



# HYUNDAI ELEVATOR PROFILE

## HYUNDAI ELEVATOR CO., LTD.

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### HYUNDAI ELEVATOR INTERNATIONAL SALES & SERVICE NETWORK

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#### BANGLADESH

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#### PAKISTAN

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#### EGYPT

International Eng. & Trade  
10 El Hakam St., Helmyt El Zayton Cairo, Egypt  
Tel: 20-2-2241-8542 Fax: 20-2-2639-2672

#### U.A.E.

Arabian Elevators & Engineering Co., Ltd.  
P. O. Box : 26031, Sharjah, U.A.E.  
Tel: 971-6-573-9920 Fax: 971-6-573-0962

#### KUWAIT

Deal General Trading & Contracting Co.  
P. O. Box 27956 Safat, 13140 Kuwait  
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#### ALGERI

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The "Hyundai Spirit", the creative and positive way of thinking is vitally alive and spread every where in Hyundai's Icheon Head Office & Factory. It's the Hyundai spirit that builds the brilliant future of Hyundai today.



## HISTORY

- 1984 01 Agreement signed by Hyundai and Westinghouse(U.S.A.) to establish a joint venture company
- 05 Hyundai Elevator Co., Ltd. established. Technical License Agreement signed by Hyundai and Westinghouse to manufacture various kinds of elevators and escalators
- 1988 01 Established Auto Parking System Division
- 1989 09 Termination of joint venture with Westinghouse
- 1990 04 Established Material Handling System Division
- 1991 12 Certificated ISO 9001 certification from DNV
- 1993 08 Established joint venture in Shanghai, China
- 09 Established joint venture in the Philippines
- 1995 04 Completed construction of Research & Development Building at Icheon
- 09 Grand prize of Customer Satisfaction & Management Innovation by K.M.A.C awarded
- 11 Distribution Center in Chonan completed
- 1996 07 Listed on the Korea Stock Exchange
- 08 New office building in Seoul completed
- 12 Certificated After Service Certification from the Ministry of Trade and Commerce
- 1997 04 Certificated ISO 14001 environmental certification from DNV
- 1998 03 Certificated ISO 9001 and ISO 14001 certification from DNV for the Auto Parking Systems and Material Handling Systems
- 1999 08 Certificated CE Mark for escalator from DNV
- 10 Signed a contract for a technology alliance with Japan's Nabco for PSD (platform screen doors)
- 2001 07 Certificated CE Mark for elevator from DNV
- 2002 03 Certificated EM Mark for MRL(Machine-Room-Less) elevator from Korean Agency for technology & standards
- 03 Certificated CE Mark for all elevator safety components from DNV
- 2003 09 Certificated Korea Productivity Award from Korea Productivity Center
- 2004 12 Certificated ISO9001 and ISO14001 Certification from DNV for Platform Screen Doors
- 2005 02 Selected one of the most admired companies from the federation of Korean industries and the Seoul economic daily
- 12 Certificated CE mark for material handling system from TÜV
- 2007 12 Certificated New Excellent Technology for the capacitor-less inverter control for driving elevator from the Ministry of Science and Technology

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# HIGH SPEED TRACTION ELEVATORS

Ideal choice for heavy traffic, high rise commercial building.  
A totally integrated microprocessor group supervisory control system can adapt to a constantly changing volume of traffic.



Mokdong Hyperion, Seoul, Korea

### Main Specifications

Control System	• AC-Gearless or AC-Geared Microprocessor Control with Motor Drive
Speed	• 150 ~ 600 m/min
Capacity	• 13 ~ 28 persons/900~1800 kg
Operation	• 1Car : Selective Collective (1C2BC) • 2 ~ 8 Cars : Group Operation

- The most sophisticated type of car assignment system
- Most advanced traffic features
- Video monitoring system



National Agricultural Cooperative Federation, Seoul, Korea



Mokdong Hyperion, Seoul, Korea



### Destination Floor Selection System

Destination Floor Selection System manages elevator more effectively. Passengers register designation floor then share nearest elevator. The system saves travel time by evenly distributing passengers. Also, by grouping passengers having the same target floor on the same elevator will save energy and increase efficiency also.



Hyundai Dept. Store, Seoul, Korea



Daewoo Trumpworld I, Seoul, Korea



Hanwha Condo, Busan, Korea



Korea Securities Finance Corp. Seoul, Korea

## MEDIUM SPEED TRACTION ELEVATORS

The most economical option for residential or mid-rise commercial building. Customers can save 50% on the electricity cost of conventional ACVV elevators. The highest efficiency is achieved through the optimal combination of voltage and frequency of electric power supply to the induction motor-VVVF (Variable Voltage Variable Frequency), the latest and most advanced technology.



ASEM Convention Center, Seoul, Korea



Park Hyatt Seoul, Seoul, Korea



Nurimaru APEC House, Busan, Korea



Incheon International Airport, Incheon, Korea



Hyundai Hotel, Gyeongju, Korea

### Main Specifications

Control System	• Geared or Gearless • VVVF (Inverter) Microprocessor Control
Speed	• 30~120 m/min
Capacity	• 6~24 persons/450~1600 kg
Operation	• 1Car : Selective Collective • 2~4 Cars : Group Operation

- Innovative energy-savings & reduced electric power requirements
- Extremely smooth riding comfort & accurate landing
- Minimized motor size & minimized noise/vibration
- Enhanced system reliability
- Minimum space requirements

## MACHINE-ROOM-LESS ELEVATORS

An innovative new elevator which does not require a separate machine room. Applicable to residential or mid-to high rise commercial buildings.

### Main Specifications

Control System	• VVVF(Inverter) Microprocessor Control
Speed	• 45 ~ 120 m/min
Capacity	• 8 ~ 24persons / 550 ~ 1600kg
Operation	• 1 Car : Selective Collective (1C2BC) • 2 ~ 4Cars : Group Operation

- More flexible architectural design
- Benefit in north side slanting line limitation and sunshine right regulation
- Minimized power equipment and power consumption
- Reduction of building costs
- Smoother and superior riding comfort
- Environment - friendly products
- Applicable up to 32 floors (96m)



Machine-Room-Less Elevator (Roof Top Mounted Type)



Leejo Building, Seoul, Korea



Hyundai Home Town, Bucheon, Korea



A Residence, Seoul, Korea

## MARINE ELEVATORS

Another example of how Hyundai offers innovative solutions for vertical transportation system needs in special environments. Applicable to wide range of shipboard use-tanker, bulk carrier, containership, Ro-Ro, ferry, navy vessel, FPSO, RIG, etc. Widely recognized brand by major classification societies-DNV, ABS, LR, GL, BV, NK & KR.

### Main Specifications

Control System	• VVVF Drive with Microprocessor Control
Speed	• 30, 45, 60, 96 m/min
Capacity	• 320, 500, 800, 1000, 1500, 2000kg
Operation	• Group Control • Selective Collective (2BC)
Landing Door	• Hinged type(A-0, A-60) • Center open type(A-0, A-60)

- Safety switches, emergency stop device, alarm against rolling/pitching
- Fireproof landing doors certified by marine authorities and classification societies such as DNV, ABS, LR, GL, BV, NK, KR, CCS, etc
- Fire, CO<sub>2</sub> or halon alarms available to warn against entering engine room area in case of fire and/or gas leaks.



Traction machine



Operating panel



Control panel



The swing-type fireproof landing door



Cab design with required safety features

# ESCALATORS

Most reliable, fail-safe mode of transportation for shopping malls, department stores, subways, mass transit stations, terminals, and so on. Minimal maintenance requirements are another benefit you can expect from Hyundai escalators.

# MOVING WALKWAYS

Simple, elegant designs with high people-moving efficiency which saves both energy and space in airport, shopping centers, subway links, connections to car parks, and sports stadium.



Kentucky International Convention Center, Louisville, Kentucky, USA



Incheon International Airport, Incheon, Korea

### Main Specifications

Type	Millennium Escalators			Modular Escalators		H-series Escalators		
	ML800	ML1000	ML1200	M800	M1200	HA800	HA1000	HA1200
Capacity (P/Hr)	4500	6750	9000	4500	9000	4500	6750	9000
Vertical Rise	2046mm~10500mm			7000mm~36000mm		7600mm - 13600mm		
Speed of Step	30~40 m/min							
Inclination	30°, 35°							
Power Supply	AC 3PH, 208~600V, 50/60Hz							
Application	Shopping mall, Hotel, Department store, Bank, Office building etc.			Mass transit station, Subway, Terminal etc.		Airport, Subway, Multi-sports complexes, Mammoth conference halls		
Effective Step Width	594 mm	813 mm	1014 mm	594 mm	1014 mm	594 mm	813 mm	1014 mm

Note) Available for out door escalators.



Hillstate Gallery, Seoul, Korea



Incheon International Airport, Incheon, Korea



Incheon International Airport, Incheon, Korea



Mokdong Hyundai Department Store, Seoul, Korea

### Main Specifications

Type	PM800	PM1000	PM1200	PM1400	PM1600
Balustrade Width(mm)	778	994	1197	1416	1617
Pallet Width (mm)	594	813	1014	1251	1434
Capacity (P/Hr)	4500	6750	9000	11000	13000
Inclination	0°, 12°		0°		
Speed	30~40 m/min				
Power Supply	AC 3PH, 208~600V, 50/60Hz				
Operation System	Key Switch Reversible				

# MATERIAL HANDLING SYSTEMS

We provide optimized material handling solutions which are highly efficient and reliable. By effectively combining high quality material handling equipments with our excellent engineering capability, we can create the most suitable system for every situation and environment. Our services help clients optimize their logistics capabilities while realizing substantial savings on time and costs

- Automatic Warehouse System (AS/RS)
- Distribution Center
- In Process Automation (Factory Automation)
- Cold Warehouse System (-25°C)
- Automatic Warehouse for Hazardous Materials
- Airport Logistics
  - Cargo Terminal System
  - Baggage Handling System
- High Speed Sorting Systems and Conveyor Systems
- Building / Hospital Automation
- Automation Systems for Clean Room
- Vertical Conveying System
- Automated Transportation Systems
  - AGV(Automated Guided Vehicle)
  - RGV(Rail Guided Vehicle, RTV)
  - EMS(Electrical Mono-rail System, Sky-Rav)
- Material Handling Computer Systems



Automatic Warehouse(unit type)



Air Cargo System



Cold Storage



High Speed Sorting System



Laser Guided Vehicle(LGV)



AMHS for TFT-LCD



Automated Guided Vehicle(AGV)



Pneumatic Tube System



Sky RAV(Overhead Transportation System)



Loop Type RTV



High Rised Automatic Warehouse

# AUTO PARKING SYSTEMS

Is your facility running short of parking spaces?  
 Try Hyundai Auto Parking Systems.  
 This will give you maximum satisfaction and profit with minimum land requirement.  
 The PLC(Programmable Logic Control) system achieves the most efficient operation with minimum manpower requirement.

- Elevator Parking System
- Cart Parking System (Horizontal Type)
- HIP (Hyundai Integrated Parking) System etc.



Cart Parking System (Horizontal Type)



Finedigital, Inc., Bundang, Korea



Geo Place, Busan, Korea



Cheonho Hyundai Department Store, Seoul, Korea



Cheonho Hyundai Department Store, Seoul, Korea-HIP (Hyundai Integrated Parking) System



Cheonho Hyundai Department Store, Seoul, Korea



Elevator Parking System



# PLATFORM SCREEN DOORS

PSD(Platform Screen Doors) is a safety system used in subway and LRT (Light Rail Transit) to cut off platform from the railway. Sliding doors interact with car doors, open and close as a ATO (Automatic Train Operation) system make a signal when an electric train stops at the designated place. PSD is becoming more popular in the field of subway and LRT as it offers the following benefits to the customers.

- To ensure perfect safety of passengers while getting on and off.
- To improve amenity on platform.
- To maximize energy saving.

## Full-closed Type



Yongdu Station of Seoul Subway Line 2



Dongmyo Station of Seoul Subway Line 1

## Semi-closed Type



Daejeon Subway Line 1



Daejeon Subway Line 1

## Gate Type



Gangbyeon Station of Seoul Subway Line 2



Gangbyeon Station of Seoul Subway Line 2

# QUALITY ASSURANCE

Excellence of Quality is the most critical factor in today's global market place. With a firm belief that the best quality is the best service for the customers, all the Hyundai Elevator employees are committed to providing superior quality products and services that conform to customer's requirements.

Recognizing 'Zero Defects' as the Standard of Performance, all the Hyundai Elevator employees are continuously trained in the "Total Quality Management" program and participating in various quality management activities.

And a wide variety of test and inspections are also carried out by inspection specialists utilizing the most modern testing and inspection equipments, ensuring the compliance of our products with customer requirement.

Products passing the various specialized tests and through inspections are packed, shipped and delivered to our customers in seaworthy packing.

The excellence of the Hyundai Elevator Company and its employees have been acknowledged by the various international standard and quality associations as show in the above certifications.



- ISO 9001 Quality Management System Certificate for HELCO
- ISO 14001 Environment Management System Certificate for HELCO
- Certificate of International Welding Bureau (CWI) for HELCO
- Certificate of Welding Inspector (CWI) by American Welding Society (AWS)
- Certificates of Qualified Elevator Safety Inspector (QEI) by National Association of Elevator Safety Authorities (NAESA), USA
- Certificates of Qualified Elevator Safety Inspector by Japanese Construction Ministry
- UL/CE Certifications for various Elevator & Escalator Safety Equipments

## RESEARCH & DEVELOPMENT

Hyundai recognizes the continuous research and development of the highly sophisticated systems and innovative new products as the most critical factor and the key investment for continued competitiveness and leadership in this technology-sensitive industry.

Hyundai Elevator Research & Development Center plays the vital role in leading the various development efforts of new system technologies.

R & D is also trying to apply to our products the whole new concepts of related technologies-linear motor elevator, group control system utilizing artificial intelligence based on fuzzy theory, interface with building management system.

A new generation of elevator systems is being developed on the basis of these technological frontier.

The Elevator Test Tower, equipped with variety of specialized test equipments, provides a simulated installation/operation field for various strategical tests such as the Simulation Tests, Code & Regulation Tests, New Product Development Tests & Troubleshooting Tests as well.

Training of field service technicians on existing and newly developed products prior to market application is another key advantage it provides.



Simulation Test of Inverter



AC Gearless Machine Test



The Elevator Test Tower

## PREVENTIVE MAINTENANCE

Hyundai has developed a centralized, computerized Remote Monitoring System (RMS) nationwide that provides a comprehensive and immediate service for the Hyundai maintenance customers. This system continuously keeps tabs on the operation of your elevator for 24 hours a day.



Customer Service Center

At the heart of every control panel of elevator is a computer capable of constantly gathering thousands of bits of information by the system and analyzing and displaying car status and position for elevators hundreds or even thousands of miles away. And when the trouble conditions are detected the alarm report provides for the specific diagnosis to assign the appropriate service technician to building.

This preventive maintenance by RMS keeps elevators operating at peak efficiency. It prevents major problems and prolongs the life of your elevators.



ASEM Convention Center, Seoul, Korea

