



OFFSHORE ELEVATORS

PRODUCT GUIDE

ALIMAK OS & OS-Ex

Access anytime, anywhere

ALIMAK

Traction passenger and freight elevators for marine and offshore applications

Alimak OS traction passenger and freight elevators are designed not only to move people, but also to be able to handle materials weighing to 10,000 kilograms or more when required. All Alimak elevators are built to last in the most extreme environments.

ELEVATOR SHAFT

The elevator shaft is made of aluminium with structure of hollow sections and welded SW panels. Material quality is AA 6082-T6 for profiles and AA 5083-H22 for plates. The welded shaft structure with panels is watertight. Ingress of water at landing is reduced to a minimum. The elevator shaft is complete with emergency escape ladder and permanent lighting inside. The aluminium shaft is unpainted. The elevator shaft has vertical support at lower landing and horizontal support at each landing.

The machine room is located on top or beside of the elevator shaft. There is a monorail and lifting lug in ceiling for maintenance and replacement of the equipment. Light fixture, smoke detector is installed in machine room ceiling.

GEAR AND MOTOR

Quiet-running worm gear with tempered worm screw. Traction sheave with tempered grooves. DC brake magnet. AC-motor with VSD-drive. Load independent stop tolerance: +/-5 mm. Protection class: EEx de IICT4 (IP56). The worm gear and motor are special designed for lifting application. The motor is equipped with space heater and instrumentation to measure motor vibration, bearing temperature and motor winding temperature. Voltage 400/690 V. Painting of motor and gear according to C5-M. Noise level one meter from the equipment is 74 dB. Power: 75 kW.

ELEVATOR CAR AND FRAME

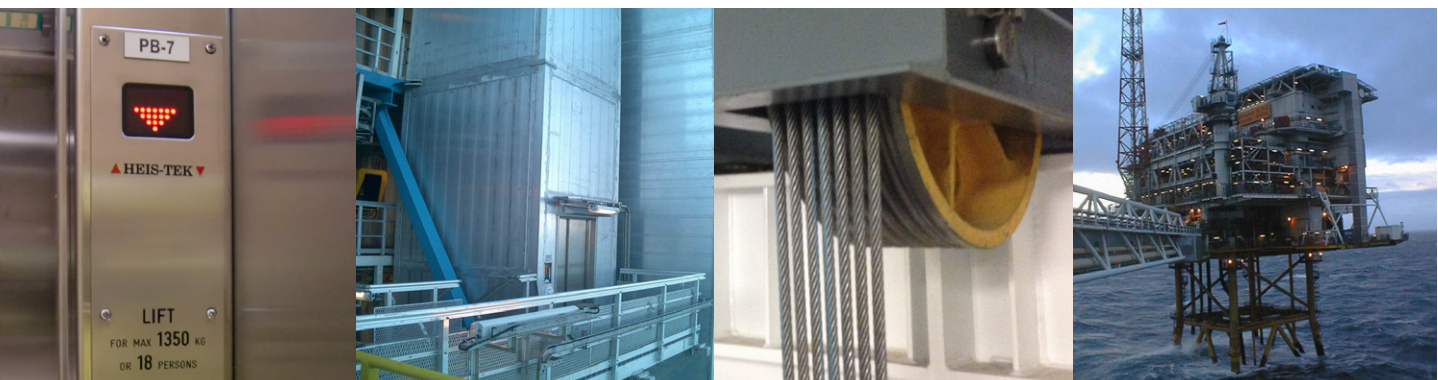
Car frame (heavy duty) with safety gear accordance to regulations. Steel frame is supplied hot dip galvanized.

Elevator car with walls and roof of stainless steel panels AISI 316 Grit 180/220. Side walls will be equipped with two crash bars of aluminium. Handrail \varnothing 32 mm at one sidewall. Floor of galvanized checker plate or plain sheet for application of other floorings.

The elevator car has escape hatch in the ceiling and emergency ladder inside car. Opening of the escape hatch will automatically stop the elevator. The elevator car is equipped with two lighting fixtures. The elevator car is closed by a 2- or 4-panel horizontal sliding door. Light curtains with sender and receiver is installed in car entrance to prevent the door to close while personnel are entering the cabin. The car will be provided with inspection panel on car-roof for maintenance and service purpose.

DOORS

The elevator shaft is equipped with 2- or 4-panel horizontal sliding door. Panel, frame and sill in stainless steel AISI 316. Protection class for door motor: EEx IIB T4. The doors are electrical and mechanical locked and cannot be opened unless the car is situated at the landing. Opening of shaft door is possible by emergency key. The door operator has safety switch according to regulations.



CONTROL SYSTEM

When Ex equipment is required, the control panel must be installed in safe area (LER). The control cabinet consist of a CPU with software for elevator application and compliance with EN81. The VSD is also installed in the cabinet together with necessary starters, fuses, relays, etc.

An interface control panel is installed in the machine room. Supply and installation of cables between control panel and machine room by others.

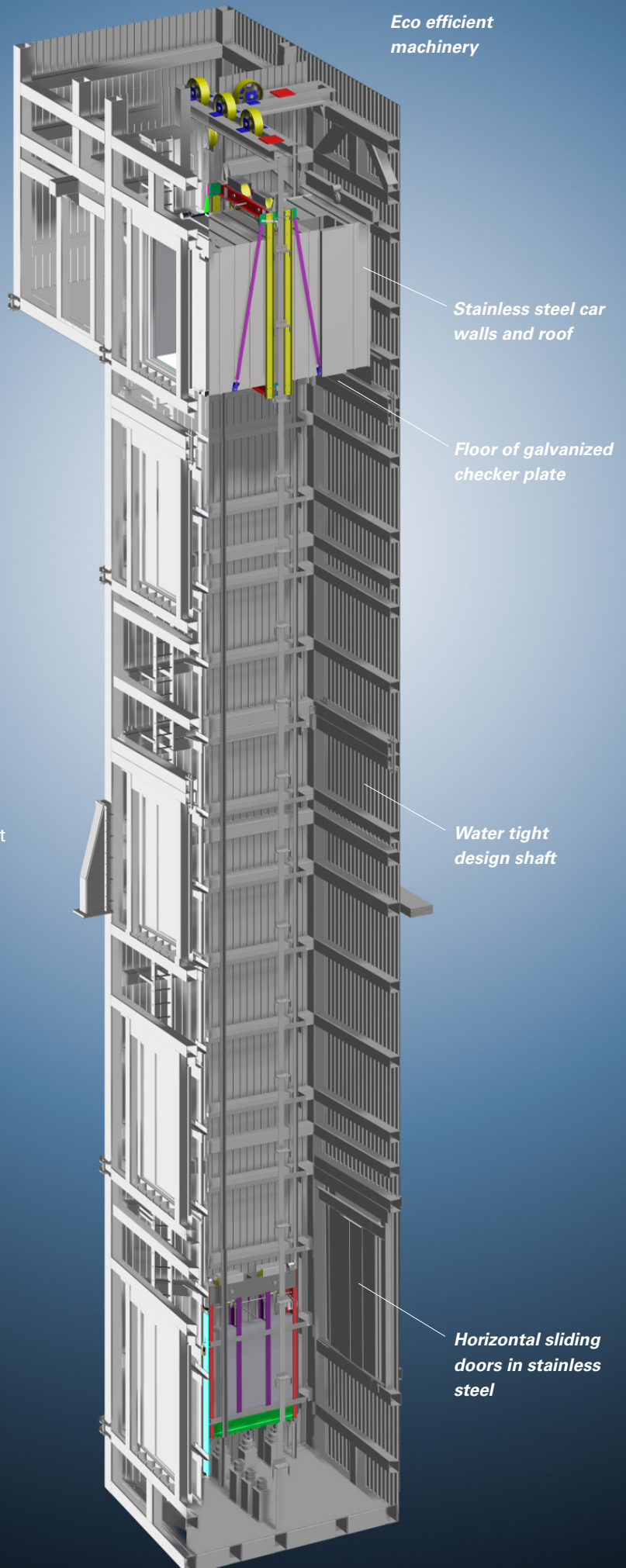
All fix cables are flame resistant and halogen free. Trailing cables are flame retardant and halogen free.

EXPERIENCED SUPPLIER

Alimak has supplied elevators for the offshore market since 1974. We supply elevators for Living Quarters, but also outdoor elevators complete with lift shaft. Our company have maintenance agreement with BP, ConocoPhillips, Equinor and Statoil. More than 1,500 Alimak OS elevators have been supplied for both offshore and onshore applications.

CODES AND REGULATIONS

Alimak OS elevators comply with EN81-20/50, ISO 8383, 2014/33/EU and Norsok standard R-002, Appendix E. The elevators are mainly designed according to client's requirements.



Technical specifications

MAIN BENEFITS

- Individually tailored design for customer requirements
- New installations and elevators modernisations
- Modular design delivering a wide range of car sizes and capacities
- Energy efficient machinery
- Eco-efficiency
- Superior ride comfort
- Watertight elevator shaft
- Fully collective elevator control system
- Durable materials: stainless steel car wall panels and roof with car support frame of hot dip galvanized steel. Car floor of galvanized checker plate.
- Wide range of optional equipment and functions delivering you the right equipment for each individual task.



	ALIMAK OS	ALIMAK OS-Ex
Payload capacity	630 kg – 10,000 kg	1,000 kg – 10,000 kg
Travelling speed	1.0–1.6* m/s	0.5–1.0** m/s
Lifting height	Up to 80 m	Up to 50 m
Motor control	Frequency control (VSD)	Frequency control (VSD)
Internal car width:	1.2 m – 2.5 m**	2.0 m – 2.5 m**
Internal car length:	2.2 m – 4.0 m**	3.5 m – 4.5 m**
Internal car height:	2.2 m – 3.0 m**	2.5 m – 3.5 m**
Door opening (W x H):	1.0 m x 2.9 m**	1.9 m x 2.9 m**
Power supply range	380–690 V, 50 or 60 Hz, 3 phase	
Regulations		ATEX
Protection class	None (Safe area)	Zone 2
		Gas group I, IIA or IIB
		Temp. class T4

* For optional hydraulic design, travelling speed max. 1.0 m/s.
 ** Can be adapted to client's specification.
 For other demands or specifications, please consult your Alimak representative.