



REVERSED STERN DRIVE TUG[®] 2513 "BIS VIRIDIS"

GENERAL

BUILDING YEAR	2018
CLASSIFICATION	Bureau Veritas
FLAG	Dutch

DIMENSIONS

LENGTH O.A.	24.73 m
BEAM OVERALL	13.13 m
DEPTH AT SIDES	4.95 m
DRAFT AFT	5.50 m
TONNAGE	327 GT / 98 NT

TANK CAPACITIES

FUEL OIL	77.4 m ³
FRESH WATER	10.2 m ³
BILGE WATER	6.0 m ³
SEWAGE	6.0 m ³
DIRTY OIL	2.5 m ³
LUBRICATION OIL	2.5 m ³
UREA	3.0 m ³

PERFORMANCES (TRIALS)

BOLLARD PULL AHEAD	75 tons
SPEED	12.9 knots

PROPULSION SYSTEM

MAIN ENGINES	2x MTU 16V 4000 M63L-1A
TOTAL POWER	4480 bkW (6008 bhp) at 1800 rpm
THRUSTERS	Rolls Royce US 255
PROPELLER DIAMETER	2700 mm
FORCED VENTILATION	60.000 m ³ /h
EXHAUST EMISSION	IMO Tier III compliant

AUXILIARY EQUIPMENT

GENERATOR SET	2x Caterpillar C4.4 TA, 81 kVA, 400 V, 50 Hz
Ø GENERATOR SET	2x Caterpillar C4.4 TA, 94 kVA, 440 V, 60 Hz
GENERAL SERVICE PUMPS	2x Azcue CA 50/3A 20 m ³ /h at 2.35 bar
BILGE WATER PUMP	Azcue CA 32/0.5 3.6 m ³ /h at 1.1 bar
FUEL PUMP	Azcue BR-41-10 12 m ³ /h at 1 bar
FUEL OIL PURIFIER	2x CJC, PTU3 27/81 3x FA/BLA 27/27
COOLING SYSTEM	Closed box cooling system
FRESH WATER PRESSURE SET	Azcue MO-31/10
HYDRAULIC SYSTEM	Double main engine driven pumps

Ø SEWAGE TREATMENT

PLANT

Ø OIL POLLUTION CONTROL

Ø FIFI SET

Ø FIFI MONITOR

Tecnicomar Ecomar 20

Dispersant pumpset with two spray booms
Diesel driven pump 600, 1200, 2400 or Ø
with water spray
1x 600, 1x 1200 or 2x 1200 m³/h,
water/foam

DECK LAY-OUT

ANCHOR

ANCHOR WINCH

TOWING WINCH

1x 360 kg Pool (High Holding Power)
Hydraulic 10 m/min
Hydraulically driven split drum 31 ton pull
up to 11 m/min, reduced pull up to 38
m/min, 175 ton brake
SWL 100 ton
Cylinder + block bow fender, D-fender
side/aft and Ø tyre fendering

Ø TOWING HOOK

FENDERING

ACCOMMODATION

For 4 (Ø 6) persons, completely insulated and finished with durable modern linings, sound absorbing ceiling in the wheelhouse and floating floors. Air-conditioned wheelhouse, accommodation and switchboard room. Accommodation above main deck with a captain's cabin, chief engineer's cabin, one double crew cabin, pantry, mess/dayroom and sanitary facilities. The superstructure is mounted resiliently to reduce noise levels.

NAUTICAL AND COMMUNICATION EQUIPMENT

SEARCHLIGHTS

RADAR SYSTEM

COMPASS

Ø GYRO COMPASS

AUTOPILOT

SATELLITE COMPASS/GPS

ECHOSOUNDER

SPEED LOG

VHF

VHF HAND-HELD

Ø UHF

NAVTEX

AIS

Ø SSB

Ø LRIT

EPIRB

SART

ANEMOMETER

1x Norselight, 2000 W + Ø 1x Norselight
2000 W

1x Furuno FAR-1518-BB + Ø 1x Furuno
FAR-1518-BB

Cassens & Plath Reflecta 11

Anschuetz Standard 22 Compact

Simrad AP-70

Simrad GN70/HS80A

Furuno FCV-628 or Ø Furuno FE-800

Furuno DS-80

2x Sailor 6222 + Ø 1x Sailor 6215

Jotron TR-20

Motorola DM4400

Furuno NX-700

Furuno FA-170

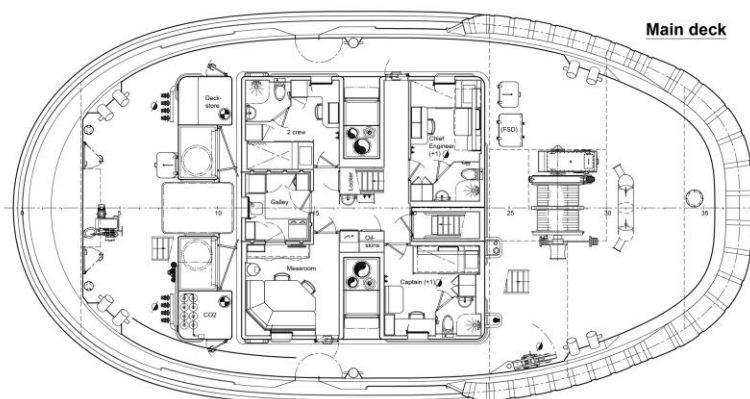
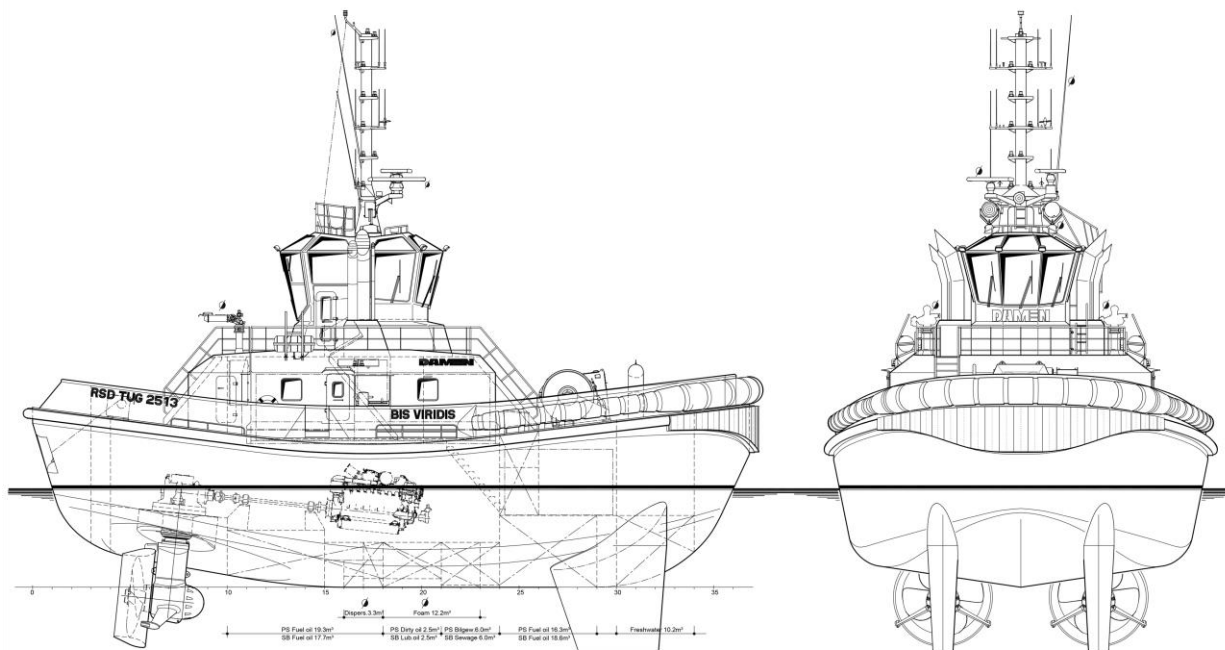
Furuno FS-1575

Furuno Felcom 19

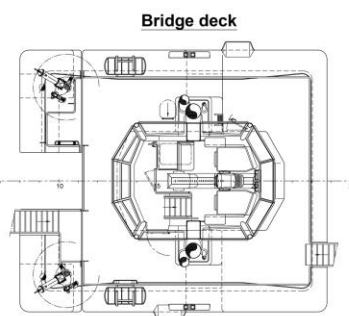
Jotron Tron-60S

Jotron Tronsart20

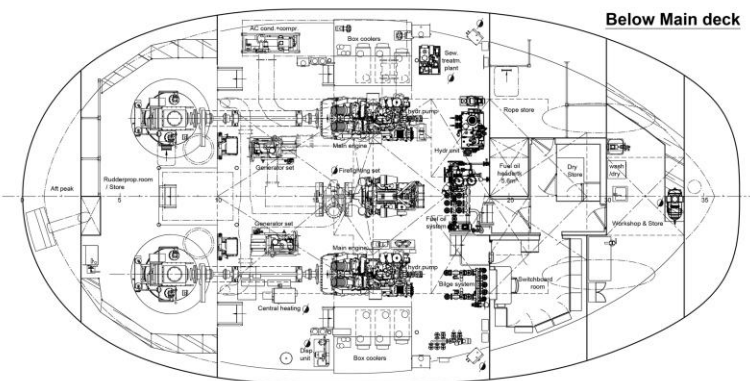
Gill Instruments GMX 500



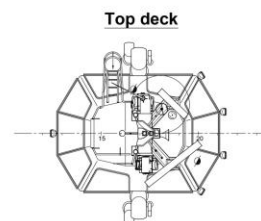
Main deck



Bridge deck



Below Main deck



Top deck

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DAMEN

DAMEN MARINE SERVICES

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