

Toisa Vigilant

6,000 BHP - Multi-Purpose Offshore Support Vessel

OUTLINE SPECIFICATION / DATA SHEET



GENERAL

Builder / Year	Wuhu, China / 2005
Flag / POR	Bahamian / Nassau
Class	Det Norske Veritas +1A1, Supply Vessel SF, AUTR, HELDK-S, Tmon
Gross tonnage	3,404
Nett tonnage	1,131
Deadweight (summer)	3,426 tonnes

DIMENSIONS

Length OA	80.50 m
Breadth mid.	18.00 m
Draught (summer)	6.10 m

PERFORMANCE

Service speed	abt. 10-12 knots
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CARGO DECK

Clear sheathed deck area	48.0 m x 15.0 m = 720 m ²
Deck strength	5 tonnes / m ²
Deck load	abt. 1,200 tonnes
Mezz Deck	Approx. 464m ²
Deck area under Mezz Deck	Approx. 379m ²

Clear Deck area aft of Mezz Deck	Approx 221m ²
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CARGO CAPACITIES

Approx. at 100%

Fuel oil cargo	1,000 m ³
Potable water	933 m ³
Drill water	900 m ³
Dry bulk @ 80 psi.	5 x 42.5 m ³ = 212 m ³ (7,504 ft ³)
Liquid mud @ 2.8 sg	399 m ³ - (2,508 bbls)
Brine @ 2.8 sg	367 m ³ - (2,307 bbls)
Base oil	170 m ³ - (1,069 bbls)

CARGO PUMPING

Fuel oil cargo	1 x 150 m ³ /hr @ 9 bar
Potable water	1 x 150 m ³ /hr @ 9 bar
Drill water	1 x 150 m ³ /hr @ 9 bar
Dry bulk compressors	2 x 28.4 m ³ /m @ 80 psi
Liquid mud	2 x 75 m ³ /hr @ 21 bar
Brine	2 x 75 m ³ /hr @ 21 bar
Base oil	1 x 150 m ³ /hr @ 9 bar

HELIDECK

D value of 18.7m and max gross weight of 8.6mt
Heli-reception room and full emergency equipment.

DP2 SYSTEM

DP / Joystick Control	IMO Class 2 DP System - Kongsberg K-Pos DP-21
Reference Systems	2 x Independent DGPS HPR (Sonardyne + Ranger computer) Fanbeam
Transponder Deployment	"A" Frame + 1,000 m Winch

PROPULSION

Two MAK 8L26 marine diesel engines each developing 3,217 BHP @ 750 rpm each driving 1,600 kW shaft alternator and CP propeller.
Total developed power 4,800 kW (6,434 BHP)

GENERATION

440 / 3 / 60	
Shaft alternators	2 x 1,600 kW
Main alternators	2 x 350 kW
Harbour/Emergency set	1 x 190 kW

THRUSTERS

Forward tunnels	2 x 610 kW
Aft tunnels	2 x 610 kW

DECK MACHINERY

Main crane	20 tonnes @ 12 m radius 4 tonnes @ 31 m radius
GP crane - offshore knuckleboom type with 2t winch.	1 tonne @ 16 m radius 2 tonnes @ 10 m radius

A Frame	10.2 tonne SWL 3 tonne at 3000m
Active Heave Winch for A Frame	Mermac R40 AHC Winch
Windlasses	2 x 15t hydraulic
Tuggers	2 x 12t hydraulic
Capstans	2 x 10t hydraulic

ACCOMMODATION

Wheelhouse and accommodation fully air conditioned	
Single berth cabins	2 suites + 9 en-suite
Two berth cabins	22 en-suite
Hospital	1 berth
Conference Room	1
Gymnasium	1
Complement	55 persons in current arrangement

STABILISATION

Two passive roll reduction stabilisation tanks

DECK SERVICES for ROV's etc.

Electrical Power	1,000 kW DB's 440/3/60
Compressed Air	5.6 bar / 80 psi