Focus on Historical Elevators

Solutions for historical modernizations and more are discussed in this Industry Dialogue.

by Kaija Wilkinson

German-born Christian Schulz is head of operations at Schindler. After several roles at technology company ABB, he joined the 145-year-old Swiss company in 2003, initially as product line manager for Existing Installations, and later as managing director of Schindler subsidiary C. Haushahn Group from 2009 to 2014, before going on to become group head of Service and Modernization. He became a member of Schindler's Group Executive Committee in 2016. He holds a degree in Production Engineering and a PhD in Mechanical Engineering from the University of Kaiserslautern in Germany. Schulz (CS) took the time to speak with EW Europe (EWEU) recently about modernization trends in Europe, touching on some interesting projects including a bespoke lift at the Louvre in Paris and double-deck elevators in Westminster City Hall in London.

EWEU: In Europe, approximately what percentage of Schindler's portfolio consists of modernizations?

CS: Currently, modernizations make up less than 10% of our portfolio on an annual basis, so it's not a huge amount. Yet, modernization is becoming more and more important as urbanization accelerates. Over 50% of the elevators and escalators in Europe are older than 20 years, and elevators in Europe are among the oldest in the world. So, a lot of equipment is old and only getting older. As a result, demand for modernization is increasing.

EWEU: What parts of Europe are busiest for Schindler for

modernization, and what are the factors driving it?

CS: The bigger, older cities in countries such as Germany, France and Spain where property owners are often keen to increase the value of a property are busiest. Yet, a key driver of modernization is safety. The European Committee for Standardization recently added to its standard for new lifts in establishing the key Safety Norm for Existing Lifts, often called EN-80. Frequently considered a benchmark outside Europe, this mandatory initiative across Europe aims to increase safety on existing elevators. Clearly, modernization is also heavily dependent on customers who are willing to actually pay for it.

Saving energy is another key factor. For property owners and facility managers' wanting to reduce energy consumption, and in turn, lower CO2 emissions, modernizations offer, energy recovery drives, for example, as well as energy-efficient dispatch systems that optimize traffic flow. Indeed, by reducing the environmental impact of their buildings and complexes, modernization is also a way for customers to contribute to sustainability.

EWEU: What are some challenging/rewarding modernizations Schindler performed recently in Europe?

CS: Schindler manages an enormous variety of highly technical and very iconic modernizations in super-old, historic and protected buildings. For example, we modernized London's Westminster City Hall with double-deck lifts. At the famous Louvre in Paris,



Schindler significantly modernized the museum's bespoke lift. This was a real challenge technically: The lift has neither shaft nor rope, so we had to invent a very special solution. In Russia, Spain and Germany, we have also carried out iconic elevator modernizations.

EWEU: What about paternosters? Does Schindler work on them?

CS: Paternosters were most common in continental Europe and were almost decommissioned years back. Today, some still exist and property owners are allowed to operate them. We have maintenance contracts on a few. **EWEU:** What are the challenges and considerations when working on elevators in UNESCO World Heritage sites?

CS: The biggest challenge when working on protected buildings are the preparations before the physical work is started. First, we work closely with the building's officials to understand what can and cannot be changed, then, what can be refurbished and how. Our experts give careful thought to the elevator's design, color combinations, cladding and materials. Our people go the extra mile to design and create the technology that meets the needs of The bespoke lift in the Louvre in Paris is surrounded by a winding staircase; photo courtesy of Schindler.

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"[When working on elevators in UNESCO World Heritage sites], our people go the extra mile to design and create the technology that meets the needs of both customers and those of protected buildings.."

- Christian Schulz, Schindler head of Operations both customers and those of protected buildings.

EWEU: What are Schindler's top-selling modernization solutions for elevators and escalators in Europe?

CS: One of our really great solutions is our Transit Management technology. Through its destinationdispatch system, invented by Schindler, a programmed digital device increases capacity of existing elevators by optimizing elevators' most direct route. So, if a building has a three-elevator system, property owners can still use two elevators to efficiently carry traffic throughout the building while one is out of service for modernization. Passengers hardly notice the difference, as traffic flow is optimized.

When we start a modernization, one of the first things we do is run an analysis of traffic and capacity. This requires detailed calculations, as we need to offer customers a solution that keeps people moving with fewer elevators than before. Transit Management has been really successful across Europe. Value that we keep their buildings fully operational during an elevator modernization and that the technology works on all types and brands of elevators.

EWEU: What about escalator modernization products?

CS: Our InTruss solution is designed for places where an escalator cannot actually be replaced due to a lack of space, for example, in underground subway systems such as the London Unground. While several escalators can be replaced with new ones, often there are a few where InTruss is the best solution. The truss — the escalator's steel construction — stays in place and is refurbished, while the drives, chains, steps, controllers and brakes are completely renewed. Escalators and moving walks are no longer just a means of transportation: They are also part of the building's design, and our packages aim to transform styles into modern new looks.

EWEU: How long does it take to modernize using the InTruss system for say, a set of escalators?

CS: The planning part of the project can be lengthy. If you have a 14-year-old escalator, for example, we have to pull together all technical details before any new components can be produced. But once everything is ready, it takes days and weeks instead of months. Equally, elevator modernizations can also be completed in a few days.

EWEU: What is the main reason your clients choose new equipment instead of partial modernization of existing equipment?

CS: Often, customers don't want to spend large sums of money in one go; they prefer a step-by-step approach. For example, one year they might install a new controller and the next, a new drive, and so on. Nonetheless, their whole modernization program is carried out in a coordinated way, so they can benefit from reduced energy consumption, which is growing in demand throughout Europe, and revitalized design, without having the burden of financing the entire program at once. ⊕