

KONECRANES®

# Committed to growth

Annual Review 2018



# Committed to growth

This year marks the 25<sup>th</sup> anniversary of Konecranes as an independent company. In a quarter of a century, we have grown to become a leading lifting equipment solution provider on a global scale.

As the global material handling market evolves, we will continue to lead in developing next-generation solutions. Through intelligent design and the implementation of digital solutions that make our products smarter, we are making our customers' operations safer and more efficient.

Thanks to the acquisition of MHPS, we are now stronger than ever to face future challenges and take on new business opportunities. Our Service business has already started to leverage our additional installed equipment base, but we have only just scratched the surface of its potential. Service will be an even stronger growth engine for Konecranes going forward.

2019 will be the third and final year of the Konecranes-MHPS integration. As we start to emerge from this phase, we are ready to move on with the next steps of our strategy and adopt a greater role in the material handling ecosystem of our customers.

We are ready to shift gears to growth.

## HOW TO READ THIS REPORT



An assessment of the year's operations and a view of the upcoming year and future prospects  
[ar2018.konecranes.com/en](https://ar2018.konecranes.com/en)

### OTHER REPORTS



Summary-level reports about Konecranes' financial results, financial position and cash flows  
[ar2018.konecranes.com/en](https://ar2018.konecranes.com/en)



Information regarding Konecranes' governing principles, group structure, salaries and compensation of the CEO and Board of Directors  
[ar2018.konecranes.com/en](https://ar2018.konecranes.com/en)



Information about Konecranes' sustainability work, its management, actions, goals and results  
[ar2018.konecranes.com/en](https://ar2018.konecranes.com/en)

## CONTENTS

→ Konecranes in a snapshot	2
→ 2018 in numbers	3
→ A technology company	4
→ CEO's letter	6
→ Strategy	8
→ Market review	11
→ Our business areas	12
→ Research and technology	14
→ How we make an impact	17
→ Creating sustainable value	18
→ Konecranes as an investment	21

This publication is for general informational purposes only. Konecranes reserves the right at any time, without notice, to alter or discontinue the products and/or specifications referenced herein. This publication creates no warranty on the part of Konecranes, express or implied, including but not limited to any implied warranty or merchantability or fitness for a particular purpose.

[www.konecranes.com](https://www.konecranes.com)



# Konecranes in a snapshot

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 2018, Group sales totaled EUR 3,156 million. The Group has 16,100 employees at 600 locations in 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (KCR).



In 2018, Group sales totaled EUR 3,156 million.



# 2018 in numbers

<div>Order intake</div> <div>(+2.8%)</div> <div>3,090.3</div> <div>MEUR</div> <div>3,007.4 MEUR in 2017</div>	<div>Net sales</div> <div>(+0.6%)</div> <div>3,156.1</div> <div>MEUR</div> <div>3,137.2 MEUR in 2017</div>	<div>Adjusted EBITA</div> <div>8.1</div> <div>%</div> <div>6.9% in 2017</div>
<div>Order book</div> <div>(+11.7%)</div> <div>1,715.4</div> <div>MEUR</div> <div>1,535.8 MEUR in 2017</div>	<div>Number of active and pending patents</div> <div>2,300</div> <div>Largest portfolio in the lifting industry</div>	<div>Gearing</div> <div>42.5</div> <div>%</div> <div>41.1% in 2017</div>

# A technology company

Everything we do is targeted at one goal: improving the safety and productivity of our customers' operations. We offer everything from optimized, systematic maintenance services to a world-leading range of smart connected industrial cranes, lifting systems and container handling equipment.

## Market leader in crane service

Konecranes is the market leader in crane service, with the world's most extensive crane service network. More than 600,000 pieces of equipment are covered by Konecranes service agreements. Konecranes can provide expert maintenance for any brand of equipment from any manufacturer. Lifecycle Care in Real Time is our comprehensive and systematic approach to maintenance; connecting data, machines and people. Incorporating predictive maintenance elements as part of the maintenance program can further optimize activities, reduce unplanned downtime and improve equipment safety, productivity and lifecycle value.

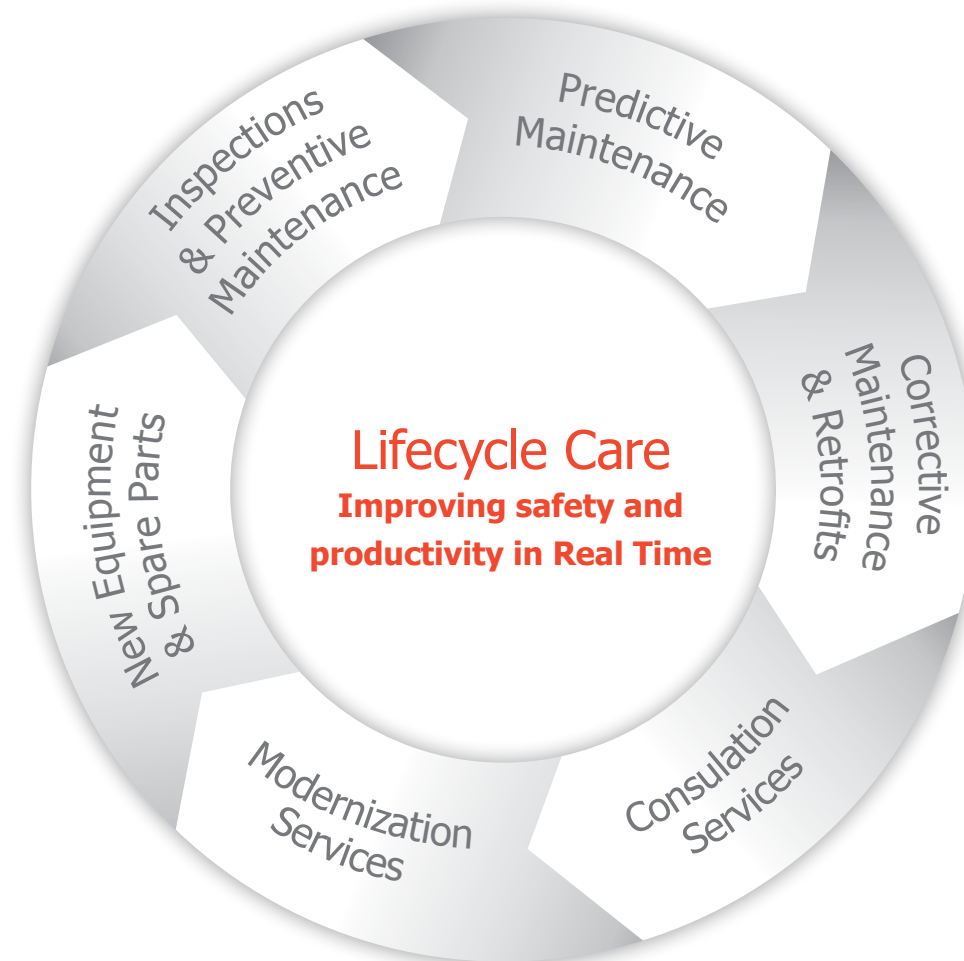
## Lifting equipment solutions for a wide range of industries

Konecranes provides a full range of lifting equipment solutions from light lifting equipment for workshops to large-scale process automation solutions, as well as container handling solutions for port operators.

Our motors, gears and controls are designed specifically for cranes and lifting motions. We also design the interaction between the key components and the software specifically for lifting. This gives our cranes a longer lifetime and an excellent functionality. We call this concept the Core of Lifting.

## Optimized crane fleet management with our digital solutions

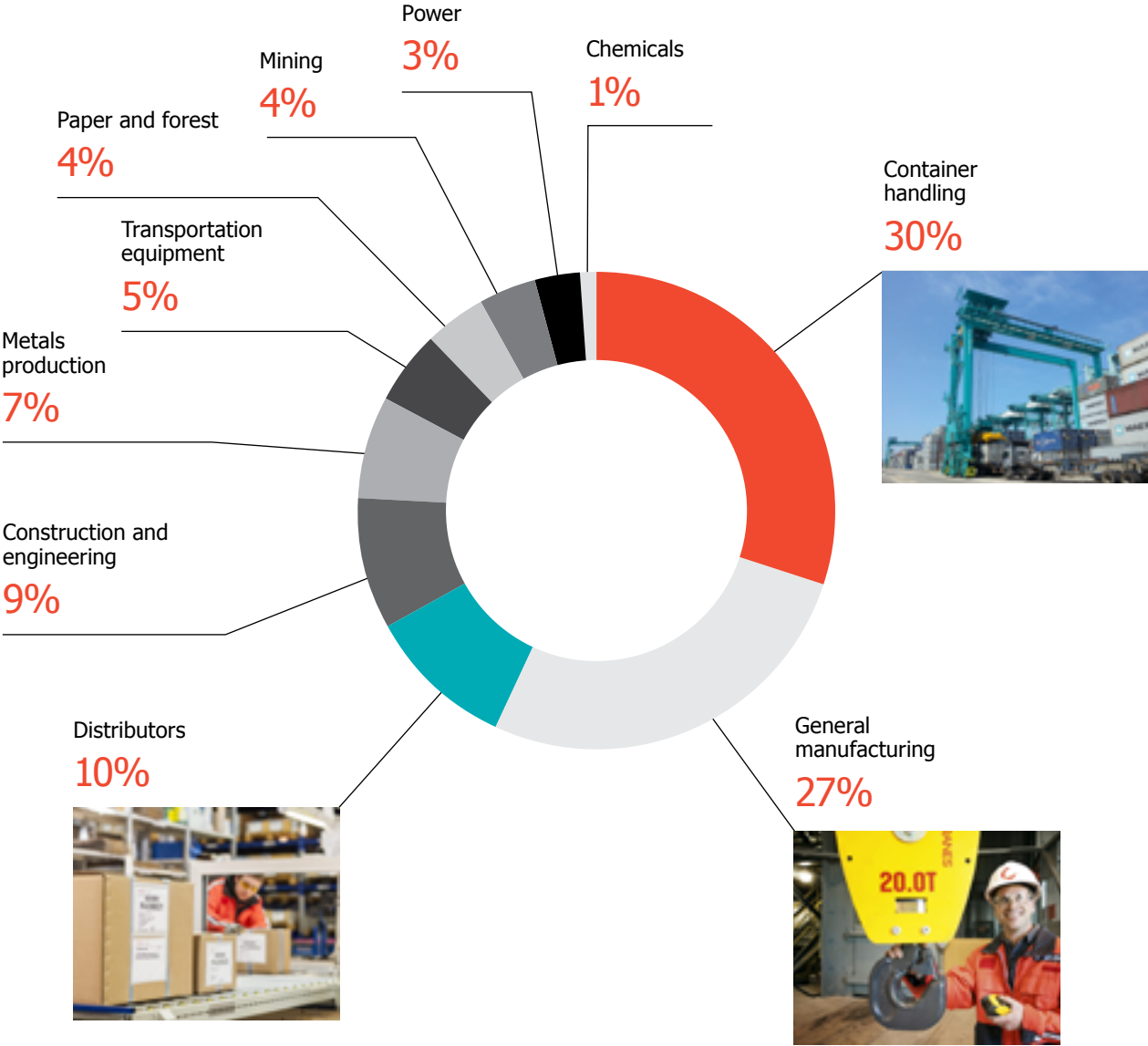
To date, more than 19,000 cranes worldwide have remote connections with our TRUCONNECT remote monitoring center for optimized operation management in real time. TRUCONNECT uses sensors and a diagnostic unit placed on the crane to collect usage and operating data such as running time, lifted loads, motor starts, work cycles and emergency stops.



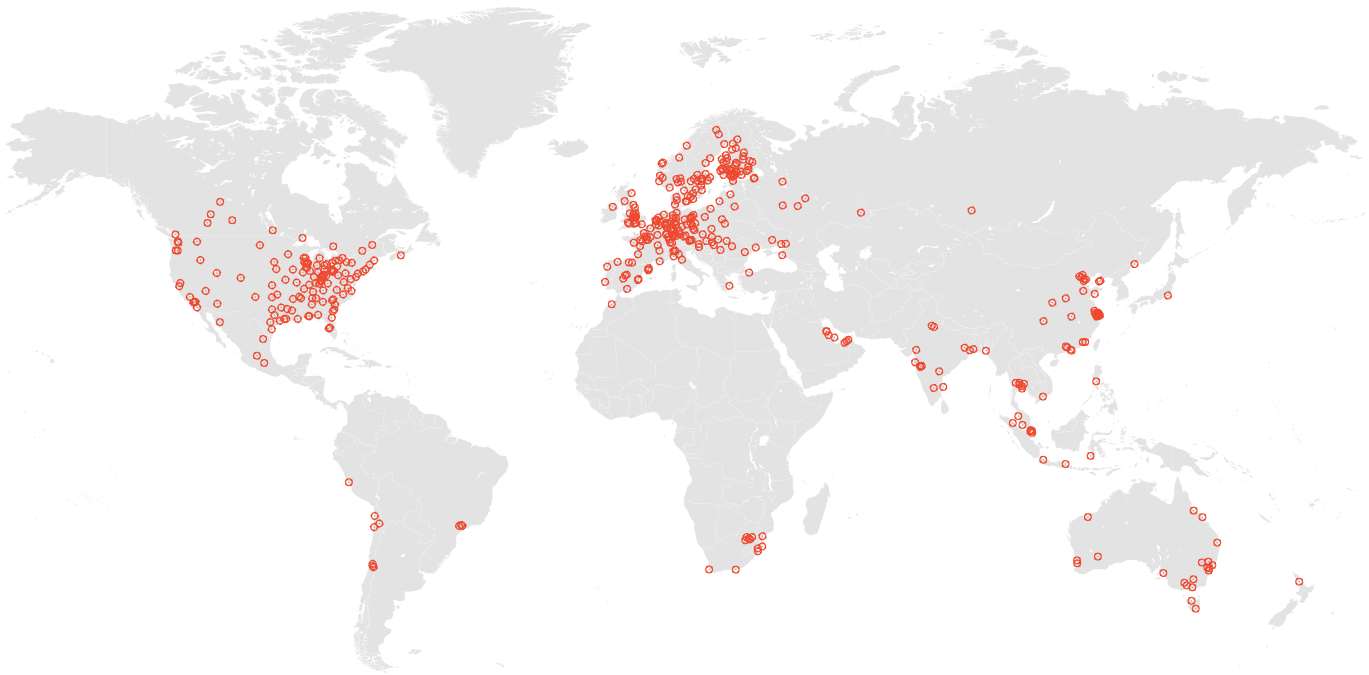
Customers are able to view data on a single asset or an entire fleet through the secure yourKONECRANES.com customer portal via mobile phone, tablet or desktop connections – which means, from virtually anywhere.

In addition to improving safety and reliability, remote monitoring also has a profound impact on maintenance scheduling and planning. Replacing components when they need to be replaced – not before and not after – saves money. Also, the ability to plan an outage, rather than respond to a breakdown, safeguards production goals and makes life easier for everyone.

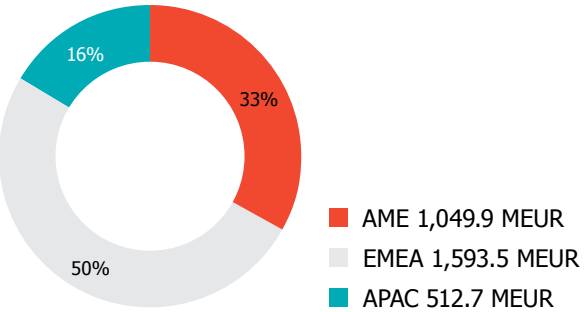
Orders by customer segments, 2018



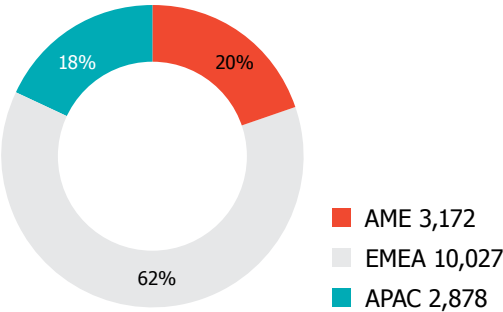
Being close to our customers through local presence



Sales per region, 2018



Personnel per region, 2018





# From integration to growth

Dear shareholders,

Konecranes posted strong earnings in 2018, and as we start the new year I want to reflect on what has been an important period for the Group. I think the time is just right for this, as I have served as Konecranes' CEO for three years now, and Konecranes itself has also arrived at a landmark, celebrating its 25th anniversary this year.

We are certainly a very different company today than three years ago. To begin with, our Service business has shown growth and now has huge potential in its sights thanks to the acquisition of MHPS in 2017. We already started to reap the benefits of the additional installed base in 2018, but have only scratched the surface of the very exciting business potential in Service, which we think will be a significant growth engine for Konecranes going forward.

But Service is just one example of the big steps we took as a company in 2018. We delivered EBITA margin improvement and record-breaking order growth. A major highlight in 2018 was our order from Abu Dhabi Terminals (ADT) for 54 Automated Rail Mounted Gantry (ARMG) cranes. This represents a major system delivery and was underwritten by the customer's faith in our delivery capabilities and, above all, our technology. We start 2019 with much higher orderbook than ever before.

Also, Port Solutions' underlying performance was satisfactory. The lift truck business enjoyed great success in 2018, winning its largest-ever order when Toll Group ordered over 40 lift trucks for their Australian operations.

In Industrial Equipment, the component business posted double-digit growth in sales, and some larger projects made the year quite successful. Our standard crane

business also enjoyed growth towards the end of the year. Our productized service offering performed very well. We increased product development and are very satisfied with how these projects have been executed.

Underpinning all of this has been the rapid digitalization of our business, which we think keeps us ahead of our competitors and thus in excellent shape to seize future business opportunities as the era of the industrial internet begins.

These achievements show that our customers continue to believe in the cornerstones of our business: our superior product offering, our digital capabilities and our excellent service network.

In short, we executed very well, with some significant milestones across the business.

## Steady progress in integration

Our business performance was especially pleasing given the hard work done in integrating MHPS, with 2018 arguably the most critical year in terms of delivering the benefits of the acquisition and meeting our commitment to shareholders. One area where we took big strides was product harmonization, and during the year we were able to reduce costs related to many of the products added to our portfolio through MHPS.

Visiting our facilities around the world, I have been struck by the energy, enthusiasm and dedication of the people I encounter. Individuals have taken on new responsibilities with the integration, discovering the chance to grow in their careers. These are things we love to see, and we can repay this with opportunities to develop further. My warm thanks go to each and every employee for their efforts so far.

**“The cornerstones of our business remain our superior product offering, our digital capabilities, and our excellent service network.”**

The year did not proceed without the need to make some tough decisions, however. Efficiency measures were necessary in three of our facilities to ensure the long-term productivity of the Group.

Before closing, it is important to note the good progress on our journey to make a positive impact on the environment, both by reducing our own footprint as well as increasing our handprint. We have set new targets for our energy usage and emissions and taken further steps in embedding circular economy thinking within our industry. The alignment of the sustainability and safety cultures of MHPS with those of Konecranes is well under way.

## Looking ahead

As we begin 2019 our demand environment still looks healthy and stable despite macroeconomic concerns which are slowing decision making in certain customer sectors and countries like the UK, where activity has stagnated

due to Brexit uncertainty. Outside the UK, the demand environment is still at a good level in many parts of Europe and North America, and in 2019 we expect to see faster sales growth and improved profitability.

Indeed, thanks to the acquisition of MHPS Konecranes is now far stronger to face the challenges of 2019 and beyond. As we start to emerge from the integration phase, we are ready to move forward decisively with the next steps of our strategy and adopt a greater role in the material handling ecosystem of our customers. This start to our next 25 years as an independent company is both exciting and inspiring, and, as ever, we are grateful for your continued support along the way.

**Panu Routila**  
President & CEO



"2018 was a year of good execution, EBITA margin improvement, and order growth."



# Strategy

At Konecranes, we are not just lifting things, but entire businesses. We have real-time knowledge of how millions of lifting devices perform. We use this knowledge, around the clock, to make our customers’ operations safer and more productive.

## MISSION – WHAT WE DO

We are not just lifting things, but entire businesses.

## VISION – WHAT WE WANT TO ACHIEVE IN THE LONG TERM

We know in real time how millions of lifting devices perform. We use this knowledge around the clock to make our customers’ operations safer and more productive.

## STRATEGY – HOW WE GET THERE

### TECHNOLOGY LEADERSHIP

### REAL TIME VISIBILITY TO CUSTOMERS’ EQUIPMENT

### END-TO-END PROFITABILITY

### SHARED & HARMONIZED PROCESSES

### SERVICE

Lifecycle Care in Real Time  
Service for all types and makes of cranes and hoists  
Global service network  
Improve the safety and productivity of our customers' operations

### EQUIPMENT

Core of Lifting  
Direct and Indirect channels in Industrial Equipment  
Multi-brand strategy  
Need based customer offering

## TACTICAL FOCUS AREAS – WHAT WE WILL FOCUS ON DURING THE NEXT 2–3 YEARS

### GROWTH

Customer experience

### PROFITABILITY

Realizing potential

### TECHNOLOGY

Engineering capabilities

### PEOPLE

Lifting people

VALUE PROPOSITION – BRAND PROMISE: **LIFTING BUSINESSES™**

## The way forward

Fundamental changes are taking place in material handling in factories and ports, and the next level of communication for machines in these sectors is approaching. As we proceed, we will place increased strategic focus on the crane as part of the entire material handling ecosystem.

We are, in fact, already present in this expanded area. 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.

Growth geographies are another megatrend we are responding to, strengthening our market position in China as well as the APAC region. We will continue to pursue commercial excellence, while ensuring that our manufacturing operations remain competitive in the face of unpredictable macroeconomic conditions.

## Technology leadership

We see the future of our offering in terms of its readiness for Industry 4.0 and its strong potential for integration into the wider ecosystem of our customers' operations. As a trend, intelligence will expand to lighter devices from heavy process equipment, while we will enjoy economies of scale due to our ability to capitalize on introducing common technologies across the entire portfolio.

Digitalization plays a key role here, both in terms of Konecranes placing more emphasis on digital operations in our equipment and service offerings, and in our ways of working. We will highlight a number of areas in which

digitalization actions can help us to gain new business, as well as increase our cost efficiency. Software will also play an increasingly important part in our portfolio.

## Real-time visibility of customers' equipment

A real-time view over the operation and maintenance of our products is one of Konecranes' key strategic assets. We enable transparency over the customer's entire operations, and can make timely recommendations for productivity and safety improvements based on on-board data acquisition and KPI calculation capabilities. These attributes will certainly increase in importance over time.

Connectivity with service technicians is an established benefit of IoT, allowing for remote maintenance through a dedicated and secured system. The Konecranes data cloud with analytics is also a critical component for strategic development, providing sales leads and enabling co-creation projects with our R&D Remote Center.

## End-to-end profitability

Preserving the competitiveness of our manufacturing operations is of critical importance as we respond to a highly volatile and complex macroeconomic situation, as well as the trend of consolidation and clustering in industries such as the port sector. Our approach to such uncertainty is a comprehensive focus on profitability that underpins all of our actions.

## Shared and harmonized processes

We will continue to streamline our recently integrated platforms to realize technological synergies and cost efficiencies. Development of our processes will enable growth, innovation and operational efficiency in the future.

**Fundamental changes are taking place in material handling, and the next level of communication for machines is approaching.**



# Market review

The demand for Konecranes' products and services are driven by market conditions in the manufacturing industry, including the general manufacturing, metal production, power generation, automotive, pulp and paper, raw materials, and chemical industries, and container transportation industry. Investment in new lifting equipment is cyclical and varies across different industries depending on the economic environment for that industry.





# Market review

Activity in the world's manufacturing sector, according to the aggregated JPMorgan Global Manufacturing Purchasing Managers' Index (PMI), continued to grow in 2018, although the pace of growth has slowed down clearly since the beginning of the year. The PMI declined and fell to a 27-month low in December 2018 but remains on an expansion path. Overall, business sentiment has worsened due to growing geopolitical worries.

In the Eurozone, after a long period of rapid growth in economic activity the pace of expansion slowed down in 2018. Though the manufacturing economy's current run of expansion extends to five-and-a-half years, the growth in December was the weakest since February 2016. At the end of 2018, softness in new orders was behind the slowdown in overall growth. At the end of 2018, slower growth was widespread and the Eurozone's 'big-four' economies posted the lowest manufacturing PMI readings. The Netherlands was the top performer in the Euro area and the rate of expansion improved to its best in three months. The European Union manufacturing capacity utilization decreased slightly during the second half of 2018. Outside the Eurozone, the UK manufacturing sector continued to grow, though the average PMI reading during the fourth quarter in 2018 was the weakest since the third quarter in 2016 (the first quarter after the EU referendum).

In the US, the manufacturing sector's growth slowed down in 2018 compared to the previous year-end. In December 2018, the improvement in operating conditions was the weakest in 15 months, however still clearly above the manufacturing sector's PMI in the Eurozone. Correspondingly, the US manufacturing capacity utilization rate declined in the fourth quarter. Also, business confidence was low at the end of the year; optimism among purchasing managers was at its lowest for over two years in December 2018.

As for the emerging markets, in China, the PMI dropped in 2018 and fell into contraction territory at the end of the year. Russia stabilized at the end of the third quarter after a four-month sequence of contraction and the PMI turned to growth during the last quarter of the year.

In Brazil, manufacturing operating conditions improved in the second half of 2018 following a decline during the first half of the year. In India, the growth of the manufacturing sector picked up during the second half, and the nation posted the highest quarterly average PMI since 2012.

**After setting an all-time high in early 2018, global container throughput turned to a decline. The index has since increased and reached a new record in October.**

After setting an all-time high in early 2018, global container throughput turned to a decline. The index has since increased and reached a new record in October. In January-December 2018, global container throughput increased by approximately 4 percent year-over-year.

Regarding raw material prices, both steel and copper were clearly below the previous year's level at the end of December 2018. The 2018 average EUR/USD exchange rate was approximately 4 percent higher compared to the year-ago period.

# Our business areas

Konecranes is a global leader in industrial lifting and port solutions with a strong service offering.

## Service

Business Area Service improves the safety and productivity of our customers' operations. From a single piece of equipment to entire operations, we provide specialized maintenance services and spare parts for all types and makes of industrial cranes and hoists.



## Service

	2018	2017	2016 <sup>*)</sup>
Orders received, MEUR	986.5	966.3	981.4
Order book at end of period, MEUR	214.3	196.0	200.3
Net sales, MEUR	1,192.5	1,179.5	1,214.1
Adjusted EBITA, MEUR	180.0	161.3	153.4
Adjusted EBITA, %	15.1	13.7	12.6
Operating profit (EBIT), MEUR	162.8	139.7	
Operating margin (EBIT), %	13.6	11.8	
Personnel at the end of period	7,372	7,206	

## Industrial Equipment

Business Area Industrial Equipment serves general manufacturing, and various process industries with industrial cranes. We also provide crane components and lifting equipment solutions to other crane manufacturers and distributors. The business area includes the brands Konecranes, Demag, SWF Krantechnik, Verlinde, R&M and Donati.



## Industrial Equipment

	2018	2017	2016 <sup>*)</sup>
Orders received, MEUR	1,248.9	1,127.3	1,148.9
Order book at end of period, MEUR	590.6	526.9	540.9
Net sales, MEUR	1,150.9	1,118.2	1,130.8
Adjusted EBITA, MEUR	42.6	34.6	-6.1
Adjusted EBITA, %	3.7	3.1	-0.5
Operating profit (EBIT), MEUR	15.1	-4.0	
Operating margin (EBIT), %	1.3	-0.4	
Personnel at the end of period	5,782	6,024	

## Port Solutions

Business Area Port Solutions has the widest and deepest offering in container handling, shipyard handling and mobile handling in harbors. It includes a full range of software and services.



## Port Solutions

	2018	2017	2016 <sup>*)</sup>
Orders received, MEUR	1,096.0	1,056.2	1,045.2
Order book at end of period, MEUR	910.5	812.9	766.4
Net sales, MEUR	1,012.9	975.7	1,091.4
Adjusted EBITA, MEUR	71.3	44.8	52.7
Adjusted EBITA, %	7.0	4.6	4.8
Operating profit (EBIT), MEUR	40.0	11.7	
Operating margin (EBIT), %	4.0	1.2	
Personnel at the end of period	2,830	3,067	

<sup>\*)</sup> Comparable combined company figures.

“Each of our Business Areas plans and acts to achieve a culture of profitability, growth and people excellence. To this end, Konecranes leadership has the job of enabling engaged and committed employees.”

- Panu Routila,  
Konecranes President and CEO

## Service

### Key developments in 2018

In 2018, Business Area Service made good on its promise to realize growth and gain profitability from the ongoing digital and business transformation and MHPS integration synergies. There was solid progress in delivering increased operational efficiency, diligent cost control and an improved customer experience.

### Growth in all regions and key industrial segments

Growth was evident in all regions and across several key industrial segments compared to previous years. In 2018, EMEA and AME saw accelerating growth during the year and APAC performed relatively well.

Megatrends continue to support Service growth worldwide including the increasing importance of safety and productivity gains, expanding regulations and compliance requirements, alongside outsourcing and digitalization.

By staying true to our core values, while at the same time adjusting our offering and business model, we have brought mutual benefits to our bottom line and to our customers' operations.

## Industrial Equipment

### Key developments in 2018

In 2018 the defined go-to-market strategy for Demag and other Konecranes operations were fully taken into use. During the year, the new combined supply and factory network was also built, causing changes in our factory network. In accordance with the original planning, the work continues in 2019 to further streamline operations.

While brand-specific offering continues as the leading concept, several lower component-level changes were made to products in order to gain scale benefits. These new products were launched and are providing additional cost savings.

Integration efforts caused little to no impact to customers, and planned synergies are being realized. All in all, the year was a successful one for the business area.

### Increased profitability in 2018

Profitability for the business area continued to improve overall. The above integration efforts caused some additional operational costs during the year. The financial results continued to develop positively. Across all main industrial equipment customer segments, demand continued to be fairly strong, with some geographical differences.

## Port Solutions

### Key developments in 2018

Business Area Port Solutions experienced moderate order intake growth in 2018 with increased activity in Europe and North America. The integration plan was successfully carried out, resulting in a wider and deeper product and system offering. A harmonized product portfolio and growth in global container handling led to increased opportunities for cross-promotional sales.

A growing number of customers made investments in automation, in both existing brownfield and greenfield locations. This contributed to better results than last year, with full year net sales up by 3.8% and adjusted EBITA up by 59.4% over 2017.

### Innovating for growth

This was an important year for innovation in Port Solutions, with the launch of the Automated BOXPORTER RMG System and the Automated RTG System Version 2.0. In October, the business area received Konecranes' second largest order ever, from Abu Dhabi Terminals. Earlier in the year, the business area launched the world's first hybrid reach stacker for container handling.



# Building industrial capabilities for tomorrow

The material handling industry stands on the brink of a technological revolution that will blur the lines between the physical and digital spheres. We can already see how emerging technologies like AI, advanced wireless networks or fully autonomous vehicles are disrupting our thinking on what is possible and what is not.

Konecranes has a track record of industry-shaping innovations spanning over a century. These innovations are protected by patents and other applicable registrations, and today Konecranes has the industry's largest patent portfolio. To secure our position and continue providing unique offerings, Konecranes has started to define a new digital strategy and kicked off several R&D projects to identify how applicable emerging technologies are impacting the material handling industry. Our position as the biggest player in the lifting industry allows our technology platforms to scale up and capitalize on resulting economics.

To keep up with the speed of industry changes and technology development, Konecranes has partnered with industrial ecosystems such as DIMECC and Combient, and increased collaboration with universities in China, Finland, Germany and India. In addition, Konecranes is adapting lean customer-centric design and development practices to create new products and services.

Industry 4.0 is not possible without implementing the latest communication standards. Konecranes participates in the definition of the new machine-to-machine communication interface standard, based on OPC UA for industrial cranes, in accordance with the European Material Handling Federation (FEM) and German Machine Manufacturer Association (VDMA). This standard will guide product design and enable us to benefit from an application ecosystem which is likely to develop once the standardized data models and interfaces are put into effect.

## **Konecranes launches its own start-up program**

The most visible parts of Konecranes' start-up collaboration are the Konecranes REACH Program for

start-ups and our partnership with Maria 01, the Nordics' leading start-up hub.

The purpose of the Konecranes REACH Program is to shorten time to market for new solutions that help us serve our customers better. In 2018, the REACH Program looked for new ways to apply AI and analytics in field service, to digitalize ports, make container logistics smarter, and improve human-machine interaction.

## **Technologies change the way products and services are designed**

Emerging technologies impact the way new products and services are designed. These technologies will enable us, for instance, to offer cranes that are continuously improving by developing machine-learning algorithms and deploying them to our products.

We see products becoming increasingly smarter, being able to sense not just their own status but also the environment they operate in. Ultimately these products become autonomous in performing operations that are required of them.

Konecranes is piloting microservices and container technologies-based product design, which enables product enhancements after the equipment is delivered to customers. This design has already been piloted with process cranes and lift trucks, enabling software updates to increase efficiency, safety and productivity.

The newly launched Automated Rubber Tired Gantry (ARTG) system version 2.0 is equipped with the latest wireless communication technology; control signals and video signals are now wireless. This means that the ARTGs can be diesel-powered and there is no need for cable reels

We see products becoming increasingly smarter, being able to sense not just their own status but also the environment they operate in.

and fiber optics. Truck handling is automated, with remote supervision. The Konecranes ARTG system version 2.0 will be instrumental in driving the evolution of RTG-based container terminals to fully automated operation. The research Konecranes does with 5G and NB-IoT supports this objective.

Our customers can make better choices for the environment without compromising the performance and power of their machines. Thus, Konecranes has launched ECOLIFTING for lift trucks, a concept that comprises three driveline solutions for lift trucks: Power Drive, offering up to 15% fuel savings; Flow Drive, with up to 25% fuel savings; and the pioneering Hybrid Drive, offering up to 40% fuel savings.

Agilon®, Konecranes’ multi-award-winning material handling solution, is a great example of applying existing solutions to new markets. In addition to industrial markets, Agilon is now used in both indoor and outdoor retail settings as Pick & Go stations to replace parcel lockers.

**Integration of global business processes and IT systems proceeding as planned**

Konecranes’ internal digitalization and the MHPS integration are proceeding as planned. The majority of the business units are now using global IT systems. Common oneKONECRANES processes and systems will provide Konecranes with a 360° view on customers, real-time visibility to demand and supply, higher scalability and lower transactional costs. These will be key enablers for Konecranes’ future growth.

Many technologies are impacting our industry



1. Advanced Robots	> Autonomous, cooperating industrial robots > Numerous integrated sensors and standardized interfaces
2. Additive Manufacturing	> 3D printing, particularly for spare parts, prototypes and production tools > Decentralized 3D facilities to reduce transport distances and inventory
3. Augmented Reality	> Augmented reality for maintenance, logistics, remote control, training, etc. > Display of supporting information, e.g., through AR glasses
4. Simulation	> Simulation of value networks > Optimization based on real-time data from intelligent systems
5. Horizontal/ Vertical Integration	> Cross-company data integration based on data transfer standards > Precondition for a fully automated value chain
6. Industrial Internet	> Network of machines and products > Multidirectional communication between networked objects
7. Cloud	> Management of huge data volumes in open systems > Real-time communication for production systems
8. Cyber-security	> Operation in networks and open systems > High level of networking between intelligent machines, products, and systems
9. Analytics	> Full evaluation of available data (e.g., from ERP, SCM, MES, CRM, and machine data) > Real-time decision-making support and optimization



# Corporate responsibility

We believe that sustainable growth results from strong, responsible performance. We strive to improve our products, processes and services continuously and deliver on our commitments through concrete actions. Our objective is to bring value to our people, the environment and the societies where we operate while pursuing our mission to lift our customers' businesses.





# How we make an impact



**Industry 4.0**  
Automated and integrated solutions unlock new levels of efficiency



**Globalization & geopolitics**  
Uncertainty in political and economic shifts affect trade patterns



**Energy transition & low carbon**  
Shift to clean energy sources



**New talent economy**  
Talent migration and competition for talent

MEGATRENDS IMPACTING US



OUR STRATEGY

We strive to maximize the positive impact we bring to society and reduce our negative impacts



## Safety

- Improving safety on all levels
- Safe products, services and operations are seen as an opportunity to create value



## Consistent performance

- Product performance, quality and reliability
- Trustworthy service, maximizing uptime
- Product and service optimization
- Constant development of skills and knowledge



## Resource efficiency and responsible supply chain

- Eco-efficient product design
- Supply chain management
- Carbon reduction
- Lifecycle care



## Responsible operations and transparency

- Compliance, ethics & integrity
- Data security



## Social commitment

- Diversity and inclusion
- Respect in the workplace
- Raising awareness and impacting attitudes

OUR SUSTAINABILITY COMMITMENT

## Financial growth

Konecranes will continue to generate growth and profitability, remaining competitive in a constantly changing marketplace. Our position as a preferred partner creates financial stability both for us and for our value chain.

## Use of innovative technologies

We help our customers develop world-class operational performance by optimizing their material handling flows, making lifting devices intelligent and connected, and designing their underlying hardware to meet the specific demands of the material handling industry.

## Safety culture

We foster a global safety culture by prioritizing safety performance at all levels. Focusing on safety throughout our value chain drives the development of our own safety culture and those of our stakeholders.

## Circular economy

We aspire to stimulate greater change through a sustainable and innovative offering that harnesses the potential of circularity and digitalization.

LONG TERM VALUE CREATION

# Creating sustainable value

At Konecranes, we believe it is of paramount importance to create long-term value for our stakeholders. In addition to creating value for our customers and shareholders, we strive to increase our overall sustainable impact through leveraging the circular economy, digitalization and our deeply rooted safety culture. By doing this, we can best remain competitive and at the same time help our key stakeholders – customers, shareholders, employees and society at large – to achieve their goals.

Konecranes constantly analyzes and acts upon the megatrends affecting our industry and stakeholders. We adopt new technologies that help our customers make their operations safer and more productive. We find new ways to use resources efficiently and make climate-smart choices. We operate in a responsible and transparent manner, supporting inclusivity at work and society at large. Workforce diversity boosts innovation, improves organizational performance and fosters outstanding customer service. In our view, diverse and inclusive teams deliver better results.

By consistently providing our customers with products and services that enable smooth, efficient and responsible material handling, we earn our place as a valued and strategic partner. To maintain our position for years to come, we need to attract and develop the best talent, implement smart technologies in our offering, develop new business models, improve the design and reliability of our products and maintain a deep understanding of our customers' current and future needs. Achieving these goals requires close engagement with all our stakeholders, as we develop ways to measure the intangible value we create, such as intellectual capital.

## **Sustainable business practices increase long-term shareholder value**

Konecranes aims to continue generating growth and profitability and remain competitive in a constantly changing marketplace. By earning our place as a preferred partner for our customers, we create financial stability not only for our company and employees, but for our entire value chain. Long-term shareholder value is built with sustainable business practices and risk management. We aspire to have a positive impact on the societies in which we operate around the world. We accomplish this

by providing rewarding jobs and competitive income for employees, and by supporting local economies as an employer. Here, Konecranes is often an important provider and buyer of goods and services, and an important taxpayer as well. We also support selected non-profit organizations which support our values.

## **Developing innovative technologies**

Konecranes helps its customers to develop world-class operational performance by optimizing their material handling flows and by making intelligent and connected lifting devices. The hardware in our products – which we call the Core of Lifting – is designed to meet the specific demands of the material handling industry. On the service side, Lifecycle Care in Real Time is our comprehensive, systematic approach to lifting equipment maintenance. It harnesses the industrial internet to connect data, machines and people to provide the right service at the right time. The objective is to reduce unplanned downtime while increasing equipment safety, productivity and lifecycle value. Usage data from the equipment is employed to improve performance over time. Service activity is planned and budgeted effectively to improve safety and productivity. Digitalization improves predictive maintenance by providing accurate information on the availability, location and condition of equipment. We see a great deal of potential in the interplay between digitalization and the circular economy and are striving to realize this.

## **Taking the leap towards a circular economy**

Konecranes sees great opportunities in pursuing circular economy business models. Great material, cost and environmental savings can be achieved by renting, repairing, modernizing, reusing and recycling products.

## **Targets**

In 2015, we set long-term targets that we aimed to achieve by the year 2020, and have been monitoring our performance since then.

### **Corporate Responsibility Targets**

- > Code of Conduct training
- > Assessing suppliers for sustainability
- > Certified ISO 14001 Environmental Management Systems in all factories
- > Reducing energy intensity
- > Reducing emission intensity
- > Renewable energy
- > Decreasing Lost-Time Accident level
- > Significantly reducing serious injuries and 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 Group management
- > Balance in nationalities in Group management to maintain a global mindset



Our wide-ranging offering allows us to provide eco-efficient power options such as hybrid power with the latest battery technology and regenerative braking. We invest continuously in R&D.

We design our products with their complete lifecycle in mind. We seek to lengthen our product lifecycle through reuse, modernization and recyclability. Modernization and retrofitting reduce raw material usage while increasing the energy efficiency of our products, reducing the total environmental impact of the product lifecycle. Modernization also improves equipment safety, productivity, reliability and usability while reducing the need for repairs and unscheduled maintenance. In our own operations, targets to shrink our environmental footprint help us to improve our resource and energy efficiency.

### Cultivating a strong safety culture

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, manufacture, maintenance and service 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, where people lead by example to drive improvements and where everyone plays a part in building a safe and healthy working environment. We work towards this goal with the aid of systems and programs that manage the safety of our products, services and operations, and by transparently following up and analyzing our safety performance.

## Highlights

- › Global Health, Safety and Environment (HSE) tool successfully launched. The tool gathers and manages environmental and safety observations and facilitates incident investigations and root cause analyses.
- › New Supplier Code of Conduct introduced.
- › Code of Conduct and Anti-Corruption Policy renewed, Whistleblowing channel launched, Head of Compliance & Ethics recruited, and Group level Compliance and Ethics committee established.
- › Joined CIRCit, a Nordic research project on circular economy.
- › Introduced the ECOLIFTING concept for eco-efficient lift trucks at TOC Europe, Port terminal operator exhibition in Rotterdam, the Netherlands.
- › HSE improvement planning process rolled out. Business units systematically identified key areas of improvement aiming to harmonize HSE planning activities annually and to identify common focus areas across the company.
- › Analyzed current state of diversity at Konecranes in collaboration with Aalto University, examining current attitudes within the company and exploring opportunities for improvement.



# Konecranes as an investment

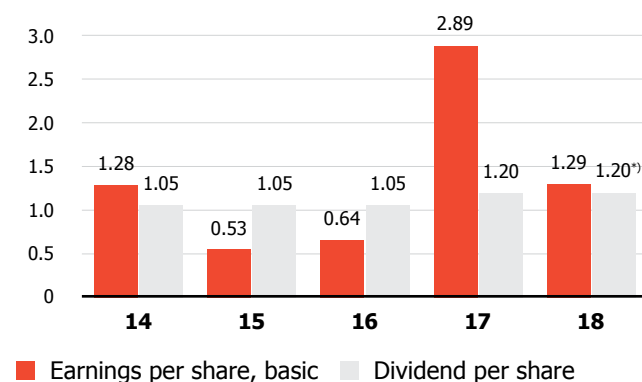
In 2020, Konecranes is the leading industrial and port technology company across all its operations. But we will not stop there – we will continue to seek new avenues for growth.



# Konecranes as an investment

Konecranes is in the business of improving its customers' material handling safety and productivity.

## Earnings & dividend per share, EUR



<sup>\*)</sup> The Board's proposal to the AGM

### 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 enable preventive 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 no 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

- Target for 5% compound annual sales growth in 2018–2020.
- 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 services.

### 4. Target for 11% EBITA margin by 2020

- Margin expansion driven by EUR 140 million synergy savings targeted between 2017–2019 (EUR 79 million P&L impact achieved by year-end 2018).
- Improved operating leverage especially in Business Area Service.

### 5. Solid financial position and dividend

- Healthy balance sheet (with gearing at 42.5% at the year end), 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 84% of earnings.

### 6. Strong long-term commitment to sustainability

- We aim to maximize the circular value in all of our products.
- We are committed to reduce our energy intensity (MWh/sales) by 25% and greenhouse gas emission intensity (tCO<sub>2</sub>e/sales) by 50% during 2017–2025.
- We are also committed to run our factories with 100% renewable electricity by 2025.



**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. The Group has 16,100 employees at 600 locations in 50 countries. Konecranes is listed on the Nasdaq Helsinki (symbol: KCR).

**KONECRANES®**  
Lifting Businesses™

## Corporate Headquarters

### Konecranes Plc

P.O. Box 661 (Koneenkatu 8)  
FI-05801 Hyvinkää, Finland  
Tel. +358 20 427 11

### Investor Relations

Eero Tuulos  
Vice President, Investor Relations  
Tel. +358 20 427 2050  
eero.tuulos@konecranes.com

### Communications

Niina Suhonen  
Director, Corporate Communications  
Tel. +358 40 843 9438  
niina.suhonen@konecranes.com

## Regional Headquarters

### Americas

Konecranes, Inc.  
4401 Gateway Blvd.  
Springfield, OH 45502, U.S.A.  
Tel. +1 937 525 5533

### Europe, Middle East and Africa

Konecranes Region EMEA  
P.O. Box 662 (Koneenkatu 8)  
FI-05801 Hyvinkää, Finland  
Tel. +358 20 427 11

### Asia-Pacific

Konecranes Pte. Ltd.  
8 Admiralty Street, #06-11 Admirax  
Singapore 757438  
Tel. +65 6 861 2233