

Press release

Elevator Technology

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thyssenkrupp looks to delivery robots for elevator maintenance logistics

- As part of a research project, thyssenkrupp Elevator is testing TeleRetail delivery robots to make elevator maintenance safer and more efficient.
- The robots will be displayed from today onwards at the IAA Frankfurt Motor Show, where thyssenkrupp is participating as an application partner of TeleRetail

New solutions for urban logistics: Self-driving vehicles will be a normal part of street scenes in smart cities of the future. Whether moving people or goods, autonomous vehicles promise greater efficiency, safety and smoother logistics. Particularly when it comes to delivering goods, the effects will be clearly visible. Instead of bulky vans, compact delivery robots will ensure that packages get to their destination by the quickest route possible.

TeleRetail is developing driverless delivery vehicles like these, and for thyssenkrupp Elevator they could be an optimal logistics solution for elevator servicing. Together with the software developer TeleRetail, thyssenkrupp launched a pilot project in which delivery robots will transport spare parts and other material to maintenance job sites. The cloud-based driverless systems could form complete supply and logistics networks; a promising solution with enormous development potential.

For elevator and escalator servicing, spare parts are needed quickly and a technician either has to drive back to base in his service vehicle or have it delivered by a colleague. But with increased traffic clogging up city streets, the pressure on supply chains is increasing all the time. "This is a challenge of urbanization that our service technicians are already experiencing today," explains Ivo Siebers, Senior Vice President of Global Logistics at thyssenkrupp Elevator. "With driverless delivery robots we could fill a gap and get spare parts from our warehouses to the job site faster, more flexibly and with less impact on the environment."

The advantages: The delivery robots are just 85 cm wide and suitable for traveling on sidewalks, thereby avoiding road congestion. They can also reach inner-city areas where vehicular transport is limited and carry payloads weighing up to 35 kg. Information on delivery status can be obtained quickly via an online Logistics Automation Platform. "We hope to improve our service delivery in this way," adds Siebers.



"With our platform we want to optimize logistics by saving time and costs, and minimizing space requirements, energy consumption and emissions," says Torsten Scholl, CEO of TeleRetail Mobility Automation. The software developer is taking part in this year's IAA Frankfurt Motor Show where two of the delivery robots – one branded in thyssenkrupp blue – will be on display in the "New Mobility World" (booth B11, hall 3.1).

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The thyssenkrupp Group is also back at the IAA Frankfurt Motor Show this year. The company will be showcasing its capabilities as a forward-looking, innovative partner to the international automotive industry at booth A14 in hall 8.0. The focus will be on future trends in the global sales markets: autonomous driving, e-mobility, and digitalized production. For example, the company will present new developments in the chassis area such as electric powered steering, steer-by-wire and adaptive damper systems that are paving the way for more automated and autonomous driving. thyssenkrupp will also be focusing on high-performance materials for electric motors and newly developed production lines that allow bodies, powertrains and batteries to be manufactured more quickly and at lower cost.

Images to download are available here

About TeleRetail GmbH:

TeleRetail automates regional logistics while minimizing the ecological footprint of transportation. Its Logistics Automation Platform combines almost any mode of transport - Including couriers, taxis, drones, and self-driving transporters. Its Self-Driving Transporters automate logistics as well as intralogistics for industrial clients. The company's technologies reduce the space, cost- and energy requirements of local logistics up to 90% - thereby significantly improving the quality of life on planet earth.

About us:

thyssenkrupp Elevator

thyssenkrupp Elevator brings together the Group's global activities in passenger transportation systems. With sales of 7.5 billion euros in fiscal 2015/2016 and customers in 150 countries, thyssenkrupp Elevator built its position as one of the world's leading elevator companies from scratch in a mere 40 years' time applying thyssenkrupp unique engineering capabilities. With more than 50,000 highly skilled employees, the company offers smart and innovative products and services designed to meet customers' individual requirements. The portfolio includes passenger and freight elevators, escalators and moving walks, passenger boarding bridges, stair and platform lifts as well as tailored service solutions for all products. Over 900 locations around the world provide an extensive sales and service network to guarantee closeness to customers.

thyssenkrupp

thyssenkrupp is a diversified industrial group with traditional strengths in materials and a growing share of capital goods and services businesses. Around 156,000 employees in nearly 80 countries work with passion and technological expertise to develop high-quality products and intelligent



industrial processes and services for sustainable progress. Their skills and commitment are the basis of our success. In fiscal year 2015/2016 thyssenkrupp generated sales of around €39 billion.

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Together with our customers we develop competitive solutions for the challenges of the future in the areas Mechanical, Plant and Materials. With our engineering expertise we enable our customers to gain an edge in the global market and manufacture innovative products in a cost- and resource-friendly way. For us, technical progress and innovations, allied with the combined strength of the Group, are key factors enabling us to meet current and future customer and market requirements around the world, grow on the markets of the future, and generate strong and stable earnings, cash flows and value growth.

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