FOR A LIFETIME OF RELIABLE OPERATION

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KONE

KONE Elevator Solutions for Cargo Vessels



PROVEN SOLUTIONS THAT SERVE YOU FOR THE LIFETIME OF YOUR VESSEL

When building a cargo vessel, durability is paramount. All the components of KONE marine elevators are designed and manufactured to withstand the rough conditions, intense vibrations, rolling, and pitching a ship experiences at sea. Our solutions are ideal for heavy-duty marine environments and come with full legal compliance.

We offer a wide range of equipment sizes and designs – from space-saving machine room-less elevators to heavy-duty freight elevators – all with fast delivery and designed for minimal installation time. But we deliver more than just equipment – we deliver a long-term solution that serves you for the lifetime of your ship.

And because KONE elevators offer excellent energy efficiency and superior reliability, reducing downtime and maintenance costs, they have a lower total cost of ownership over their operational lifetime than competing solutions. In fact, with significantly lower energy consumption than hydraulic elevators, the energy savings over the lifetime of the equipment can amount to more than the initial cost of the elevator. And as no oil is required, both the risk of fire and the environmental impact are reduced, for added peace of mind.



TECHNICAL SPECIFICATIONS

From compact machine-room and machine-room-less elevators to heavy-duty freight elevators, our solutions for cargo vessels will reduce your total cost of ownership while offering reliability and peace of mind.

KONE MONOSPACE® ELEVATOR

The space-efficient KONE MonoSpace has no need for a machine room, giving naval architects greater design flexibility while also saving construction costs and reducing weight. It provides energy-efficient vertical transport in a compact space, and as there is no machine room, it can even serve the topmost deck.

KONE MonoSpace											
Weight (kg)	Door type	Car size (mm) W x D x H	Trunk clearance (mm) W x D	Door (mm) W x H	Speed (m/s)	Pit (mm)	HR (mm)				
400	Center opening	900x1300x2100	1750x1950	800x2000	1.0	1365	3900				
400	Hinged	900x1300x2100	1600x1900	800x2000	1.0	1365	3900				
525	Center opening	1100x1300x2100	1900x1950	800x2000	1.0	1365	3900				
525	Hinged	1100x1300x2100	1800x1900	800x2000	1.0	1365	3900				
750	Center opening	1100x1600x2100	1950x2000	900x2000	1.0	1365	3900				
750	Hinged	1050x1650x2100	1800x1975	900x2000	1.0	1365	3900				
1000	Center opening	1100x2100x2100	1900x2450	900x2000	1.0	1365	3900				
1000	Hinged	1100x2100x2100	1850x2400	900x2000	1.0	1365	3900				

KONE MINISPACE™ ELEVATOR

The compact machine room of the KONE MiniSpace is simply an extension of the elevator shaft, fitting neatly into a small space above and making it easy and cost-efficient to construct.

KONE MiniSpace												
Weight (kg)	Door type	Car size (mm) W x D x H	Trunk clearance (mm) W x D	Door (mm) W x H	Speed (m/s)	Pit (mm)	HR (mm)	Machine room (mm) W x D				
400	Center opening	900x1300x2100	1750x2000	800×2000	1.0	1365	3900	Trunk + 1500 mm				
400	Hinged	900x1300x2100	1750x2000	800x2000	1.0	1365	3900	Trunk + 1500 mm				
525	Center opening	1100x1300x2100	1850x2000	800x2000	1.0	1365	3900	Trunk + 1500 mm				
525	Hinged	1100x1300x2100	1850x2000	800x2000	1.0	1365	3900	Trunk + 1500 mm				
750	Center opening	1100x1400x2100	1950x2150	900x2000	1.0	1200	3900	Trunk + 1500 mm				
750	Hinged	1050x1400x2100	1950x2150	900x2000	1.0	1200	3900	Trunk + 1500 mm				
1000	Center opening	1100x1800x2100	1950x2550	900x2000	1.0	1200	3900	Trunk + 1500 mm				
1000	Hinged	1100x1800x2100	1950x2550	900x2000	1.0	1200	3900	Trunk + 1500 mm				

KONE TRANSYS™ GOODS ELEVATOR

Our proven heavy-duty freight elevator, based on KONE MonoSpace, is available in different car sizes to transport freight of up to 10,000 kg. Exceptionally space-efficient, it needs no machine room, making it easy to position and reducing construction time and costs. The KONE TranSys features quiet operation, smooth running to protect fragile loads, excellent leveling accuracy, and doors that open to the full width of the car to make loading and unloading easy and safe.

KONE MONOSPACE



KONE MINISPACE







DESIGNED FOR A LIFE AT SEA

KONE elevators are designed and built to cope with the tough demands of a vessel at sea. All our marine equipment will:

- Withstand rough weather conditions and ship movements, shocks, and vibrations
- Perform reliably in heavy seas: up to $\pm 10^{\circ}$ rolling for a period of 10s, or up to $\pm 5^{\circ}$ pitching for a period of 7s
- Have high-quality electrification and components that meet international marine safety standards
- Include advanced control and monitoring systems
- Feature cars and landing doors that are approved and certified by major classification bodies

They also feature a wide range of innovations that help cut running costs, boost goods transportation efficiency, and provide smooth, safe travel for crew.



KONE ECODISC[®] HOISTING MACHINE

Our marine elevators are powered by the compact KONE EcoDisc. This gearless technology lowers energy consumption, reduces demands on space, and improves reliability. It is designed for a long operational lifespan and consumes significantly less energy than a comparable geared hoisting machine.



CONTROL SYSTEM

The elevator controller ensures accurate, smooth, and efficient operation in all modes. The control system can be configured to make the elevator return to a pre-determined deck when vacant or even if the power cuts out. It can also ensure an automatic return to the evacuation deck in case of fire, increasing the safety of everyone on board.



ELEVATOR CAR

KONE elevator cars are designed to be both safe and comfortable. They are fitted with a fan, slots for natural ventilation, a wallmounted escape ladder, and an escape hatch in the ceiling. The wall panels are reinforced against noise and vibrations and the automatic sliding door is equipped with a curtain-of-light sensor for additional safety. Our cars also feature tough stainless steel walls and ceilings, teardrop stainless steel floors for added durability, and a choice of car operating panels.

CAR OPERATING PANEL

The car operating panel is located on one of the car's side walls, close to the door. A position indicator screen with deck indication number, directional arrow, and overload indication, floor buttons with call accepted light, alarm button, door open and close buttons, and an emergency intercom are included as standard.

We also offer a key-controlled switch for priority call, rolling/ pitching indicator and alarm, fire/ CO_2 indicator and alarm, and wall-mounted telephone to be connected to ship's system.



SOLUTIONS FOR THE LIFETIME OF **YOUR SHIP**

services are:

- ISO 9001 marine certification

KONE's lifecycle approach can also be seen in our world-class global maintenance service, which keeps your equipment working reliably for its entire operational lifespan.

MAINTENANCE

We offer qualified preventive or emergency maintenance support in major ports through our global service network. Our maintenance

- Preventive: We maintain your equipment effectively in order to provide the highest standards of quality and safety.
- Responsive: We support your business by reacting quickly to your service requests.
- Corrective: If maintenance is required, our technicians will respond quickly and efficiently in order to ensure minimal disruption.
- Consultative: We are committed to providing you with a superior level of service.
- Our global spare parts service ensures maximum availability for your equipment. All key components are manufactured in-house, and we stock a wide range of spare parts in order to ensure fast delivery. We can also supply spare parts for other brands of equipment.

SAFETY AND CERTIFICATIONS

Safety is the number one priority in all our processes: design, manufacturing, installation, and maintenance. We also actively participate in industry-wide initiatives to develop codes and standards. Our maintenance and modernization services are designed to maximize the safety of your equipment, ensuring it works reliably with minimum disruption. KONE holds the following certifications:

- ISO 14001certification
- Achilles JQS (Joint Quality System)
- DNV (Det Norske Veritas) type approval

REFERENCES

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We have successfully delivered vertical transport solutions for a variety of cargo-vessel projects around the world. Below is a selection of our most recent references.

Triple E class container shipsDSMI, South KoreaMaersk Lir10,000 TEU series vesselsJiangsu New Yangzijian shipyard, ChinaSeaspan180,000 ton Bulk carrier series vesselShanghai Waigaoqiao shipyard, ChinaThenamar174,000 m3 LNG carrier vesselsHudong-Zhonghua shipyard, ChinaChina Ship Triple E class container ships 10,000 TEU series vessels

Read more about our marine references at marine.kone.com

Maersk Line Thenamaris China Shipping





KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace®, KONE NanoSpace[™] and KONE UltraRope[®].

KONE employs close to 50,000 dedicated experts to serve you globally and locally.

KONE Marine

marine.kone.com

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