konecranes established a Data Science Lab in Lyon, France that builds analytics and insights from data. With centralized data science skills, Konecranes can capitalize, share and turn data models into production.

The Data Science Lab projects are in full speed. One concrete project to increase customer-centricity is the further analysis of our customer feedback data. After a service or equipment delivery, Konecranes measures customers' experience with the Voice of Customer survey. With data science and AI-driven analysis, we can derive more information from ratings and free text comments and see better

where we have succeeded and where we can improve. This allows us to react to customer needs more quickly and use feedback to improve products and services.

Extending the innovation ecosystem continues

The systematic build-up of an innovation ecosystem started a couple of years ago. In 2019, we already saw concrete results from this effort. Last year Konecranes discovered a Swedish AI-start-up through our own systematic startup program, REACH. We are now using their AI-powered troubleshooting software commercially in Business Area Service to increase technical support efficiency and serve our customers even faster than before. Another highlight is our partnership from 2017 with a deep tech startup, with first customer installations now completed. Their solution analyses the structural integrity of sea containers during lifting to reduce quality costs and processing time from container logistics. The REACH program continued through 2019 and we started collaborating with three new startups, with use cases from Port Solutions and Service.

Co-operation with ecosystems like DIMECC's Intelligent Industry Ecosystem and startup hubs, like Maria 01, are an important part of our extended innovation ecosystem. The benefits of embracing open innovation hve been now extended by launching the first internal project accelerator at Maria 01 with four R&D projects. The teams are working in a startup-like environment to guickly develop customer-centric digital solutions.



PRODUCT OVERVIEW 2019

STRATEGY

From optimized, systematic maintenance services to leading lifting solutions and software, Konecranes' products fulfill every need.



SERVICE

Konecranes provides specialized maintenance services and spare parts for all types and makes of industrial cranes and hoists. Our offering includes inspections and preventive maintenance, predictive maintenance and remote monitoring, corrective maintenance and retrofits, consultation services, modernization services, new equipment and spare parts.



YOURKONECRANES.COM

yourKONECRANES is our cloud-based customer portal. Crane usage data, maintenance data and asset details are linked, giving a transparent view of events and activities.



PARTS

We offer genuine Konecranes spare parts as well as replacement parts for all other makes and models. Konecranes' ability to design and manufacture parts includes rebuilding, reverse engineering, made-toorder parts, and component and assembly modernization.



KONECRANES STORE

Konecranes STORE offers 24/7 access to spare parts and accessories for many brands, makes and models of cranes and hoists, and selected pre-configured lifting equipment.



MODERNIZATIONS

We can completely modernize an existing crane as an alternative to replacing it. Modernizations can help increase capacity, speed, duty, ergonomics and load control.



SMART FEATURES

Konecranes Smart Features are available for electric overhead traveling cranes and port cranes, bringing improvements to both safety and productivity through software and hardware. Boasting features such as Sway Control and Target Positioning, they can be installed on new cranes or retrofitted to existing ones.



INDUSTRIAL CRANES - CONFIGURED-TO-ORDER CRANES (CTO)

Konecranes' range of Configured-to-Order industrial cranes, from standard to the most advanced, covers almost every lifting application. Launched in 2019, our new S-series crane has never-before-seen features like the tilted drum, offset reeving, synthetic rope and the girder sliding connection.



INDUSTRIAL CRANES - ENGINEERED-TO-ORDER CRANES (ETO)

Konecranes' Engineered-to-Order cranes incorporate intelligent features, ergonomic controls and automation to assist operators. Our newly launched M-series is the most compact and modular heavy winch in the business, maximizing performance and minimizing downtime.



WORKSTATION LIFTING SYSTEMS

Konecranes' light lifting products offer safe and reliable material handling for workstations and production lines across a wide range of manufacturing operations. In 2019, we introduced the new C-series: built for over a million operations, it is our most advanced electrical chain hoist to date.



PRODUCTS FOR HAZARDOUS ENVIRONMENTS

Our comprehensive range of explosionproof cranes and components draws from our long experience in explosion-proof applications. World-class engineering and product development defines the lifting equipment, which is designed for extremely demanding work environments.





UNIVERSAL CRANES

Our Demag universal crane portfolio includes single and double-girder overhead traveling cranes and suspension cranes. Built on decades of experience, they deliver quality, efficiency and reliability.



STRATEGY

PROCESS CRANES

We tailor our Demag process cranes to meet customers' production needs, maximizing efficiency, availability and safety. We provide fully automated crane solutions for industrial storage spaces and manufacturing processes.



MODULAR CRANES

Our Demag modular crane components can be combined to create individual suspension monorails, suspension cranes and pillar-mounted and wall-mounted slewing jib crane systems, from a single working station up to a complete intralogistics system.



REMOTE OPERATING STATION (ROS)

Featuring the same controls as an operator's cabin, our ROS enables remote crane control through real-time camera views. The ROS brings savings and ergonomics of use to the customer since no operating cabin is needed on the crane.



KONECRANES LIVE CHANNEL

Konecranes Live Channel allows a prospective buyer to test-drive a crane without leaving the office. Using a crane equipped with the latest Konecranes Smart Features, customers can conveniently experience our products via an online call.



COMPONENTS

Our Demag components include hoists, control units and other crane modules as well as drives, wheel blocks, travel units, inverters, energy supply lines and control systems. We offer a complete range of products, from sub-assemblies to complete systems.



FORKLIFT TRUCKS

Konecranes heavy-duty forklift trucks have lifting capacities ranging from 10 to 65 tons. The OPTIMA cabin provides increased safety and visibility and the latest engines are eco-efficient and powerful.



CONTAINER LIFT TRUCKS

Maneuverable, strong and reliable, Konecranes container lift trucks handle empty (8-10 tons) and laden (30-45 tons) containers at ports and intermodal terminals.



REACH STACKERS

Powerful, efficient and offering proven performance, Konecranes reach stackers have lifting capacities ranging from 10 to 80 tons for container handling, with special attachments for a wide range of industrial applications.



PORT SERVICE

We provide technical support for all makes and models of equipment in container handling, bulk handling and shipbuilding operations. We help customers to maintain the safety and reliability of their equipment throughout its lifetime.



SUSTAINABILITY



TERMINAL OPERATING SYSTEM

Our TBA Group's Terminal Operating Systems (TOS) enable users to manage cargo flow within container, bulk and general cargo ports and terminals. Integration with on-site equipment, and real-time reporting, allows users to plan workloads, define storage locations, improve decision making and efficiently manage operations.



STRATEGY

SHIPYARD CRANES

Konecranes' offering for shipyard material handling includes plate and block handling cranes for hull manufacturing, floating dock cranes, single-boom and double-boom cranes for ship outfitting, and the Goliath gantry crane for ship block assembly.



CONTAINER HANDLING EQUIPMENT

Konecranes' offering for container handling includes ship-to-shore cranes, rubbertired gantry cranes, rail-mounted gantry cranes, automated RTG and RMG cranes, automated guided vehicles and straddle carriers.



MOBILE HARBOR CRANES

Konecranes Gottwald Mobile Harbor Cranes are a very efficient and flexible solution for handling containers, bulk materials, general cargo and project cargoes in terminals.



STRADDLE CARRIERS

Konecranes Noell Straddle Carriers are available in several sizes, stacking containers 1-over-2 or 1-over-3. Maneuverable, fast and reliable, these machines can be fully automated without the need for additional yard infrastructure.



AUTOMATED STACKING CRANE (ASC) SYSTEMS

Konecranes offers automated rail-mounted gantry (ARMG) and automated rubbertired gantry (ARTG) systems. They offer container terminals all the advantages of fully automated operations.



AUTOMATED HORIZONTAL TRANSPORT

Konecranes offers a complete portfolio of automated horizontal transport for automated container handling in terminals. This includes the Konecranes Noell A-SPRINTER, Konecranes Gottwald Automated Guided Vehicles and Automated Terminal Tractors.



RAIL MOUNTED GANTRY CRANE (RMG)

Konecranes' RMG sets the standard for intermodal container handling. It incorporates a host of technological innovations, most notably smarter cabin with video and monitoring technology that provides superb visibility to container handling operations.



SHIP-TO-SHORE (STS) CRANES

Used for container ship loading and unloading, our STS cranes have a lifting capacity of up to 65 tons and an outreach of up to 70 meters.



NUCLEAR CRANES

We provide nuclear cranes, specialized lifting equipment and licensing support for our customers throughout the global nuclear industry.



R&D

SUSTAINABILITY AT KONECRANES

We believe that sustainable growth results from strong, responsible performance. We create value for our stakeholders on multiple fronts, through circular economy, digitalization and our deeply rooted safety culture. For our customers, we offer solutions they can rely on and on-time, impeccable service. With our service concept, all lifting equipment can be maintained in excellent condition for top performance, extending the life span to the fullest.





Sustainable offering and circularity

We design our products with their complete life cycle in mind, as the majority of the environmental impact of products' lifecycle is defined at the product design stage. Building our processes around circular economy principles helps us improve our resource and energy efficiency while creating value for the customer by reducing their environmental footprint.

In 2019 we:

- Continued our work on making circularity an integral part of key internal processes
- Held internal workshops and trainings on circular
- Started work on a Circular Economy roadmap

Climate action and resource efficiency

We are committed to providing our customers with sustainable solutions and services while preventing and minimizing emissions and waste. The focus of our climate work is to strive for energy efficiency and emission reductions and to analyze the possible direct and indirect impacts climate change might have on on our business. We work hard to reduce our carbon footprint through setting challenging targets for energy efficiency and emissions.

In 2019 we:

- Continued to work towards meeting our environmental targets which include reducing our energy intensity (MWh/sales) by 25% and greenhouse gas emission intensity (tCO₂e/sales) by 50% during 2017-2025. In addition, we are committed to powering our factories with 100% renewable electricity by 2025. See the Sustainability Report for more information about our 2019 performance.
- Finalized a climate risk scenario analysis to strengthen our understanding of climate change and its physical and transitional risks as well as related market risks. We have also conducted

- natural hazard risk assessments at certain company
- Finished an extensive Life Cycle Assessment (LCA) calculation on one product group to find improvement areas.
- Started drafting of a Climate road map with the top management

Safe workplace and safe products

Safety at Konecranes begins with providing our customers with equipment and services that enable them to work efficiently and safely throughout the product lifecycle. We incorporate safety into the design, manufacturing, maintenance and servicing of our products. Our safety culture is based on the principle that there is no work so urgent or important that it cannot be done safely. We strive for a working culture where workplace injuries and illnesses are prevented with our established standard operating procedures and behavioral safety rules.

In 2019 we:

- Identified the strategic focus areas for Safety. For more details, see the Sustainability Report
- Rolled out the Konecranes Life Saving Behaviors
- Improved our Lost-Time Accident (LTA) rate by 9.4%

A diverse, inclusive and engaging work environment

Our innovation not only focuses on products, technologies and service solutions, but also on new ways of working and leveraging workforce diversity to amplify innovation. Fostering diversity in terms of gender, age, cultural and educational backgrounds has been repeatedly proven to encourage innovation and deliver exceptional organizational performance.

In 2019 we:

- Reviewed basic HR procedures such as recruitment, career development, rewarding, and learning & development to ensure that diversity issues are properly taken into account, our decision-making process is transparent, and selections can be justified.
- Prepared a training on unconscious bias for top leadership and line managers and established an internal platform for sharing ideas on diversity and inclusion.
- Launched an initiative where Executive Managers are mentoring a female mentee.

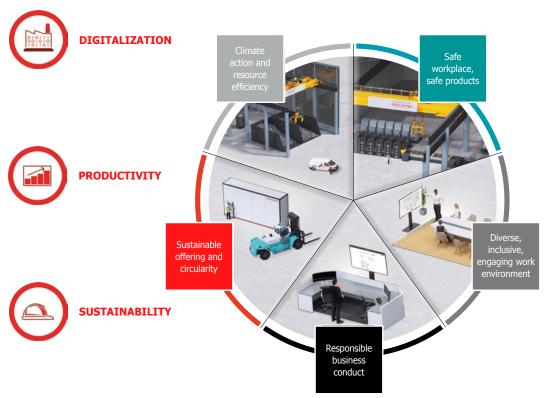
Our targets

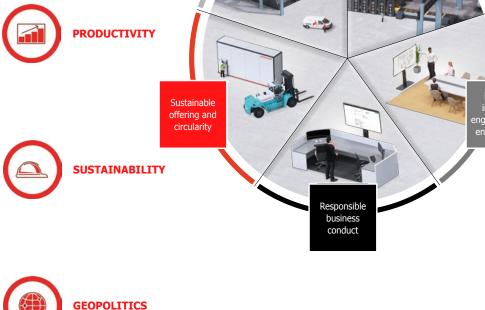
- Code of Conduct training
- Assessing suppliers for sustainability
- Certified ISO 14001 Environmental Management Systems in all our factories
- Reducing energy intensity
- Reducing emission intensity in each Business Area
- Decreasing our Lost-Time Accident level
- Significantly reducing serious injuries and achieving zero fatalities
- Certified Occupational Health and Safety management systems OHSAS 18001/ISO 45001 in all factories
- Tracking, monitoring and managing subcontractor safety
- Increasing the proportion of women in top management
- Balancing nationalities in our Group management to maintain a global mindset

See the Sustainability Report for more details.



HOW WE MAKE AN IMPACT









TRENDS IMPACTING US AND OUR CUSTOMERS

OUR SUSTAINABILITY CORE THEMES

VALUE ADDED

LONG TERM VALUE CREATION





KONECRANES AS AN INVESTMENT

Konecranes is a world-leading supplier of industrial cranes and crane components, workstation lifting systems, container handling equipment and maintenance service. With many innovative solutions and a solid patent portfolio, we are a technology leader in our industry.

Our service activities represent around 40% of total net sales, which provides a good base for long-term profitable growth and moving towards our target of 11% Group adjusted EBITA margin.

For investors, Konecranes aims to generate growth and profitability while remaining competitive in a constantly changing marketplace. The company has done a good job managing its overall profitability and giving back to shareholders; during its history, Konecranes has never cut its dividend.

For the other stakeholders and society at large, Konecranes aims to create value e.g. by using resources efficiently, delivering consistent lifting performance to our customers, improving safety at

all levels, operating in a responsible and transparent manner and supporting an inclusive society. To demonstrate Konecranes' strong long-term commitment, we have set ambitious sustainability targets for the Group.



R&D

KONECRANES AS AN INVESTMENT

Global leader in industrial lifting, port solutions and crane maintenance

1. LEADER IN TECHNOLOGY

- Own key componentry: gears, motor and controls, enable optimized design, smarter features and better reliability.
- Digitalized product offering for improved safety and productivity.
- Access to massive data streams and real-time connectivity enables preventive and predictive maintenance solutions for highest lifecycle value.

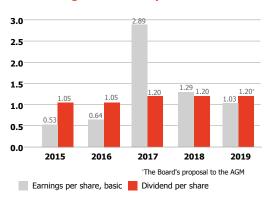
2. STRONG MARKET POSITION **IN ALL BUSINESS AREAS**

- Our global service branch network is unique in the industry. There is limited global or regional competition in industrial crane maintenance.
- Our family of leading brands secures our position as the global market leader in industrial cranes.
- We rank #1-3 in the market in all product categories for ports and container terminals.

3. ATTRACTIVE OPPORTUNITIES **FOR GROWTH**

- Significant growth potential in Service with the expansion of Konecranes' unparalleled service offering to Demag's installed base.
- Cross-promotion through enhanced product offering for ports, now covering the full range of equipment, software, automation solutions and service.

Earnings & dividend per share, EUR



4. TARGET FOR 11% GROUP ADJUSTED EBITA MARGIN

- Margin expansion driven by cost savings and efficiency improvements particularly in Business Area Industrial Equipment.
- Improved operating leverage especially in Business Area Service.

5. SOLID FINANCIAL POSITION AND DIVIDEND

- · Healthy balance sheet, providing a good base for long-term development and growth.
- Konecranes has never cut its dividend. In the past 5 years, the average dividend payout ratio has been 123% of earnings.

6. STRONG LONG-TERM **COMMITMENT TO SUSTAINABILITY**

- We aim to maximize the circular value of all of our products.
- We are committed to reduce our energy intensity (MWh/sales) by 25% and greenhouse gas emission intensity (tCO₂e/sales) by 50% during 2017-2025.
- We are also committed to run our factories with 100% renewable electricity by 2025.





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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 2019, Group sales totaled EUR 3.33 billion. Including MHE-Demag, the Group has around 18,000 employees in 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (symbol: KCR).