

# VESSEL 5

## Anchor Handling Tug / Supply Vessel



### GENERAL

Port of Registry	: Port Kelang
Year Built	: 2010
Builder	: Grade One Marine Shipyard Sdn Bhd
Classification	: American Bureau of Shipping (ABS) +A1,Towing Vessel,Fire Fighting Vessel Class 1,Offshore Support Vessel AH ,(E),+AMS
Dimension LxBxD	: 60.0 m x 16.0 m x 6.00 m
Draft	: Light: TBA / Loaded: 5.10m (max. design)
GRT / NRT	: 1706 / 511 (provisional)
DWT	: 1790

### CARGO CAPACITY

Fuel Oil	: Approx 530 m <sup>3</sup>
Potable Water	: Approx 500 m <sup>3</sup>
Drill Water	: Approx 450 m <sup>3</sup>
Base Oil	: Approx 180 m <sup>3</sup>
Liquid Mud	: Approx 190 m <sup>3</sup>
Dry Bulk (4 Nos.)	: Approx 170 m <sup>3</sup>
Deck Cargo	: 600 tons
Deck Strength	: 7.0T m <sup>2</sup>
Clear Deck Space	: 30 m x 13 m (390 m <sup>2</sup> )

### REFRIGERATED STORAGE

Freezer / Cold Room	: 10 m <sup>3</sup> approx. (-18°C)
Chiller / Cooled Room	: 12 m <sup>3</sup> approx. (+4°C)

### ACCOMMODATION (Fully Air-Conditioned)

6 x 1 men/ berth cabins	= 6 men
5 x 2 men/ berth cabins	= 10 men
3 x 4 men/ berth cabins	= 12men
Total = <u>28 men</u>	
1 Hospital	
Wheelhouse equipped with toilet.	

### NAVIGATION & COMMUNICATION

Doppler Speed Log	: 1 unit
Radar	: 2 x Rescue Radar Transponder (SART)
Gyro repeater	: 1 x unit
Navtex Receiver	: 1 unit
EPIRB	: 1 unit
Autopilot	: 1 unit
GPS Navigator	: 2 units
Echo Sounder	: 1 unit
Walkie Talkie	: 4 units
AIS / SSAS	: 1 unit each
VHF Transceiver	: 4 sets
2 Konsberg type Joy stick remote control system fitted at fwd and aft consoles	
1 set of fleet broadband Model: Sailor 250 fleet broadband; Type: Thrane & Thrane provided onboard.	

### ANCHOR HANDLING EQUIPMENT

Winch	: 1xZICOM double drum waterfall type
Line Pull	: 150 tons
Brake	: 200 tons
Drum Wire Cap.	: 1000 m x 58 mm wire
Spare reel	: 1 x 1000 meters
Tugger Winch	: 2 x 10 tons
Shark Jaw	: 2 x Max. SWL 300 tons
Guide Pin	: 2 x Hydraulic SWL 160 tons
Capstan	: 2 x 6 tons
Stern Roller	: 3.5 m x 1.8 m outer dia. SWL 200 tons
Stern Gate	: Swing Type

### MAIN MACHINERY & PROPULSION

Main Engine	: 2 x Medium Speed Caterpillar C280 TA Marine diesel, MCR of 2722 BHP@1000 rpm Total : 5444 BHP
Auxiliary Engine	: 2 x 275ekW/415V/3P/50Hz
Emergency	: 1 x 86ekW/415v/3P/50hz
Propulsion	: 2 x Berg CPP in fixed nozzles
Shaft Alternator	: 2 x Stamford 1000kW
Bow Thruster	: 1 x Schottel CPP, 8T thrust

### ANCHOR & CRANES

Anchor	: 2 x 1590 kg AC14 + 1 x 1590 kg spare
Chain	: 2 x 14 shackles, 38 mm dia stud link U2 chain.
Deck Crane	: 5T at 8m reach

### CARGO PUMP CAPACITY

Fuel Oil	: Approx 100 m <sup>3</sup> /hr at 90 m head
Potable Water	: Approx 100 m <sup>3</sup> /hr at 90 m head
Drill Water	: Approx 100 m <sup>3</sup> /hr at 90 m head
Liquid Mud	: Approx 90 m <sup>3</sup> /hr at 90 m head
Base Oil	: Approx 100 m <sup>3</sup> /hr at 90 m head
Ballast	: Approx 60 m <sup>3</sup> /hr at 60 m head
Dry Bulk Compressor	: Approx 13 m <sup>3</sup> / min at 5.6 bar
Reefer Power Point	: 8 x 415V/3P/50Hz

### FIRE FIGHTING (FIFI 1) & ANTI-POLLUTION

Pump	: 2 x Kvaerner 1500m <sup>3</sup> /hr at 14 bar
Monitor	: 2 with remote control
Sprinkler System	: FiFi Class 1 requirements
Oil Dispersant Boom	: 2 X Retractable
Oil Dispersant Tank	: 10m <sup>3</sup>

### BOLLARD PULL

Approx 64 tons

### SPEED

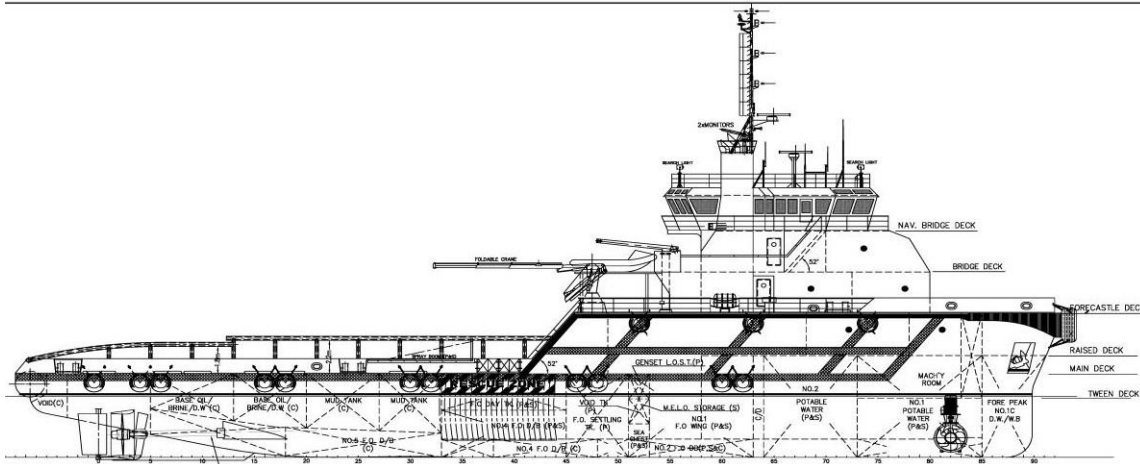
Maximum Speed	: 12 knots @ 100% MCR
Economical Speed	: 10 knots @ 85% MCR

### ENDURANCE

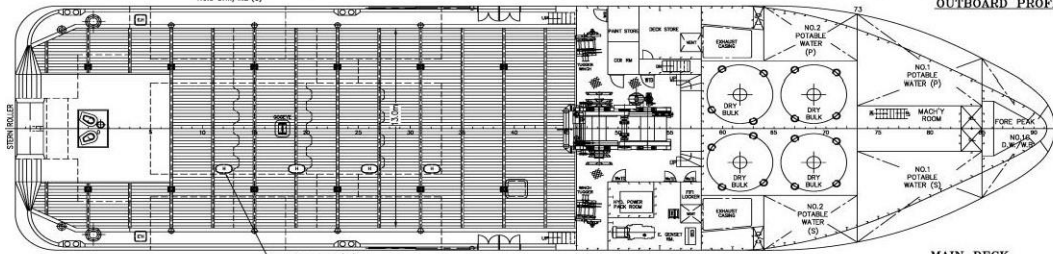
22 days

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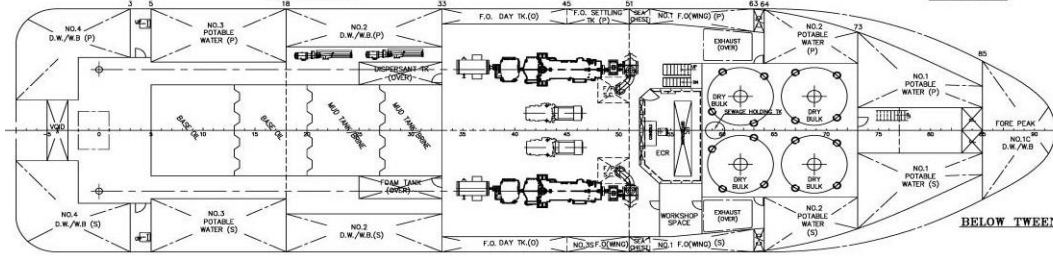
# GA PLAN



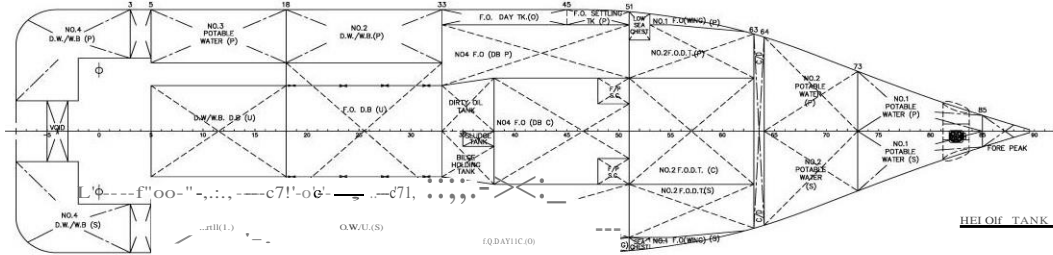
OUTBOARD PROFILE



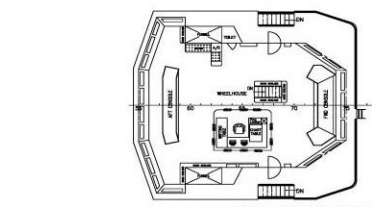
MAIN DECK



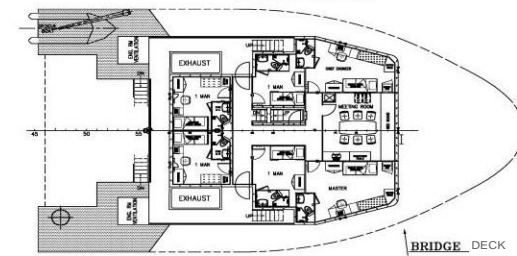
BELOW TWEEN DECK



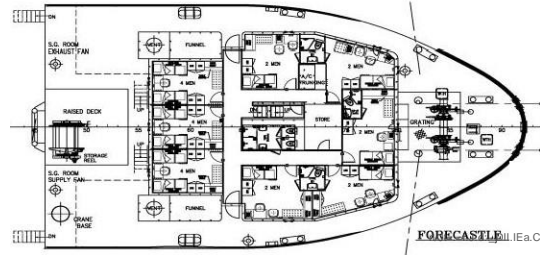
HEIOFF TANK TOP



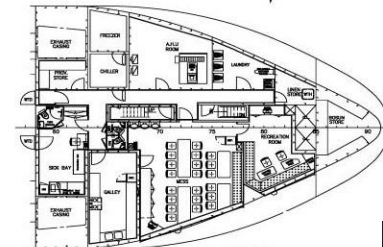
NAV BRIDGE DECK



BRIDGE DECK



FORECASTLE DECK



RAISED DECK

**PRINCIPAL PARTICULARS**

LENGTH O.A.	60.00m
LENGTH W.	58.74m
BEAM M.L.O.	16.00m
DEPTH M.L.O.	5.50m
DRAFT DESIGN EO/mox.	4.20m/4.65m
DWT	1150t/1650t
COMPLEMENT	28 MEN
POTABLE WATER	30m <sup>3</sup> (Approx)
F.O.	522m <sup>3</sup> (Approx)
OW/S.W.S.	550m <sup>3</sup> (Approx)
LIQUID MUD	177m <sup>3</sup>
BASE OIL/BRINE/DW	159m <sup>3</sup>
FOAM	10m <sup>3</sup>
DISPERSANT	10m <sup>3</sup>
DRY BULK	170m <sup>3</sup>
DIRTY OIL	11m <sup>2</sup>
BILGE HOODING	11m <sup>2</sup>
DECK SPACE	33m <sup>2</sup> (approx.)
DECK CARGO	600tonnA (approx.)

BOM AHCIOR HANDUNG/SUPPLY VESSEL			
TITLE General Arrangement			
OWNER			
BUILDER	MUHIHIBRAH MARINE ENGINEERING SDN BHD	YARD NO.	20066/20067
CLASS	BV		
CONAN WU & ASSOCIATES			
NAVAL ARCHITECTS			
12TH FLOOR, 5 INTERNATIONAL BUSINESS PARK, JARONG EAST, SINGAPORE 608914			
TEL: (65) 6562-1136 FAX: (65) 6562-1138 (65) 6562-5213 E-MAIL: conanwu@ngt.com.sg			
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