# WIND TURBINE INSTALLATION VESSEL



# **Highlights in Details**





## **KEY FEATURES**

- 11,000t Variable load
- 4,800m<sup>2</sup> Cargo deck area
- \* 2,200t @ 19m, Leg encircling crane
- Max. 120 persons on board, based on 24 single cabins and 48 double cabins.
- DP-2 positioning system

self-propelled jack-up vessel suitable for safe installation and maintenance of large-capacity offshore wind turbines components worldwide.

The vessel is designed to carry wind turbine components with the following scenarios:

+4 sets of 12 MW turbines or

\*3 sets of 15 MW turbines.

# **Main Parameter**

### **GENERAL**

Category: Class:

Jack-up Vessel TBD

### Notation:

Self-Elevating Offshore Wind Turbine Service Unit/Crane Unit; Lifting Appliance; Load Computer(I); PSPC; Ice Class B; IWS;G-ECO (BW(T), VIB1, NOI1); HELDK

SM AUT-0;DP-2

### **PRINCIPAL DIMENSIONS**

Length Overall:	133.00 m
Breadth Moulded:	53.00 m
Moulded Depth:	11.00 m
Design Draft:	6.73 m
Free Deck Area:	4,800 m <sup>2</sup>
Variable Load:	11,000 t
Max. Deck Load:	15 t/m²
Max. Water Depth:	77 m

#### **DESIGN ENVIRONMENT**

-20 °C ~ 40°C
30% to 70%
0°C to 32 °C

### LEG

Type: Chord Distance: Rack Plate: Length Overall:

#### **JACKING SYSTEM**

Туре:	Fixed, opposed rack and pinior
Drive:	Electric VFD
Number of Pinions:	144
Normal Jacking per	Pinion: 265 Mt
Max. Jacking per Pil	nion: 390 Mt
Jacking Speed, Hull	Lifting: 0.5 m/min
Jacking Speed, Leg	Handling: 0.8 m/min
Design Lifetime:	2,500 load cycles

## CRANE

Main Crane: Main Hook:

Lifting Height: Aux. Hook: Lifting Height:

**Auxiliary Crane 1: Auxiliary Crane 2:**  2.200 t @ 19 m 1.148 t @ 40 m 160 m (above deck): 400 t @ 42 m 188 m (above deck):

Triangular truss type

120.5 m(Incl. spudcan)

203.2 mm (8 inch)

9.0 m

300 t @ 20 m. 80 t @ 50 m 50 t @ 30 m

### **SPUDCANS**

Number: Type: Footing Area: 4

Polygon type approx. 230 m<sup>2</sup> each

Diesel Engines 6 X 3,380 kW

50 Hz, Tier III with SCR

50 Hz, Tier III with SCR

1 X 800 kw

500 kW

## **POWER PLANT**

Main Power:

Harbor Power:

Emergency Power:

#### PROPULSION

Main Propulsion: Bow Thrusters: Transit Speed:

3 x Azimuth Thrusters 3,500 kW 3 x 1,660 kW 8.4 kn

#### ACCOMMODATION

Total POB: Helideck:

S61N/S92A

120 Persons

**POSITIONING SYSTEM** Positioning System:

## DP-2

## **DESIGN LIFE**

Design Life:

25 Years

# **Main Deck Layout**



**Unobstructed Large Open Main Deck Area** 

Open deck area: 4800 m<sup>2</sup>

To accommodate up to three (3) sets 15MW WTG , as well as corresponding WTG sea fastening facilities

# **Project Master Schedule**

Basic Design Started:	Apr. 17 <sup>th</sup> 2021	
EPC Contract Signed:	Dec. 31th 2021	
Steel Plate Cutting	Apr. 29 <sup>th</sup> 2022	
Keel-laying	Aug. 30 <sup>th</sup> 2022	A A A
Vessel Launched	Jul. 26 <sup>th</sup> 2023	
Main Crane	Sep. 30 <sup>th</sup> 2023	and the second sec
<ul> <li>Sea Trial</li> </ul>	Nov. 13 <sup>th</sup> 2023	

Vessel Delivered





