

## 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 mld.	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 <sup>2</sup>
Deck strength	5 tonnes / m <sup>2</sup>
Deck load	abt. 1,200 tonnes

Mezz Deck	Approx. 464m <sup>2</sup>
Deck area under Mezz Deck	Approx. 379m <sup>2</sup>
Clear Deck area aft of Mezz Deck	Approx 221m <sup>2</sup>

#### CARGO CAPACITIES

	Approx. at 100%
Fuel oil cargo	1,000 m <sup>3</sup>
Potable water	933 m <sup>3</sup>
Drill water	900 m <sup>3</sup>
Dry bulk @ 80 psi.	5 x 42.5 m <sup>3</sup> = 212 m <sup>3</sup> (7,504 ft <sup>3</sup> )
Liquid mud @ 2.8 sg	399 m <sup>3</sup> - (2,508 bbls)
Brine @ 2.8 sg	367 m <sup>3</sup> - (2,307 bbls)
Base oil	170 m <sup>3</sup> - (1,069 bbls)

#### CARGO PUMPING

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

#### 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

Shaft alternators	440 / 3 / 60
Main alternators	2 x 1,600 kW
Harbour/Emergency set	2 x 350 kW
	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  
(Stiff Boom) 4 tonnes @ 31 m radius  
GP crane - offshore knuckleboom type with 2t winch.

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

#### ROV

ROV 2 x Centurion QX Work Class ROV  
Rated to maximum 3000m water depth  
LARS 2 x Lars – maximum working depth 3000m