

# TECHNICAL SPECIFICATIONS

## Wind Turbine Installation Vessel (WTIV)

# Wind Orca

### PRINCIPAL DIMENSIONS

Length over all	161.30 m
Length between perpendiculars	155.60 m
Breadth, moulded	49.00 m
Depth to main deck	10.40 m
Draught, design	5.50 m
Draught, max.	6.00 m
Payload, jacking up to	11,000 t
Max. Speed	13.0 kts

### OPERATING CONDITIONS - ELEVATED

#### Service Restrictions when Jacking:

Wind Speed	20 m/s
Significant Wave	Height 2.5 m
Leg Length	105 m
Max. Leg Protrusion	80 m below the hull
Current	Within DP Operating Envelope

### ACCOMMODATION

Cabins	111 Single Berth Cabins (with ensuite bathrooms)
Recreation Facilities	Cafeteria with seating for 70 personnel, 2 Day Rooms, Fitness Centre, 2 TV Lounges
Offices	Operations Office, 2 Conference Rooms, 4 Multi-use Offices

### CLASS

DNV	1A Self-elevating Wind Turbine Installation unit Crane Unit, E0 DPS(2) HELDK
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### FLAG

Denmark

### TANK CAPACITIES

Marine gas oil	4,200 m3
Lube oil	32 m3
Fresh water - potable	1,500 m3
Water ballast	12,000 m3 (approx.)
Sewage (black + grey)	630 m3

### LEGS & JACKING SYSTEM

Number of legs	6 sets of 3-chord truss type
Jacking System	High Speed Rack & Pinion
Speed	VFDs 0.1 - 2.4 m/min

### MAIN CRANE

Main Hook SWL	1,600 t @ 40 m
	1,200 t @ 50 m
Whip Hook SWL	425 t
Max. operating wind speed	16 m/s (1 minute mean, @ 10 m)
Utility Hoist SWL	15 t (man-riding)

### AUXILIARY CRANES

One Aux Crane	
Main hoist SWL	35 t @ 30 m (man-riding)
Aux hoist SWL	25 t @ 40 m
Deck Crane	25 t @ 30 m

### THRUSTERS

Azipod Stern Thruster	4 x 3.4 MW
<b>Bow Retractable Azimuth</b>	
Thruster	2 x 2.2 MW
Bow Tunnel Thruster	2 x 2.2 MW

### DYNAMIC POSITIONING SYSTEM

Type	DP2
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### CARGO AREA

Main Deck Area	4,300 m2
Deck Loading	15 t /m2

### HELICOPTER LANDING DECK

D-value (max.)	22 m
Weight (max.)	12.8 t