

Company plans to build sideways-moving elevators

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ThyssenKrupp wants to turn elevators sideways, move people around faster and fix products before they break.

The company, whose North American headquarters is in Chicago, unveiled the latest in a crop of new innovations in late November - an elevator that could move sideways in addition to up and down. The Multi system would use magnetic levitation technology with linear motors to move elevators through a circuit.

Incoming CEO Patrick Bass will tackle Multi and other projects beginning Jan. 1 when he takes the helm at ThyssenKrupp North America.

"Our headquarters in Chicago is a hub to help maximize and leverage and look at the innovations we can bring," he said. "Which also matches nicely to the footprint and direction for Chicago - of wanting to go from the traditional industrial Rust Belt city to now: a technological, innovation-driven center."

He says Multi would fit into that. The system would decrease elevator wait times to a maximum of 30 seconds, cut buildings' elevator footprint by up to half and conserve energy.

The company has begun building a 246-meter-tall test tower in Rotweil, Germany, to showcase the system. The tower, scheduled for completion in 2016, is designed to get people thinking about how building design

could change without the architectural restraints of a strictly up-and-down elevator.

"(After) the birth of the elevator 160 years ago, we allowed the building industry to transform," Bass said. "The problem was elevators didn't change enough. The industry became a detractor. We're limiting building heights and building shapes."

ThyssenKrupp is also thinking about sideways movement on another place: the ground.

In October, the company announced Accel, which looks like a moving walkway but works like a magic carpet. Pedestrians step onto a belt, which then speeds up and returns back to normal speed before they step off. This technology could be used at airports.

"The biggest problem in an airport is getting them into a terminal so they can either shop or make their plane," Bass said. "That's the revenue driver. The more time I spend in that tunnel, the more money I lose as an airport."

It could also be used in conjunction with public transportation.

"Instead of this old traditional railway, now you have Accel in this nice enclosed open-sunlight visible walkway that you're walking three times faster than anything before," Bass said.

Lastly, ThyssenKrupp is thinking about using data to keep everything moving smoothly. The company says it has partnered with Microsoft and CGI Group to connect its devices with the cloud to use data for predictive and preventative repairs.

"It's about up time. It's about reliability," Bass said. "We need to know

what's happening with these ([elevator](#)) cars. Real-time. That comes through the Internet of Things."

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