



NIDEC ELEVATOR

REV.2-Aug2017

MODERNIZATION

NIDEC ELEVATOR



CONTENTS

Company Profile	001
Nidec Modernization	003
Control System Modernization	006
Machine Modernization	007
Door Modernization	008
Destination Based Dispatching System	009
Portfolio	011
Fixtures and Cabin Finishes	019

Nidec Elevator

Nidec – making industrial history for over 100 years.

Our presence is global. Our products are manufactured and used across every continent. Our engineering expertise extends from the very small to the incredibly large. Our Nidec family embraces over 100,000 people working all over the world.

In every industrial segment we manufacture for, our foremost intent is to provide exceptional value, through products engineered to be the very best and through building lasting relationships with our customers and the communities we live in. Nidec Elevator brings these traditional values to our partner companies in the global elevator market.

With several prominent options in the global elevator industry, when you next explore elevators, we ask that you think of Nidec first. Partner with Nidec to discover affordable quality, responsive engineering and an absolute commitment to safety.

The Nidec marque encompasses well-known controller and machine manufacturers on both sides of the Pacific Ocean. You will find our elevator products in iconic structures ranging from the Statue of Liberty in New York City to iconic business towers in major cities. Installed in public buildings, airports, universities, residential, industrial, even on off-shore drilling platforms – Nidec engineers the optimal solution. Working directly with you, we will drive the elevator industry to ever-greater efficiency, safety, and value.

Think Elevator. Think Nidec.

Kinetek

Kinetek manufactured the best elevator components in the world, and it provides the most diverse and sophisticated technology and product's quality. Kinetek was acquired by the Nidec Group in 2012. It continues to provide field-proven elevator components across the Pacific Ocean from North America under the brand of Nidec, as well as becoming the core subsidiary of Nidec Elevator.



The Statue of Liberty Modernization Project

What is Modernization?

Modernization is a solution for existing elevators. As time goes by, existing machines, controllers and parts might not function as well. Parts of the elevator may be hard to replace, but also difficult to install new elevator due to cost, labor, hoistway and other installation limitations. Modernization end-user solution can modernizes the partial or full elevator system, as well as ensure the elevator safety and efficiency without replacing a complete new elevator.

Upgrade
Standard
Compliance

Reduce Fault and
Maintenance Cost

Improve Energy
Efficiency

Why Choose NIDEC?

- ▶ More than 40 years of modernization experiences, field-proven in the America
- ▶ One source solution & scalable product range
- ▶ Professional modernization team
- ▶ Global service network

Nidec Elevator Modernization- Modernize to modern

With more than 40 years modernization experiences, we provide concrete solution for replacing parts or even the whole elevator in a short period of time. Before modernization, Nidec pre-engineers will set up a scalable solution for every customer to ensure the best ultimate result. Therefore, in terms of cost, time and efficiency, Nidec modernization is a highly practical solution for customers.

Quick
Replacement

Professional
Modernization
Service

Customizable

Nidec Modernization – Scalable Solution

Depends on the job condition, scalable solution allows customer from replace only the control system, machine and the door operator. Nidec's scalable solution provides wide range of product line that fits the project according to the hoistway and different configurations.

2.Control System

- Control、 Group control
- COP、 LOP
- Travelling cable、 Hoistway cable
- Other hoistway components

1.Traction System

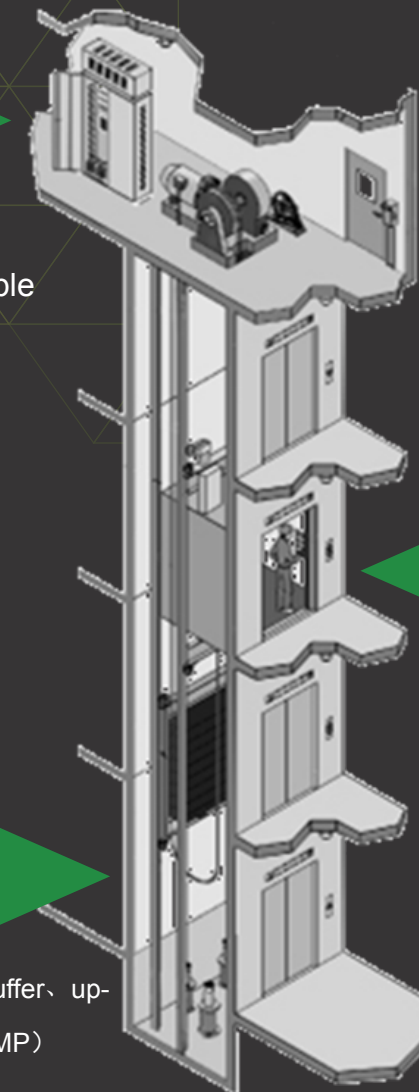
- Machine
- Bedplate
- Deflector sheave
- Rope

3.Door System

- Car door operator
- Hall door panel
- Track and hanger

4.Safety Components

- Safety components
(over speed governor、 safety gear、 buffer、 up-going overspeed protective device、 UCMP)
- Guide shoe、 Guide rail support、 Counter weight



NIDEC MODERNIZATION

Nidec Elevator provides complete package modernization utilizing our 30 years overseas modernization experiences; we offer engineer solution that will fit any existing hoistway dimension. We also provide cabin, finishes and fixtures.

Modernization Solution	A	B	C	D
Control System				
COP Fixtures				
LOP Fixtures				
All Plug-in Cables (incl. Traveling Cables, Hoistway & machine-room wiring)				
Inspection box				
Junction box				
Pit stop switch				
Voice annunciation unit				
Intercom set				
Traction machine (Geared/ Gearless ACPM)				
Machine bed plate				
Door operator				
Safety components				
Others				

Additional features: Destination Based Dispatching System

CONTROL SYSTEM MODERNIZATION

- Control System Modernization Advantage :
1. Eliminate the breakdown of electronic components aging
 2. Eliminate the wire failure
 3. Eliminate electrical switch aging caused by failure
 4. Add rope device to achieve the elevator overspeed protection and increase elevator safety factor

- Control System Modernization :
1. Control cabinet
 2. Full-set cables
 3. COP and LOP
 4. Hoistway switch

With more than 200,000 installations worldwide, Nidec Elevator is on the forefront of innovative control system in the industry. Nidec executed enormous projects from high profile to high rise, from simplex elevator to 10 car group control for different building profiles. Our control system can interface with existing AC motor, door operator and fixtures. Nidec offers the most diverse and comprehensive elevator control systems that provide comfortable, safe and the most reliable riding experience.



TRACTION SYSTEM MODERNIZATION

Power Consumption



Heat Impact



Noise Impact



Nidec ACPM machines greatly reduce power, heat and noise, which provide efficiency and maintenance free user experience.



Machine Modernization advantages :

1. Eliminate the failure caused by the aging of the traction machine and the poor performance
2. Compliance with UCMP over speed protection
3. Elevator Safety Run

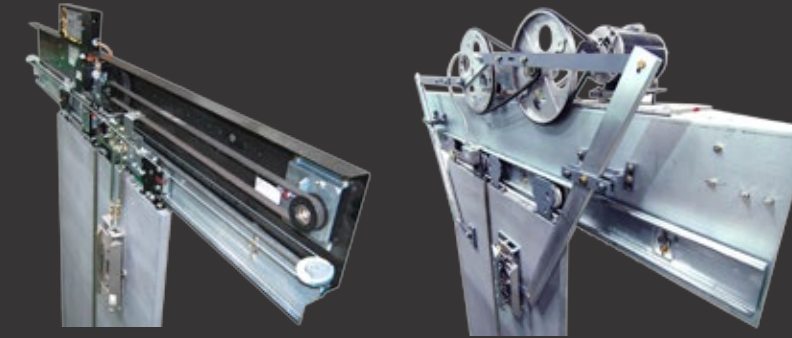
Machine Modernization :

1. Elevator Machine
2. Rotary encoder
3. Machine bed plate and guide wheel
4. Rope
5. Rope Head

Nidec Elevator provide a variety of traction machine series including 1:1 and 2:1 solution. Our modular design fits virtually any shaft dimensions. The pre-engineered solution allows direct replacement for geared application.

The sub-structure requires no fabrication and it fully support the existing structure, rope, rope angle and diameter. Nidec ACPM gearless machine can save up to 30 %-40% energy, which greatly helps to reduce the power, heat, noise generation and maintenance expense.

DOOR MODERNIZATION



Doors are one of the common replacements in elevator modernization and Nidec Elevator provides a variety of door modernization options. This includes door operators, cab doors, and door replacement with customize features. Fire rated doors can also be provided according to code requirements. Our door clutch can couple with existing door roller to work with existing landing door. Nidec also provides standard and premium door operator series upgrades that fit the elevator. The ranges of door operator modernization are :

1. Motor and Control
2. Door operator and landing door panels

Door Modernization Advantages :

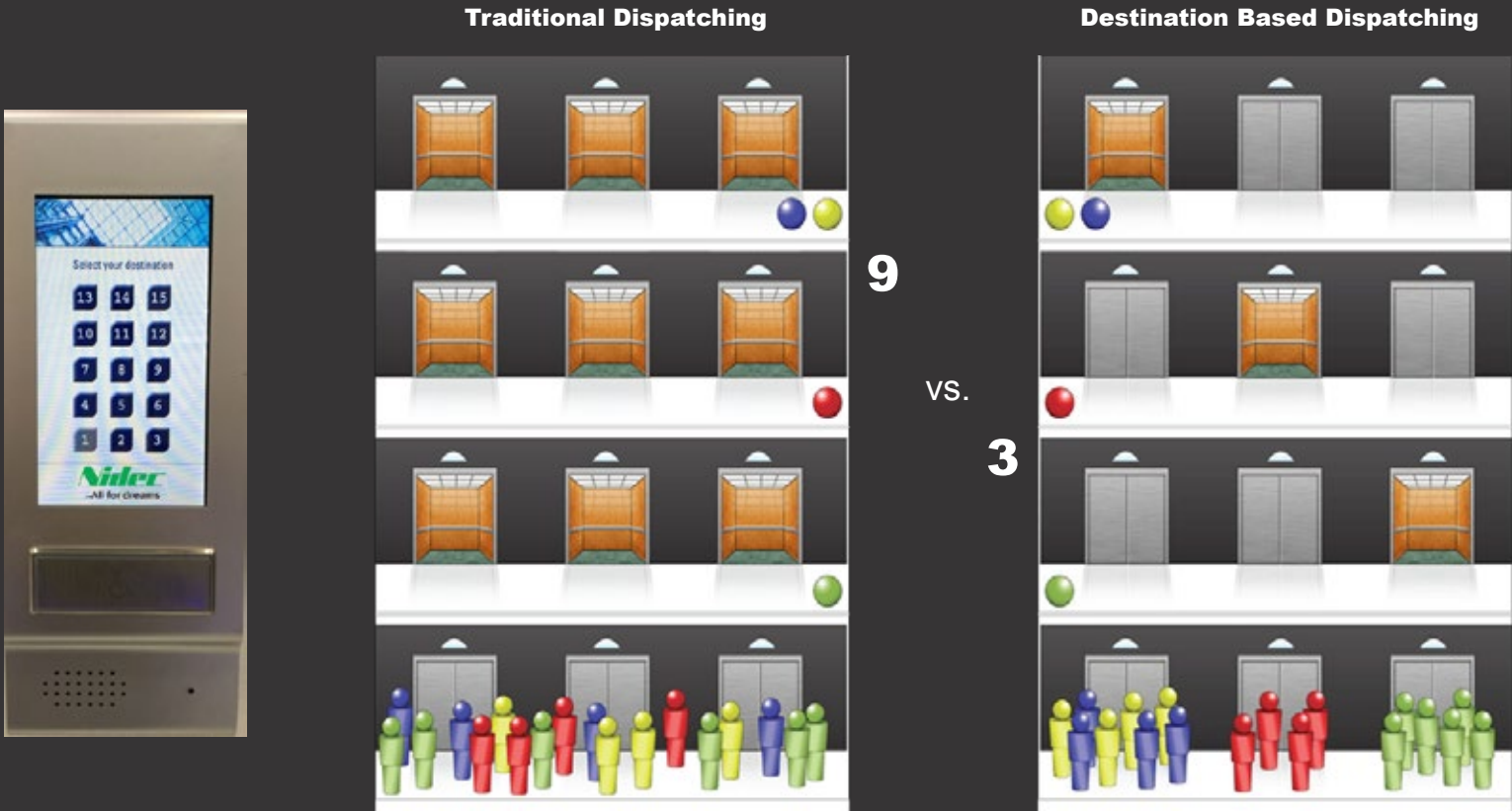
- Dead loop control
- PM motor with high performance, robust design, low noise and high response rate
- Four default speed curve selection, additional speed curve program design can be applied
- Editable interface, simple parameter setting
- Separate control unit to meet the minimum top level requirements
- 100W motor high torque output, drive more than 350kg load belt rated acceleration
- Meet the TUV EN81-58, B476-22 fire requirements of the hall door system
- Long Life-up to 100,000 times



DESTINATION BASED DISPATCHING SYSTEM (DBD)

What is Destination Based Dispatching?

The Nidec DBD system utilizes a sophisticated group dispatcher - iCue (developed by Nidec R&D) that computes the floor requests, passengers, current traffic condition and other factors concurrently and dispatch accordingly. The user experience is enhanced from traditional dispatching and the user interface makes the learning process simple for first time users. At any DBD floor, users would have to approach a destination input device (DID), usually located in the elevator area or at the turnstile area, input their designated floor and wait for designated car. This system provides excellent crowd control in the main elevator hall and eliminates traffic congestion. The Nidec DBD systems have been installed in various job sites and results has shown a reduction in time to destination during the peak hours of up to 83%.



DESTINATION BASED DISPATCHING SYSTEM (DBD)

Nidec DBD Overlay for Modernization

Nidec developed a DBD overlay for modernization of the dispatching system. After the installation of the first car, the overlay allows the new cars to connect with the existing cars. It minimizes the time of replacing the whole car group and maximizes the installation efficiency.



Seamless Security

Nidec Elevator understands that security is a significant issue nowadays; therefore, the Nidec DBD is designed with security features to secure the well-being in everyday life. Passenger's identity validates after swiping the badge at the turnstile, and the floor will be assigned simultaneously at the turnstile. Passengers can also use security card to access the kiosks at every floor for identity verifying. The user-friendly built-in security system can also adapt to the dynamic building traffic conditions and integrated fully with the building security system.

PORTFOLIO

CASE STUDY

111 NORTH CANAL, RIVER CENTER,
CHICAGO



The building is an early 1900's vintage warehouse with numerous manual doors for original freight units. It is approximately 210 feet tall (twenty landings on the new service unit).

Project Scope:

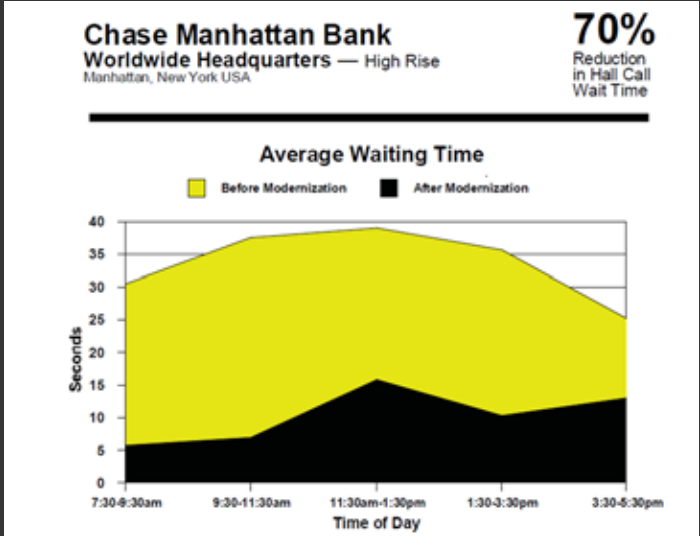
1. Modernize 10 existing passenger units. Replace four geared machines with new AC gearless machines – refurbish six retained DC gearless machines at 3.5m/s using 12-pulse SCR drives.
2. Modernize one car switch, manual freight door unit. Install new geared overhead machine at 3200kg, 2m/s.
3. Destination based dispatching system, 1 dispatcher for 10 cars and control system.

Outcomes:

1. Modernization project completed on time
2. Elevator provide efficient performance and high comfort riding experience
3. Turnstile access control application in DBD
4. Remote access, real-time monitoring, connectivity and diagnostics
5. Destination Based Dispatching system to improve group control efficiency and clearly identified passengers to their assigned car

CASE STUDY

MANHATTAN CHASE HEADQUARTERS,
MANHATTAN, NY, U.S.A



Project Scope:

- 1. Modernize eight existing passenger units, 52 floors, 1590kg, 6m/s with 12-Pulse Controls and Group Dispatcher

Statistics	Before	After
Calls	3,130	2,496
Population	3,200	5,000+

Outcomes:

- 1. Modernization project completed on time.
- 2. Elevators provide high performance comfort riding experience.
- 3. Advance Dispatching to improve group control efficiency and reduce up to 70% hall call waiting time.
- 4. Traffic control was improved when there are more passengers during peak hours

CASE STUDY

MARATHON FUTUREX,
MUMBAI, INDIA



Project Scope:

- 1. Modernize total 8 elevators, 3 complete modernizations and 5 control system modernizations.
- 2. Destination Dispatching System, 4m/s, 8 high-speed group control

Outcomes:

- 1. India high-end commercial district 4m/s high-speed complete modernization.
- 2. Elevators provide high performance comfort riding experience
- 3. Remote access, real-time monitoring, connectivity and diagnostics
- 4. Destination Based Dispatching system to improve group control efficiency and clearly identified passengers to their assigned car.

PORTFOLIO

Singapore HDB Project, 1.75m/s, Singapore



Statue of Liberty, New York, U.S.A



Malaysia ING Project,
4,0m/s, Malaysia



Hong Kong Jockey Club,
2.5m/s-3.5m/s, Hong Kong-China



Summit One Corp., 3.5m/s
Philippines



Huandao Tide Hotel,
2.0m/s, Hainan Island, China



Rosedale Hotel, 3.0m/s
Hong Kong-China



Revenue House, 2.5m/s, Singapore



PORTFOLIO

Hong Kong Hospital Authority, 1.6m/s
Hong Kong-China



Everyman Theater, 1.0m/s, Liverpool, United Kingdom



Alfred Hospital, 2.5m/s, Melbourne, Australia



Shanghai Century Tower, 2.5m/s
Shanghai China



Chase Tower, 6.0m/s, Chicago, U.S.A



CNN Tower, 2.5m/s, Georgia, U.S.A

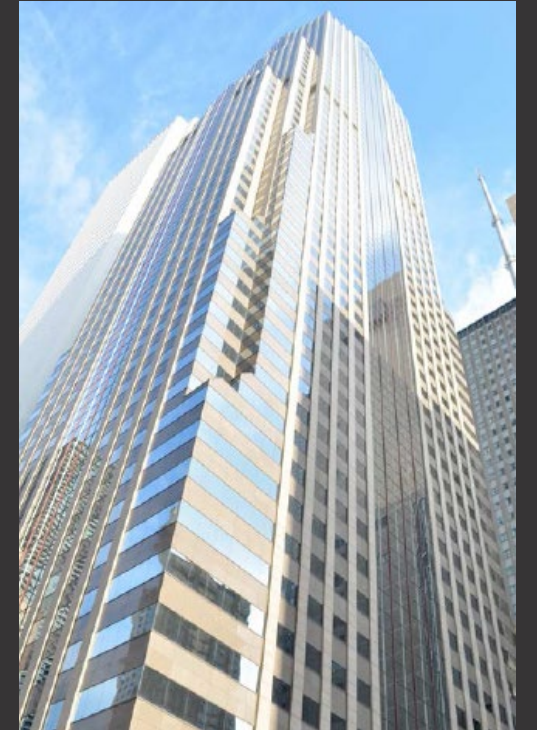


PORTFOLIO

Washington Monument,
2.5m/s, Washington, U.S.A



2 Prudential Plaza,
6.0m/s, Chicago, U.S.A



FIXTURES AND FINISHES

Nidec offers the industry's highest quality elevator fixtures. Our car operating panels, car and hall fixtures and other accessories are designed and manufactured to meet the exacting requirements of our worldwide customers.

At Nidec, we continually strive to maintain the highest levels of quality, reliability and product durability. This is our promise to you.



CABIN FINISHES

Classic Collection

STAINLESS STEEL



RED FORMICA



BLUE FORMICA



YELLOW FORMICA



Classic Flooring Finishes



Classic Laminate & Formica Finishes

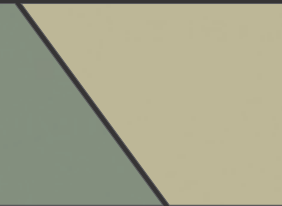
NPA-7024



NPA-0905



NPA-0925



FORMICA :::: RED



FORMICA :::: BLUE

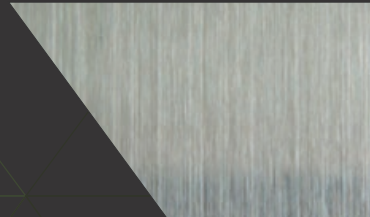


FORMICA :::: YELLOW



Classic Stainless Finishes

HAIRLINE



MARINE



SATIN



LINISHED



Classic Lighting

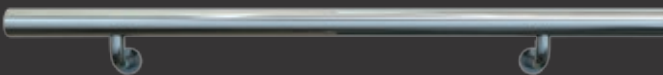


FLAT STAINLESS STEEL W/ LED DOWNLIGHTS



SUSPENDED CEILING

Classic Handrail



NHR-C1050



NHR-C1038-B

Prestige Collection

NCA-RH0832



NCA-RH0731

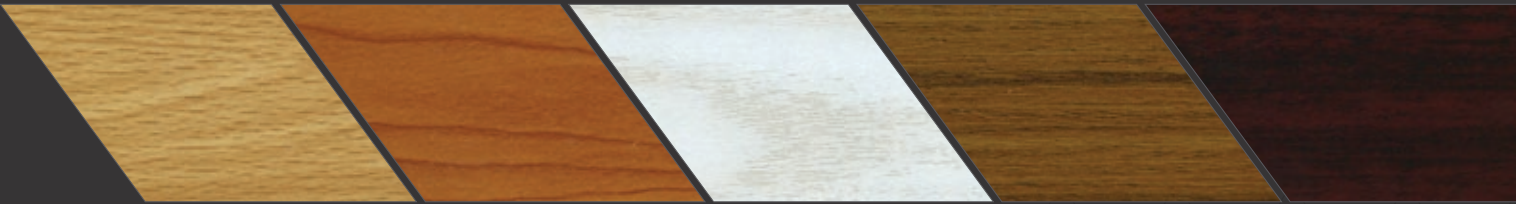


NCA-RH0618



Prestige Wood Finishes

BEECH (NPA- F-2074) CHERRY (NPA- F-7333) OAK (NPA- F-2185) TEAK (NPA- F-R0246) WALNUT (NPA- F-63-1)



Prestige Glass Finishes

NPA-RAL1014 NPA-RAL2011 NPA-RAL3002 NPA- RAL5024 NPA-RAL6019 NPA-RAL6034



Prestige Handrail Finishes



NHR-RH06F1

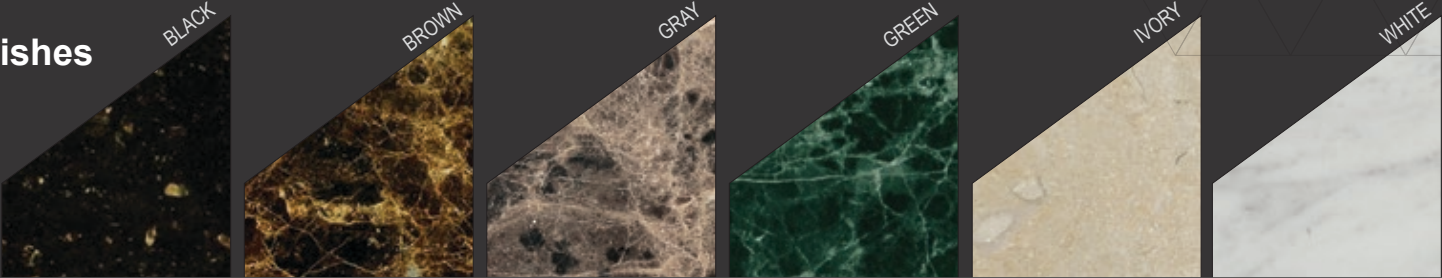


NHR-RH0J9707

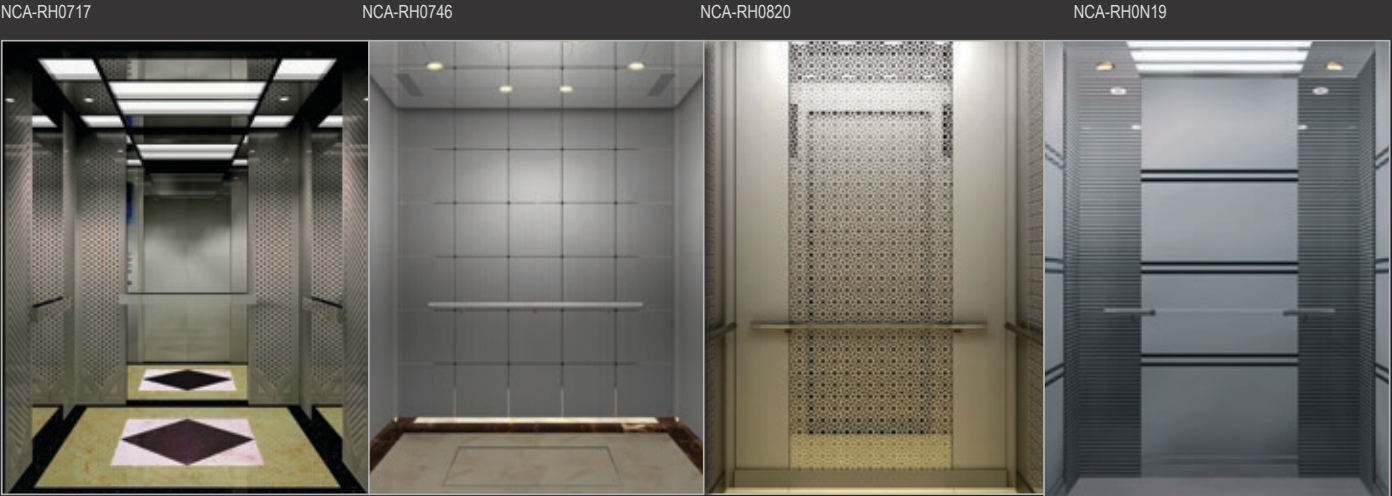


NHR-RH06F2

Prestige Flooring Finishes



Pattern SS and Etched SS Collection

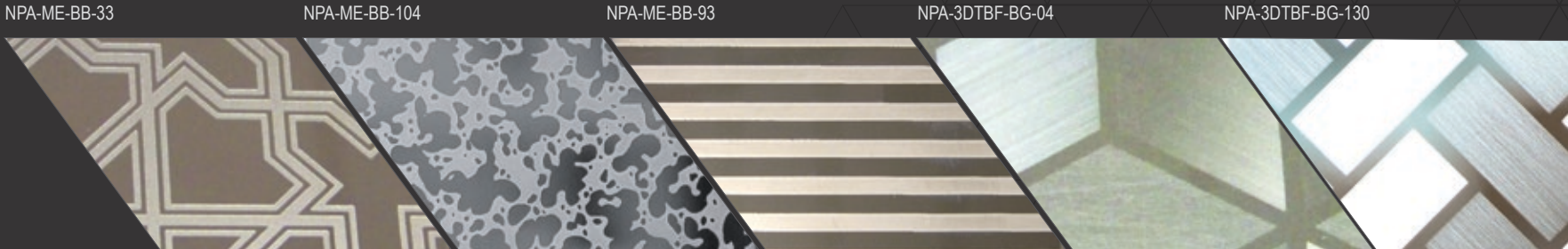


SS Handrail Finishes

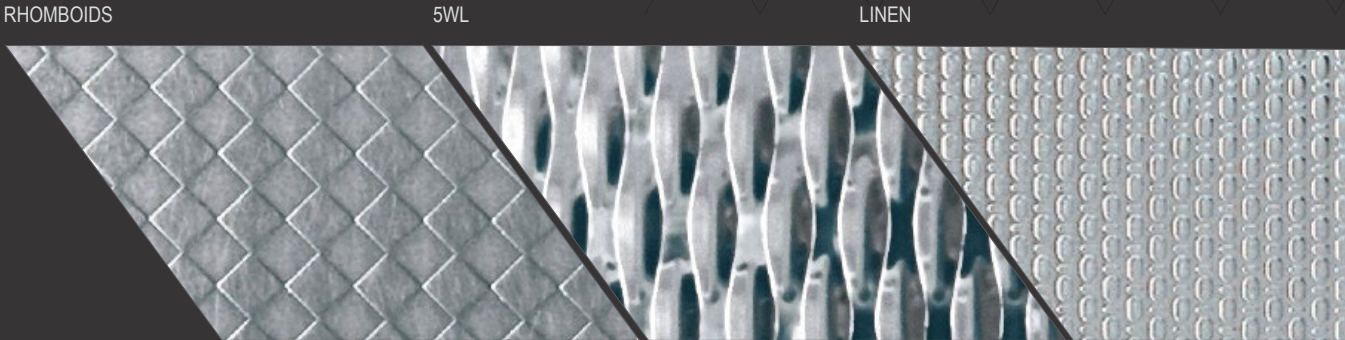


LARGE SS PATTERN

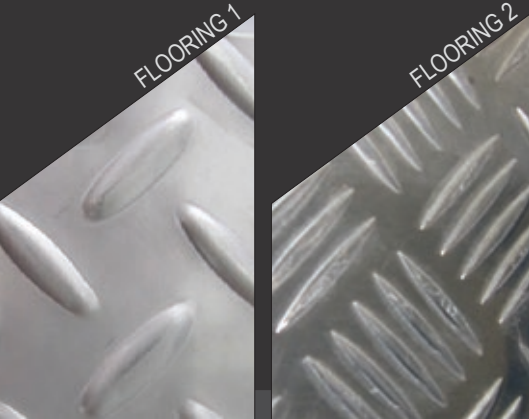
Etched SS Finishes



Pattern SS Finishes



Pattern SS Flooring Finishes



CONTACTS

China

Qingdao Headquarter Office
Phone: +86 532 5882 2500
Email: sales@nidec-elevator.com

Sophie Liang
Phone: +86 187 6526 1177
Email: sophie.liang@nidec-elevator.com

Jane Chen
Phone: +86 757 2772 3373
Mobile: +86 136 7068 5440
Email: jane.chen@nidec-elevator.com

Asia

Sara Li
Phone: +86 757 2772 3135
Mobile: +86 139 2328 2827
Email: sara.li@nidec-elevator.com

Crystal Zhong
Phone: +86 27723088-286
Email: crystal.zhong@nidec-elevator.com

Julie Liu
Phone: +86 757 2772 3181
Mobile: +86 139 2779 2789
Email: julie.liu@nidec-elevator.com

Russia

Diana Ji
Phone: +86 757 2772 3106
Mobile: +86 159 8910 0750
Email: diana.ji@nidec-elevator.com

Australia

Sunny Zhang
Phone: +86 510 6886 9829
Email: sunny.zhang@nidec-elevator.com

India

Eric Liao
Phone: +86 757 2772 3125
Mobile: +86 189 2326 3501
Email: eric.liao@nidec-elevator.com

Latin America

Jairo Guerrero
Phone: +1 916 463 9238
Email: jairo.guerrero@nidec-elevator.com
Fax: +1 916 858 4238

Camilo Ruiz
Office: +916-463-9413
Mobile: +(57) 311-551-7131
Email: camilo.ruiz@nidec-elevator.com

Gilberto Fuentes
Office: 52 181 8156 1856
Mobile: +52 181 2200 6542
Email: gilberto.fuentes@nidec-elevator.com

Middle East

Mohamed Ezzeddine
Phone: +971 50 3500856
Email: mohamed.ezzeddine@nidec-elevator.com

Faisal Mohamed Aslam
Phone: +1 916 463 9302
Email: faisal.aslam@nidec-elevator.com

Omer Al Mukthar
Phone: +971 52 8096193
Email: omer.mukthar@nidec-elevator.com

North America

Spenser Sellens
Phone: 916 463 9272
Email: spenser.sellens@nidec-elevator.com

Christine Bouma
Phone: 916-463-9495
Email: christine.bouma@nidec-elevator.com

Turkey

Ismail Kosovali
Phone: +90 212 486 01 10
Email: ismail.kosovali@nidec-elevator.com

Firas Toma
Phone: +1 916 805 1665
Email: firas.toma@nidec-elevator.com

Technical Support

Rory Yan
Phone: +0086 510 68869825
Email: rory.yan@nidec-elevator.com

Andy Zhou
Phone: +0086 182 53261566
Email: andy.zhou@nidec-elevator.com

Renan Disonglo
Phone: + 63 917 322 4416
Email: renan.disonglo@nidec-elevator.com

Edgar Garrido Rodriguez
Phone: +1 916 463 9200 - 3665
Email: edgar.rodriguez@nidec-elevator.com

Neil Johnson
Phone: +44 0 7748 180921
Email: neil.johnson@nidec-elevator.com

THINK ELEVATOR. THINK NIDEC.
NIDEC ELEVATOR