$Skyrise^{TM}$ 

## OTIS



#### WHO ELSE BUT OTIS...



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# Rising to meet the highest of challenges

Skyrise is Otis' premiere high-speed elevator system, designed and engineered for the world's most prestigious skyscrapers and high-rise residential and commercial buildings.

Our high-rise expertise is rooted in innovation and experience. From concept to completion, let us create customized solutions to meet the unique needs of your project.

| Type of Deck      | Duty Range            | Speed Range | Max. Stops | Rise |
|-------------------|-----------------------|-------------|------------|------|
| Single Deck       | 900–4500kg            | 2–10m/s     | 140        | 500m |
| Double-Deck       | 1150/1150–2250/2250kg | 4–10m/s     | 140        | 400m |
| Super Double-Deck | 1350/1350–1800/1800kg | 4–10m/s     | 140        | 300m |

Shanghai World Financial Center; Shanghai, China Completed 2008; 492 meters

30 elevators (16 super double-deck); 34 escalators

#### ENERGY AND SPACE EFFICIENCY

# Pioneering technology to give you greater efficiency

## Total energy savings of up to 50%

Permanent magnet synchronous machines use up to 50% less energy.\* LED lighting with standby mode is up to 80% more energy efficient than conventional fluorescent lamps.

The energy-efficiency of Skyrise systems have been validated based on standards set by Verein Deutscher Ingeniure (VDI). Skyrise systems achieved an overall "A" energy-efficiency class rating.



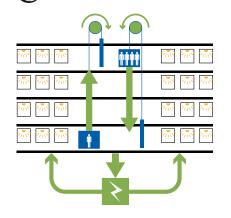
\*Compared to traditional direct current machines

## Capturing energy that's normally lost

ReGen<sup>™</sup> drives deliver substantial energy savings while helping to meet or exceed worldwide standards.

ReGen drives capture energy that's usually lost and feed it back into the building's internal electrical grid so it can be reused by other building systems.

### ReGen

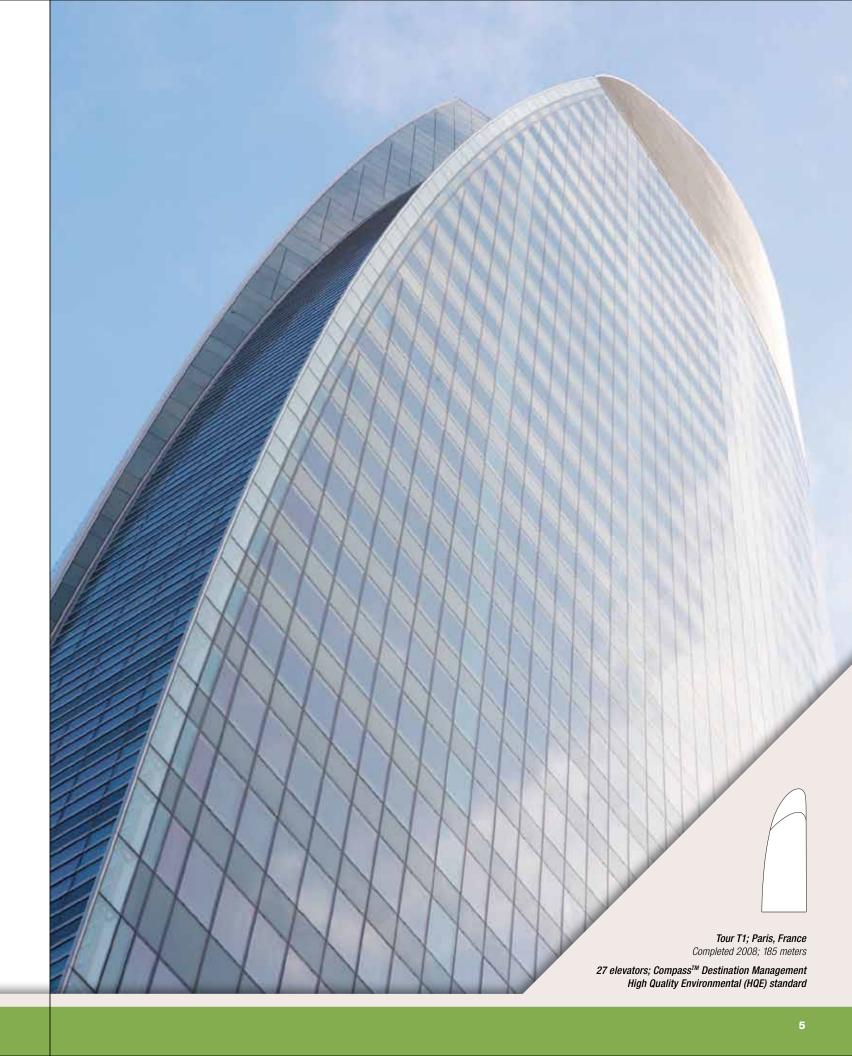


#### **Smaller machine rooms**

Skyrise systems require a smaller hoistway, freeing up valuable core space inside your building. Permanent magnet synchronous machines are 40% smaller,\* and when paired with Otis' drive technology and control system, which are 50% smaller than traditional high-rise control systems, they enable a smaller machine room.



Permanent magnet synchronous machine





#### SPEED AND COMFORT

## Taking passenger experience to a higher level

#### Compass<sup>™</sup> Destination Management for a faster and more direct route

When combined with Otis' Compass Destination Management system, Skyrise transports passengers to their destinations up to 55 percent faster. Passengers simply enter their destination floor to receive an elevator assignment for the fastest, most direct and least crowded route to their destination.

## Reduced noise and vibration for a smooth ride

Thanks to aerodynamic car and cab design and ULTRA roller guides, passengers can enjoy a comfortable ride with minimal noise and vibration.

### Increased passenger comfort

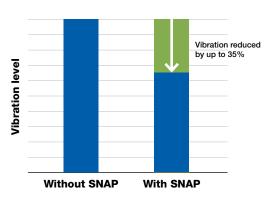
Skyrise features Otis' most innovative technology, such as advanced SNAP motion control. Using this technology, Otis is able to manage the finest degree of motion control to reduce vibration and ensure smoother starts and stops at the beginning and end of each elevator ride.

#### Car vibration

SNAP motion control increases passenger comfort by reducing car vibration by up to 35% at the start and end of each elevator run.







#### SAFETY AND QUALITY

## Raising the bar in safety standards

#### **World-class testing facilities**

Otis' products are globally engineered and rigorously tested at state of the art engineering and test facilities located in the United States, Japan, Germany, Korea and China.

We operate one of the world's tallest elevator test towers in Shibayama, Japan. This test tower stands 505 feet (154 meters) above ground and 89 feet (27 meters) below ground.

The Bristol Research Center in Bristol, Conn., United States, is home to the Otis Quality Assurance Center and North America's tallest elevator test tower—383 feet (117 meters) high.

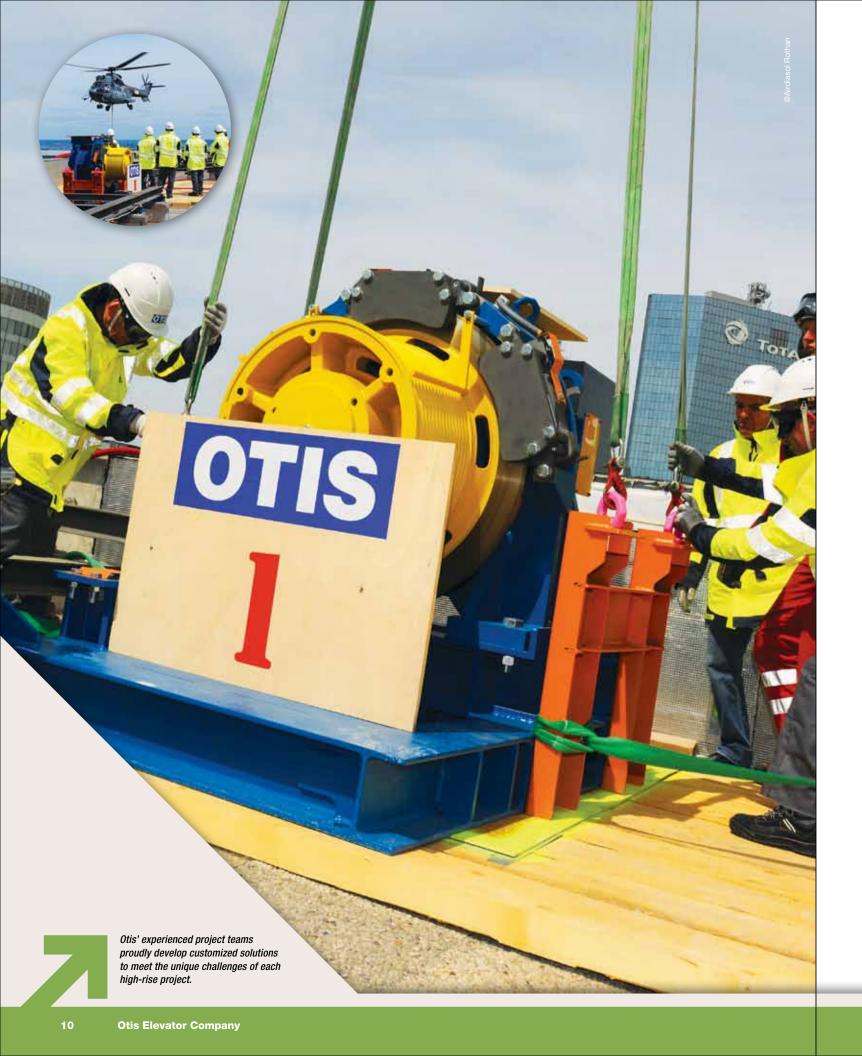
## Constant monitoring for constant peace of mind

A controller monitors the elevator system's safety circuits, performance and operational setting hundreds of times per second. This electronic fault monitoring results in accurate fault detection and precise diagnostic information that our mechanics can use to quickly pinpoint and resolve an issue.

## The right maintenance at the right time

The right maintenance at the right time extends the life of the elevator. Otis offers a variety of maintenance programs and building support systems to fit customers' needs and equipment types. We have standardized work practices around the world and can tailor a maintenance program specifically to the environment.





#### MANAGEMENT INSTALLATION

## Reaching new heights with great service

### **Dedicated teams for the**

Successful high-rise projects require a specialized project team to anticipate building, Otis employees use the the difficulties and complexities that will safest, most efficient installation arise during construction. Our project teams will partner with you through each challenge and develop innovative solutions to meet the unique needs of your project.

Otis has leveraged its extensive high-rise experience to develop a world-class training program: Otis' Major Project Management University. We train and develop talented project managers around the world who bring a wealth of knowledge and experience to each project and are committed to your success.

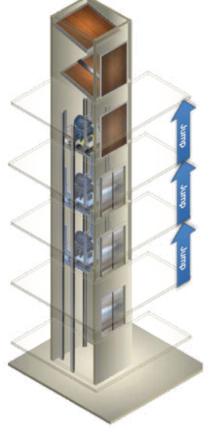
#### Refined processes for a most demanding challenges more efficient installation

To ensure the best results for your techniques, such as scaffold-less installation, traditional jump lifts and self-climbing jump lifts.

In fact, Otis developed the self-climbing jump lift, an efficient installation technique, which optimizes safety, delivery time and logistics.

#### Benefits of the Self-climbing Jump Lift

- Can be installed early in the construction process, after the first few floors are complete
- · Uses a hydraulic push-and-pull system so cranes are not required
- Reduces interruption to other building contractors
- Accelerates job site logistics with each floor jump, requiring only four hours to complete
- · Safer than conventional methods such as cranes or construction hoists



Self-climbing Jump Lift

MOVING FORWARD...

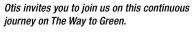
## Join Otis on our journey to **The Way to Green**

ment to continually moving our company and our customers forward. commitment of our people and our

can help your building achieve Leader- suppliers and our customers closer ship in Energy and Environmental Design (LEED) and Building Research Establishment Environmental Assessment Method (BREEAM) certification.

The Way to Green is about our commit- We recognize that The Way to Green is an ongoing effort. But with the resources around the world, we know Skyrise and its energy-efficient features we can move our company, our to a shared goal of using greener products, services and solutions.









**Otis Elevator Company** is the world's largest manufacturer and maintainer of people-moving products including elevators, escalators and moving walkways.

With headquarters in Farmington, Connecticut, Otis employs 60,000 people globally, offers products and services in more than 200 countries and territories and maintains over 1.8 million elevators and escalators worldwide.

United Technologies Corp., based in Hartford, Connecticut, is a diversified company providing high technology products and services to the building and aerospace industries.

www.otis.com