

### NCE ESCALATOR



# Setting

The tradition of innovation continues with the NCE an environmentally-friendly escalator with a variety of LED lighting options and an extended rise of 39' - 4".

# the standard



First escalator for public use - Paris Exposition, 1900

Over 100 years ago, Otis invented the escalator. Since that time, innovation has been a constant theme in Otis' development as one of the world's leading escalator manufacturers. Otis pioneered initiatives like the glass balustrade and the cleated step riser which have moved escalator technology forward and have been adopted by the industry as a whole.

### Environmentally Friendly

Proven Reliability

Aesthetics

### Safety

## Environmentally Friendly

Leading to a green future

### **MINIMAL LUBRICATION**

A highly-efficient automatic lubrication system maintains proper lubrication to all vital components while utilizing up to 98% less oil than conventional systems. This, combined with sealed-for-life bearings, minimizes environmental impact.







1 Quart

40 Quarts

At Otis, we are committed to greening the entire lifecycle of our products and processes. We have taken measures to reduce the impact of the NCE escalator on the environment.

### LED LIGHTING

Otis has replaced conventional lighting with low-energy LED lighting. This allows for a variety of lighting options while considerably reducing the amount of electricity consumed.

### **ETA PLUS**

An electronic power monitoring system controls the escalator's motor torque based on load. Sensors installed at each landing compute the number of passengers at any given time and signal the power system to adjust torque output accordingly. Whenever the escalator is carrying less than its rated load, the system applies less torque, resulting in an overall reduction in energy use.

# Reliability

A key design focus for all Otis products



Otis' goal is to ensure that a typical NCE installation with average passenger traffic load achieves a lifetime of at least 20 years without major overhaul.

At all production stages, rigorous assembly controls are implemented which compare each operation against a strict tolerance. And before each NCE system is shipped, it undergoes a series of final quality tests unique to Otis.

### AS AN OPTION

You may add Otis' EMS Panorama<sup>™</sup> system - an interactive system that allows you to monitor, control and gather information from your escalators and elevators.



# Aesthetics

A wide range of design options

Modern aesthetic options allow the NCE escalator to fit any building's design needs

### LED LIGHTING OPTIONS











Balustrade lighting 1

Natural aluminum with grooves (standard)



Aluminum with grooves, black powder coat



Stainless steel pattern with black grooves

Traffic flow light

Understep lighting



Continuous skirt panel lighting <sup>1</sup>



Silver-grey, powdercoated aluminum (standard)



Gold finish anodized aluminum



Silver finish anodized aluminum



Satin finish bronze



Satin finish stainless steel

### BALUSTRADE



Clear glass (standard)



Green glass



Bronze glass



Satin finish stainless steel



Grey glass

### **STEPS**



Jet black powdercoated aluminum (standard)



Silver-grey, powdercoated aluminum (standard)



Natural aluminum



Black with Guardian® low-friction powder coating (standard)



Satin stainless steel with transparent Guardian<sup>®</sup> low-friction powder coating

<sup>1</sup> LED lighting available in different colors. Contact your Otis representative for details.

### FLOOR PLATE







### Safety Innovative technology puts safety first

Otis prides itself on the comprehensive safety features it builds into its products. The NCE escalator is no exception.



### GUARDIAN<sup>®</sup> SKIRT PANELS WITH BRUSH GUARDS

Safety brushes promote passenger safety by gently guiding passengers away from skirt panels. Guardian skirt panels reduce side friction, minimizing risk of objects being caught.



### YELLOW DEMARCATION LINES

Located on each step, these lines provide additional visual safety by guiding passengers away from step edges. Yellow plastic inserts are also available as an option.



### COMB PLATE SAFETY DEVICE

The comb plate protection switches are located on two sides of each comb plate. If debris is lodged between the comb and steps, the comb plate will automatically lift upwards and stop the escalator.



### EMERGENCY STOP BUTTON

Located on both the upper and lower landings and mounted on posts. Pressing the red button will safely stop the escalator.



### HANDRAIL ENTRY BOX SAFETY DEVICE

The tapered handrail entry box safety device is in the handrail entry box of the upper and lower landings. If debris is inserted in the handrail entry point, the safety switch will activate, stopping the escalator.



### FLOORPLATE SAFETY DEVICE

A safety switch is installed under the floorplate to ensure proper floorplate positioning. If the floorplate is not properly aligned, the safety switch will activate, stopping escalator operation until the floorplate is properly closed.



### TRACTION WHEEL HANDRAIL DRIVE

This device synchronizes step and handrail speeds for greater passenger safety.

### MOTOR THERMAL PROTECTION

The thermal protection switch is located in the motor coil. If the motor temperature exceeds 155°C the thermal protection sensor will automatically shut down the escalator.



### BROKEN STEP AND CHAIN WHEEL CONTROL CONTACT

This contact is located at both landings. It will be activated if either a step or chain wheel is broken.





### turning positions of the upper and lower landings. If the step is

MISSING STEP DEVICE Two sensors are located at the

missing or installed incorrectly, the sensor will send a signal to the control system to shut down the escalator.

### BROKEN STEP CHAIN DEVICE

The safety switch is located on the tension carriage in the lower landing. If the step chain breaks or stretches abnormally, the safety switch will stop the escalator.

## Specifications

The NCE escalator is a versatile solution for commercial buildings, shopping malls, hotels, casinos, airports, and hospitals.

#### MAXIMUM RISE

39'- 4" (12 m)

### **MINIMUM RISE**

4'-11" (1.5 m)

### STEP WIDTH

24" step (600 mm) 32" step (800 mm) 40" step (1000 mm)

#### SPEED

100 feet per minute (0.5 m/second)

MACHINE

AC induction motor Helical worm gear

### POWER

10.1 hp, 12.1 hp, 17.4 hp, 24.9 hp

### MACHINE ROOM TEMPERATURE

39°F - 104°F (4°C - 40°C)

#### MAXIMUM RELATIVE HUMIDITY

80% (non-condensing)

### Benefits

### **ENVIRONMENTALLY FRIENDLY**

At Otis, we are committed to greening the entire lifecycle of our products and processes. We have taken measures to reduce the environmental impact of the NCE escalator on the environment.

### RELIABLILITY

Otis tests all components to ensure an average life expectancy of at least 20 years without major overhauls.

#### **AESTHETICS**

Modern aesthetic options allow the NCE escalator to fit into the design needs of your building. Our finish and LED lighting options exceed the most discerning color and texture requirements.

#### SAFETY

Innovative technologies including elongated newel, comb lighting and missing step device keep safety first.

### Features

- Automatic lubrication system applies lubrication to all critical components, dramatically reducing annual oil usage by up to 98%.
- Eta+ power monitoring system controls energy consumption by monitoring the number of passengers and applying appropriate torque levels.
- Tapered handrail entry box hides the handrail return into the guard area and discourages passengers from getting too close.
- Traction wheel handrail drive helps synchronize step and handrail speeds for greater passenger safety. Varying step and handrail speeds could cause passengers to lose their balance.
- Guardian<sup>®</sup> skirt panels with brush guards reduce side friction and help minimize clearances between the step and skirt. This reduces the risk of objects getting caught.
- One-piece, die-cast aluminum steps have cleated treads and risers that mesh with each adjacent step. This design, developed by Otis and adopted by most manufacturers, eliminates multiple parts and enhances safety.



#### WWW.OTIS.COM

ESC-5105 (1009) AKS © Otis Elevator Company 2009 All Rights reserved