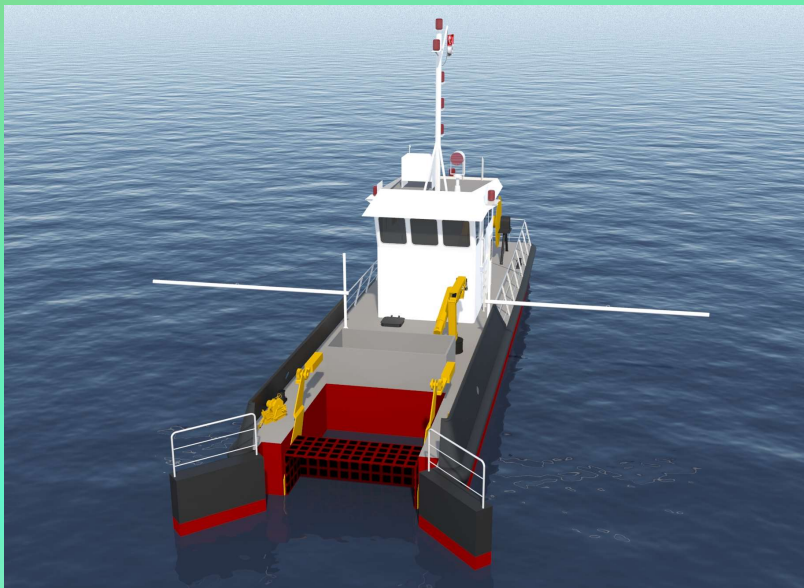


NAVNAUTIK'S PORTFOLIO ON DEBRIS COLLECTION & POLLUTION CONTROL VESSELS



DEBRIS COLLECTOR (STEEL PONTOON)

Length Overall	16.00M
Pontoon Length	12.00M
Breadth Overall	5.00M
Pontoon Breadth	1.75M (each)
Pontoon Depth	2.00M
Design Draft	1.00M
Maximum Speed	8 knots
Loitering speed	~4 knots
Total Complement	2 persons
Solid Debris Collection	~5 tons
Construction Material	Steel (Hull and Superstructure)
Propulsion System - 2 x Volvo Penta Aquamatic (~140 HP each)	
Features: Solid waste collection system equipped with Bow Sweep arm and Aft frame	

OIL RECOVERY RESPONSE VESSEL

Principal Dimensions and Main Particulars (Approx.)

- Length Overall 29.00M
- Breadth Moulded 9.60M
- Depth Moulded 5.00M
- Design Draft 3.65M
- Lightship Draft 1.85M
- Maximum Speed 12 knots
- Loitering speed ~4 knots
- Total Complement 3 + 17 persons
- Recovered Oil Capacity ~100 m3
- Construction Material Steel (Hull and Superstructure)
- Sea state: Capable of operating in Sea State up to 5
- Beaufort Scale: Capable of operating in Wind Force up to BF 6
- Operating Profile: Total 12 hours per day, 300 days per year

Classification: BV: +HULL +MACH; Oil Recovery; Special Service Sea Area 3 or equivalent



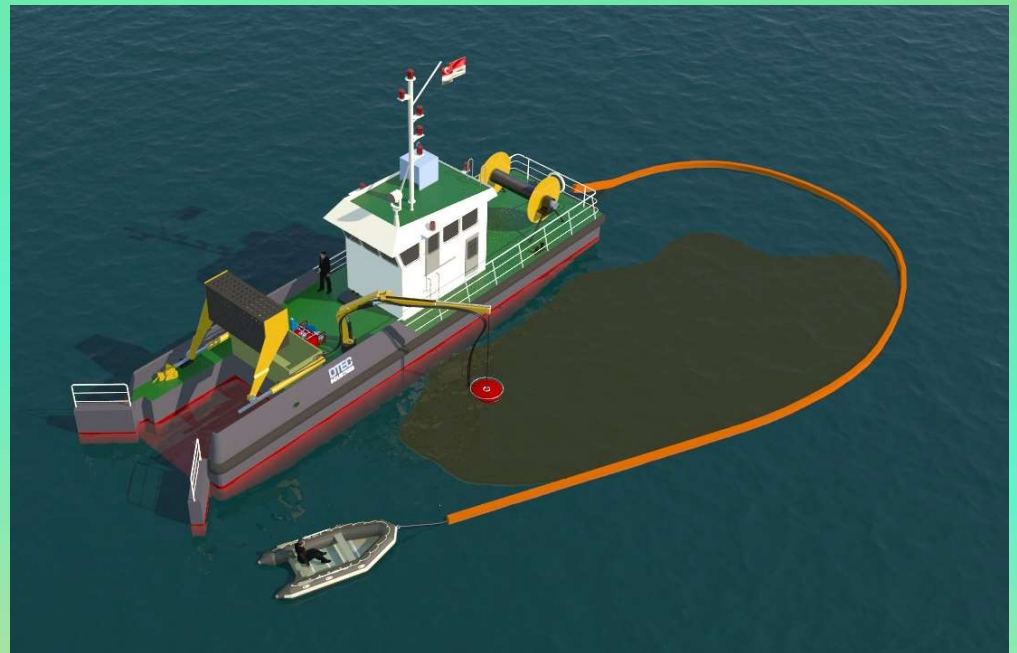


Main Propulsion System & Generators:

- Engine: 2 x 1000 HP @1400 RPM
- Two (2) CPP Propeller driven through a stainless steel shaft connected to main engine.
- Two (2) units of diesel generators each of 125 kW/440V/3ph/60Hz

Special features:

- Bow door cum Sweep arm
- Portable oil spill response equipment
- Solid waste collection system
- Oil Dispersant System
- A foldable knuckle boom crane suitable for the transport of floating solid refuse and the daughter boat
- A telescopic pole for day-night camera mounting (for air surveillance monitoring system)



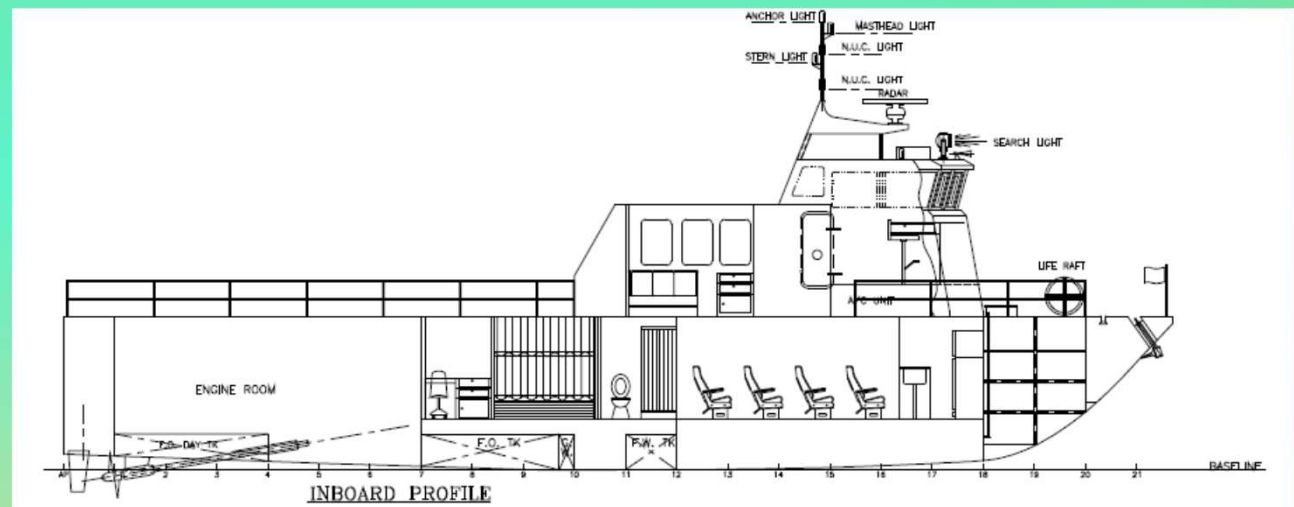
OIL SPILL RESPONSE (OSR) BOAT

Principal Dimensions and Main Particulars

Length Overall	21.70 m (approx.)
Breadth (moulded)	5.20 m (approx.)
Depth (moulded) to main deck camber	3.00 m (approx.)
Designed draught	1.50 m (approx.)
Classification	: Bureau Veritas 100A5 + MC Oil Spill Response Boat or equivalent
Diesel Oil	: 3 tons
Fresh Water	: 0.5 tons
Dispersant	: 3 tons

Performance:

About 14 knots in deep and calm water condition with two main engines each operating at 600 kw at 2100 RPM.

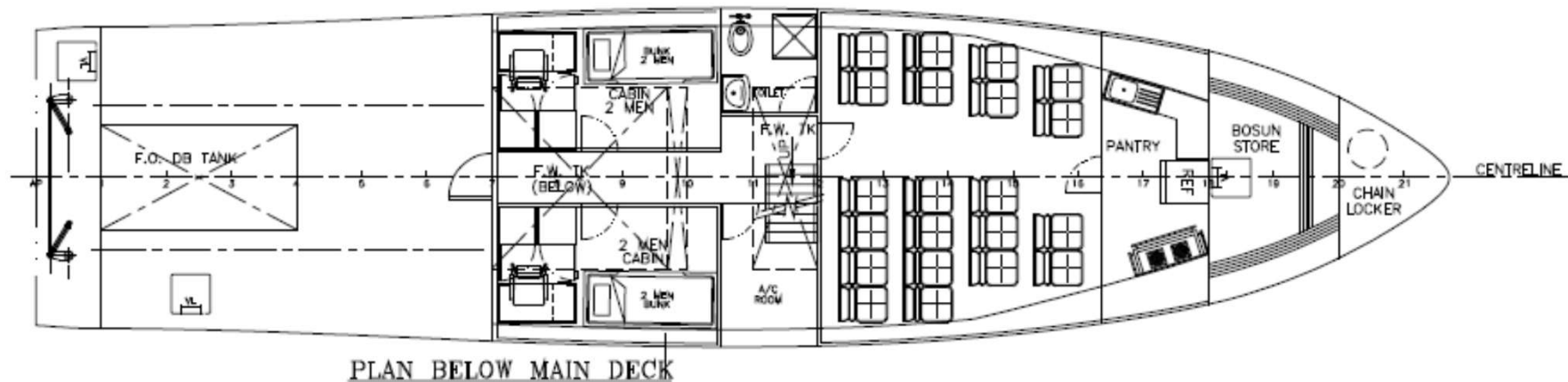
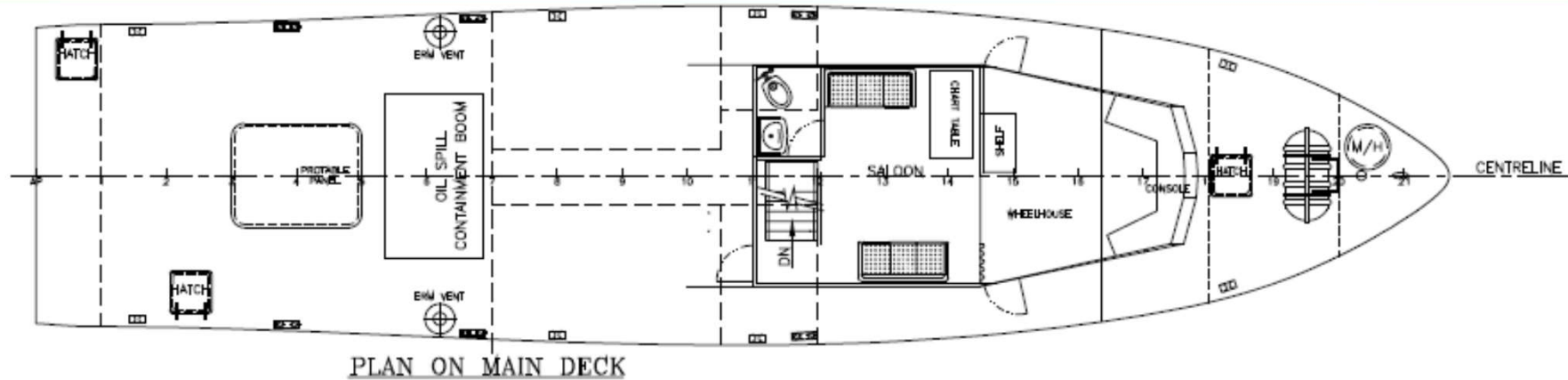


Main Propulsion System

- Main engine: 2 x 600 kw at 2100 rpm
- Two fixed pitch four bladed manganese bronze propellers.

Special features:

- Oil Spill Containment Boom
- Dispersant Spray Facility
- Fire-Fighting Equipment



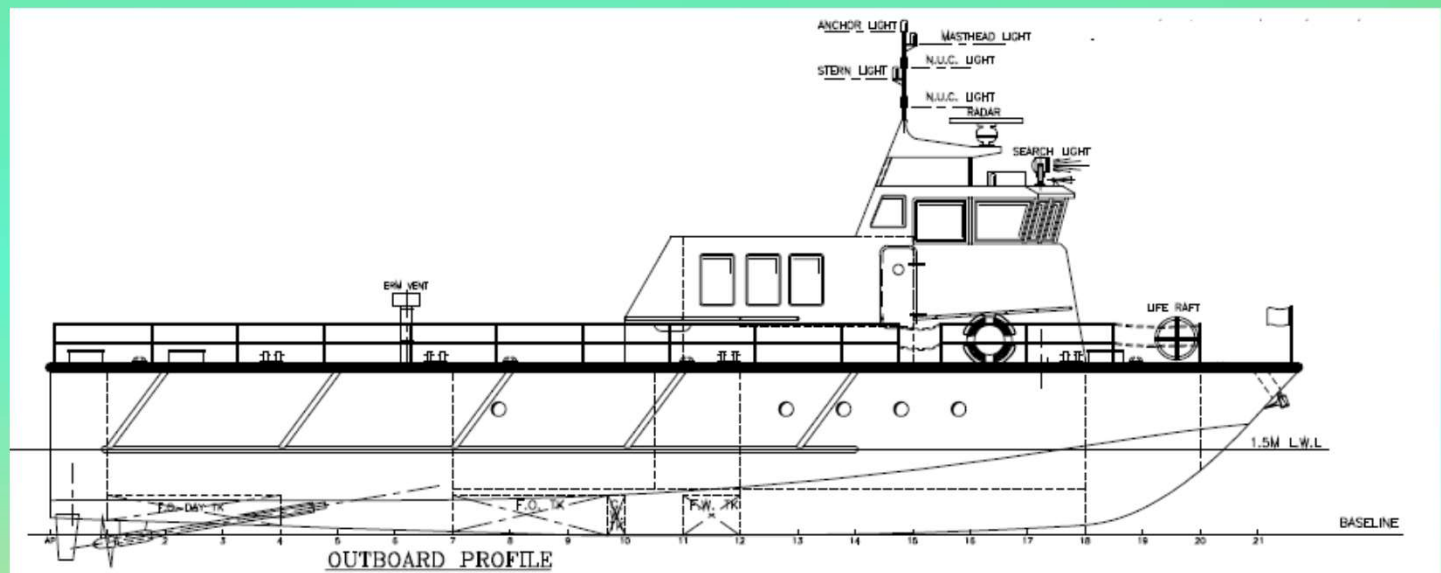
The main function of the boat shall be :

- Hull material shall be AH36 High Tensile Steel
- Deployment and maintenance of reel-mounted oil spill containment booms and associated anchoring of boom.
- Dispersant spraying on oil spills
- Fire fighting
- Mooring workboat duties

The boat shall be capable of deploying and storing reeling mounted oil spill containment boom and performing other designated functions in the following environmental conditions :

- 35 knots wind velocity
- 6 feet waves
- 90 feet water depth
- 3 knots currents

A wide flat open deck at aft as large as possible is provided as a safe and stable work platform, storage of oil spill equipment.





ABOUT US:

- NAVNAUTIK PTE LTD is a marine consultant company particularly catering for special application vessels. We specialize in the whole spectrum of varied market on specific customized application. Extensive effort is dedicated in the study of a project from technical and operational point of view.
- Such customized designs have taken place in many of our projects
- Over the three decades, we have designed various types of product / oil tankers as well as tugs and offshore support vessels.
- Over the past decade, we have successfully ventured into the offshore maritime industry also and delivered highly sophisticated vessels such as Ultra deep water pipe laying vessel (Lewek Constellation), Diving Support vessel, Accommodation Barges to support offshore oil rigs amongst other projects.
- We specialize in design of special application vessels. Our customized design solutions have ensured long-term fruitful relationship with our esteemed clients worldwide.

THANK YOU VERY MUCH
FOR YOUR TIME!

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