

> Conan Wu design Anchor Handling / Supply Vessel

> Excellent station keeping and maneuverability with 2 x 8T bow thrusters & 1 x 8T stern thruster

Equipped with double-drum electro-hydraulic Towing and Anchor Handling winches

FIFI Class 1 System

Suitable for general offshore support services

### PRINCIPAL PARTICULARS

Length Overall	67.00 m
Length Waterline	64.90 m
Breadth Moulded	16.00 m
Depth Moulded	7.00 m
Draft (max)	6.00 m
Draft (design)	5.00 m
Built	Batam, Indonesia
Year of delivery	2008
GRT / NRT	2310 / 693
Class	Det Norske Veritas
Notation	1A1 Offshore Service Vessel AHTS Fire Fighter I E0 DPS-2
Flag (Port of Registry)	Singapore
IMO Number	9487196

### PERFORMANCE

Maximum Speed / Consumption	14 knots / 23 m <sup>3</sup> (24 hrs)
Service Speed / Consumption	12 knots / 22 m <sup>3</sup> (24 hrs)
Economical Speed / Consumption	10.5 knots / 20 m <sup>3</sup> (24 hrs)
Fuel consumption in port	1.5 m <sup>3</sup> (24 hrs)
Type of Fuel	Marine Gas Oil
Bollard Pull	150 MT

### CARGO CAPACITIES

Deadweight	2370 mt
Deck Cargo	800 mt
Deck Strength	5.0 mt/m <sup>2</sup> uniform loading
Clear Deck Area	420 m <sup>2</sup>
Fuel Oil	1125 m <sup>3</sup>
Fresh Water	240 m <sup>3</sup>
Ballast/Drill Water / R Lckr	760 m <sup>3</sup>
Liquid Mud / DW	400 m <sup>3</sup>
Dry Bulk Tank	250 m <sup>3</sup> (4 x 2200 ft <sup>3</sup> ); BMH
Freezer / Chiller	10 m <sup>3</sup> / 10 m <sup>3</sup>
Foam / Detergent	13 m <sup>3</sup> / 16 m <sup>3</sup>
Rig Chain Locker / Brine / DW	200 m <sup>3</sup>

### PUMPS

Fuel Oil	1 x 150 m <sup>3</sup> /hr @ 75m head; PG Marine
Fresh Water	1 x 150 m <sup>3</sup> /hr @ 75m head; PG Marine
SWB/Drill Water	1 x 150 m <sup>3</sup> /hr @ 75m head; PG Marine
Liquid Mud / Brine	1 x 100 m <sup>3</sup> /hr @ 70m head; PG Marine
	Equipped with electrical agitators
Bilge/Ballast	2 x 45 m <sup>3</sup> /hr @ 60m head; PG Marine
GS / Fire Pump	2 x 45 m <sup>3</sup> /hr @ 60m head; PG Marine
Dry Bulk	2 x 30 m <sup>3</sup> /min @ 80 psi air compressors; BMH Nordstroms system fitted with dryers

\* Liquid Mud tanks are strengthened for products up to 2.5 SG and can be nominated to carry Brine

### PROPULSION SYSTEM

Main Engines	2 x 4000 kw (5440 bhp) @ 750 rpm Wartsila 8L32
Main Generators	2 x 590 kw @ 1800 rpm / 440V / 3Ph / 60Hz Caterpillar 3412DITA
Emergency Generator	1 x 84 kw @ 1800 rpm / 440V / 3Ph / 60Hz Caterpillar C4.4DITA
Shaft Alternator	2 x 1600 kw @ 1800 rpm / 440V / 3Ph / 60Hz Leroy Somer LSA 52.2 M60/4p
Bow Thruster	2 x 600 kw electric-driven Wartsila LIPSTRONIC 7000 TTb tunnel type (CPP); 8T thrust
Stern Thruster	1 x 600 kw electric-driven Wartsila LIPSTRONIC 7000 TTb tunnel type (CPP); 8T thrust
Steering Gear	2 x Hallapa; 7Tm; 35 deg
Propulsion	2 x CPP in Kort Nozzles; Wartsila Lips
Rudders	2 x high performance streamline Becker

### DECK EQUIPMENT

Anchor Windlass	1 x electro-hydraulic RRM Brattvaag BMG41040
Drum	suif' for 300 m (L) x 48 mm (Ø) p/p rope rated pull 12.8 mt @ 14.2 m/min
Gypsies	suif' for 40 mm (Ø) chains rated pull 12 mt @ 14.5 m/min
Warping drum	400 mm (dia) x 450 mm (L) rated pull 12.8 mt @ 14.2 m/min
Bow Anchors	2 x 1920 kg high holding power anchors
Chains	330 m (L) x 40 mm (Ø) Grade U2 (each side)
Capstan	2 x 10 mt @ 14.6 m/min electro-hydraulic; RRM Brattvaag CMXC22010K10F24
Tugger Winch	2 x 11 mt @ 19m/min electro-hydraulic; RRM Brattvaag LAKMX2202 Drum Capacity : 325 m (L) x 25 mm (dia) SWR
Deck Crane	1 x 2T @ 15m Fixed-boom type Hankook
Towing/AH Winch	1 x electro-hydraulic double drum; RRM Brattvaag SL250W/BSL250W
Upper Drum Cap (Tow)	2000 m (L) x 76 mm (Ø) SWR
Lower Drum Cap (AH)	2000 m (L) x 76 mm (Ø) SWR
Line Pull	250 mt @ 8.5 m/min at 1st layer 88 mt @ 14 m/min at 1st layer 31 mt @ 29 m/min @ 1st layer
Stall Pull	250 mt @ 1st layer
Brake Capacity	320 mt static @ 1st layer Remote control from aft control stand in wheelhouse
Gypsies	1 for 3" / 1 for 2.5" chains
Warping Drums	Nil
Stern Roller	4.00 m (L) x 2.00 m (dia) Hankook; SWL 300 mt
Wire Chain Stoppers	2 x retractable Karm Fork; SWL 300 mt wire / chain size 60mm Ø to 102mm Ø
Tow Pins	1 pair; retractable Karmoy guide pins with horizontal locking tops; SWL 160 mt
Rope Reel	1 x electro-hydraulic RRM Brattvaag ALMX63012 Drum Capacity : 2000 m (L) x 76 mm (dia) SWR
Reefer Points	2 x 5pin x 32A 2 x 4pin x 32A

**ACCOMMODATION**

Berths	6 x 1 berth cabins =	6
	2 x 2 berth cabins =	4
	8 x 4 berth cabins =	<u>32</u>
Total		<u>42</u>
Hospital	1 x 1 berth cabin =	1

All cabins fully air-conditioned & all c/w attached toilet (except 4-berth cabins)

**RADIO AND NAVIGATION EQUIPMENT**

GMDSS	Furuno RC-1800T (Area 3) comprising :
SSB	1x Furuno FS-2570 with built in DSC
Inmarsat C	Furuno Felcom 15 & Felcom 15 SSAS
VHF Radio	2 x Furuno FM 8800S with built-in DSC
Navtex Receiver	1 x Furuno NX 700 (518 KHz)
SART	2 x McMurdo S4 (9 GHz)
EPIRB	1 x McMurdo E5 SMARTFIND (406 MHz)
Portable VHF Radios	3 x McMurdo R2 (25KHz)
Radar	1 x Furuno FAR 2137 (S Band ARPA Radar)
	1 x Furuno FAR 2117 (X Band ARPA Radar)
Echo Sounder	1 x Furuno FE 700
GPS	1 x Furuno GP 150
Gyrocompass	1 x Anschuetz Standard 22
Autopilot	1 x Anschuetz Nautopilot NP2015
Magnetic Compass	1 x Cassens & Plath Reflecta 1 (10024)
Weather Fax	1 x Furuno FAX 410
Speed Log	1 x Furuno DS-80
Wind Indicator	1 x Furuno RD 30
AIS	<b>1 x Furuno FA-150</b>
BNWAS	1 x Marble MS-421

**FIRE FIGHTING & ANTI-POLLUTION EQUIPMENT**

<b>EXTERNAL</b>	
FIFI Sytem	Class 1 with water curtain all round
Fire Pump	2 x 1680 m3/hr @ 13 bar, FFS SFP250x350 driven by front PTO of M/E
Monitors - (water/foam)	1 x 300-1200 m3/hr, FFS1200-300LB
- (water)	1 x 1200 m3/hr, FFS1200LB
Oil Dispersant System	In-Line Induction Principle using GS pump 75 cub.m/hr 2 x 1 1/4" UOC 900 Nozzle 1 x MI-80F Inline Inductor
<b>INTERNAL</b>	
Emergency Fire Pump	1 x 35 m3/hr @ 60m head; PG Marine
BA Recharging Comp	1 x 260 ltrs/min @ 300 bar; Bauer Kompressoren Mariner 250-E
CO2 system in engine room	
Fire Detection & Alarm System in living spaces & engine room	

**SAFETY AND ENVIRONMENT**

Liferafts	4 x 25 / 2 x 20 men SOLAS approved type
Rescue Boat	1 x 6 men inflatable DSB 5.1 SR/IRB c/w 26.5 kw Yamaha D36 Outboard Engine
Oily Water Separator	1 x 1 m3/hr c/w 15 ppm alarm Facet Intl
Water Maker	1 x 12 m3/day Reverse Osmosis, Aquamar
Sewage Treatment Plant	1 x 42 men; Facet Intl
Incinerator	1 x 180,000 kcal/hr Industmarine