







Accredited with DHSAS 18001 Certification



Accredited with Korea Ap
Service Quality Business
Certification a



oroved for CE Marking for all areas of elevator, n industry first in Korea



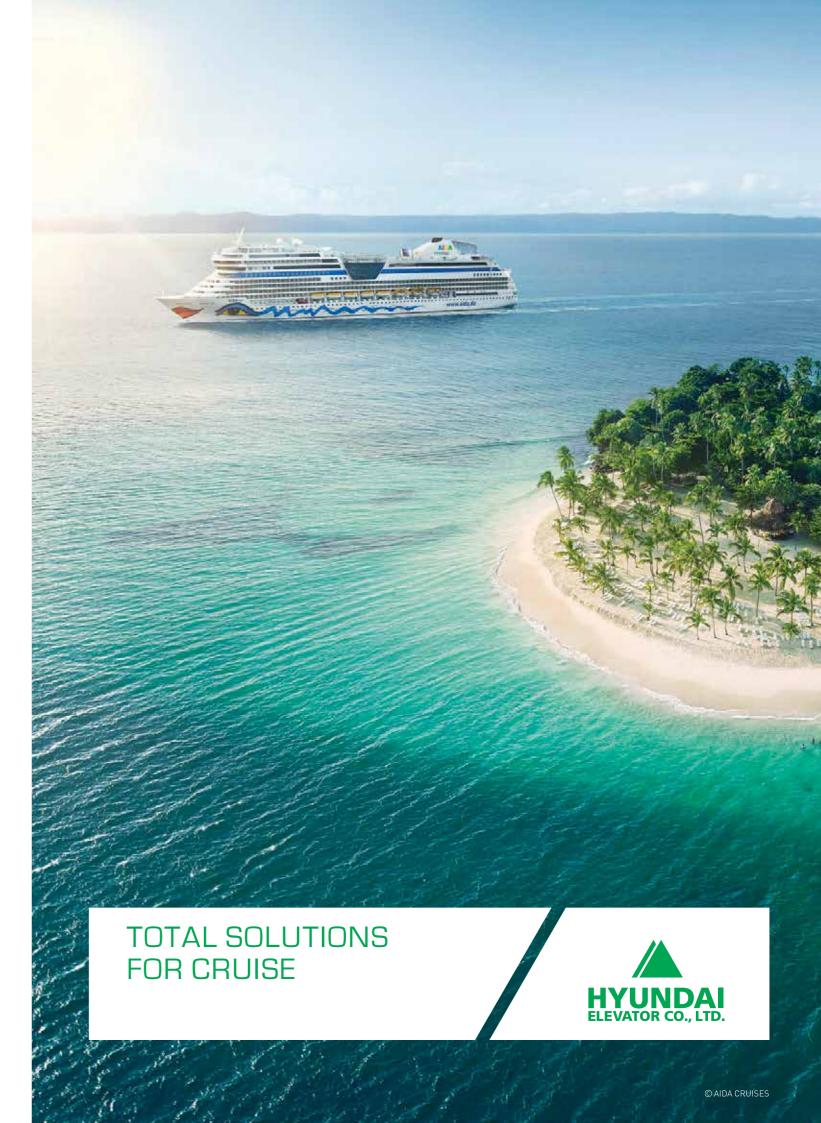
Selected for (Good Desig



Accredited wil



C-CRU-E0112/2018.01/1st Edition







WHY HYUNDAI ELEVATOR?



As it is more important for everything to operate perfectly when out at sea, we make it a rule to provide products that ensure the efficient and safe transportation of both people and cargo onboard as a reliable partner.

Total Moving Solution Provider

Hyundai Elevator is a transportation equipment supplier that offers comprehensive service from the design of elevators, escalators, and moving walkways to their manufacturing, installation and maintenance. We were founded in 1984 and have been retaining the largest market share in Korea over the past 11 years. Our technological prowess and expertise are globally recognized and have elevated us to new heights. We have been supplying elevators and escalators for large vessels (oil tankers, bulk/ore carrier, container ships, offshore plants, and passenger ships) since 1986. Our products have an impeccable reputation among major classification societies such as DNVGL to LR, ABS, BV, KR, and CCS.

No.1



Allin One D



- Ranked 1st in market share in the Korean elevator market for 11 consecutive years
- Ranked 1st in market share in the global marine elevator market
- Equipped with high-caliber installation and design experts
- Recorded the lowest accident rate in the industry

Lead time minimized by establishing an enterprise-wide system dealing with in-house designing, purchasing, manufacturing, and quality control.

Global Network



Eco-friend



Maintenance service promptly provided at major ports around the world through our global service network

Eco-friendly and efficient management achieved as evidenced by reaching Class A on the energy efficiency scale (certification of Germany's TÜV SÜD attained)

06 TOTAL SOLUTIONS FOR CRUISE

Solutions for Cruise Ships

Total Solutions



We provide total transportation solutions, from elevators to escalators, for cruise ships. We offer a wide range of products for different purposes and ship types.



1. Passenger Elevator

Elevators for accommodating passengers are focused on ensuring ride comfort and creating an ambience that matches the luxurious interior of a cruise ship. Different options and features can also be selected to cater to the individual needs of customers (group car control, destination selection, information screen, etc.).



3. Service Elevator

Large service elevators for transporting luggage, goods and foods are designed to comply with the standards of the United States Public Health Service (USPHS) and to guarantee durability and safety.



2. Panoramic/Scenic Elevator

Car walls are installed with transparent safety windows so that passengers can enjoy a panoramic view from the elevator. All windows employ condensation-prevention double-glazed glass for safety and easy maintenance.



4. Passenger Escalator

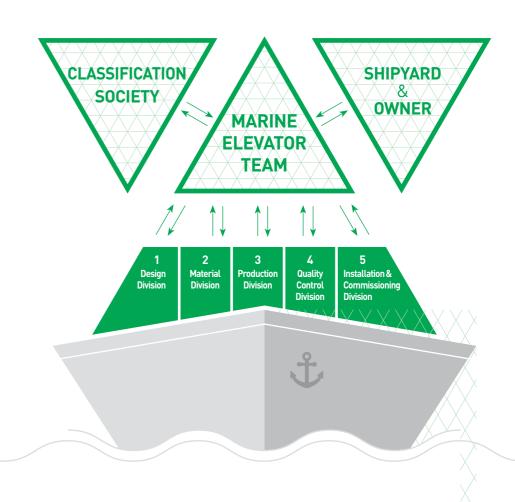
Our escalators that help people conveniently move around cruise ships are designed to comply with EN115, the EU guidelines in assessing the safety of escalators. Different features can be selected to ensure efficient maintenance and energy saving.

Our Experts Specializing in Cruise Ship Elevators

Professional Team

We operate a team of experts specializing in cruise ship elevators.

The team offers elevator design options optimized for each customer.



1. Design Division

The Design Division takes charge of all designs from basic designs to production designs based on consistent standards and reflects the needs of shipowners and shipyards in each step.

4. Quality Control Division

The Quality Control Division assesses each product and controls quality based on international standards and the rules of classification societies.

2. Material Division

The Material Division procures and delivers the quality materials required by each design in a timely manner.

3. Production Division

The Production Division creates the best quality products in a safe, secure workplace.

5. Installation & Commissioning Division

The Installation & Commissioning Division conducts the installation and inspection of installed products at shipyards and promptly responds to the requests of shipowners, shipyards, and classification societies.





RIDE COMFORT

Ride comfort at sea ensured by minimizing vibrations

ENERGY EFFICIENCY

Eco-friendly technology maximizing energy efficiency

OPTIMIZED FOR CRUISE SHIPS

Luxurious interior designs ideal for cruise ships

EFFICIENT MAINTENANCE

Remote management possible 24 hours a day for more convenient and efficient maintenance

10 TOTAL SOLUTIONS FOR CRUISE

$\stackrel{\wedge}{\Rightarrow}$

Technology

Experience our cutting-edge technology that ensures efficient and reliable people-moving service out at sea.

High-Efficiency Gearless Synchronous Traction Machine



Maximum Ride Comfort

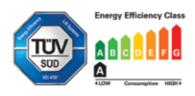
The key to the production of vessel elevators is the technology to minimize vibrations transmitted from the body of the ship. Our gearless synchronous traction machine ensures smoother ride quality by dramatically reducing noise and vibration. In addition, the vibration-proof traction machine base works to prevent even the smallest vibrations.

Energy Saving

Our gearless synchronous traction machine employs the synchronous traction motor using a permanent magnet, thereby reducing energy consumption by 25% compared to an induction motor.

Eco-friendly Technology and Convenient Maintenance

Our gearless synchronous traction machine is eco-friendly as it does not require any gear oil. It adds to convenience in maintenance and reduction of management costs.



Rated Class A on Germany's Elevator Energy Efficiency Scale

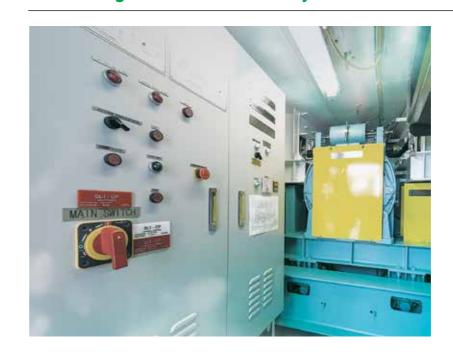
Our major products were rated Class A (the highest rating) by TÜV SÜD, a certification provider of Germany, on the energy efficiency scale set by Verein Deutscher Ingenieure (VDI), the largest engineering association in Western Europe.



/DI 4707 Part

VDI 4707 Part1 is a set of guidelines for the assessment and rating of elevators. International certification is provided by taking into consideration capacity, speed, interval, energy consumption in service, and average distance in service. Elevators are rated in terms of a set of seven energy efficiency classes from A [most efficient] to G (least efficient].

Power Regenerative Inverter System That Reuses Energy





Up to 60% Energy Saved

Energy generated from the operation of elevators is reused to minimize energy consumption and save up to 60% of energy when elevators are in service (energy efficiency improved by 77.5%).

Heating Value of the Machine Room Decreased

Energy generated from the operation of elevators is converted into renewable energy instead of heat, and thus the heating value of the machine room is dramatically decreased.

Remote Monitoring and Control System (RMCS)





The remote elevator control panel is mounted with a terminal for collecting operating data and thereby allows remote monitoring of the operation of elevators in real time 24 hours a day via TCP/IP (LAN). This system also enables the direct operation and control of elevators for the first time in the industry.

10 TOTAL SOLUTIONS FOR CRUISE

Portfolio

A wide range of cruise lines has shown full satisfaction with our advanced quality and services. Add greater value to your cruise line with our state-of-the-art technology.



New Golden Bridge

SHIPFACTS

Type: Passenger Ferry Tonnage: 27,000 GT Length: 190 m Breath: 37.65 m Draught: 8.25 m Deck: 11 Speed: 23 Knots Passenger: 750 Cargo: 290 TEU Delivery: 2000



Norman Leader

SHIP FACTS

Type: RoRo Passenger Ferry
Tonnage: 27,000 GT
Length: 162 m
Breath: 25.6 m
Draught: 5.8 m
Speed: 21 Knots
Passenger: 1,215
Lane Meter: 1,500
Delivery: 2010



STENA Transporter/STENA Transit

SHIP FACTS

Type: RoRo Passenger Ferry
Tonnage: 33,690 GT
Length: 212 m
Breath: 26 m
Draught: 6.3 m
Speed: 22 Knots
Passenger: 300
Lane Meter: 4,056
Delivery: 2011



Panstar Dream

SHIP FACTS

Type: RoRo Passenger Ferry Tonnage: 21,680 GT Length: 160 m Breath: 27 m Draught: 6 m Speed: 22 Knots Passenger: 545 Cargo: 220 TEU Delivery: 1997

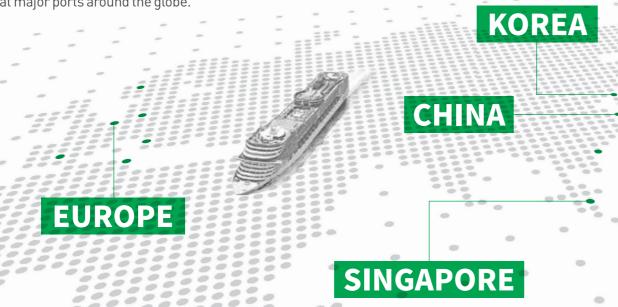




14 TOTAL SOLUTIONS FOR CRUISE GLOBAL SERVICE NETWORK 15

Global Service Network

We provide pinpoint, speedy services whenever necessary. Our global network enables prompt and effective responses to any request for maintenance at major ports around the globe.









HYUNDAI ELEVATOR CO., LTD. (HEAD OFFICE)

P.I.C.: MR. Y. S. PARK & MR. K. Y. EOM **TEL.**: +82 2 3670 0868/0845 **FAX.**: +82 2 3672 8763/8764

E-MAIL: ys.park@hdel.co.kr/ ky.eom@hdel.co.kr

OCEAN ELEVATOR

P.I.C.: MR. KEVIN MOON **TEL.**: +82 2 2617 0643 **FAX.**: +82 2 2619 5881

E-MAIL: ocean@ocean-elevator.com / kymoon@ocean-elevator.com / jnkim@ocean-elevator.com

S-MARINE ENG CO., LTD

P.I.C.: MR. DAVE YU TEL.: +82 10 3519 5131 FAX.: +82 2 336 7767

E-MAIL: s.marine.eng@gmail.com/ s.marine.dave@gmail.com

CHINA

SHANGHAI-HYUNDAI ELEVATOR CO., LTD.

P.I.C.: MR. STEVEN KIM

TEL.: +86 21 5435 6195 / +86 18621736960

E-MAIL: jinl0573@hdel.com.cn/

hyundai sh@yeah.net

S-MARINE ENG CO., LTD

P.I.C.: MR AUSTIN KIM **TEL.**: +86 182 0170 1342

E-MAIL: smarine_sh012@yeah.net

HONG KONG & CHINA HD-GLOBAL (HK) ENGINEERING SERVICES LTD.

P.I.C.: MR. S. C. KIM

TEL.: +852 6325 9038 (HONG KONG) +86 755 6138 8980 (CHINA)

+86 188 2585 5903 (CHINA) FAX.: +86 755 2585 5496 (CHINA)

E-MAIL: hyundaisz@naver.com

hyundaisz2015@vip.163.com

hyundai_global@yahoo.com

JAPAN

U.S.A.

NIPPON LIFTS ENGINEERING INC.

P.I.C.: MR. DAISUKE ITOH **TEL.**: +81 45 478 1790

FAX.: +81 45 478 1792

E-MAIL: daisuke.itoh@nle-jpn.co.jp/

marine@nle-jpn.co.jp

SINGAPORE

HANKOOK ENGINEERING PTE LTD.

P.I.C.: MR. H. S. KIM & MR. Y. X. LI

TEL.: +65 6295 4787 **FAX.**: +65 6295 4806

E-MAIL: hkengr@singnet.com.sg

U.S.A.

DELAWARE ELEVATOR INC.

P.I.C.: MR. LARRY HATCH **TEL.**: +1 757 449 1619

E-MAIL: lhatch@delawareelevator.com

EUROPE

BELGIUM, SPAIN, NORTH AFRICA

AZOV INTERNATIONAL

P.I.C.: MR. ROBERT TILLEY

TEL.: +32 52 408 3000

E-MAIL: info@azovinternational.com

CROATIA & MALTA

PETRC ELEVATOR

P.I.C.: MR. DAVID PETRC

TEL.: +385 51 641 190 (CROATIA)

+356 2144 6726 (MALTA)

FAX.: +385 51 643 406 (CROATIA)

+356 2144 6928 (MALTA) **E-MAIL**: david.petrc@petrc-elevator.hr

GERMANY

HANS LUTZ MASCHINENFABRIK GMBH & CO.KG

P.I.C.: MR. LARS VON PEIN **TEL.**: +49 40 72769 261

FAX.: +49 40 72769 115

E-MAIL: service@lutz-elevators.com NORWAY

MYHRE HEIS & ELEKTRO AS

P.I.C.: MR. Morten B. Taraldsen **TEL.**: +47 9928 5410

E-MAIL: morten@mhe.no