

# WSD36

## SERVICE LIFT FOR WIND TOWER

CE

**EN 81-44:2024**

- Machinery Directive  
2006/42/EC
- Electromagnetic Compatibility Directive  
2004/108/EC
- Low Voltage Directive  
2006/95/EC
- Safety of machinery  
EN ISO 12100
- Safety of machinery - Electrical equipment of machines  
-Part 32: Requirements for hoisting machines  
EN 60204-32

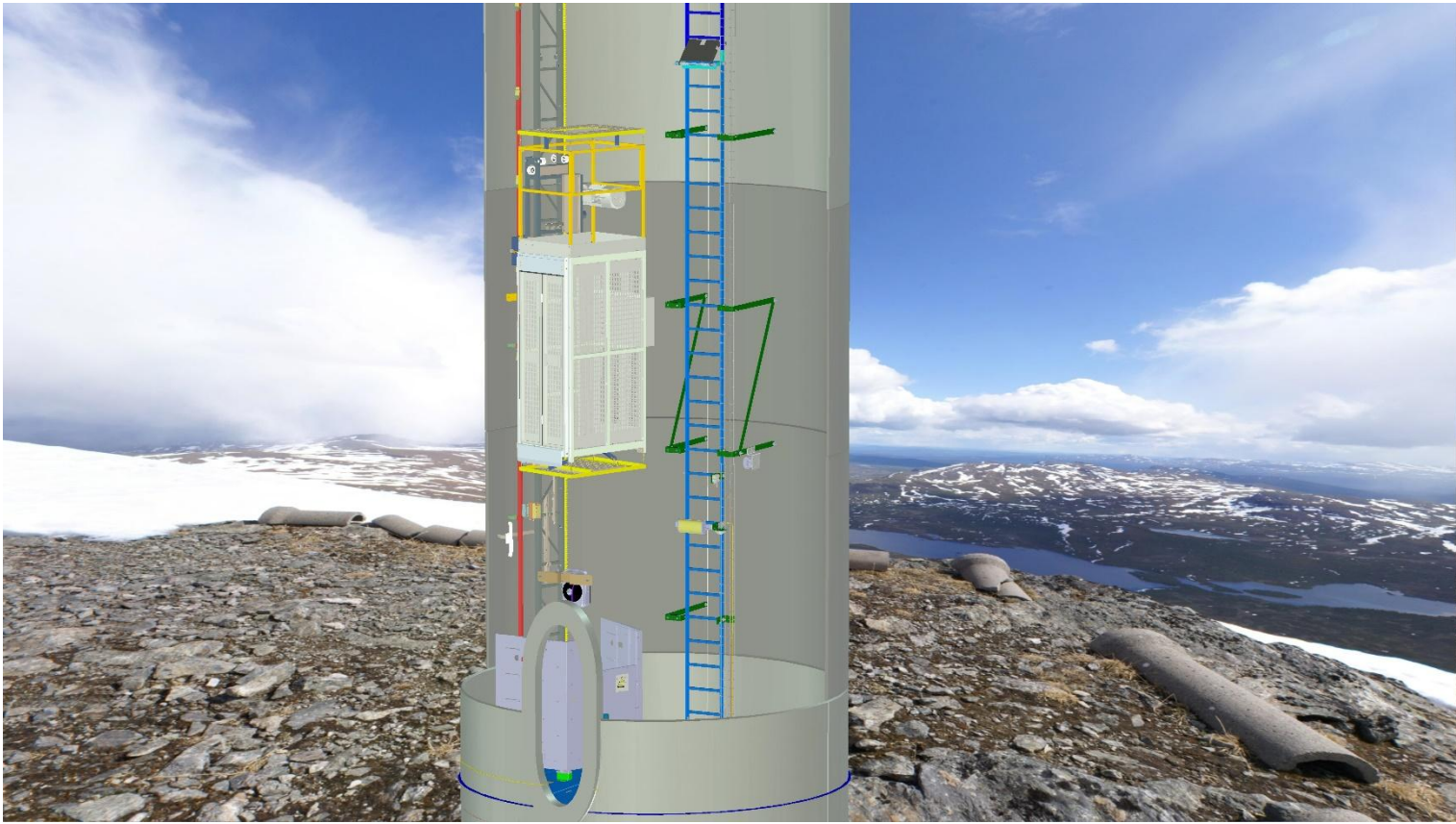


# SERVICE LIFT FOR WIND TOWER

## PROFESSIONAL TOWER ACCESS EQUIPMENT FOR MULTI-PERSON



Service Lift for wind tower is a lifting device installed inside of the wind tower, driven by motor reducers engaged by **zero-backlash roller rack**, moving up and down along the guiding mast fixed on the inner wall of the tower, transporting the operators and small tools from the starting platform to the working platform.



## Zero-backlash roller rack Service Lift

### New Solutions to Wind Tower Access

Through the engagement of the zero-backlash roller and rack, travel of the car is accurately controlled, with larger load and higher speed. Its operation efficiency is obviously improved compared with the traditional wire rope type lift.

Bus Bar is used for power supply. The service lift can be used during the construction period.

This service lift can adapt different types of wind turbine tower, especially suitable for large wind turbines and high tower projects both on land and offshore.

# Main Features of WSD36

- **Bus Bar Power Supply System (Power Cable optional)**

Adopting bus bar power supply system, which fundamentally solves the problems of cable skin breaking, cable breaking and unsmooth cable collection, and is safer and more reassuring. Modular construction and heightening at any time will not affect the construction progress.

- **Roller & Rack Transmission**

The zero-backlash roller rack transmission with special teeth profile replaces the traditional wire rope transmission, so the operation is more stable, which avoids that problems of wire rope win, rope clamping, wire breakage in the traditional lift. The service life and the transmission efficiency are greatly increased, and the later maintenance cost is effectively reduced.

- **Imported Driving System**

Equipped with 1 set of European Brand motor reducer, the machine is compact design, stable operation, durable and low maintenance cost.

- **Centrifugal Safety Brake**

Equipped with 1 set of centrifugal safety brake, the machine is safe and reliable, greatly increasing the safety of passengers.

# Main Features of WSD36

- Can be used during construction of wind tower

It can be used after the completion of first section of wind tower. Passenger can use this service lift during the construction process of wind tower. The height of mast and bus bar can be increased accordingly, which is very fast and convenient.

- Higher load and bigger space can be tailored

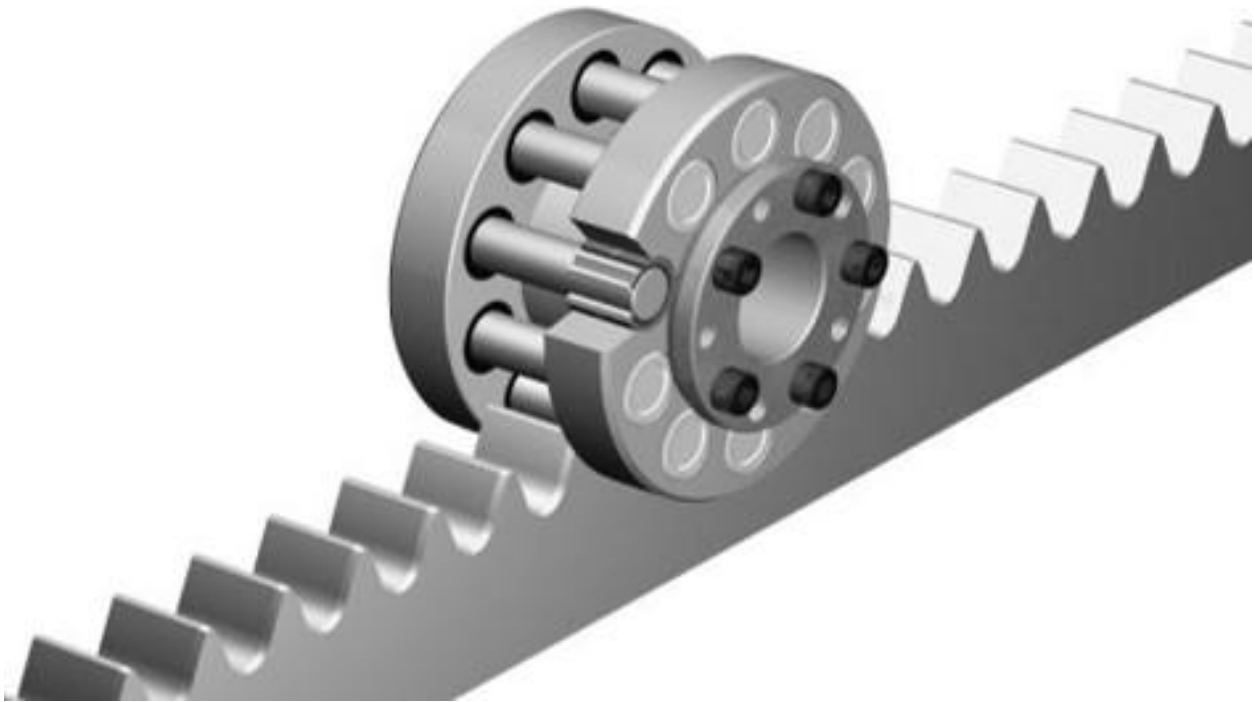
Working load is 360kg ,with enough space for 3 persons ( higher load and bigger space can be tailored) .

- Higher speed for higher efficiency

Lifting speed can be 22m/min, higher speed is on request for clients' requirement.

# WSD36 Technical specifications

Model	WSD36	Power	1x4kw
Rated Load	360 kg	Cabin Size	Inner Size 1100x800x2200mm
Passengers	3 人 Persons	Power Supply	400 V, 50/60 Hz, 3P+PE
Max. Working Height	150m	Ambient Temperature	-30 °C - 60 °C (Low Temperature Type On Request)
Lifting Speed	22m/min	Mast Section Size	400x80x2000mm, 45.8kg ( Including Rack)
Compliant Standards	BS EN 81-44:2024 EN 60204-32 EN 12100		
Other Models Available	SL24 (Working Load 240kg) SL48 (Working Load 480kg)		

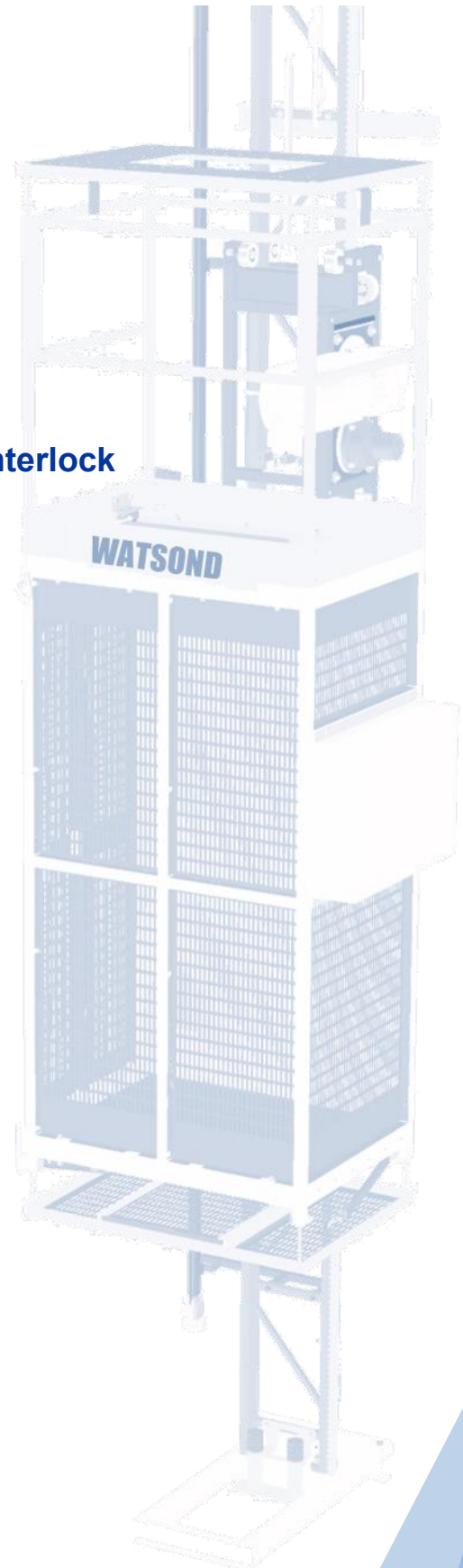


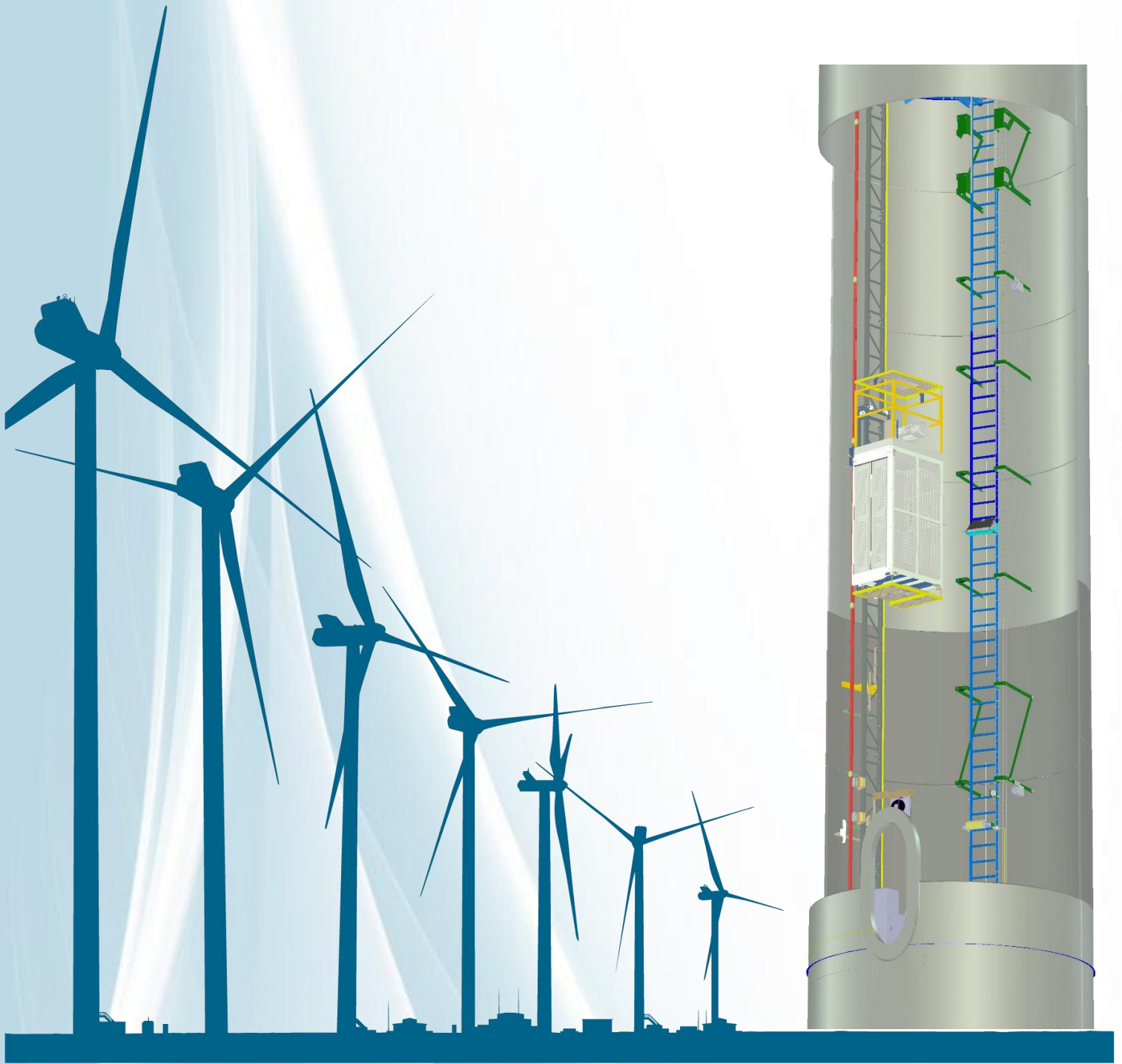
## Advantages of Zero-backlash Roller Rack Transmission

- ◆ There are always 2-3 contact portion, which generates no backlash in both forward and opposite directions.
- ◆ High precision, low noise and low vibration.
- ◆ The machine doesn't wear away fast, inducing less heat and generates the minimum amount of dust.
- ◆ By elongating accessories, a travelling speed of 3m/s can be obtained.

# WSD36 Safety Features

- ◆ Centrifugal Safety Brake
- ◆ Rack Inductive Detector
- ◆ Emergency Stop
- ◆ Travel Limit Switches
- ◆ Buffers at the travel limits
- ◆ Non-slipping Floor
- ◆ Cabin access door with electromechanical interlock
- ◆ Bottom and top trap door with limit switches
- ◆ Bottom anti-obstacle device
- ◆ Low voltage panel
- ◆ Phase control
- ◆ Cabin roof railing
- ◆ Supporting structure emergency ladder
- ◆ Lighting inside the cabin
- ◆ Voice Warning device for lift in movement
- ◆ Anchorage points inside and at cabin roof
- ◆ Overload device
- ◆ Lift way protection
- ◆ Landing gates (optional)





**WATS  ND**