

# Topaz Master

85T BP - 64.8 M - 5700 kW - DP2 - AHTS

Vessel Specifications



## **Diesel-electric propulsion**

Lower fuel consumption, reduced environmental footprint

50-man accommodation - MLC compliant

420m<sup>2</sup> of clear deck space



# Vessel Specifications

## General

Flag	Marshall Islands
Port of registry	Majuro
Class	ABS, + a1 Offshore Support Vessel (AH, TOW, Supply-HNLS), FFV-1 (Fire Fighting Class 1), + AMS, E, +DPS-2, Offshore Support / Supply & Towing Service Vessel
Year built / builder	2017, TBA
IMO number	TBA

## Dimensions

Length overall	64.80 m
Length WL	63.66 m
Beam (moulded)	16.00 m
Depth (moulded)	6.80 m
Design draft	5.10 m
Max draft (moulded)	5.40 m (approx)
Deadweight	2000 t
Deck area	420 m2 (approx)
Deck cargo	650 t
Deck loading	7 t/m2
GRT	2332 t
NRT	699 t

## Machinery

Main generator set	4 x 1425 kW, 690V/3P/60Hz - Diesel Engine Driven 2 x Diesel Engine with front PTO
Emergency generator	1 x 200 kW, 440V/3P/60Hz -Radiator Air Cooled, Model: Cummins QSM11-DM
Bow tunnel thruster	2 x Bow CPP Tunnel thrusters, Rolls-Royce TT1650 DPN CP c/w electric motor driven
Stern Thruster	2 x Stern CPP Azimuth thruster, Electric motor driven with input power @2400kW
Propulsion system	Stern CPP Azimuth thruster

## Deck equipment

Deck crane	1 x unit Telescopic Boom Crane, electro-hydraulic, pedestal Mounted; Working Radius 15 m – 5mt SWL Working Radius 10 m – 7.5mt SWL Minimum Working Radius 3 m
Anchor windlass / Mooring winch	1 x Electro-Hydraulic Windlass with 2 x Gypsy, Mooring Wire Drum, 2 x warping head Gypsy Rated Speed : 11.4t @ 0-11 m/min (at Max. Duty) Drum Rated Speed : 12.3t @ approx. 0-11m/min (Max.) Wire Size : 247m of 48mm dia. wire 2 x Chain Stopper Roller type NP3 36-44 with lashing screw
Shark jaw	1 set hydraulically retractable (triplex), SWL 200 T
Towing pins	1 unit angular type, 115 T SWL
Stern roller	Approx. 1.8m I.D. / 2.0m O.D. x 4.0m length with SWL 250mt
Capstan	2 x 10T @ 0~12 m/min
Anchor handling / Towing winch	1 x Electro-Hydraulic high pressure of Waterfall type (Double drum) local and remote control
Drum Capacity	1250 M x Ø60mm wire each drum
Drum Pull (1st layer)	150t x 0~6.0 m/min (1st) 93t x 0~0~10 m/min (Mid) 67t x 0~14 m/min (Outer)
Drum Brake Holding	250t (static, 1st layer)
Dynamic Breaking	28 to 188 ton @56m/min (1st layer)
Tugger winch	2 x 10T Hydraulic Winch
Storage reel	1 x 7T at 0~19 m/min, 3300m of 60mm dia. wire

## Performance

Trial speed @ 100% MCR	13 knots
Bollard pull	90 t (approx)
Endurance	25 days at about 11.0 knots cruising speed

## Tank Capacities

Fuel oil	640 m <sup>3</sup>
Fresh water	397 m <sup>3</sup>
D.W./ballast	640 m <sup>3</sup>
Liquid mud/Brine/RO	411 m <sup>3</sup>
Dry bulk	172 m <sup>3</sup> (4 tanks)
Base oil	123 m <sup>3</sup>
Foam	13 m <sup>3</sup>
Dispersant	13 m <sup>3</sup>

# Vessel Specifications

## Transfer Rates

Fuel oil cargo pump	1 x 100 m <sup>3</sup> per hr @ 80 m head
FW cargo pump	1 x 100 m <sup>3</sup> per hr @ 80 M head
DW cargo pump	1 x 100 m <sup>3</sup> per hr @ 80 M head
Brine pump	2 x 75 m <sup>3</sup> per hr @ 24 bar
Air compressor / Dry Bulk	2 x 13.0 m <sup>3</sup> per min @ 5.6 bar
Liquid mud pump	2 x 75 m <sup>3</sup> per hr @ 24 bar
Base oil pump	1 x 75 m <sup>3</sup> per hr @ 80 m head

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## Communication and navigation equipment

GMDSS	Yes, Area A1+A2+A3
Navtex	Yes
GPS	Yes
SART	Yes, 2 nos.
EPRIB	Yes
Walki - talkie	Yes
Echo sounder	Yes
Radars	Yes
Magnetic Compass	Yes
AIS	Yes
SSAS	Yes
Speed log	Yes
Gyro compass	Yes, 3 nos.
Anemometer	Yes
PA / Intercom	Yes
Autopilot	Yes
Sound power phones	Yes
Navigational lights	Yes
BNWAS	Yes
DP system	Kongsberg's DP-2 System

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## Fire fighting equipment

Fixed fire fighting system	FIFI Class 1 with Water Spray
External FiFi pump	2 x 1700 m <sup>3</sup> per hr, Driven by Main Generator Engine front PTO
Fire monitors (Water / Foam)	1 x 1200 / 300 m <sup>3</sup> per hr
(Water)	1 x 1200 m <sup>3</sup> per hr
Throw length / Height	140 m / 50 m
Fixed fire protection system	Fixed CO2 system and water mist system for Engine
Fixed fire alarm & detection system	as per ABS / Statutory rules
Dispersant system	6m boom c/w spray nozzles

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## Dynamic Positioning equipment

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## Safety equipment

Rescue boat	6 Persons, Speed 20 knots
Davit	A-Frame type

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## Accommodation

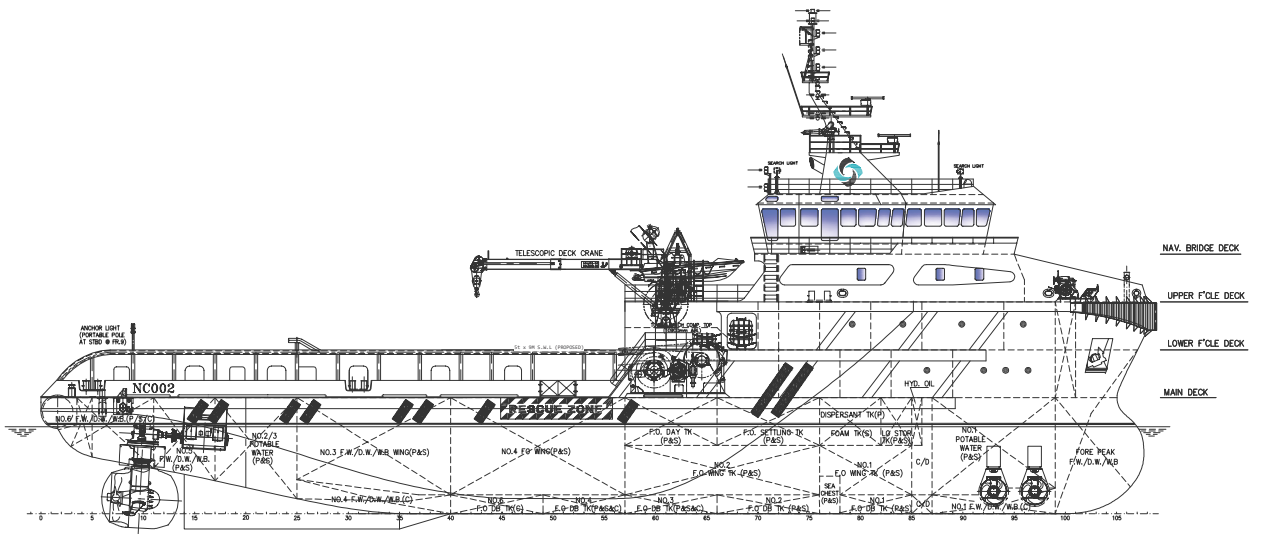
6 x 1 man cabin =	6 men
8 x 2 men cabin =	16 men
7 x 4 men cabin =	28 men
Total	50 men

1 x Hospital = 1 man

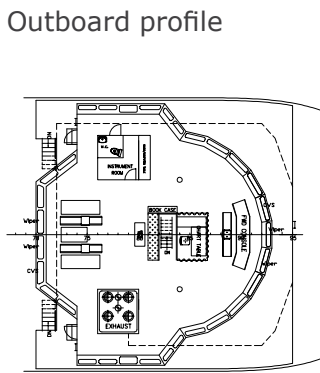
Fully air-conditioned

Last revision July 2017

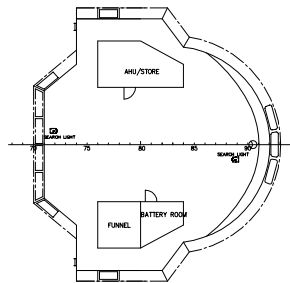
# GA Specifications



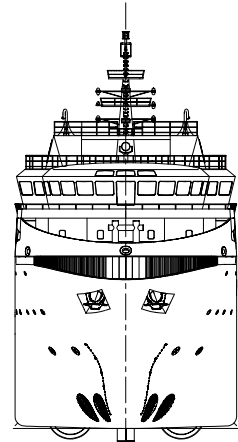
Outboard profile



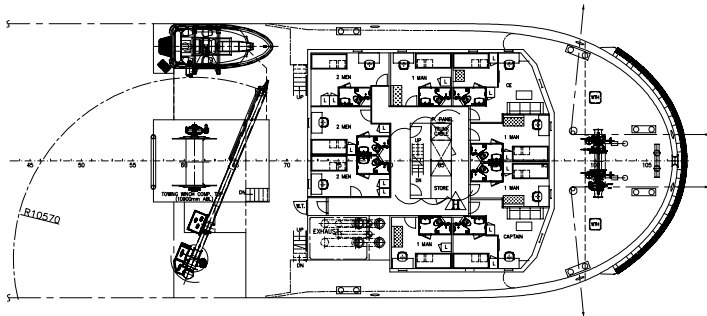
Nav bridge deck



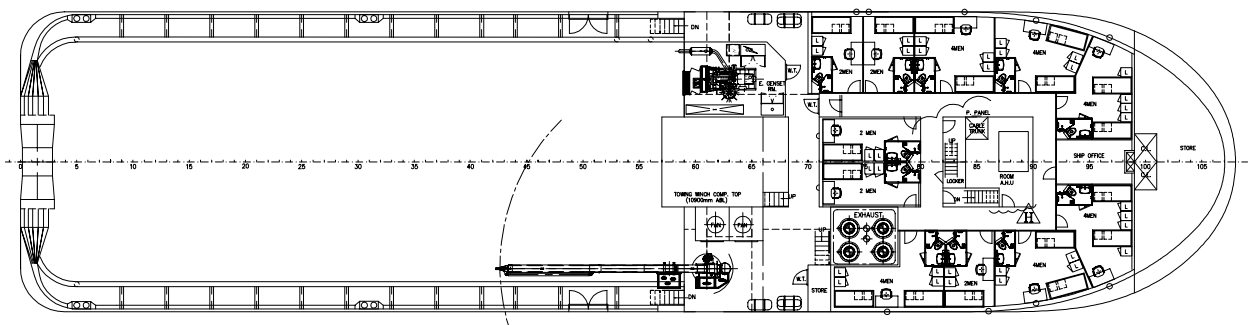
Wheelhouse top



Front view

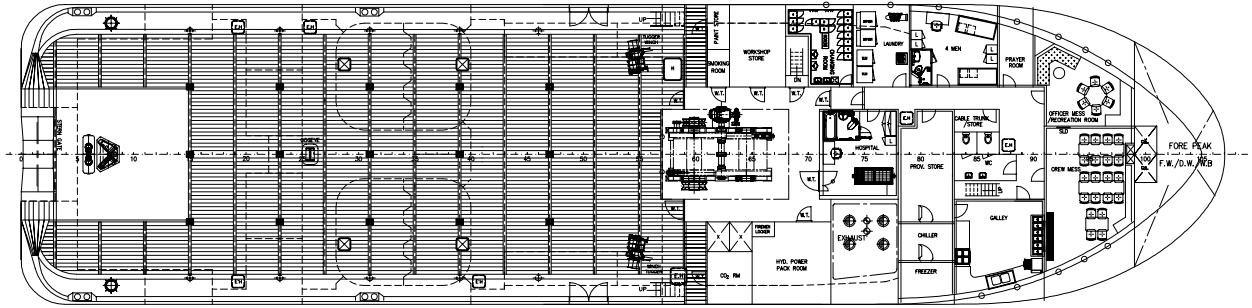


Upper forecastle deck

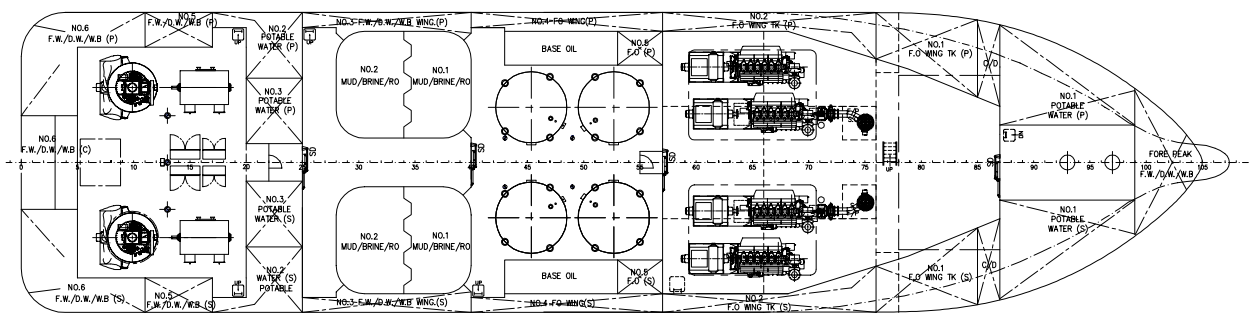


Lower forecastle deck

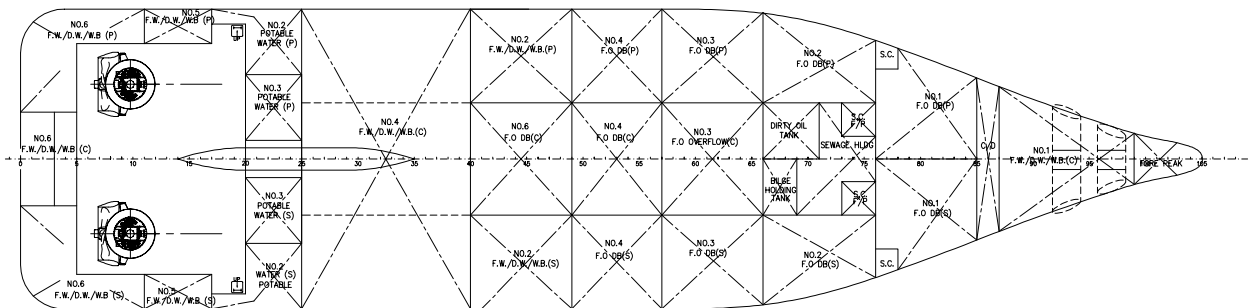
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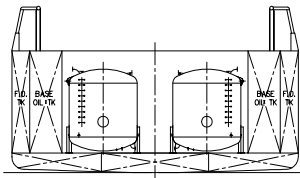
Main deck



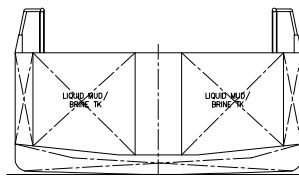
Below main deck



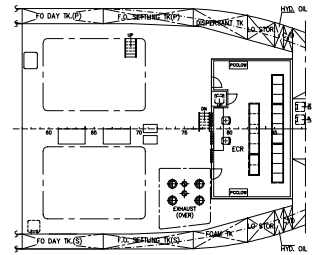
Bottom / Tank top



Section at cement tank



Section at mud / brine tank



Tween deck  
In E/R+Cement Comp

#### CONTACT

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