

HEA Thor

A versatile self-elevating barge designed for offshore wind farm construction and maintenance operations. The vessel combines a four-legged jack-up system with DP2 capability, enabling safe and efficient operations in water depths of up to 50 m. Equipped with a heavy-lift offshore crane with a lifting capacity of up to 400 t, approximately 1,850 m² of usable deck space, and accommodation for 56 personnel, the vessel is well suited for turbine installation, heavy lifting, offshore construction, and long-term maintenance campaigns.

General Information

Type:	Self-elevating jack up barge
Design:	Damen Offshore
Built:	2010
Builder:	CRIST Shipyard, Gdansk (Poland)
Class & Notations:	DNV ∇ 100 A5 Self elevating unit, Special purpose ship, ∇ MC AUT DP(2)
Flag:	Portugal (Madeira)
IMO:	9577147

Principle Dimensions

Length overall LOA:	92.77m
Hull length:	70m
Hull breadth:	40m
Total beam (BOA):	40m
Hull depth:	6.16m
Draft:	4.6m (8.43m Incl. thrusters)
Variable load:	3700t (2500t)
Load capacity:	12t/m2
Main deck area:	1850 m2

Helideck

Type/ Diameter:	Aluminium / 19.6m
Capacity:	9.3 Tons
Helicopter type:	Sikorsky S61N-S92N / CAP 437

Legs and Spud cans

Number/Type:	4 / tubular
Leg length / Diameter:	83.35m / 3.7m
Spud can type:	Circular
Spud can L x B x H:	8.5m x 8.5m x 3.6m
Spud can bearing area:	72.25 m2
Spud can bearing pressure:	80 t/m2

Jacking System

Type:	Hydraulic, dual jacking frames
Maker:	Muns Techniek
Locking pins:	12 cylinders & 6 pins per leg
Elevating speed:	0.8m/min
Pull-out capacity:	1230 t/leg
Jacking capacity:	3340 t/leg
Holding capacity:	4330 t/leg
Storm holding:	4330 t/leg

Generators and Machinery

Main engine:	2 x MTU 16V4000M73, 2560 kW
Main generator:	3 x Cummins KTA50-D(M1), 1230 kWe, 1800 rpm
Auxiliary generator:	1 x Cummins KTA38-D(M1), 920 kWe, 1800 rpm
Emergency generator:	2 x Cummins KTA19-D(M)1, 400 kWe, 1800 rpm
Water maker:	2 x 10 m3/day
STP:	100 POB

Control Systems

DP System:	Kongsberg K-POS 21
Navigation and communication systems, according to IMO requirements.	

Cranes

Main crane	
Maker/ Model:	Liebherr BOS 14000-500 D LITRONIC
Type:	Diesel-hydraulic offshore crane
Boom length:	Long: 93m, Short: 60.08m
Long boom capacities:	400t @ 16.5-20m – 73.8t @ 62m
Short boom capacities:	Aux - 50t @ 18.4- 66.3m
Short boom capacities:	500t @ 11.5-20m – 157t @ 52m
Short boom capacities:	Aux - 50t @ 13.4- 57.3m
Hooks above main deck:	Main hook: Long 87m, Short 56m
Aux hook:	Long 91m, Short 61m
Auxiliary crane No.1	
Maker/ Model:	HMB LINTEC marine GmbH
Type:	Telescope crane at Port FWD side
Capacities:	4t @ 19.5m
Auxiliary crane No.2	
Model:	PTM1800 Palfinger hydraulic crane
Capacity:	6t @ 2.2m, 3.8t @ 30.5m

Safety Systems

Lifeboats:	2 x 56 POB
Life rafts:	4 x 25 Men, 2 x 12 Men
MOB/Fast rescue craft:	1 x 12 POB

Propulsion

AFT thrusters:	2 x 2560 kW BERG BAT 730 CPP
FWD thrusters:	2 x 750 kW HRP 5011 WM CPP
Service speed:	6 knots

Deck Equipment

Four-point mooring system:	4 x 300 kN (pulling), 900 kN (holding) 12 m/min with load, 24 m/min without load, wire on drum 900 m
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Tank Capacity

Fuel oil:	366 m3
Fresh water:	120 m3
Ballast water:	3900 m3
Endurance:	30 Days

Operation Conditions

Criteria	Wind	Hs	Current
Field transit:	36m/s	1.8m	
DP:	11.8m/s	1.5m	0.75 m/s
Jacking:	10.8m/s	1.5m	0.75 m/s
Water depth:	50m		

Accommodation and Facilities

Configuration:	Current
1 Man cabins:	6 Cabins
2 Men cabins:	25 Cabins
4 Men cabins:	-
Total POB:	56 POB

Facilities

Galley, mess room, client offices, meeting room, recreation rooms, gymnasium, changing rooms, coffee rooms, sick bay, Helli reception/ departure facilities, laundry, stores, workshops, Starlink VSAT and DP-PRS