# **TOSCANA**

# ESCORT TUG



High performance towing and escort tug designed for efficient ship maneuvering and assistance to very large ships. Developed to offer truly superior ship-handling and seakeeping performances, this unit is able to docking and escorting ships in more extreme conditions than ordinary vessels.

Highly maneuverable, fully automated and fitted with reliable equipment, this tug is provided with redundant machinery in order to avoid any downtime in operations. The high bollard pull rating compared with the limited dimension of the hull makes this vessel a particular design capable to operate at any port/terminal in every condition.

In addition to the basic functions explained above, this tug can be easily deployed also for additional services, among which:

- Fire fighting
- Antipollution and environment control
- Salvage operations
- Coastal and deep sea towing





#### **ESCORT TUG**

#### **CONSTRUCTION and CLASSIFICATION**

TYPE Escort tug
OWNER Fratelli Neri S.p.A.

DELIVERY 2016

BUILDER Damen Galati Shipyard
DESIGN Damen ASD Tug 2913

FLAG Italy
PORT OF REGISTRY Genova
IMO NUMBER 9807827

CLASSIFICATION Bureau Veritas I & Hull & Mach,

Unrestricted Navigation, Tug – Escort Tug, Fire Fighting Ship 1, Waterspray, Oil Recovery Ship – Second Line, Supply Vessel – Oil Product (FP>60°C), IWS,

**₩**AUT-UMS

### **MAIN CHARACTERISTICS**

LENGTH OVERALL 29.10 m
BEAM OVERALL 13.23 m
DEPTH AT SIDES 5.35 m
DRAUGHT (AFT) 5.60 m
GROSS TONNAGE 421

#### **TANK CAPACITIES**

FUEL OIL 181.7 m³ (incl. double hull tanks)

 FRESH WATER
 34.2 m³

 LUBE OIL
 4.6 m³

 DIRTY OIL
 2.8 m³

 SLUDGE
 2.4 m³

 BILGE WATER
 5.2 m³

OIL RECOVERY  $74.0 \text{ m}^3$  (if in use, max. fuel oil is  $97.7 \text{ m}^3$ )

FOAM 9.2 m³
DISPERSANT 6.1 m³
SEWAGE 5.3 m³

#### **PERFORMANCES**

SPEED AHEAD 13.0 kts
BOLLARD PULL AHEAD 80 t
BOLLARD PULL ASTERN 70 t

#### PROPULSION SYSTEM

MAIN ENGINES 2x Caterpillar 3516C TA HD / D,

2025 kW at 1800 rpm each

PROPULSION 2x Rolls Royce US255 P30 FP

CLUTCHES Rolls Royce "built in" slipping clutches

#### **AUXILIARY EQUIPMENT**

GENERATOR SETS 2x Caterpillar C7.1 TA, 100 ekW each,

400V/50Hz

FUEL OIL PURIFIER Westfalia OTC 3-02-137, 1600 l/h
COOLING SYSTEM Box cooling + anti growth system

SEWAGE TREATMENT Hamann Supermini Plus
FRESHWATER MAKER Hemwater HEM25/1300F3

#### **DECK EQUIPMENT**

ANCHOR 2x 495 kg HHP

ANCHOR/TOWING DMT hydraulically driven two speed winch

WINCH with double drum and warping head, pull 38

ton at 12.2 m/min, slack rope speed 37.8

m/min, 200 ton brake

AFT WINCH DMT hydraulically driven two speed winch,

pull 38 ton at 12 m/min and reduced pull at 38 m/min, 200 ton brake, with spooling

doviso

TOWING HOOK 2x Mampaey, disc type 100 t SWL, fore+aft CAPSTAN DMT, 5 ton at 15 m/min, electrically driven

DECK CRANE Heila HLM 10-3S, lifting capacity 0.8 ton at

10.36 m

FENDERING D-fender at sides, cylinder fender at transom

corners, D-fender at stern, cylinder bow

fender and W-block fender

## **NAVIGATION and COMMUNICATION EQUIPMENT**

RADIO STATION GMDSS A1+A2+A3

COMPASS 2x Magnetic Kotter (one spare)

GYROCOMPASS Anschutz Standard 22

ECHO SOUNDER Furuno FE-800
SPEED LOG Furuno DS-80

SEARCHLIGHTS 2x Norselight 2000 W

VHF 2x Sailor Compact 6222, 25 W

RADAR Furuno FAR 2117 with 19" LCD screen

GPS Furuno GP-170
AUTOPILOT Simrad AP70
SSB Furuno FS-1575

INMARSAT C

2x Furuno FS-15/5

2x Furuno Felcom 18

NAVTEX

Furuno NX-700A

AIS

Furuno FA-170

EPIRB

Jotron, Tron-60S

SART

Jotron, Tron Sart 20

ANEMOMETER Windsonic OMC 115

#### **ACCOMMODATION**

Accommodation for 10 persons, insulated and finished with durable modern linings, acoustical Dampa ceiling in the wheelhouse, floating floors and air conditioned. Available 6 cabins, galley, mess/ day room, switchboard room, dry store, changing room, eng. workshop and sanitary facilities.

#### **ADDITIONAL EQUIPMENT**

FIRE FIGHTING SET FiFi 1 Class fire fighting system with

dedicated diesel engine Caterpillar C32 ACERT driving a 2800 m³/h pump, 2x 1200 m³/h foam/water monitors, waterspray

system

OIL RECOVERY Oil booms on hydraulic reel

EQUIPMENT Disc/brush floating skimmer with 50 m<sup>3</sup>/h

transfer capacity

Dispersant pumpset with 2 spraybooms

Portable gas detectors



General Arrangemen



