KONECRANES

Welcome to Hyvinkää!

Kiira Fröberg, VP Investor Relations May 11, 2023

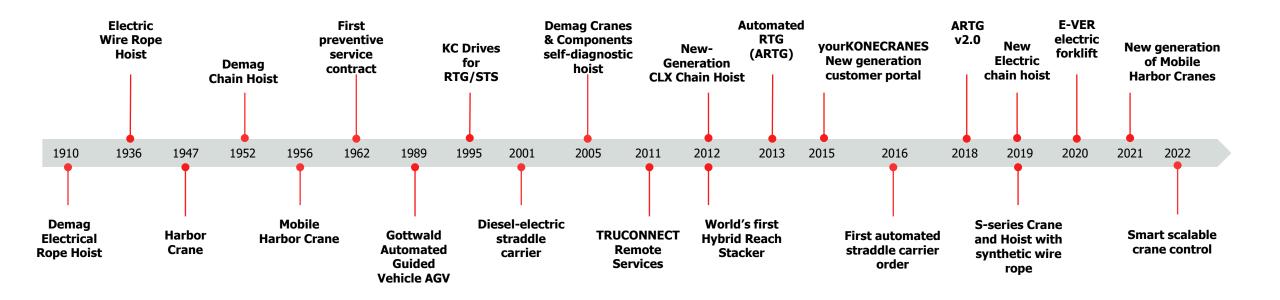
Site visit - Agenda

09:00	Welcome Kiira Fröberg, VP, Investor Relations
09:05	Konecranes Technologies Juha Pankakoski, EVP, Technologies
09:25	Supply Operations Risto Helle, SVP, Supply
	Hyvinkää Operations Pekka Koskinen, VP, ETO Supply, Head of Hyvinkää factory
09:45	Factory tour & Technologies demos





Konecranes - Innovation Milestones



Sustainability

Demand for responsibly made and supplied products, lifetime extensions, alternate energy sources, optimized usage



Big Data and Analytics

Ability to detect actionable patterns and opportunities from data in all areas of business



Digitization / Industry 4.0

M2M connectivity providing process optimization opportunities



Modular Automation

Increasing system throughput needs, increased requirements for flexibility, saving on labor



Need for Flexibility

Faster turnaround times, flexible manufacturing lines, distributed warehousing, late configuration and inventory management



Cyber Security

Proliferation of connected devices, vulnerable industrial architecture, low or no user authentication, increased interest for cyber crime



Personnel Safety

Increasing legislatory requirements, co-habitation of humans and machines more common



Scarcity of Talent

Demographics, unattractiveness of industry, skills shortage, digital natives





Strategic Technology Themes for '23–'27

Deep Domain Experience (CoL)



Key initiatives related to core product/ service competitiveness, including support for simplification and standardization of offering

Smart, Connected Products



Roadmaps for automated and autonomous operation and movement, including standard solutions for connectivity, computing, and sensors

Digitalization and Data



Building of superior E2E digital customer and employee journeys, enhancement of physical products with digital services, using data for insights and new business

Uniform, World-Class Processes and Systems



Next evolution of composable 1KC processes, allowing for business-specific customization whilst maintaining information integrity, and allowing easier divestment/integration of businesses

Using Partner Ecosystem for Value Acceleration



Supporting internal and external innovation, co-creating with key stakeholders, optimizing supplier base for cost, availability, compliance, and sustainability



Unlocking Industrial productivity

- Zero4 is a Konecranes-led 70 M€ Research & Innovation programme. The programme is part of Business Finland's "Veturi" initiative where Finnish companies are invited to solve some of the society's most pressing challenges through research, development, and innovation in Finland.
- Purpose of the programme is to **boost the industrial productivity** and **competitiveness** of Finnish companies and decrease absolute greenhouse gas emissions and energy waste.
- Zero4 focuses on working towards the vision of a **unified material flow platform** that is developed together with ecosystem partners, universities, research institutes and customers.
- The programme mission will be reached by **zeroing down four key deficiencies** from material flows:

INFORMATION BARRIERS **GHG EMISSIONS** ZERO⁴ **SAFETY INCIDENTS WASTED ENERGY**



Future solutions are developed through 7 interlocking streams We invite stakeholders to join our journey in building and commercializing future material flow solutions

Themes

ZERO INFORMATION BARRIERS

Create a common material flow platform and optimize material and information flows

ZERO GHG EMISSIONS

Decarbonize material flow equipment and activities

ZERO WASTED ENERGY

Design material flow equipment and operations to consume less energy and to regenerate what is spent

ZERO SAFETY INCIDENTS

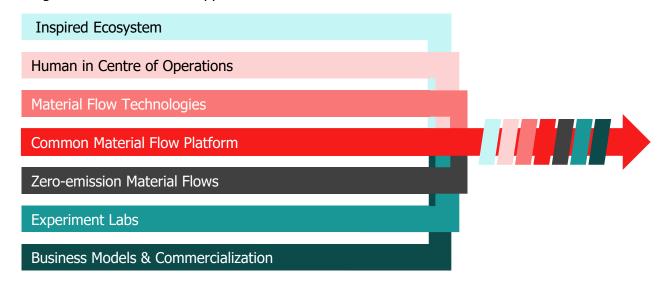
Make material flows and related activities **safer for humans** and remove any disruptions from operations

Examples of research topics

In Zero4, we will study, for example, the following questions and many more:

- How can material be identified and tracked with multiple sensors forming a smart space?
- How can simulations, enhanced with real-time data, be used to optimize material flow of a complete factory?
- What is the most suitable system concept for emission monitoring, avoidance, and allocation in intralogistics?
- How equipment ownership effects product lifecycle and selected circularity strategies?

Programme research and support streams











Topics



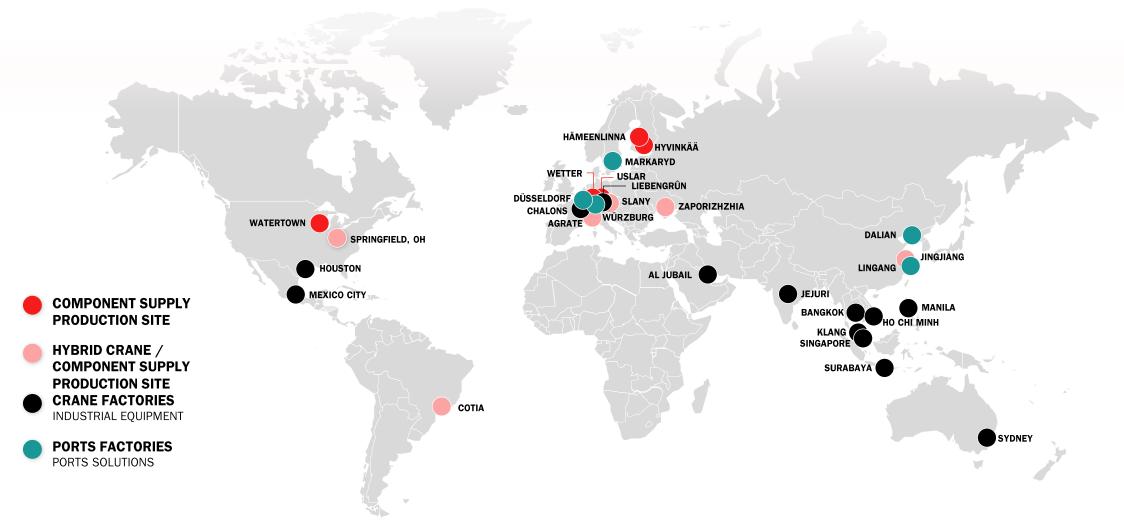
Supply Network



Hyvinkää Operations

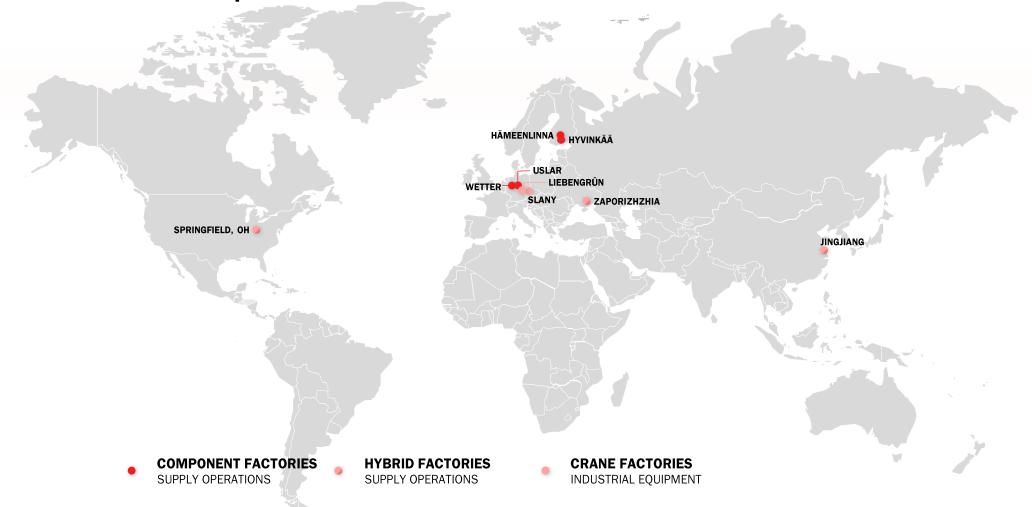


Konecranes' own production network



BU SUPPLY OPERATIONS

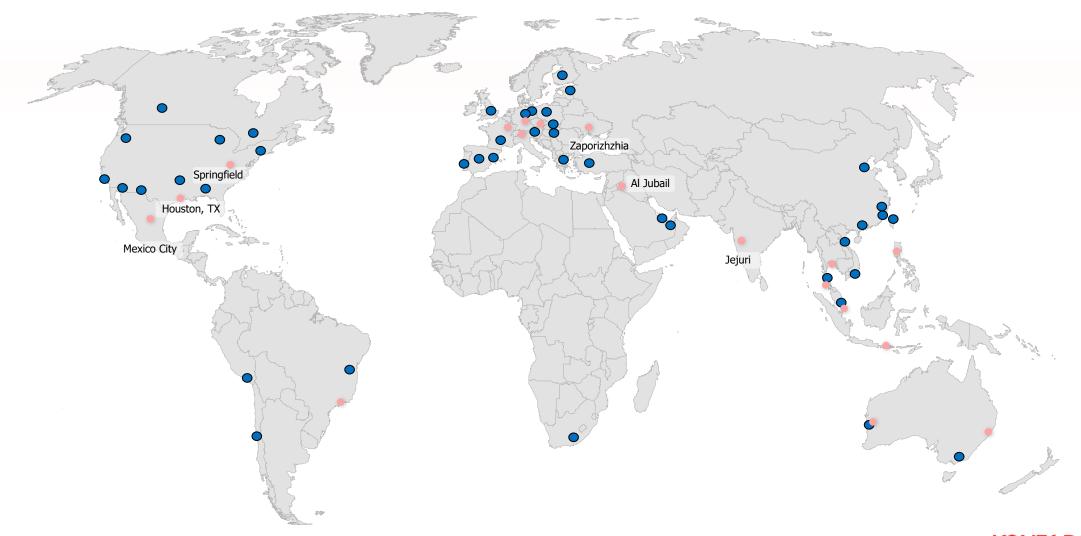
Konecranes' component and crane factories and DCs





SUBCONTRACTING NETWORK CLOSE TO OUR CUSTOMERS

IE current factory footprint supplemented with an extensive subcontracting network



BU Supply Operations' factories





Hyvinkää factory, factsheet



PERSONNEL

~270

~200 operatives + 70 staff
12% female
Ø Age 42
Ø Service years 13
6 nationalities



MAIN PRODUCTS

Trolleys for industrial cranes and port cranes, e-rooms, electrical cubicles and cabinets, heavy gears and rope drums.

SUSTAINABILITY

100% renewable electricity since 2014

Total CO2 emissions 2022 ~ 350tCO2





ANNUAL PRODUCTION OUTPUT (2022)

70 Port crane trolleys

210 Heavy IE trolleys&Winches

2900 Gears & machineries

30 e-rooms

+ a large amount of other crane components: machineries, drums, electrics





