

Schindler's Robotic Installation System for Elevators (Schindler R.I.S.E) Pioneering the automated elevator installation



Schindler R.I.S.E Introducing robotic technology in the elevator installation

Today, buildings are not only growing taller and wider, they are also growing much faster. To address these increasingly challenging demands on installation schedules, Schindler provides the fastest elevator installation method to date: its revolutionary robotic installation system, Schindler R.I.S.E. This cutting edge technology improves the safety & health for the installation force, while providing a very high installation quality for the customer.

As a technology leader in innovative urban solutions for the smart cities of tomorrow, Schindler has developed the Robotic Installation System for Elevators (Schindler R.I.S.E) that couples advanced automation with elevator technology. For the first time in history, a robot can execute installation steps autonomously, which provides many benefits including a safe and high-quality installation of elevators.









Schindler R.I.S.E in Action

The Schindler R.I.S.E system can complete a section of the hoistway - drilling and setting the anchor bolts required for landing doors, divider beams and guide rail wall brackets - much faster than conventional installation methods. Three cameras are mounted onto the platform to allow remote viewing, but once commissioned, the system operates independently; no operator is required.

Once installed in the elevator shaft, the autonomous Schindler R.I.S.E can operate around the clock. In case of an unexpected event, the Schindler R.I.S.E operator is contacted through the on-board WiFi. With Schindler R.I.S.E, the installation team is relieved from the physically demanding, repetitive and time-consuming tasks of drilling and setting hundreds of anchor bolts, which improves safety in a taxing work environment.



Benefits for Our Customers and Our People

- High-level accuracy
- Better-quality installations
- Removal of conflicts; improved planning with BIM integration
- Improved worker safety and welfare; reduced need for nonergonomic manual tasks
- Automatic installation steps
- Most efficient installation method for drilling and setting anchor holts
- Highly attractive installation schedules for fast handover to customers

Schindler R.I.S.E and Building Planning

Robotics usher in a new way of working, directly linked with digital planning.

Schindler R.I.S.E complements other digitization solutions in the tall building industry, such as Building Information Modelling (BIM). With Schindler R.I.S.E, the robot can obtain data directly from the digital building model. This ensures the bolts are placed exactly according to the layout and removes the need for manual and error-prone data transfer to construction workers. Information and data from each step of the installation is recorded and automatically exchanged in the digital model of the building for later reference in the construction and maintenance phases of the project.





Reference Installations

The system supports the high-quality installation of elevators and is ideally placed for application in high-rise buildings. Recently the innovative technology has been used to install several elevators in influential commercial complexes and residential buildings around the world, including the Triiiple Complex in Vienna, Austria and the Varso Tower in Warsaw, Poland "- the tallest building in the European Union."



Schindler Innovation Preparing for the future today

"We are proud to introduce this innovative robotics system which provides a new level of worker safety and helps improve quality," said Karl-Heinz Bauer, Chief Technology Officer, Schindler Group. "This is another example of Schindler's commitment to providing the most advanced digital and urban mobility solutions to shape the smart cities of the future."

Schindler has been a pioneer in elevator technology with a long tradition of developing innovative mobility solutions, including the first-ever patent for elevators without a machine room. Visit https://schdlr.link/35JZlL1 for more about Schindler's ongoing digital innovations, including Schindler R.I.S.E.

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