

*The heart of your building™*



KONE Escalator  
modernization solutions





# The value of a flexible approach

The escalator truss can last for the lifetime of the building. The mechanical components can wear out or become outdated after a few decades. Safety regulations, as well as the electrical and monitoring systems, have changed considerably in the last 10 or 20 years. And aesthetics can change as quickly as trends in interior design.

Given these various lifecycles, it makes sense to take a flexible approach to escalator modernization. KONE gives you a range of options, so you can replace the entire installation or individual components as needed, with a modular solution. This enables you to replace

the electrical system or enhance the aesthetics, for example, while leaving the mechanical components intact.

KONE is the only company that can offer a complete escalator modernization without removing the existing truss. This solution is based on modules that allow modernization to be done quickly, with minimal impact on the building and people flow. This gives you the best of both worlds. You get a quiet, safe, reliable and energy-efficient escalator, and you get modernization that is fast, clean and less disruptive, at lower overall cost.

# The value of a thorough assessment

KONE keeps your escalator running safely and reliably for the lifetime of your building, from installation, through maintenance and repairs, to modernization, and finally to replacement.

The KONE Care for Life™ service provides a thorough assessment of the escalator, followed by planning and implementation of modernization services. For building managers, modernization based on KONE Care for Life™ means minimum disruption and maximum availability. For owners, it means predictable escalator lifecycle modernization and budgeting. And for users, it means safe and convenient use of the escalator.

## **From assessment to implementation**

The first step is a thorough evaluation of the existing installation, focusing on aesthetics, safety, accessibility

and performance. Based on the results of the KONE Care for Life™ assessment, we present a plan for reaching the required level of performance. This can range from regular maintenance, to upgrades, to modular modernization, to full replacement.

Every year KONE services and modernizes thousands of escalators and autowalks worldwide. Every modernization project is coordinated by a local, professional project manager, so you always know who to call if a problem arises. The project is implemented in the most time- and cost-effective way possible by specialist teams.



# The value of a modular approach

A modular solution enables you to modernize the installation with minimal impact on the building structure and minimal interruption to people flow in the building. You can select the modules that require the most urgent attention, and upgrade the other modules as needed. This enables you to spread the costs over several years.

## ❶ Mechanical

Replacing the old worm gear with the highly efficient KONE ECO3000™ Drive reduces energy consumption and increases performance. The chainless drive minimizes downtime and increases the availability of your escalators.

When you replace the old step chain with the unique lubrication-free KONE ECO3000™ Chain, you eliminate oil smell and the risk of oil leaks through the cladding. It also reduces the risk of fire. The entire installation is cleaner and safer and requires less downtime for maintenance.

## ❷ Electrical

Replacing the old controller with a new micro-processor-based controller significantly improves safety and energy-efficiency. The state-of-the-art KONE ECO3000™ Controller connects to the latest safety monitoring systems. For example, handrail speed monitoring measures the difference in speed between the steps and the handrail. If the speed variation exceeds a pre-defined limit, the escalator stops,

assuring the safety of passengers. In order to minimize energy consumption, you can upgrade the escalator to standby operation.

## ❸ Aesthetics

Improving the aesthetic appearance of the escalator can make it an eye-catching feature of the building. Numerous upgrade packages are available to integrate with the design of the building, and to look good for years to come.

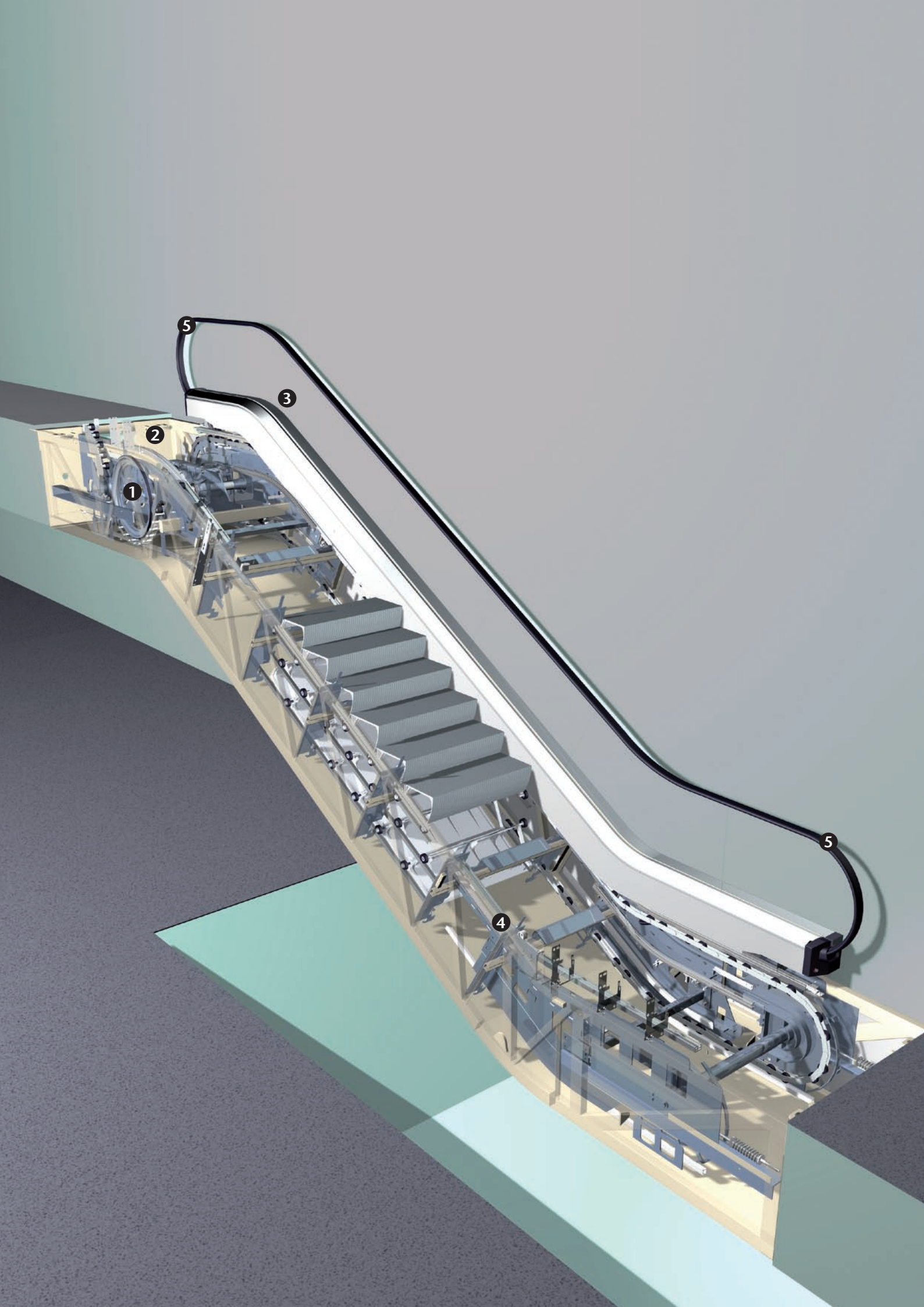
## ❹ Additional safety solutions

Safety requirements have changed a lot in the last 20 or 30 years. Upgrading the old escalator to meet the EN115 norm assures that your escalator meets the latest safety standards. For example, a brush deflector system can prevent shoes and clothing from getting trapped between the steps and the skirting panels. Dynamic braking can be fitted to maintain constant stopping distances under all load conditions. Additional safety signage on the steps is also available to ensure safe behavior on the escalator.

## ❺ Accessibility

Good accessibility makes the escalator safer and more convenient for all users, especially for older people and families with children. Upgrade packages are available, for example for the entrance/exit areas, to provide visual and audible announcements as well as travel direction indication.









# A full solution for every location

## **Full modernization**

In full modernization, you retain the truss, but replace all other escalator components. This is an excellent solution in narrow, difficult to access locations. In these cases you do not need to demolish floors and roofs, and can maintain the existing appearance of the building. In this way you gain the advantages of improved performance, aesthetics and safety, while reducing the operating costs.

## **Full replacement**

In full replacement, the entire installation including the truss is removed and a new one is put in its place. This can be done in open, easy to access location to give all of the benefits of a new escalator – performance, availability, energy-efficiency, safety – with quick installation time. Usually it means an interruption of only a few days.



# References



## **O'HARE INTERNATIONAL AIRPORT** CHICAGO, ILLINOIS, USA

Scope	4 elevators and 24 escalators
Construction	2003-2007
Project type	Full replacement



## **ROME UNDERGROUND AUTHORITY** ROME, ITALY

Scope	32 escalators and 4 ramps
Construction / Modernization	2006 to 2010
Project type	Full replacement



## **SOKOS LAHTI** LAHTI, FINLAND

Scope	6 escalators
Modernization completed	January 2007
Project type	Full replacement

KONE is a global leader in providing complete and innovative solutions for the design, installation, modernization and maintenance of elevators and escalators and the maintenance of automatic building doors. Our 29,000 dedicated employees serve you in 49 countries.

KONE cooperates closely with you from the earliest stages of a project in order to ensure the smooth flow of people and goods throughout your facilities for their entire lifetime. Life-cycle thinking underlies our commitment to proactive, reliable service and modernization solutions. KONE serves you locally as well as globally, for example in the Trump Tower in Chicago, Swiss Re in London and Beijing International Airport.

KONE Corporation  
**[www.kone.com](http://www.kone.com)**

