

Seven Waves

Construction/
Flex-lay

subsea 7



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
- Special Purpose Ship Code Compliant

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

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 3,690kW (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)

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 1 x Radius 1 x Cyscan

Speed / Consumptions

Service Speed	13 knots (approx)
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Tank Capacities (100%)

Marine Gas Oil	2,208m ³
Potable Water	997m ³
Ballast Water	4,704m 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

Deck Cranes

Huisman Mast Crane	
Main line (AHC)	400t
Whip line (man riding)	40t @ 58m
Cargotec auxiliary knuckle boom crane	
Main line (AHC)	25t
Whip line (man riding)	10t
HS Marine Service Crane on the TLS tower	
Main line (man riding)	25t
Port side	5t
Starboard side	4t harbour lift

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 613t and 200t, both with 2,500m of wire. The moonpool is designed to hang off products up to 605t and is fitted with a mechanism to allow the product to be rotated under full load. There are two 30t deck loading tensioners on the stern of the vessel - one on each side.

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.

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