

Newbuilding 24m 2020Bhp Shallow Draft ASD Tug



General Particulars

Vessel Type	24M Shallow Draft Tug
Keel Laid / YOC	December 2020 / 2024
Flag / POR	Panama / Panama
Class / Notation	BV / I, Hull, Mach, Tug, Coastal Area, Inwatersurvey

Principal Particulars

Length Overall	Approx. 24.20 m
Breadth	Approx. 9.00 m
Depth	Approx. 3.8 m
Draft	Approx. 2.40 m (working) / 2.60 m (max)
Deadweight	Approx. 70 T
Deck Space	Approx. 30 m ²
Speed	Approx. 10 knots @ 100% MCR
Endurance	Approx. 4.5 days @ 85% MCR
Bollard Pull	Approx. 25 T
GRT / NRT	Approx. 198 / T.B.A
Fuel Consumption	Approx. 6T

Accommodation

Complement	10 men (4x1 berth, 1x2 berth, 1x4 berth)
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Tank Capacity

Fuel Oil	Approx. 40 m ³
Fresh Water	Approx. 22 m ³
Lube Oil	Approx. 3.0 m ³
Foam	Approx. 2.7 m ³
Dispersant	Approx. 1.5 m ³
Permanent FW	Approx. 23 m ³

Engine Machinery

Main Engine	2 x Mitsubishi S12A2-T2MPTK, 776 kW@1860 rpm
Main Generator	2 x Oceanic 95, 76 kWe (105 bHP)@1500 rpm
Alternator	2 x Mecc Alte ECP34 2S4C (50 Hz/415 V)
Azimuth Thrusters	2 x Sjmatek SZP90A-FP, 945 kW@1860 rpm
Air Compressor	1 x Vico ENYC-10A, 0.36m ³ /min, 3kW/4hP (10 bar)
Engine Rm. Fan	2 x Hison 700-4-a2-12.5°, Cap: 7,300 m ³ /hr
Thruster Rm. Fan	2 x Hison LF300-2-110/5B-15°, Cap: 1,164 m ³ /hr
Ext. Fi-Fi Pump	2 x SFP250x350XPC, Cap: 600 m ³ /hr@120 mlc
OWS	1 x Detegasa Delta Owsan P-0.5, cap: 0.5m ³ /hr
Main Switchboard	1 x GCE MSB AC 415/3φ/50 Hz, DG: 86kW*2+24kW
Air Condition Sys.	1 unit AHU JLM R407C, Air Flow: 2,200 m ³ /hr Cooling Cap: 2 x 17.5 kW (415V/3Ph/50Hz)
Defrosting Sys.	1 unit Wheelhouse Window Defrosting Unit

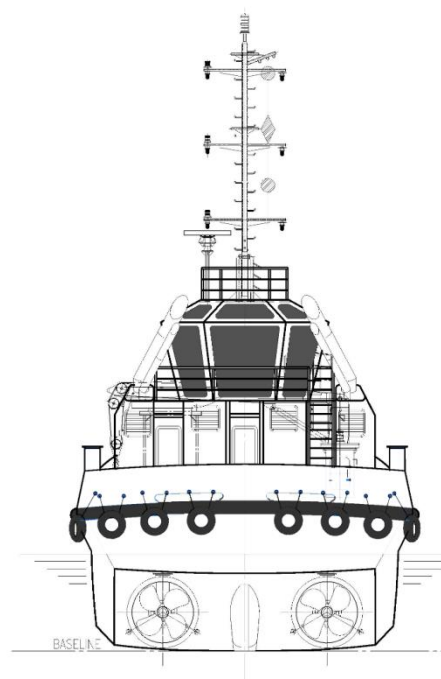
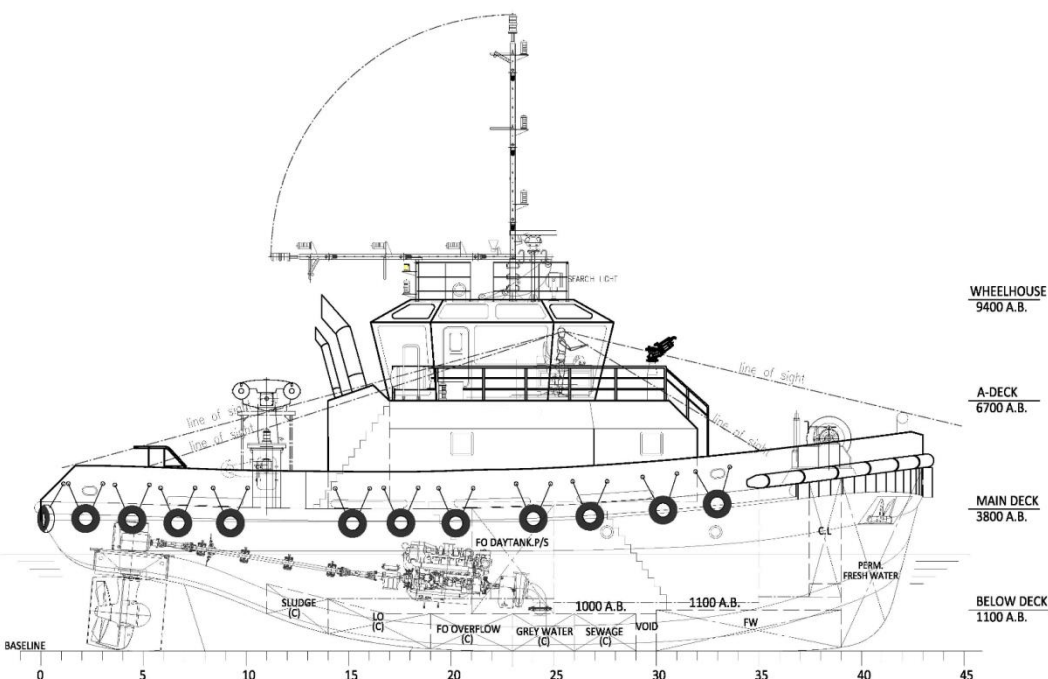
Pumps

Fuel Booster	2 x KSB Itur RC 01, Cap: 1m ³ /hr@10 m
Fuel Oil Transfer	1 x Desmi HD41 EFM-1U3B2, Cap: 3.5m ³ /hr@20m
Dirty Oil	1 x Itur RC-1, Cap: 3 m ³ /hr@20 m
Grey Water	1 x Desmi SA 25-122-13/A9H, Cap: 3m ³ /hr@15m
SW Cooling	2 x Desmi S50-32-135N/A09, 14 m ³ /hr@20m
FW Pressure Set	2 x Rolid Pedrollo JSWm2C, Cap: 2.8 m ³ /hr@29.5m
Fire/Bilge/GS	2 x KSB ITUR AU 65/10, Cap: 16m ³ /hr@45.5m

Deck Machinery

Towing Hook	1 x SLTY30 Pneumatic Disk Towing Hook SWL: 30 T
Anchor Windlass	1 x YMA17.5-2-45/TW15 Rated: 40 kN@0-10m/min Brake Holding: 80 kN Drum: 150 kN x 10m/min x 17.5 mm Ø Chain (U2) Drum Capacity: 2 x 150m x 28mm Ø (rope)
Deck Crane	1 x SWL1T/5M Hydraulic Slewing Crane SWL: 1T, Lifting Height: 30m Working Radius: Min.: 1.8m, Max: 5m
Fast Rescue Boat	1 x Qingdao Goboat RIB-390C Capacity: 5 persons Engine: 30 HP/22kW (Yamaha) 2-stroke

This vessel specification is given in good faith and assumed to be correct. Owners reserved the right to amend without notification.



Communication Equipment

X-band Radar	1 x Simrad Halo 2003
Echo Sounder	1 x Simrad Sonarhub
GPS	1 x Simrad GS25
AIS	1 x Simrad NAIS-500 (Class B)
GMDSS VHF	1 x Sailor 7222
VHF Radio	2 x Sailor RS20S (Class D)
MF/HF Radio	1 x Icom IC-M710
Navtex Receiver	1 x JMC NT-1800
EPIRB	1 x Jotron Tron 60AIS
SART	1 x McMurdo S5A
2-way VHF	2 x McMurdo R5 (portable)
BNWAS	1 x SM Elec Le Guardian 2025
TV Antenna	1 x Bantenn TV-350
Common Bat Tel.	1 x Hanshin HST-12S
P.A System	1 x Hanshin HPA-7300
Magnetic Compass	1 x Saura MR-150A
GPS Compass	1 x Lars Thrane LT-1000 NRU
Multifunction Disp.	2 x Simrad NSS12 evo3S
N2K Network Sys.	1 x Simrad NEP-2

Safety Equipment

Portable Pump	1 x Kama KDP-20, Cap: 16 m ³ /hr@12 m
CO2	1 shipset w/ 4 cylinders 68L/45KG
Fire Detection Sys.	1 shipset w/ General Alarm System
Search Light	1 x TG-27 220V 1000W (IP 56)
Flood Light	4 x TG-11 200V 300W (IP 56)
Battery Charger	2 x 24V, DC 28.2V, 50A battery charger
Water Monitor	2 x FFS600/300 LBM, Cap: 600/150 m ³ /hr
Oil Dispersant Sys.	2 x Flat Spray Veejet Nozzle, UOC-600
Fire Extinguisher	1 shipset (according to Safety Plan)

Galley Equipment

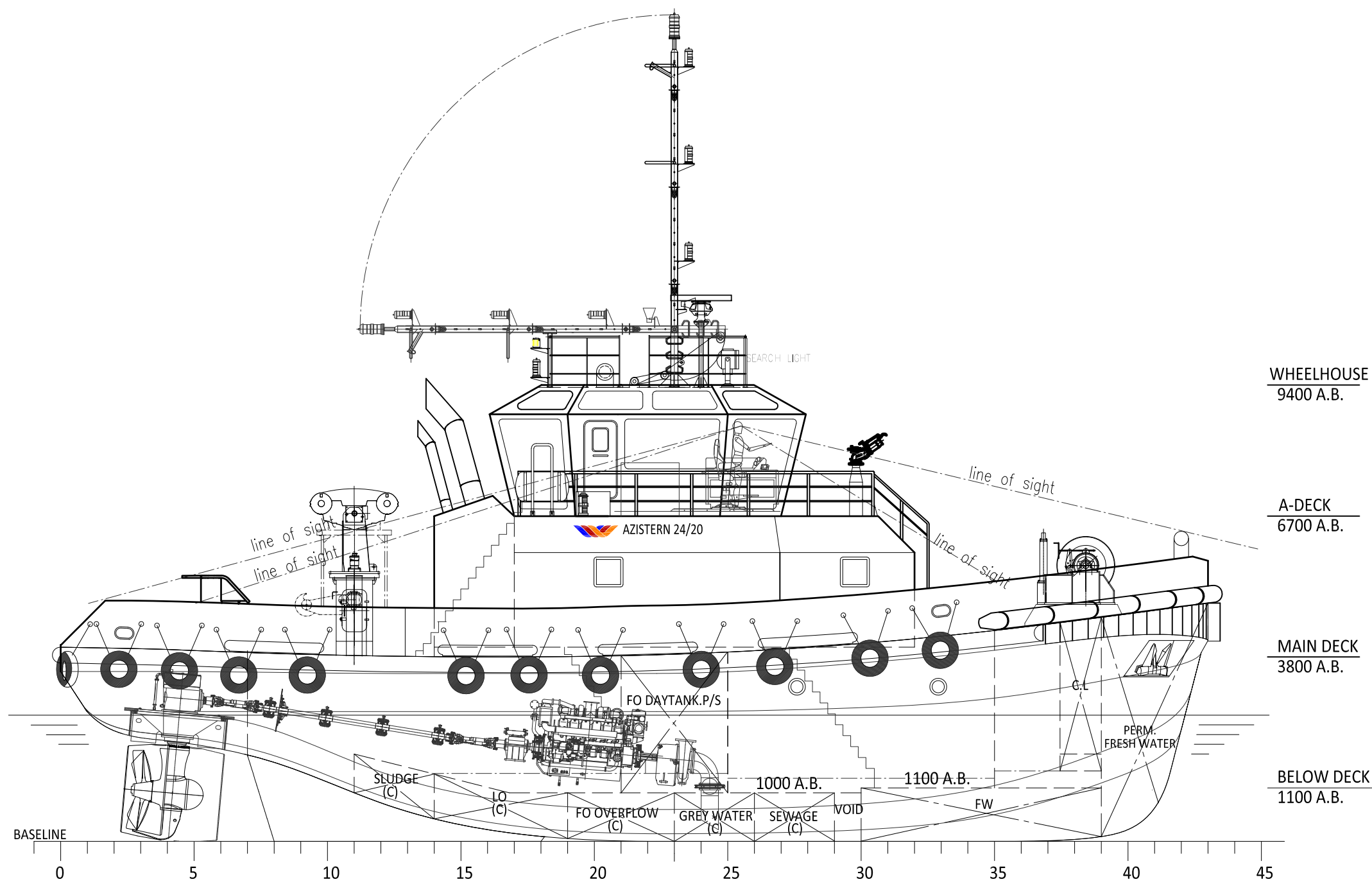
Cooking Range	1 x Anjiang AZS2/R c/w 2 hot-plate and oven
Water Heater	1 x AUX ALA160, Cap: 160L, 4.5kW/IP44
Waste Disposer	1 x LC50-13, Cap: 150kg/hr (220V/1P/50Hz)
Refrigerator	1 x AR200, Cap: 200L (220V/1P/50Hz)
	1 x AS500R/F, Cap: 500L (220V/1P/50Hz)
Microwave Oven	1 x A925F4T-SS, Cap: 28L
Water Boiler	1 x ASQ-30G, Cap: 30L

Miscellaneous

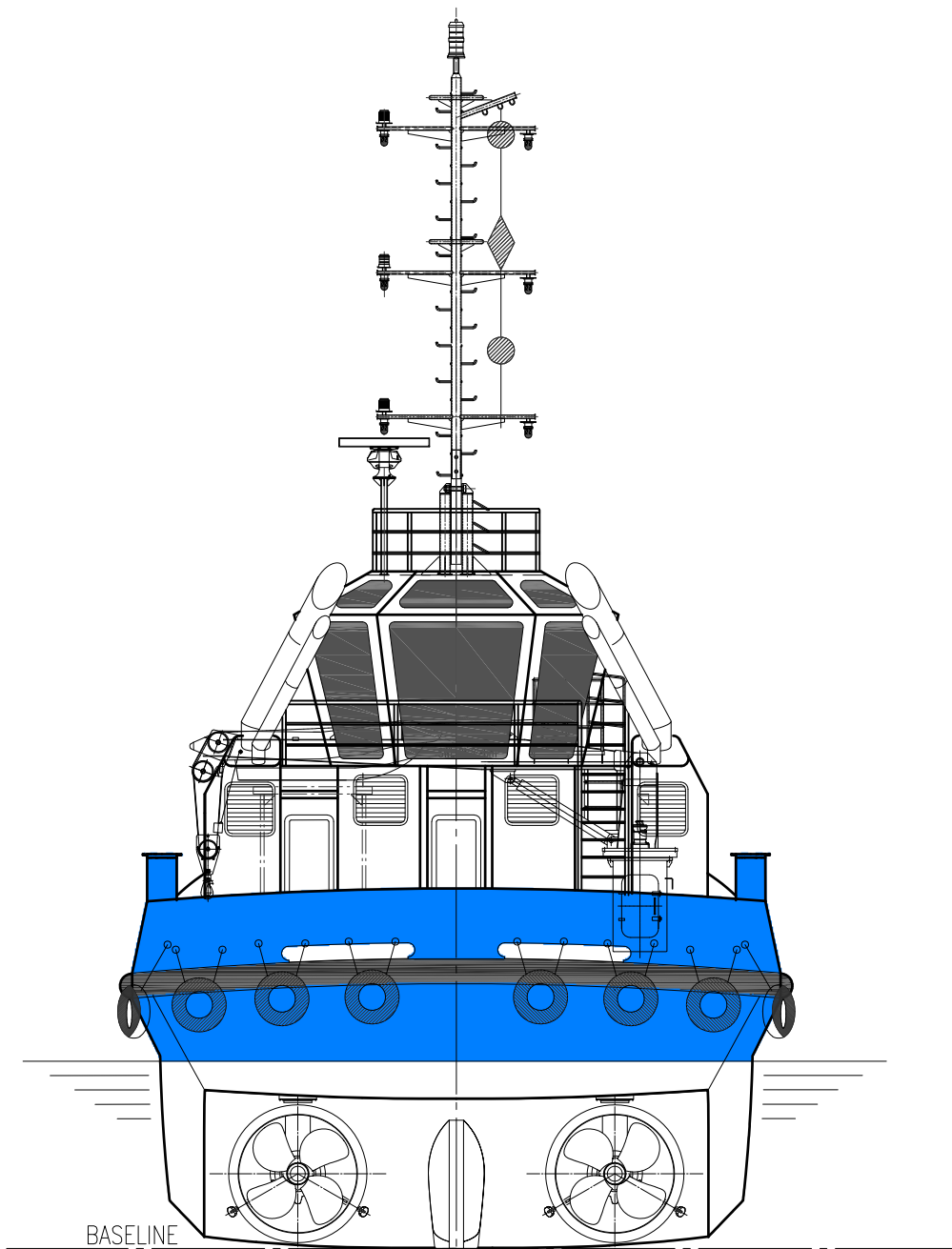
Wipers	4 sets marine wiper c/w motor 2 speed
Pilot Chair	1 unit pilot chair
Air Horn	1 x Air Horn (≥ 130 dB(A))
Washer/Dryer	1 x AXQG80, Cap: 8kg (220V/1P/50Hz)
Hand winch	1 x PNW-2000R c/w 40 m x 9 mm Ø

AZISTERN 24/20 SHALLOW DRAFT TUG

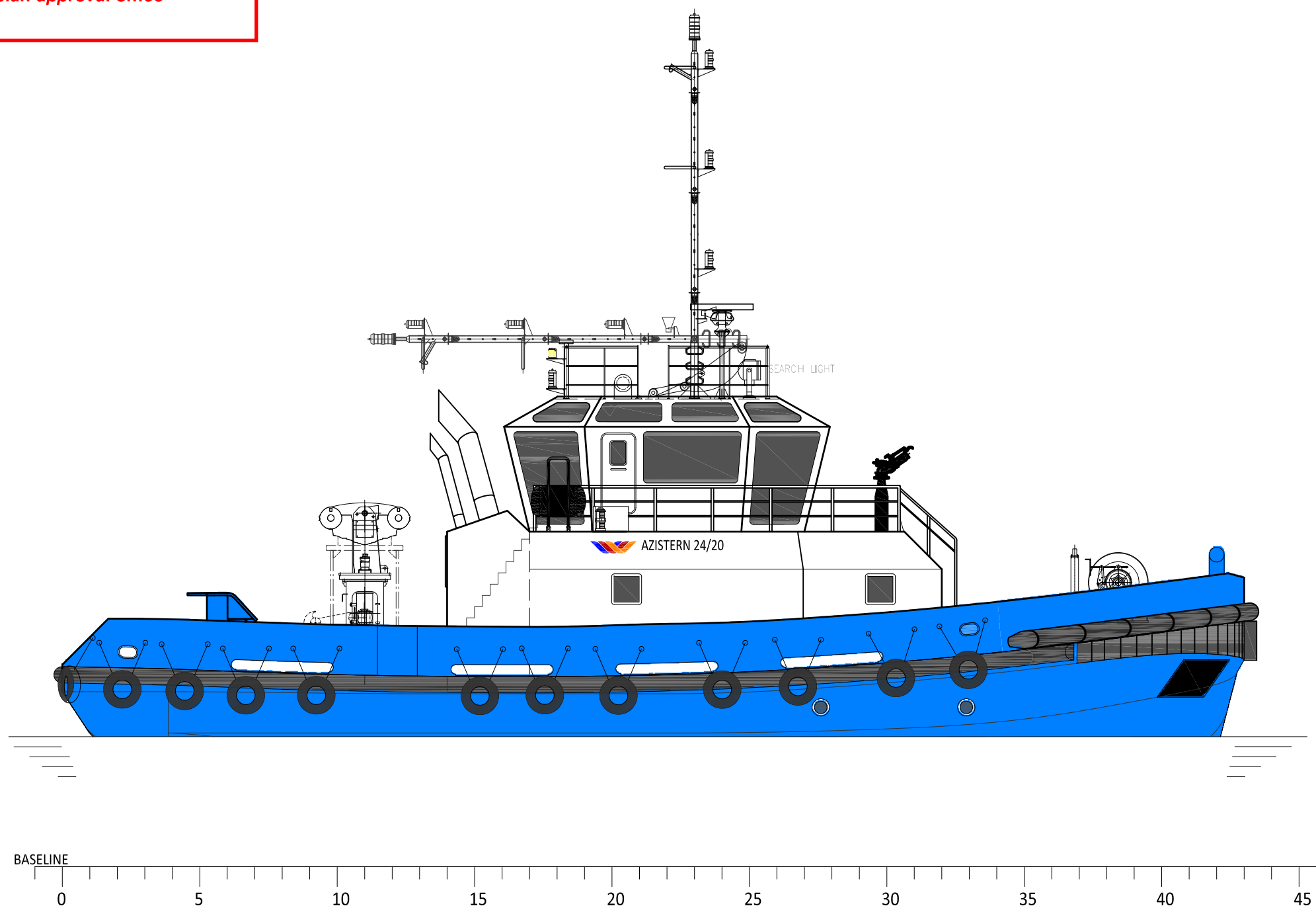
Bureau Veritas Marine & Offshore
Section 33256A.....
VU avec commentaires
Shanghai, 19-Oct-2023
[Electronic document]
The plan approval office



PROFILE



STERN VIEW



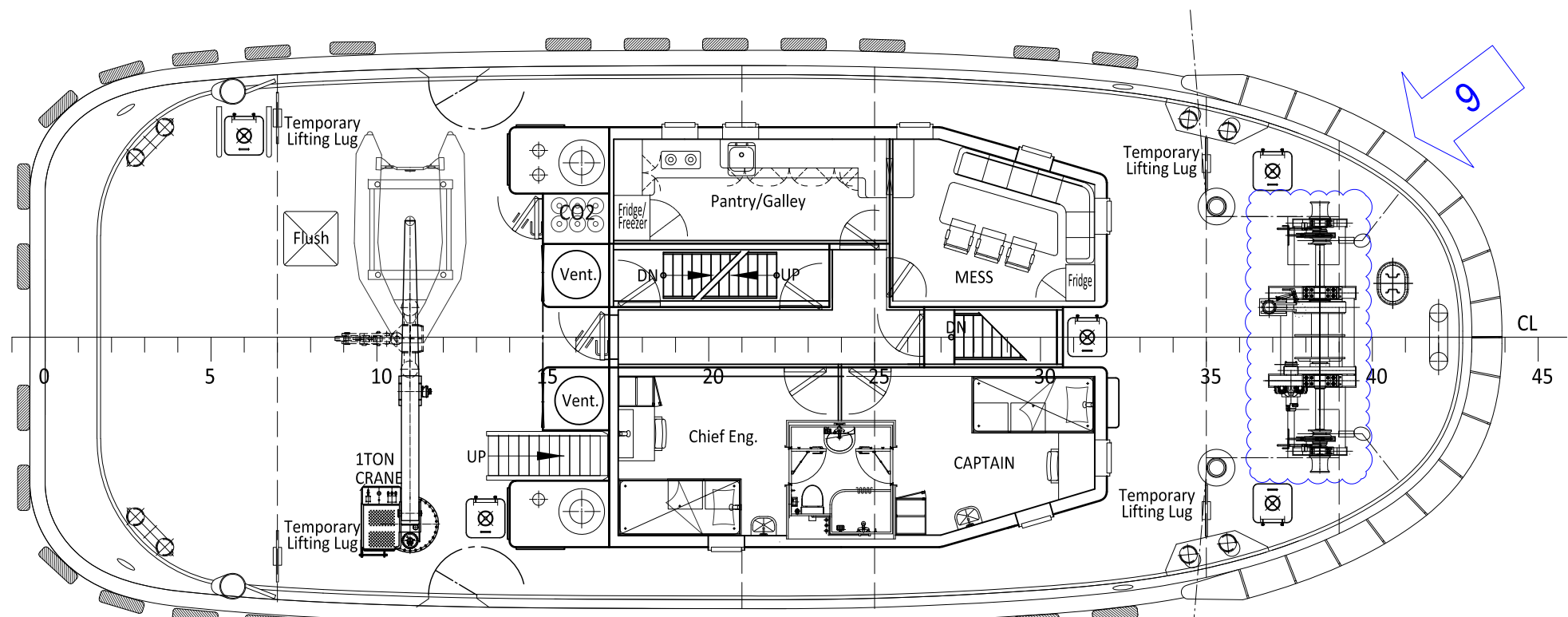
PROFILE

MAIN PARTICULARS

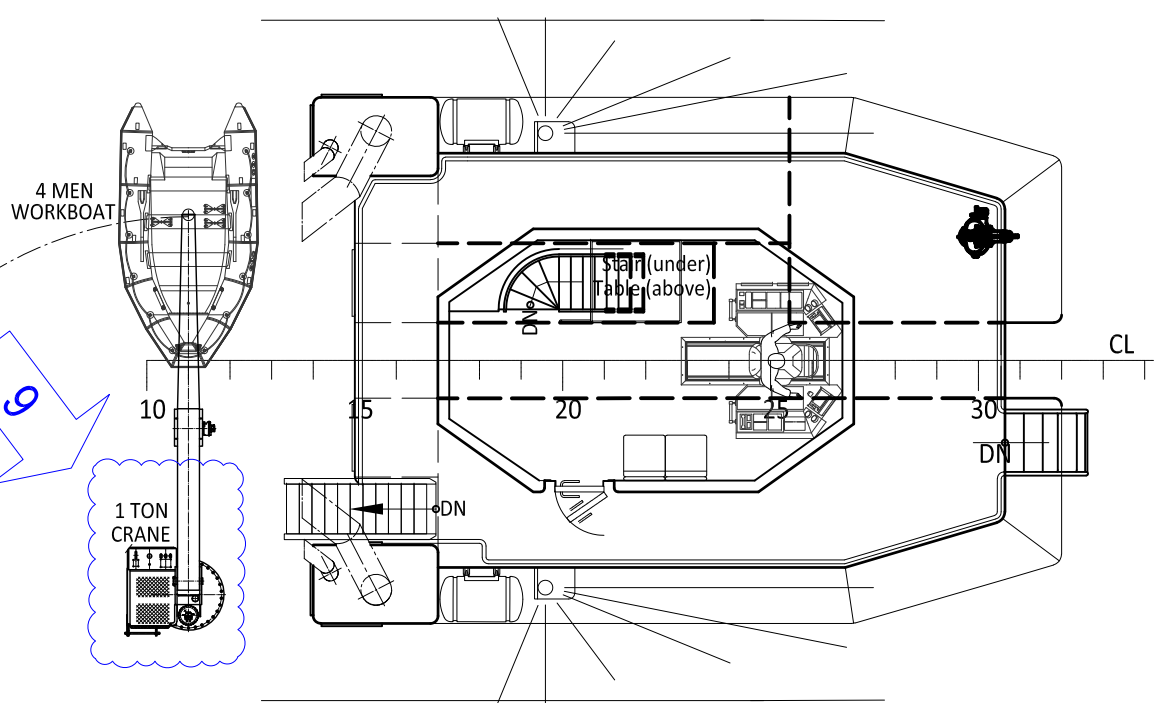
LENGTH oa.	24.20 m
LENGTH hull	23.65 m
BREADTH mld.	9.00 m
DEPTH mld.	3.80 m
DRAFT design	2.60 m
Working Draft	2.40 m
BOLLARD PULL	In excess of 25 TON
PROPULSION	2x750 KW
SPEED	10 KNOTS
FO CAPACITY	40 m3 (Approx.)
FW CAPACITY	22 m3 (Approx.)
ACCOMMODATION	10 POB
GRT	BELOW 200

CLASSIFICATION:

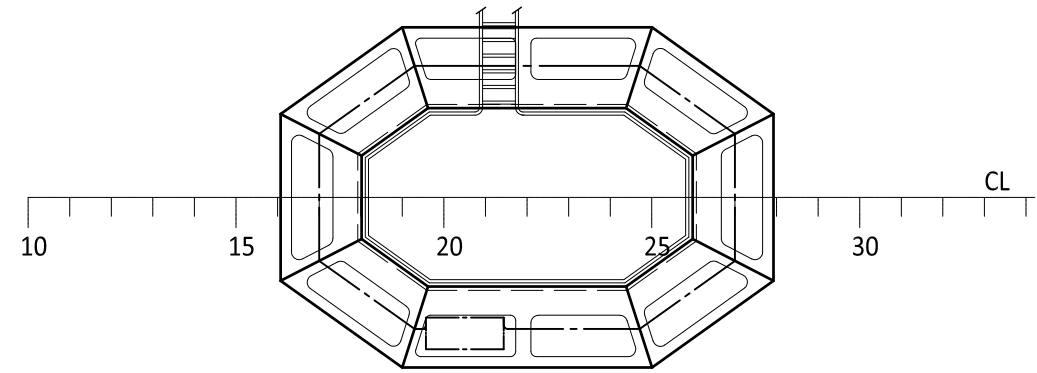
BV: I, HULL, MACH, Tug, Coastal Area, INWATERSURVEY



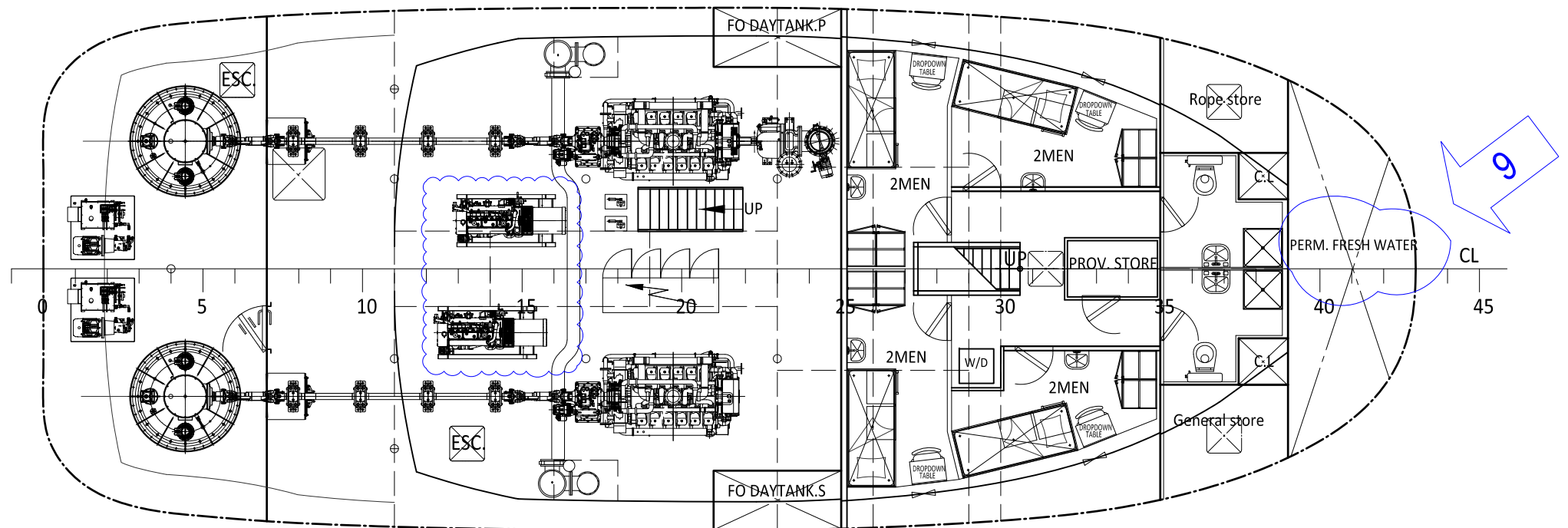
MAIN DECK



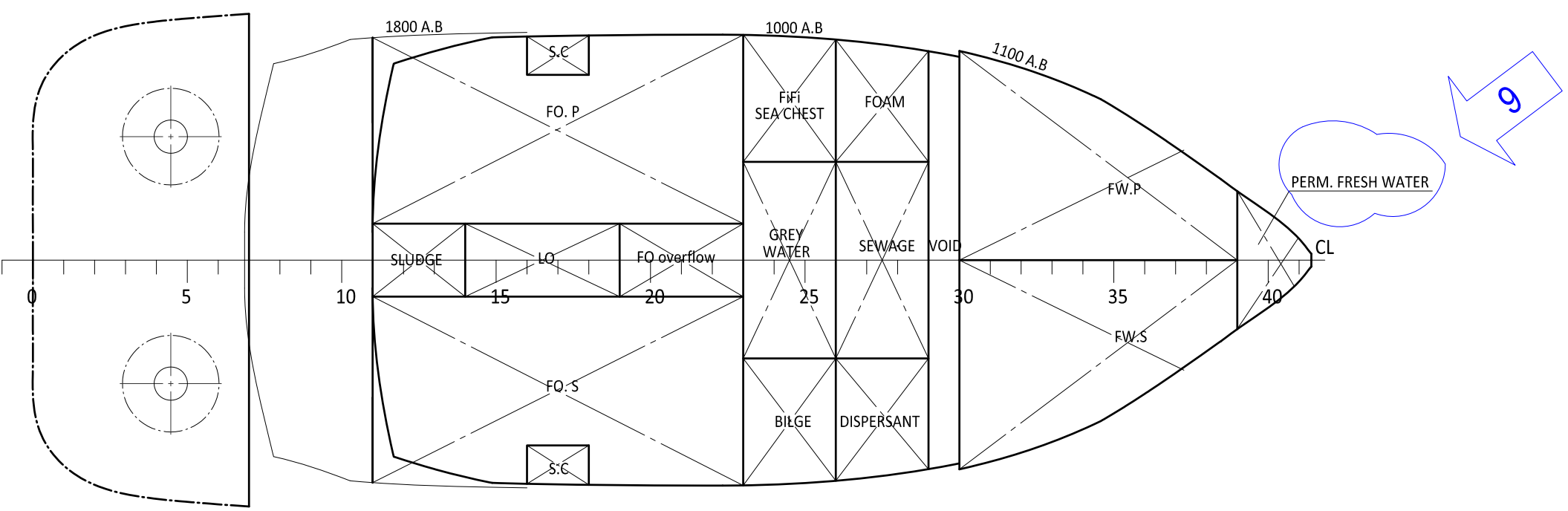
A-DECK



WHEELHOUSE TOP



TANK TOP



BELOW TANK TOP

LPO2148841 : Below TANK TOP: We have noted the LO tank is adjacent to fuel oil tank (FO.P, FO.S * FO overflow).According to Pt B, Ch 2, Sec 2,-2.1, following requirements should be complied with:
-the thickness of common boundary plates of adjacent tanks is increased by 1mm
-the sum of the throats of the weld fillets at the edges of these plates is not less than the thickness of the plates themselves
-the structural test is carried out with a head increased by 1 m with respect to Ch 13, Sec 6, [1.4].
To be satisfied by attending surveyor.

R9		GENERAL UPDATED	X.Y	A.W	2023-08-29
R8		THE VENDOR OF M/E & THRUSTER UPDATED	A.W	E.Z	2023-07-03
EDITION MARK	QUANTITY	REVISION OR APPROVAL BASIS	REVISER	APPROVED	DATE
CLASS:	BY	AZISTERN 24/20 SHALLOW DRAFT TUG		Basic Design	
DESIGNED	X.Y	GENERAL ARRANGEMENT		HULL No.	
CHECKED	A.W			DWG. No.	
APPROVED	E.Z			PAGE	1/1
CHK OF STD.				WEIGHT	
VERIFIED				SCALE	1:100
DATE	2023-05-16				