

Seven Waves

Construction/
Flex-lay

subsea 7



The *Seven Waves* is a heavy construction vessel capable of operating in water depths of up to 2,500m.

- Length 145.9m x breadth moulded 29.9m
- Service Speed: 13.0 knots
- Accommodation: 120 persons
- 550t top tension VLS
- AHC crane: 400t @ 16.5m
- 2 x work-class ROVs

General Information

Classification	Lloyds Register, +100A1, +LMC, UMS, DP(AA), CAC(3), EP, ICC, IBS, *IWS, NAV-1, UD strengthened for load of 10t/m ² and 5t/m ² , Helicopter Landing Area
Built	Merwede Shipyard, The Netherlands
Delivery	2014
Flag State Authority	Isle of Man Government
Port of Registry	Douglas

Dimensions

Length Overall	145.9m
Breadth moulded	29.9m
Depth to maindeck	13.0m
Draught (design)	7.2m
Draught (summer)	8.3m
Deadweight (operational)	7,025t
Deadweight (max)	11,312t
Max displacement	27,013t
Gross Tonnage	17,283t
Net Tonnage	5,185
Air draft (with TLS vertical)	66.9m at 6.6m draught
Air draft (with TLS inclined)	47.4m at 6.6m draught

Manoeuvring and Propulsion Systems

Main Engines / Generators	6 x 3,840kW (Wartsila diesel electric)
Propulsion	3 x 2,950kW stern azimuth thrusters (Wartsila) 2 x 2,400kW retractable bow azimuth thrusters (Wartsila) 2 x 2,200kW bow tunnel thrusters (Wartsila) Total thruster power 18,050kW

Dynamic Positioning Systems

DP Classification	DP (AA) - Class II
DP System	KPOS DP22 dual redundancy
Reference Systems	2 x Veripos DGPS 1 x Seapath DGPS 2 x HiPAP 500

Speed / Consumptions

Service Speed	13 knots+, 45m ³ day
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Tank Capacities (100%)

Marine Gas Oil	2,208m ³
Potable Water	998m ³
Ballast Water	4,696m ³
Anti-Heel tanks	1,525m ³
Technical FW (in WB tanks)	633m ³

Cargo Deck

Deck strength	10t/m ² partially on aft deck, 5t/m ² elsewhere
Deck area	approx 1,200m ²

Communications Systems

The vessel is fitted with an extensive communications system including a dual KU /C Band Vsat satellite communication system, 2 x Inmarsat C and Inmarsat F systems.

Deck Cranes

Huisman Mast Crane	
Main line (AHC)	400t @ 16.5m
Maximum reach	39.5m
Wire length	2,500m
Whip line (man riding)	40t @ 58m
Maximum reach	58m
Wire length	500m
Cargotec auxiliary knuckle boom crane	
Main line (AHC)	25t @ 15m
Maximum reach	32m
Wire length	2,800m
Whip line (man riding)	10t
Maximum reach	33m
Wire length	150m
HS Marine Service Crane on the TLS tower	
Main line (man riding)	25t @ 10m
Max reach	15m
2 x TTS stores / moonpool handling knuckle boom cranes	5t at 17m

ROV Systems

The vessel is fitted with two over side launched work-class Hercules type ROVs rated to 3,000m.

Pipelay Systems

The vessel is fitted with two underdeck storage carousels, with a capacity for 2,500t and 1,500t of product. A vertical (tiltable) lay system (550t top tension capacity) is permanently installed for deployment of a range of flexible products with a diameter from 100 to 630mm. The lay tower can operate at up to 10° and is fitted with two tensioners, each of 275t capacity which can be retracted clear of the firing line, and with two wire centralisers. Two A&R winches are fitted of 600t and 200t, both with 2,500m of wire. The moonpool is designed to hang off products up to 600t and is fitted with a mechanism to allow the product to be rotated under full load

Accommodation

120 persons	
Single cabins (with dayroom)	4
Single cabins	40
Double cabins	38
Hospital (not included in total)	3

Helideck

The vessel is fitted with an approved and certified helideck suitable for Sikorsky S92 and Super Puma operations.

D value	22.2m
T value	12.8t