

HIGH-RISE ELEVATOR HOISTING AND ELECTRIFICATION MODERNIZATION

KONE ReGenerate™ 800

IT PAYS TO MAKE A GOOD FIRST IMPRESSION

What are prospective tenants' first impressions when they enter your building? Is the lobby full of people waiting for the elevator, or are they moving efficiently to their floors? Is the elevator ride smooth and comfortable, or bumpy and noisy?

YOUR COMPETITIVE EDGE

The KONE ReGenerate™ 800 modernization solution includes the main components of the elevator: the hoisting machinery, controller and electrification system. These can be supplemented with new elevator cars, signalization and landing doors, and a destination control system.

The result is an elevator group that operates reliably, energy-efficiently and smoothly. There are fewer people waiting in the lobby, even during peak periods. And they ride to their destination in comfort and safety.

The KONE ReGenerate 800 is a high-performance solution for elevators in high-rise buildings. It can help you maintain your building's status as a prime property within your market.

ADDRESSING YOUR CONCERNS

You may have concerns about disruption to your building operations during modernization. Thorough analysis of your requirements ensures that you get the solution you need. KONE provides modernization solutions that integrate seamlessly with existing technologies to speed up installation. KONE project management ensures that the project is planned properly and implemented efficiently. When modernizing an elevator group, the KONE Modernization Overlay maintains or even increases traffic capacity during the project.

Before you begin a modernization project, it makes sense to see exactly what needs to be done. KONE Care for Life™ is an analysis and report on the condition of your elevators, together with recommendations on how to improve their performance.





CASE: SKY TOWER, AUCKLAND, NEW ZEALAND

A FASTER RIDE TO THE TOP OF NEW ZEALAND

A combination of KONE UltraRope technology and KONE ReGenerate 800 was used to modernize the tallest man-made structure in the Southern hemisphere. Three glass-fronted elevators take visitors up to the seven public floors located between levels 50 and 60. A fourth elevator serves a dual purpose as the building's service elevator and shuttle service between the observation deck.

FAST FACTS

Building type: Commercial

Completion: 1997

Modernization: 2015

KONE solution: Full modernization with KONE UltraRope™, KONE ReGenerate™ 800 and KONE Destination.

KONE REGENERATE™ 800 RAISES YOUR BUILDING'S COMPETITIVENESS



A stylish car interior, with award-winning KONE Design signalization, is an attractive feature in any building.

IMPROVED PERFORMANCE

The new electrification system in the KONE ReGenerate 800 package replaces outdated technology to improve reliability, safety and energy efficiency. It can interface with many types of existing elevator components, ensuring rapid, trouble-free installation. KONE regenerative drives can recover up to 30% of the elevator system's total energy consumption.

LESS WAITING

The KONE group control system, available as an option, efficiently manages traffic, minimizing passenger waiting and travel times. If required, KONE can install the KONE Destination system. This can significantly improve traffic handling – to the standard of a modern Class A building. It reduces waiting times in the lobby while reducing crowding in the cars, thus improving passenger comfort.

GREATER SAFETY

The KONE ReGenerate 800 complies with the most stringent safety norms. One important safety criterion is leveling accuracy. The closed loop drive control provides accurate floor leveling for improved passenger safety and accessibility. Ascending overspeed protection and uncontrolled movement protection are also standard safety features of this solution.

RIDE COMFORT

A smooth, silent ride creates a feeling of luxury as tenants rise to the upper floors. The powerful, highly-efficient KONE EcoDisc® permanent magnet motor provides a smooth, efficient ride. KONE drive systems ensure smooth acceleration and stopping. And KONE door systems provide fast and smooth door operation to improve traffic capacity and ride comfort.

KONE ReGenerate 800	MX18 Machine		MX32 Machine		MX40 Machine	
	1:1	2:1	1:1	2:1	1:1	2:1
Max load [kg]	1150	2000	1600	3200	2000	4000
Max speed [m/s]	3.5	4.0	6	3.5	8	4
Max travel [m]	180	180	300	180	400	180
Max floors	63	63	126	63	126	63
Max elevators in group	8	8	8	8	8	8
Max starts/year	400,000	400,000	400,000	400,000	400,000	400,000



CUT ENERGY CONSUMPTION

KONE is a pioneer in eco-efficiency, having introduced many innovations that have proved themselves in thousands of installations. The KONE EcoDisc®, introduced in 1996, has made energy-hungry hoisting units obsolete.

In high-speed applications, where gearless hoisting units are already used, reductions in electrical loss are the main area of savings. This is mainly achieved because of the very high power factor of the permanent magnet design, together with zero slip losses.

EXPERIENCE BASED ON THOUSANDS

Based on its long experience, KONE has developed a systematic modernization process that ensures that you get precisely the solution you require, and that the project is completed on time and on budget, with minimum disturbance to building tenants and visitors.



STEP 1

ASSESS YOUR CURRENT EQUIPMENT

To plan and budget, you need to understand how the equipment is running.

With the KONE Asset Management Plan you save money, avoid downtime and budget smarter. The KONE Care for Life(TM) analysis identifies the main areas of improvement for your equipment. Based on this, we can together agree a long-term plan to keep your equipment running safely and reliably.

EQUIPMENT LIFE CYCLE PLANNING

- **KONE Care for Life™ assessment** – to analyze the performance, safety, eco-efficiency, aesthetics and accessibility of your elevator and compare solutions.
- **KONE Asset Management Plan** – helps to plan and budget for future modernization needs.

STEP 2

PLAN FOR OPTIMAL PEOPLE FLOW

Evaluation of your business targets helps plan optimal People Flow.

Evaluation of your business targets helps plan optimal people flow for your building. With our traffic analysis service and planning tools, we can simulate the building traffic flow and analyze how changes in equipment specifications affect people flow.

PEOPLE FLOW PLANNING

- With **KONE People Flow Analyser** we can easily specify the needed elevators for your building
- With **KONE People Flow Simulator** we can simulate the traffic flow in your building for both elevators and escalators
- To understand equipment energy consumption, we can provide you energy-efficiency calculations

OF MODERNIZATION PROJECTS



STEP 3

MINIMIZE DOWNTIME DURING INSTALLATION

KONE Project Managers keep the project in schedule and ensure minimum disturbance to tenants.

Our Project Managers plan with you how to ensure smooth modernization. During installation, the KONE technicians protect the floors and walls and provide safe routes for building users. To maximize handling capacity during the project, the KONE Modernization overlay provides maximum traffic handling capacity for the elevators which are in use.

IMPLEMENTATION SERVICES

- **KONE Modernization overlay** – maximize traffic handling capacity during modernization with a temporary group overlay.
- **KONE project planning and control procedures** – a global tool to plan and control the project and ensure that delivery and installation progress as planned.

STEP 4

MAXIMIZE RELIABILITY FOR A LIFETIME

Maintenance after modernization is important so that the new equipment can run reliably for decades.

To ensure reliable operation during modernization, KONE maintenance training programs focus on equipment from all manufacturers.

MAINTENANCE SERVICES

- **KONE Maintenance** - a unique maintenance plan for your equipment allows you to choose the level of service you need.
- **KONE Customer Care Center™** – a 24/7 helpdesk for reporting technical failures and requesting assistance. Two-way voice communication with elevator passengers via KONE Voice Link™.

KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE NanoSpace™ and KONE UltraRope®.

KONE employs close to 50,000 dedicated experts to serve you globally and locally.

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