



## DAMEN ASD TUG® 3213

### "DOLPHIN I"

#### GENERAL

|                 |                                                                                                                 |
|-----------------|-----------------------------------------------------------------------------------------------------------------|
| YARD NUMBER     | 513005                                                                                                          |
| DELIVERY DATE   | September 2013                                                                                                  |
| BASIC FUNCTIONS | Towing, mooring, escorting, fire fighting and pollution control                                                 |
| CLASSIFICATION  | Bureau Veritas I ✱ HULL • MACH Escort Tug; Fire Fighting ship 1 waterspraying Unrestricted Navigation • AUT-UMS |
| OWNER           | Specialist Marine Services, King Abdullah Port , KSA                                                            |

#### DIMENSIONS

|                |         |
|----------------|---------|
| LENGTH O.A.    | 32.14 m |
| BEAM O.A.      | 13.29 m |
| DEPTH AT SIDES | 5.50 m  |
| DRAUGHT AFT    | 6.00 m  |

#### TANK CAPACITIES

|                 |                      |
|-----------------|----------------------|
| FUEL OIL        | 200.0 m <sup>3</sup> |
| FRESH WATER     | 65.2 m <sup>3</sup>  |
| FOAM            | 14.3 m <sup>3</sup>  |
| DISPERSANT      | 3.0 m <sup>3</sup>   |
| LUBRICATION OIL | 10.7 m <sup>3</sup>  |
| BILGE WATER     | 4.9 m <sup>3</sup>   |
| DIRTY OIL       | 4.9 m <sup>3</sup>   |
| SEWAGE          | 2.3 m <sup>3</sup>   |
| SLUDGE          | 2.4 m <sup>3</sup>   |

#### PERFORMANCES

|                     |            |
|---------------------|------------|
| BOLLARD PULL AHEAD  | 84.8 ton   |
| BOLLARD PULL ASTERN | 79.7 ton   |
| SPEED AHEAD         | 13.8 knots |

#### PROPULSION SYSTEM

|                    |                                  |
|--------------------|----------------------------------|
| MAIN ENGINES       | 2x Caterpillar C280-8/MC         |
| MAIN ENGINE POWER  | 5420 bkW (7268 bhp) at 1000 rpm  |
| AZIMUTH THRUSTERS  | 2x Rolls Royce US 285            |
| PROPELLERS         | 3000 mm controllable pitch prop. |
| BOW THRUSTER       | 215 kW, 820 mm diameter          |
| ALARM SYSTEM       | Praxis Maxiguard                 |
| FORCED VENTILATION | 80.000 m <sup>3</sup> /hr        |

#### AUXILIARY EQUIPMENT

|                        |                                                                   |
|------------------------|-------------------------------------------------------------------|
| MAIN GENERATOR SETS    | 2x Caterpillar C9 TA, 230/400V, 188 kVA, 50 Hz                    |
| BILGE WATER SEPARATOR  | Facet 0.5 m <sup>3</sup> /hr                                      |
| FUEL PURIFIERS         | 2x Westfalia OTC 2-02-137                                         |
| COOLING SYSTEM         | Box cooling + anti marine growth system                           |
| SEWAGE TREATMENT PLANT | Headhunter TW-200B                                                |
| HYDRAULIC SYSTEM       | Double main engine driven pumps                                   |
| DISPERSANT             | Dispersant pump set with 2 spraybooms                             |
| FIRE FIGHTING          | Main engine driven pumps, 2x 1400 m <sup>3</sup> /hr              |
| FIFI MONITORS          | 2x 1200 m <sup>3</sup> /hr water, 2 x 300 m <sup>3</sup> /hr foam |

#### DECK LAY-OUT

|                     |                                                                       |
|---------------------|-----------------------------------------------------------------------|
| ANCHOR & CHAIN      | 2x 585kg HHP anchor, 330m 24mm studlink                               |
| ANCHOR/TOWING WINCH | Two speed double drum winch, pull 44 ton at 27.4 m/min, 250 ton brake |
| CAPSTAN             | 5 ton at 15 m/min. Electrically driven                                |
| DECK CRANE          | Heila HLM 10-2S, 1100 kg at 7.84 m                                    |
| TOWING WINCH AFT    | Two speed double drum winch, pull 50 ton at 10.7 m/min, 250 ton brake |
| TOWING HOOK AFT     | Mampaey 100 ton S.W.L.                                                |

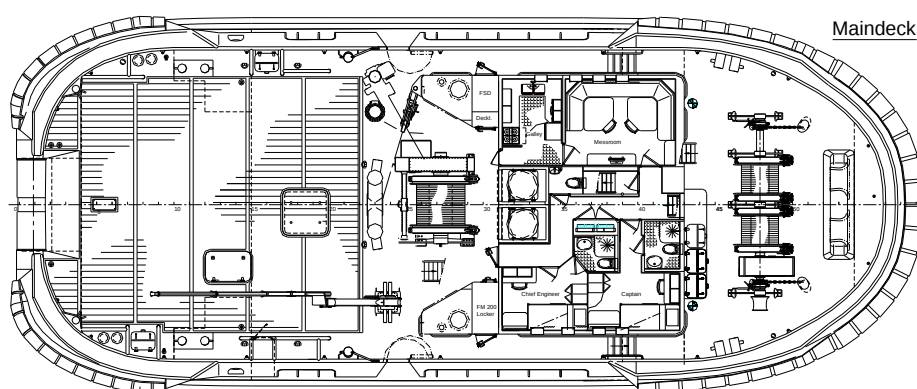
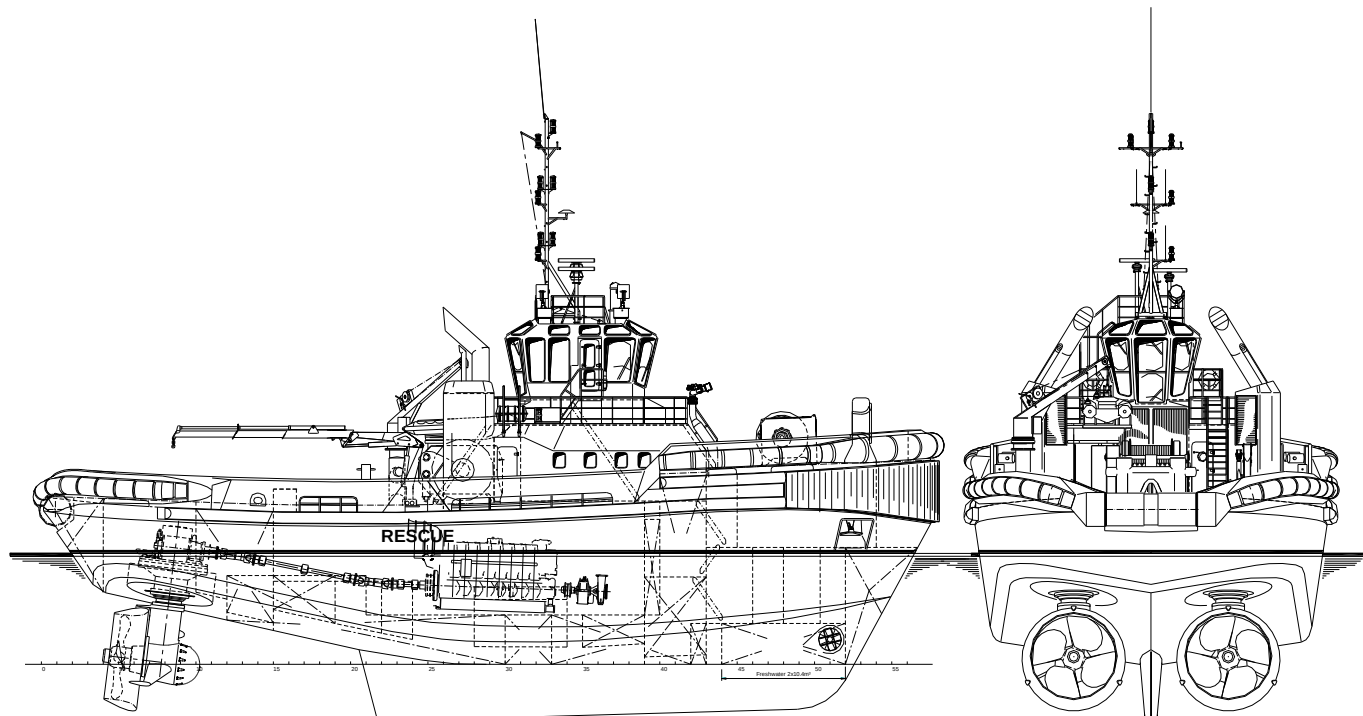
#### ACCOMMODATION

Heated and air-conditioned spaces for 9 persons, consisting of three single cabins and three double cabins, stores, mess room, galley, laundry and sanitary spaces.

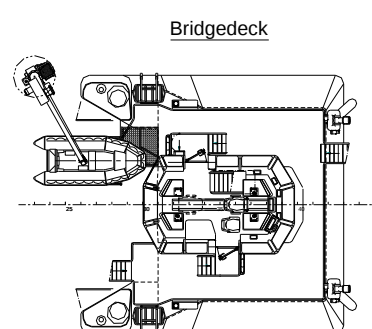
#### NAUTICAL AND COMMUNICATION EQUIPMENT

|                     |                                        |
|---------------------|----------------------------------------|
| GMDSS               | Area 3                                 |
| RADAR SYSTEM        | 2x Furuno FAR-2117                     |
| COMPASS             | Magnetic kotter/Satellite Furuno SC 50 |
| AUTOPILOT           | Simrad AP-50                           |
| GPS                 | Furuno GP-150                          |
| ECHOSOUNDER         | Furuno FE-700                          |
| VHF RADIO TELEPHONE | 2x Sailor RT6222 (one with DSC)        |
| SSB                 | Furuno FS-1570                         |
| AIS                 | Furuno FA-150                          |
| NAVTEX              | Furuno NX-700                          |
| INMARSAT + SPARE    | Furuno Felcom 15                       |
| ANEMOMETER          | Windsonic OMC 115                      |

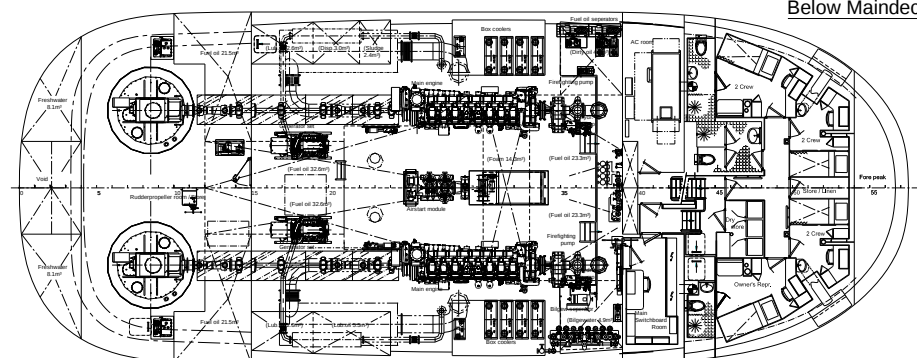
\* PHOTOGRAPH SHOWS IDENTICAL VESSEL



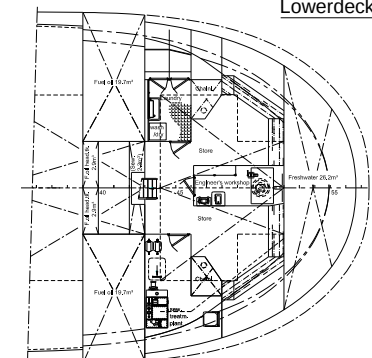
Maindeck



Bridgedeck



Below Maindeck



Lowerdeck

# DAMEN ASD TUG<sup>®</sup> 3213

"DOLPHIN I"

**DAMEN**

DAMEN SHIPYARDS GORINCHEM

Member of the DAMEN SHIPYARDS GROUP



Industrieterrein Avelingen West 20  
4202 MS Gorinchem

P.O. Box 1  
4200 AA Gorinchem  
The Netherlands

phone +31 (0)183 63 99 11  
fax +31 (0)183 63 21 89

info@damen.nl  
www.damen.nl