





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, or allow for more free space on the bridge deck.

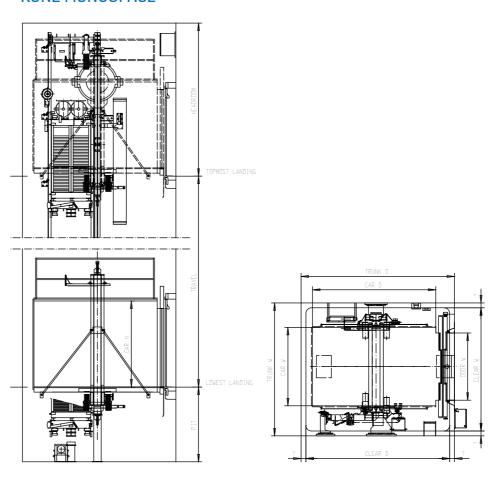
KONE MINISPACE™ ELEVATOR

The compact machine room of the KONE MiniSpace is simply an extension of the elevator shaft, making it easy and cost-efficient to construct. Only a small additional space is needed, which can be located above, beside, or below the shaft – whichever integrates best with the ship's design.

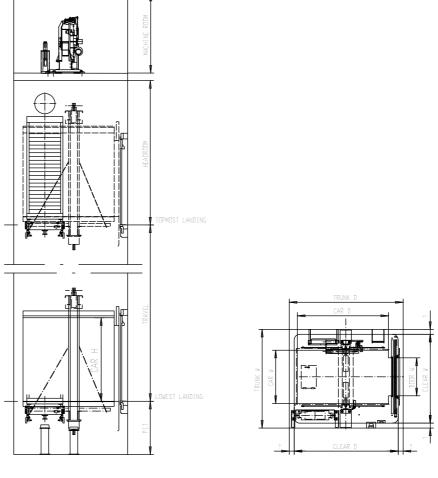
KONE TRANSYS™ GOODS ELEVATOR

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 the full width of the car to make loading and unloading easy and safe.

KONE MONOSPACE



KONE MINISPACE



These drawings are intended as a guideline only. Precise elevator dimensions and specifications for individual projects will be determined by KONE specialists.

PREDICTABILITY IN AN UNPREDICTABLE ENVIRONMENT

KONE elevators are designed and built to cope with the tough demands of marine installations. We are an Achilles JQS approved supplier and all our 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, maximize availability, and provide smooth, safe travel for crew and goods.

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.

ELEVATOR CAR

KONE elevator cars are safe and durable. They are fitted with a fan, slots for natural ventilation, a wall-mounted 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, and teardrop stainless steel floors for added durability.

MAINTENANCE

We offer qualified preventive maintenance support in major ports through our global service network. Our maintenance services ensure that your equipment operates reliably and maintains smooth people and goods flow on board your vessel.

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

We strive for continuous improvement in all of our business activities. We abide by and even exceed all applicable rules and regulations, working closely with both suppliers and customers to prevent or reduce emissions and waste generated by our business operations. KONE holds the following certifications:

- ISO 9001 marine certification
- ISO 14001 certification
- Achilles JQS (Joint Quality System)
- DNV (Det Norske Veritas) type approval



REFERENCES

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

Tianjin Xingang shipyard, China

Atlantic Mercy hospital ship
Arctia Polaris icebreaker
Petronas FLNG SATU
NDLO logistics support vessel
BP Quad FPSO vessel
Goliat FPSO vessel
Ceona Amazon
NB 9355U/KCROP
Pazflor FPSO vessel
Ramform Titan-class seismic vessels
Pacific Orca and Pacific Osprey

ARCTECH Helsinki shipyard, Finland DSMI, South Korea DSMI, South Korea Hyundai Heavy Industries Co., Ltd., South Korea Hyundai Heavy Industries Co., Ltd., South Korea Lloyd Werft Bremerhaven GmbH, Germany Technip,UAE

DSMI, South Korea Mitsubishi Heavy Industries, Japan Samsung Heavy Industries, South Korea Mercy Ships
Arctia
Petronas
Norwegian Defence Forces
BP
Eni Norge
Ceona
Al-Khafji Joint Operations (KJO)
Total
PGS
Swire Pacific Offshore

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



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