

Dedicated to People Flow™

KONE

THE MACHINE-ROOM-LESS ELEVATOR

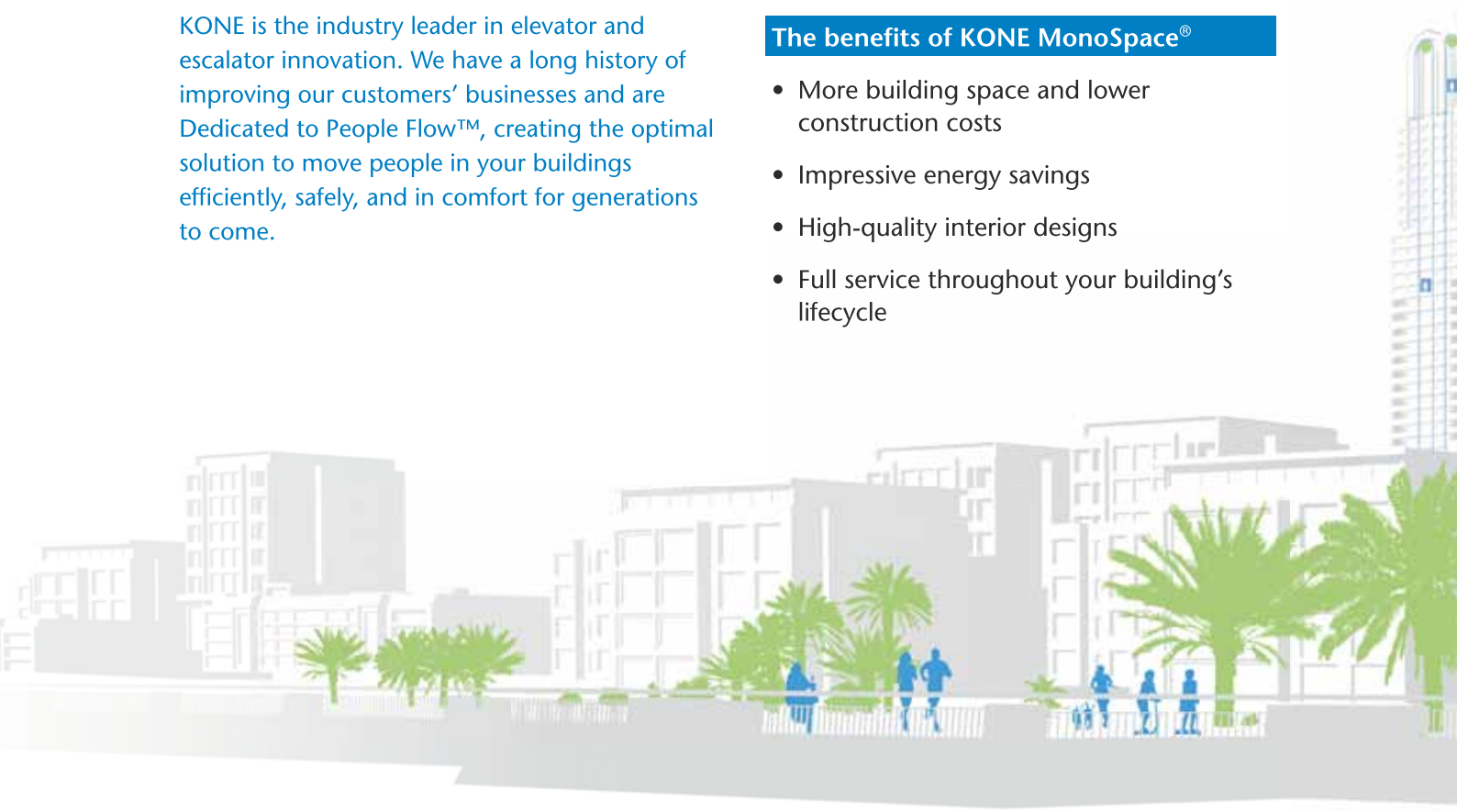
KONE MonoSpace®

100 years of elevator expertise at your service

KONE is the industry leader in elevator and escalator innovation. We have a long history of improving our customers' businesses and are Dedicated to People Flow™, creating the optimal solution to move people in your buildings efficiently, safely, and in comfort for generations to come.

The benefits of KONE MonoSpace®

- More building space and lower construction costs
- Impressive energy savings
- High-quality interior designs
- Full service throughout your building's lifecycle



KONE MonoSpace® – The industry standard for machine-room-less elevators
Since its introduction in 1996, KONE MonoSpace® has become the standard that other manufacturers aspire to. The first elevator without a machine room, our patented innovation provides a smooth quiet ride for passengers, gives more design freedom for architects, lowers construction costs, reduces energy consumption, and frees up building space that can be put to more profitable use.

To date, over 200,000 KONE MonoSpace® elevators have been installed worldwide – transporting millions of people every day. KONE MonoSpace® is reliable, with years of dependable operation behind it.

More space, lower costs
KONE MonoSpace® requires only a single space – the shaft. The elimination of the machine room gives architects and developers greater design freedom and saves construction costs. And because KONE MonoSpace® uses less space, you can lease more space. It also saves construction time and materials.
For more information, turn to page 5 .

Better eco-efficiency
KONE MonoSpace® elevators, powered by the KONE EcoDisc® hoisting motor, consume less energy and result in lower thermal losses than traditional machines. *Find out how on page 6.*



Attractive interior design
Our elevator design concepts are the work of renowned professionals and designers, who unite attractive interiors with practical durability.
See examples on page 8.

Excellent service throughout your building's lifecycle
KONE offers full service throughout your building's lifecycle. Our expertise in traffic analysis means your building will have the right elevator capacity to ensure smooth People Flow.™ We also offer flexible KONE Care™ maintenance and modernization services to keep things running smoothly.

Elevator specification in three simple steps

Specifying the optimal elevator solution for your needs takes just three simple steps:

1. Specify your elevator based on the expected People Flow™ and size of your building.
2. Choose a car design to suit your building interior from our selection of professionally designed cars or create a custom look and feel by choosing from the wide selection of materials in the KONE Design Collection.
3. Select additional options together with your sales representative to further enhance your elevator solution.

The KONE MonoSpace® advantage

The secret behind KONE MonoSpace® is the permanent magnet, gearless KONE EcoDisc® motor. KONE EcoDisc® weighs less than half of a conventional geared traction machine and is approximately twice as efficient.

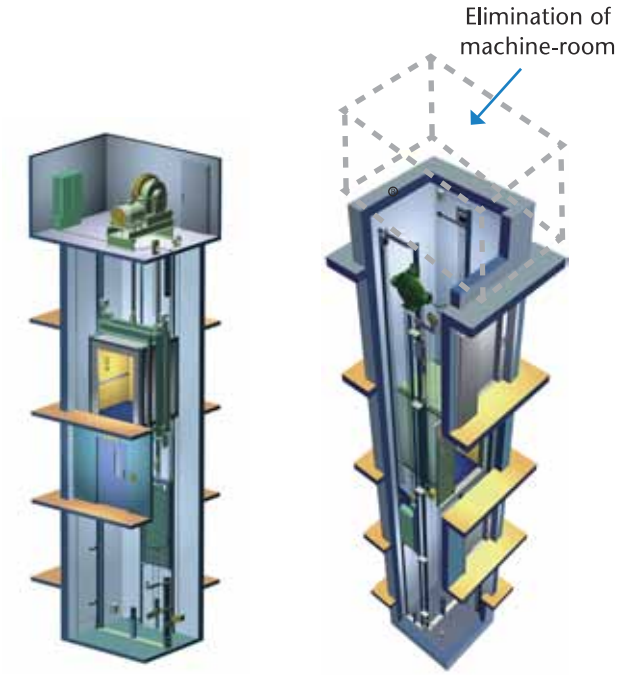
KONE MonoSpace® does not need a separate machine room, thanks to the KONE EcoDisc® hoisting motor, which is so compact that it can be located in the shaft.

The elevator and all machinery are installed inside the shaft, simplifying the building interface and saving space for more profitable use.

A smooth and quiet ride
With the low rotational motor speed of KONE MonoSpace®, you get smooth ride quality and comfort. The V3F variable frequency drive ensures a superior acceleration/deceleration profile, better floor-to-floor travel times, and precision leveling. The modular LCE-M control system is designed by KONE and uses serial communication with self-diagnostic capability to offer excellent reliability. The end result is a ride experience that will help set your building apart.

A wide range of applications
In addition to standard passenger elevators, KONE MonoSpace® technology is used for special applications such as service, scenic and bed elevators.

A focus on quality and safety
Quality is one of the key drivers at KONE. High quality People Flow™ solutions enable people to move smoothly, safely, comfortably, and efficiently. Reliable products maximize the performance of our customers' buildings. Our commitment to quality covers the entire product lifespan, from manufacturing and installation to ongoing maintenance.



Conventional Lift System

KONE machine-room-less Lift System

Industry standards and requirements
All KONE manufacturing units are ISO 14001 certified and meet all elevator industry standards and requirements, including:

- GB7588-2003(EN81-1 : 1998)
- Singapore SS 550:2009

KONE MonoSpace® elevator range

Max travel: up to 36 floors or 90 meters of travel

Max load: transport up to 2000 kg for passenger application
transport up to 5000 kg for freight application

Max speed: up to 2.5 m/s

Group size: up to 6 cars in 1 elevator group

* For speeds above 2.5m/s: please contact KONE sales organization, www.kone.com.

Faster installation with lower costs



Easy and cost-efficient installation
Due to the compact size of the KONE MonoSpace® machine-room-less solution, support is required only from wall-mounted brackets and a simple supporting structure on the guide rail. Installation is easier as there is no need for extensive support.

The whole installation process is both safer and faster. KONE has devised scaffold-less installation methods using special tools to erect the elevator. KONE has defined 5 Site Absolutes for what needs to be done on the building site before elevator installation can begin. When these requirements are met, the installation process is non-stop and requires minimal or no assistance from the builder.

How KONE MonoSpace® speeds up construction

- Minimal or no support required from builder during lift installation (this is subjected to completion of the 5 Site Absolutes)
- Scaffold-less installation

Taking eco-efficiency to new heights

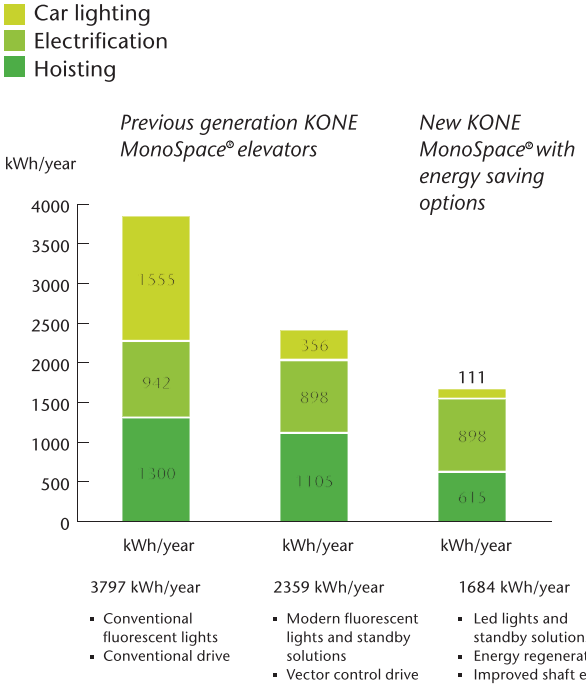
Save energy and costs. It is a simple calculation with impressive results. KONE MonoSpace® elevators, powered by the KONE EcoDisc® hoisting motor, consume less energy than other gearless elevators. KONE EcoDisc® also creates less thermal losses than traditional machines, which brings direct savings in cooling and ventilation costs.

But the hoisting motor is not the only thing that can reduce the total energy consumption of an elevator. KONE has analyzed every function and option in order to reduce the total energy consumption.

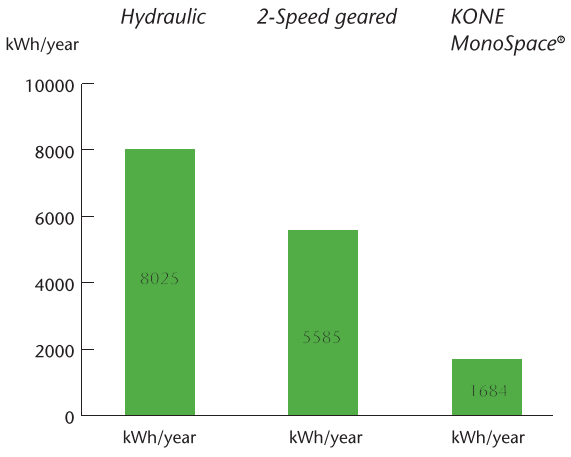


The eco-efficient KONE EcoDisc® hoisting system

MonoSpace® energy consumption



Energy consumption compared to previous technologies



* The basis for the calculations is: an elevator speed of 1 m/s, a load of 1000 kg, 150,000 starts/year, 350 running hours, a travel height of 12 m and 5 floors.

A green hoisting system
The KONE EcoDisc® hoisting system made hydraulic and geared hoisting units obsolete. With this highly efficient drive system, KONE MonoSpace® has become the industry leader in elevator energy efficiency.

Regenerative drive
When the car is descending with a heavy load (or ascending with a light load), it contains potential energy. The regenerative drive recovers this energy, saving up to 20% of the total energy consumed by a typical 13 person KONE MonoSpace® elevator.

Further energy savings with standby mode
Lights, signalization and ventilation can consume a considerable amount of energy even when the elevator is not moving. In a residential elevator this can represent a considerable portion of yearly energy costs. KONE offers the following options to minimize energy consumption:

1. Automatic car light operation turns off the lights when the car is not in use and on again when the car is called.
2. Corridor illumination control automatically controls the light on the destination floor.
3. The power stage of the drive is set to sleep mode when not in use.
4. Signalization displays are dimmed when not in use.
5. The car fan is turned off when the elevator is not in use.

Eco-efficient car lighting
Surprisingly, the car lighting can account for up to 40% (1100 kWh) of an elevator's energy consumption. Halogen spots have been replaced with eco-efficient, long-lasting LED and modern fluorescent lighting technology. The lights are optimized for maximum efficiency and natural color saturation. LED lights last up to 10 times longer than traditional halogen bulbs and use up to 80% less energy.



Professionally designed or customized interiors





An extensive range of customizable interior designs helps you to create elevators that are a perfect fit for your building.

Award-winning design

Good Design award 2008

KONE design has won the prestigious Good Design award granted by the Chicago Athenaeum and The European Center for Architecture Art Design and Urban Studies

At KONE, we see design as an essential part of research and development. Design and technology work together to create the best possible passenger experience.

A perfect match for your building

KONE brings a new dimension to advanced elevator technology design that turns an elevator ride into an elevator experience. With light, color, patterns, and materials you can create a unique elevator ambience. You can continue the building's architectural appearance from the facade, through the lobby and into the elevators. A unique elevator provides more than just a ride – it provides an experience that stays in passengers' minds and adds value for the building and its users.

You can select from a set of professionally designed elevator designs or customize the elevator cars to match your building.
To see the full range of options, please see the KONE Design Collection catalogue.

Replacing an existing elevator with KONE MonoSpace®





When you replace an existing elevator with KONE MonoSpace®, you not only gain benefits – such as eco-efficiency, a smooth ride, and reliable operation – you also increase space efficiency and accessibility.

Two choices for replacement
Full replacement can be done in two ways. With traditional full replacement, all of the equipment, including the landing doors, is replaced, giving you a completely new elevator. On the other hand, if the landing doors are still in good condition, you can keep them and replace all of the equipment inside the shaft. This eliminates the cost of dismantling and replacing the landing doors and finishing as well as cleaning the landings.

Two types of space efficiency
KONE MonoSpace®uses building space more efficiently in two ways. Firstly, it is a machine-room-less elevator, so you can use the space in the old machine room for another purpose. Without the need for a machine room on the roof, the elevator can also serve the top floor or attic of the building. The Maintenance access panel (MAP) is integrated in small cabinet, which is only 85 mm thick, in the wall of the topmost landing entrance. Without occupying any shaft space, this arrangement makes maintenance safe and convenient. Secondly, the size of the car can be flexibly designed in order to produce the largest possible car with the existing shaft dimensions. In many cases it will be possible to increase the car size in order to carry more passengers, or to allow building residents to carry large items such as furniture or bicycles.

Wide-opening door
A large range of landing doors is available in order to provide the widest opening doors for the size of the existing shaft. This provides greater accessibility for passengers – especially important for people pushing baby carriages or those in wheelchairs. In a busy office building, for example, a wide-opening door allows passengers to enter and exit the elevator more quickly.

Awards and certifications

1/2008 KONE is chosen as one of the "2007 Annual Top 10 International Brands for China Energy-Efficient Buildings" by the China Ministry of Construction

12/2007 KONE is awarded 2007 Best Real Estate Supplier at the China International Real Estate & Architect Fair (CIHAF). KONE MonoSpace® was recommended one of the "2007 Recommended Components & Products for Energy-saving Construction"

2002–2007 In the survey organized by the customer committee of the National Construction Mechanic Equipment & Construction Machinery Branch of the China Quality Association, KONE was graded by customers as "Satisfied elevator", "Satisfied escalator", "Satisfied autowalks", and "Satisfied aftersales service"

2002–2007 KONE is named "Recommended Components & Products for National Demonstration Projects of Housing" by Housing Industrialization Center, MOC, China

2006 KONE Elevator recommended as "National Customer Satisfied Brand" by CFCP (China Foundation of Consumer Protection)

12/2005 KONE MonoSpace® cited by Legambiente Lombardia (Environmental Coalition of Lombardy), the government of the Region of Lombardy, the Technical University of Milan, and Bocconi University for environmental friendliness during their fifth annual "Friend of the Environment Awards for Innovation". The awards are given for "Efficiency in Consumption and Eco-design: solutions for sustainable development".

06/2005 Congratulations on the 100,000th KONE MonoSpace® elevator, which was installed in the National Grand Theater, Beijing, China

07/2003 KONE wins Premio Quartrium Award for originality, Spain

03/2000 KONE solutions chosen for Thermo-Staete, the most energy-efficient office building in the Netherlands

04/1999 KONE wins the Construmat 1999 Prize for Innovative Technology, Barcelona, Spain

02/1999 KONE is chosen for "Eyecatcher", a Swissbau showcase green building, Switzerland

03/1998 KONE wins Electrical Industry's (SET) Annual Award, Finland

10/1997 KONE wins Top Prize for Innovation at the SAIE '97 Fair, Bologna

06/1997 KONE wins the Grand Prix '97 at the CONECO fair, Bratislava, Slovakia

09/1996 KONE wins the Grand Prix at the Building Fair, Prague

KONE MonoSpace® milestones

03/1996 KONE MonoSpace® announced

1998 World's longest test shaft (329 m), Tytyri Elevator R&D Center, Finland

01/2007 The latest KONE TranSys™ (a goods elevator based on MonoSpace® technology) loads up from 2000kg to 5000kg

01/2007 Additional speeds up to 3.0 m/s for KONE MonoSpace® Elevator

04/2008 200,000th KONE MonoSpace® elevator delivered

KONE references



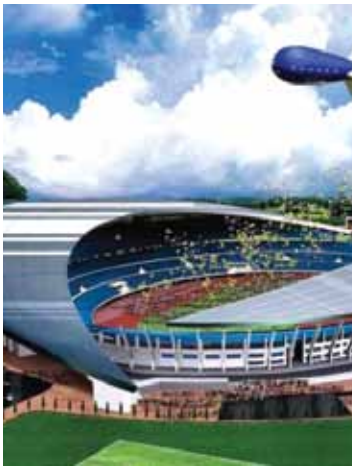
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Floridian, Singapore



313@Somerset, Singapore



Terengganu Stadium, Malaysia



Lumina Kiara, Malaysia



The Strand, Malaysia



KEM Office, Indonesia



Centerpoint, Vietnam



Suvarnabhumi International Airport, Thailand



King Power Complex, Thailand



Central World, Thailand



Cam Ranh Airport, Vietnam

KONE provides innovative and eco-efficient solutions for elevators, escalators, and automatic building doors. 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 central to all KONE solutions. This makes us a reliable partner throughout the lifecycle of your building. We challenge the conventional wisdom of the industry. We are fast, flexible, and, with such innovations as KONE MonoSpace®, KONE MaxiSpace™, and KONE InnoTrack™, we have a well-deserved reputation as a technology leader. You can experience these innovations in architectural landmarks such as the Trump Tower in Chicago, the 30 St Mary Axe building in London, Schiphol Airport in Amsterdam, and the Beijing National Grand Theatre in China.

KONE employs over 34,000 dedicated experts to serve you in over 50 countries.

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