

## Borzou & Zaal - Line Handling Tugs



### GENERAL

**Year of Build** 2009

**Type** Damen stan tugs 1606

**Basic Functions** Towing, mooring and survey Operations

**Classification**

Bureau Veritas

1 \* Hull Mach Tug Coastal Area

30 nautical miles

**Painting** Epoxy paint system

### DIMENSIONS

**Length** O.A. 16.56 m

**Beam** O.A. 5.54 m

**Depth at Sides** 2.54 m

**Draught Aft** 2.35 m

**Sacantungs** hull 10 mm, sheerstrake 20 mm

### TANK CAPACITIES

**Fuel OIL** 14.0 m3

**Fresh Water** 1.1 m3

**Sewage** 0.7 m3

**Bilge Water** 0.5 m3

### PERFORMANCE

**Bollard Pull Ahead** 15.9 T

**Speed** 11.5 knots

### PROPULSION

**Main Engines** 2 x Caterpillar C18 TA / B

**Total Power** 896 bKW (1200 bhp) @ 1800 rpm

**Gearboxes** 2 x Reintjes WAF 264 L 4.5:1

**Propellers** 2 x Kaplan II fixed pitch propellers

**Nozzles**

2 x 1350 mm Van de Giessen

"Optima" with st inner rings

**Rudders** 2 x streamlined, double plates

### AUXILIARY EQUIPMENT

**Generator Set** Caterpillar C2.2 NA, 230V, 18 kVA, 50 Hz

**Alternator** 24 V 2 x main engine driven

**Battery Sets** 2 x 24 V 200 Ah + change over facility

**Alarm System** Engines, gearboxes + bilge alarm

**Bilge/Gs Pump** Elec. Driven, Sterling SIHI VW SI 5013 20 m3/hr

**Fuel Oil System** Duplex filters, water separators + SOS valve

**Cooling System** Closed cooling system / Keel cooled

**Water System**

Electrically driven freshwater hydrophore and Sewage pump

**Fresh Water Heater** 230 V, 30 liter

**Ventilation** Mechanical Ventilation in ER

### DECK LAYOUT

**Anchors** 2 x 80 kg Pool (HHP)

**Chain (TOT)** 100 m shortlink chain 13 mm diameters

**Anchor Winch** manual for one anchor

**Towing Hook** Disc type, 25 tonnes

**Life rafts** One (or 2 optional) on top deck

### ACCOMMODATION

The accommodation is completely insulated and finished with durable modern livings, acoustical Dampa ceiling in the wheelhouse and a floating floor. The air –conditioned wheelhouse is fitted with a corner settee with table and a control position. Below deck a galley, sanitary Facilities and a store are provided. Crew cabin with four bunks.

### NAUTICAL AND COMMUNICATION EQUIPMENT

**Searchlight** Pesch 250 W + flood ight 150 W

**Horn** Electric

**Radar** Furuno 1932

**Compass** Magnetic Kotter type

**GPS** Furuno GP-32

**Echosounder** Furuno LS-6100

**VHF Radio** Sailor RT2048