



KONGSBERG



Thor— NB 106 at Astilleros Asmar S.A.

DESIGN AND INTEGRATED SYSTEMS

UT 512 L Multipurpose Coastguard Vessel

This leaflet describes a;

OPV / Tug / Oil Recovery / Coast Guard Vessel, designed for following duties:

- Offshore stand-by, rescue and assistance
- Tanker assistance (up to approx 200.000 TDW)
- Towing vessel
- Oil recovery
- General law enforcement operations / fishery control
- Fire-fighting operations
- Salvage
- Hydrographic and Oceanographic survey

This comprises the UT-design philosophy for safety in operation; i.e. safety for the ship, it's crew and the environment it operates.

Hull lines based in the UT-design hull forms, well proven in the harsh North Sea, delivering a safe and stable platform for offshore operations. Two independent CPP propulsion plants, two bow and one stern thrusters, one Swing up Azimuth thruster and two independent flap rudders ensure excellent manoeuvrability and redundancy.

Simple and easy user interface with independent as well as integrated single lever joystick control, for flawless control of propulsion, thrusters and rudders.

The vessel is designed for world wide service, and is fully compliant with relevant Class, SOLAS, IMO and MARPOL resolutions.

UT 512 L
Multipurpose Coastguard vessel

DESIGN AND INTEGRATED SYSTEMS

Ship Design provides integrated system solutions for:

- Propulsion
- Power generation
- Automation
- Deck machinery incl. cranes
- Unified Bridge

UT 512 L—Multipurpose Coastguard vessel

General:

The vessel is designed to satisfy the general demands for Coast Guard Safety Services.

Class:

LRS +100A1, Ice class 1B + LMC, UMS, Occasional Oil Recovery Duties, EP, DP(AM)
Crew Accommodation Comfort acc. to class notation CAC3
Fire-Fighting ship 1 (2400) with water spray

Regulations:

SOLAS, IMO, IMO A469 (XII), MARPOL, National Authority

Main dimensions:

L.O.A. appr. 93.65 m

Performance:

Speed appr. 20 knots
Bollard pull appr. 117 ton

Tonnage - Capacities:

Potable water	appr. 260 m ³
Fuel Oil	appr. 1330 m ³
Ballast water	appr. 970 m ³
Oil Recovery	appr. 640 m ³
Dispersant chemicals	appr. 10 m ³
Free deck area	appr. 290 m ²
Dead weight	appr. 2000 ton

Anti rolling system:

2 x Passive anti rolling tanks

Propulsion:

2 x Bergen medium speed main engines 2 x 4500 kW
2 x KM CP main propellers (Open / feathering).

Side thrusters – KM:

Bow:
2 x electric driven tunnel thruster 2 x 450 kW
1 x electric driven, swing up Azimuth thruster 1 x 880 kW
Stern:
1 x electric driven tunnel thruster 1 x 450 kW

DP / Joystick system:

KM DP1
KM - Single lever joystick with auto heading

Steering system:

2 x KM Flap rudders
2 x KM Rotary vane steering gears.

Electrical power generation:

Shaft Generators, driven from main gear PTO: 2 x 2000 kVA
Main Diesel Generators: 4 x 689 kVA
Emergency Generator 1 x 225 kVA

Electrical system:

440 VAC 50-60 Hz for generators and heavy consumers
220 VAC 50-60 Hz for illumination and small consumers
220 VAC 60 Hz clean power for electronic equipment
24 VDC for electronic equipment

Deck machinery (KM):

1 x Low pressure hydraulic windlass
3 x Low pressure hydraulic Capstans, 6 ton

Towing:

1 x Low pressure hydraulic towing winch
Capacity: 50 ton pull – 250 ton brake
1 x Low pressure hydraulic light line towing winch
Capacity: 31 ton pull – 100 ton brake
Fully remote controlled with tension and length reading in wheelhouse
2 x Hydraulic remote operated towing pins

Machinery systems:

Separate auxiliary systems for port and starboard propulsion plant.

Navigational equipment:

X-band TM radar / S-band ARPA radar
DGPS
Gyro compass
Navigational Echo Sounder
Speed log
Electronic chart system

Scientific/Oceanographic sonars:

Hydroacoustic hull mounted sensors
Multibeam 50 kHz, 126 beams, 10m-3000m
Positioning system
Sound velocity probe
Misc echo sounders

Communication system:

Radio installation according to GMDSS A3, including Satcom- B/C

Accommodation:

Accommodation for a complement of 48 in single and twin shared cabins with attached WC / shower facilities.
Mess room, day room, etc.

Rescue equipment:

2 x fast rescue crafts for min. 10 men. Both arranged in approved, single point, heave compensated davit.
2 x floating reversible rescue nets

Life saving equipment:

Life saving according to SOLAS requirements for cargo ships without life boat.

External fire fighting equipment:

Installation as per Fi-Fi 1 notation.

Automation system (KM):

Machinery monitoring
Pump and valve control
Tank sounding

PLEASE NOTE:

All figures to be treated as a subject to change, without further notice, in order to meet Owners requirements or application.

P.6374 / Thor

