

## Toisa Valiant

### 6,000 BHP - Multi-Purpose Offshore Support Vessel OUTLINE SPECIFICATION / DATA SHEET



#### GENERAL

Builder/Year	Wuhu, China / 2005
Flag / POR	Brazilian (REB) / Rio de Janeiro
Class	Det Norske Veritas of Shipping +1A1 Supply Vessel, SF, AUTR, HELDK-S, Tmon with Intact & Damage Stability according to IMO Resolution A.469 (XII).

Gross tonnage	3,406
Nett tonnage	1,131
Deadweight (summer)	3,318 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	1,200 tonnes

Mezz deck	Approx. 464 m <sup>2</sup>
Deck area under Mezz deck	Approx. 379 m <sup>2</sup>
Clear Deck area aft of Mezz deck	Approx. 221 m <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 @ 80psi.	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> /m @ 21 bar
Brine	2 x 75 m <sup>3</sup> /m @ 21 bar
Base oil	1 x 150 m <sup>3</sup> /hr @ 9 bar

#### HELIDECK

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

#### DP SYSTEM

DP/Joystick Control	IMO Class 2 DP System – Kongsberg K-POS DP-21
Reference Systems	2 x Seatex DGPS HiPAP
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

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

#### THRUSTERS

Forward tunnels	2 x 160 kW
Aft tunnels	2 x 610 kW

#### DECK MACHINERY

Main crane	20 tonnes @ 12 m radius 4 tonnes @ 31 m radius 9t @ abt. 800 m water depth
A Frame	10.2 tonne SWL 3 tonne at 3000m
Active Heave winch for A Frame	Mermac R40 AHC Winch

Windlasses	2 x 15t hyd.
Tuggers	2 x 12t hyd.
Capstans	2 x 10t hyd.

#### 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 ROVs etc.

Electrical Power	1,000 kW DBs 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 – Max working depth 3000m