



## DAMEN ASD TUG® 3110

### "RAS EL-MA"

#### GENERAL

YARD NUMBER	511726
DELIVERY DATE	December 2006
BASIC FUNCTIONS	Towing, mooring, water transfer, fire fighting and pollution control
CLASSIFICATION	Bureau Veritas I ✳ HULL ✳ MACH Tug Unrestricted Navigation AUT UMS Fire Fighting Ship E – water spraying
FLAG	Algerian
OWNER	Entreprise Portuaire d'Arzew, Algeria

#### DIMENSIONS

LENGTH O.A.	30.82 m
BEAM O.A.	10.20 m
DEPTH AT SIDES	4.80 m
DRAUGHT AFT	4.81 m
DISPLACEMENT	613 ton

#### TANK CAPACITIES

FUEL OIL	138.4 m <sup>3</sup>
FRESH WATER	19.6 m <sup>3</sup>
FRESH WATER (CARGO)	32.6 m <sup>3</sup>
FOAM	8.6 m <sup>3</sup>
LUBRICATION OIL	7.8 m <sup>3</sup>
DIRTY OIL	4.3 m <sup>3</sup>
SEWAGE	2.1 m <sup>3</sup>
DISPERSANT	6.5 m <sup>3</sup>

#### PERFORMANCES (TRIALS)

BOLLARD PULL AHEAD	48.5 ton(m)
BOLLARD PULL ASTERN	46.5 ton(m)
SPEED AHEAD	12.9 knots
SPEED ASTERN	12.2 knots

#### PROPULSION SYSTEM

MAIN ENGINES	2x MAK 8M20
TOTAL POWER	3040 bkW (4120 bhp) at 1000 rpm
AZIMUTH THRUSTERS	Rolls Royce US 205
PROPELLER DIAMETER	2400 mm
FORCED VENTILATION	70.000 m <sup>3</sup> /hr

#### AUXILIARY EQUIPMENT

GENERATOR SETS	2x MAN D2866 E, 113 kVA, 230/400V, 50 Hz
HARBOUR GENERATOR SET	MAN D0824 LE 201, 58 kVA, 230/400 V, 50 Hz
BILGE PUMPS	2x Sterling SIHI AKHK 5101 20 m <sup>3</sup> /hr
FUEL PUMPS	Sterling SIHI AKHK 5101 and AOHA 3101
COOLING SYSTEM	Box cooling + anti marine growth system
FRESH WATER PRESSURE SET	SIHI AOHA 1202
SEWAGE PUMP	Libelulla L1-3H 6.6 m <sup>3</sup> /h
FIFI PUMP	Kvaerner pump 1000 m <sup>3</sup> /hr, 10 bar, driven by a main engine through a Norgear step up box
FIFI MONITOR	3x 275 m <sup>3</sup> /hr, water/foam
POLLUTION CONTROL	Dispersant spray system

#### DECK LAY-OUT

ANCHORS	2x 360 kg Pool (High Holding Power)
FORE WINCH/ TOWING WINCH	DMT, 18 ton pull at 11 m/min. or 9 ton pull at 22 m/min. Hydraulically driven
CAPSTAN	DMT 5 ton 15 m/min, electrically driven
HYDRAULIC CRANE	Heila HLM 20-2S with remote radio control
FENDERING	D-fender at sides, triple cylinder bow fender
TOWING WINCH AFT	DMT, 18 ton at 11m/min, 100 ton brake
TOWING HOOK	Mampaey, 65 ton SWL

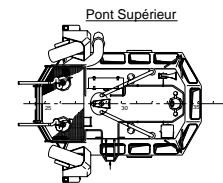
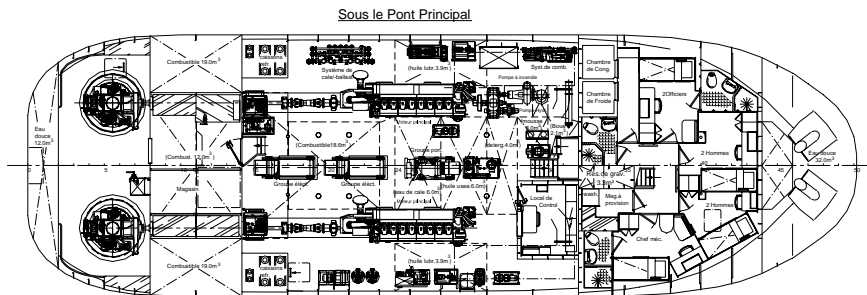
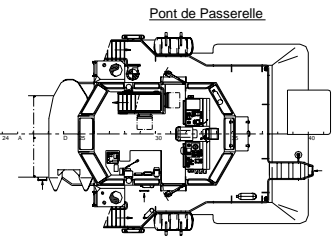
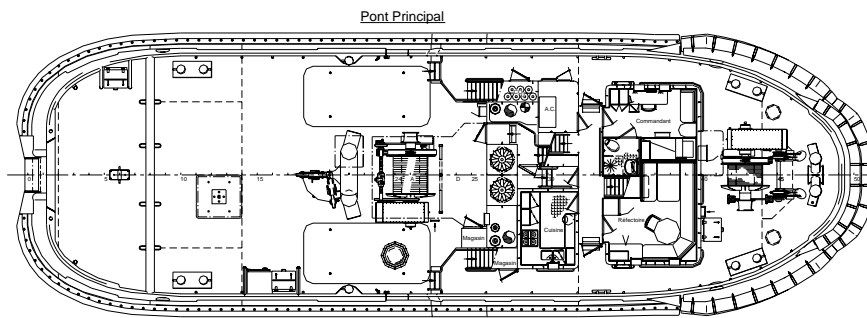
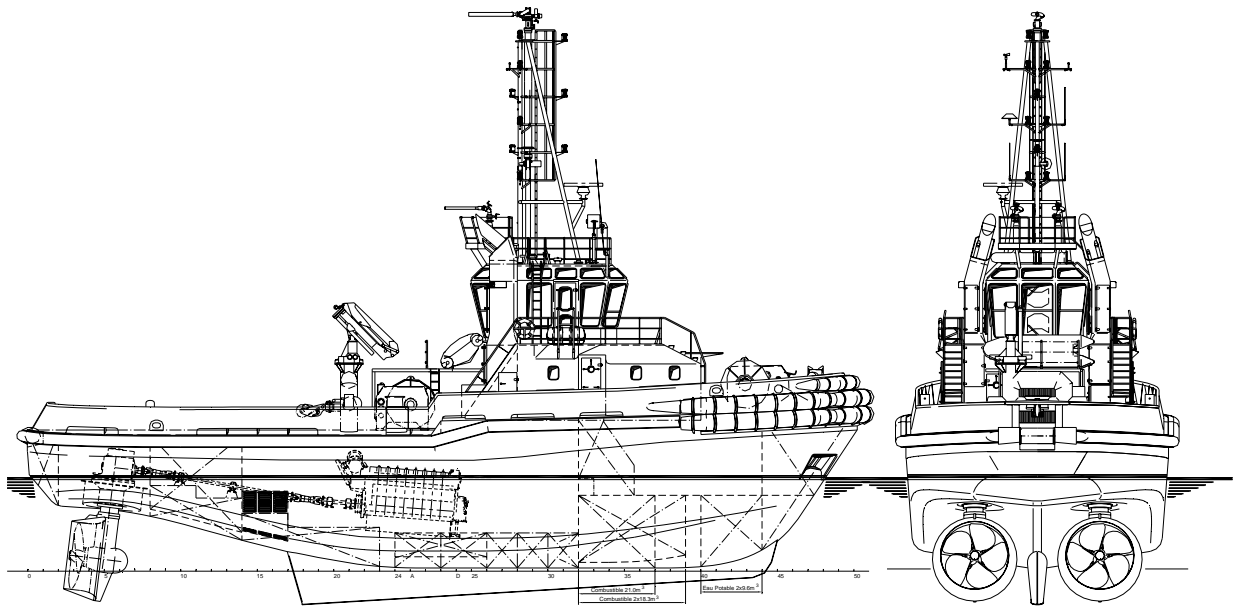
#### ACCOMMODATION

Accommodation for 8 persons, completely insulated and finished with durable modern linings, acoustical Dampa ceiling in the wheelhouse and Bolidit floating floors. Air-conditioned and heated accommodation, a captain's cabin, chief engineer's cabin, officer's cabin for 2 persons and 2 double crew cabins, a mess/dayroom, galley and sanitary facilities.

#### NAUTICAL AND COMMUNICATION EQUIPMENT

SEARCHLIGHT	Pesch 1500 W
RADAR SYSTEM	Furuno FR-7062
GYRO COMPASS	Tokimec GM-21
AUTOPILOT	Plath Navipilot V
GPS	Furuno GP-32
ECHOSOUNDER	Furuno FCV 600L
VHF RADIO TELEPHONE	Sailor RT4822 with DSC
VHF HANDHELD	2x GMDSS approved
NAVTEX	Furuno NX-500
SSB	Furuno FS-1570
ANEMOMETER	Obsermet OMC-115

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**DAMEN**

DAMEN SHIPYARDS GORINCHEM

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