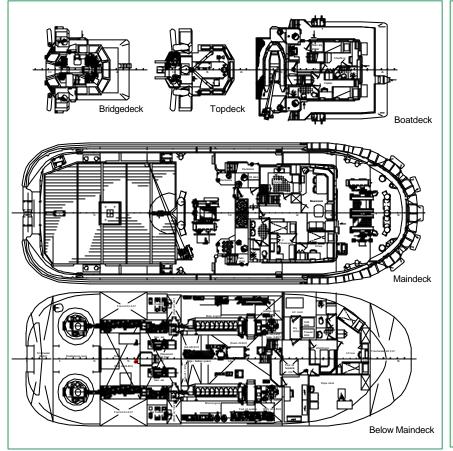
# Double azimuth stern drive tug

70 metric ton bollard pull ahead 65 metric ton bollard pull astern





DAMEN DESIGN Type ASD 3211

NEMED is designed to assist offshore oil and gas off-loading tankers.

Highly manoeuvrable, with two azimuth thrusters, this boat has its double drum towing winch located on the forecastle, thus allowing to switch from towing to pushing within seconds.

Each drum is equipped with a complete tow line giving redundancy. A towing winch is fitted on the main deck aft, giving an even higher operational flexibility.

In addition, it offer a 75m<sup>2</sup> deck space for material and 20 ft containers, even refrigerated, as well as a fire-fighting capability.

It also has two oil dispersant spray booms.

07-11-2006





# Double azimuth stern drive tug NEMED

# 70 metric ton bollard pull ahead 65 metric ton bollard pull astern

## MAIN CHARACTERISTICS

Length overall:	.32.50 m.
Beam overall (incl. rubber fender):	12.00 m.
Depth main deck midship:	5.00 m.
Loaded draft:	4.90 m.
Deadweight:	170 mt

## REGISTRATION

Туре:	.Double Azimuth Stern Driven Offshore Tug.
Owner:	.Bourbon Offshore Surf.
Year built:	2003.
Builder:	DAMEN SHIPYARDS (Holland).
Flag:	
Classification:	BUREAU VERITAS. 1 3/3 E 🛧 Tug-Fire fighting ship/water spray.
	Deep Sea. 🛧 AUT MS. 🛧 MACH.

#### PERFORMANCE

Maximum speed:	13 knots.
Economic speed:	10 knots.
Consumption:	17 t/24 h at 100% bollard pull.
-	10 t/24 h at economic speed.

# ACCOMMODATION

•	Officers:	2 cabins with 1 berth.	
		1 cabin with 2 berths.	

- Crew: .....1 cabin with 4 berths.
- Passengers: .....1 cabin with 2 berths. (the regular crew being 6, 2 additional bunks remain available for charterer's personnel, except during tug's crew changes).
- Messroom, sanitary spaces, stores.
- Fully air-conditioned.

# **PROPULSION - MACHINERY**

- Cont. output: ......2 x 2,030 kW.
- Azimuth propellers: ..........2 AQUAMASTER US 3001 . (diameter: 2,700 mm).
- •
- Auxiliary generators: ......2 CATERPILLAR 3304 BT • 100 kVA - 380 V - 50 Hz each.

# **TOWING EQUIPMENT**

#### Forecastle deck:

- 1 double drum towing winch.
  - High pull (towing drums): ......30 t. on 1<sup>st</sup> layer.
  - Brake hold (towing drums): .....150 t. on 1st layer.
  - High speed (towing drums): .....20 m/min at 1<sup>st</sup> layer.
  - Wire capacity (towing drums): .....150 m, diam. 80 mm each. - Spare tow line: .....1 complete tow line per tug (ready for use on the  $2^{nd}$  drum).

#### Aft deck:

- 1 single drum towing winch.
- Line pull: .....up to 110 t on 2<sup>nd</sup> layer.
- Brake hold: .....150 t on 2<sup>nd</sup> layer.
- Speed: .....up to 10 m/min. at 2<sup>nd</sup> layer.
- Wire capacity: ......750 m, diam. 52mm.

# SPECIAL EQUIPMENT

#### Tugger winch:

- An electro-hydraulic driven tugger winch is fitted on aft deck.
  - Pull: .....5 t.

  - Drum capacity: ......30 m of 15 mm wire.
- Stern roller:
- Diameter: ......900 mm.
- Length: .....2 m.
- SWL: .....125 t.
- Dispersant booms: .....2.
- Length: .....6.50 m.

#### **CARGO CAPACITIES, PUMPS**

Cargo deck area75 m <sup>2</sup> .	
Deck cargo:75 m.t.	
Deck loading:5 t/m <sup>2</sup> .	
Total fuel oil:130 m <sup>3</sup>	(1 x 100 m <sup>3</sup> /hr at 30 m)
Total water:100 m <sup>3</sup>	(1 x 100 m <sup>3</sup> /hr at 30 m
Foam:	
Dispersant:25 m <sup>3</sup>	•
Sewage:4 m <sup>3</sup>	•

# **ELECTRONICS**

- 2 radars.
- 1 gyrocompass.
- 1 echo sounder.
- 1 speed log.
- 1 autopilot.
- 1 GPS (DGPS).
- 1 anemometer.
- 1 INMARSAT M telephone and fax.
- 1 radio system compliant with GMDSS (A3) rules including: 2 INMARSAT STD C, 2 VHF, 1 NAVTEX, 1 SSB.
- LIFE-SAVING EQUIPMENT
- 2 x 20 persons inflatable liferafts.
- 1 x ZODIAC RB6 rescue-boat (SOLAS IMO 47 compliant) with 1 YANMAR D27 diesel engine.

#### FIRE-FIGHTING SYSTEM CLASS FI-FI I $(2,400 \text{ m}^3/\text{hr})$

- Monitors: ......2. - Water capacity: .....1,200 m<sup>3</sup>/hr. each.
- Fire-fighting pumps: .....2 x 1,300 m<sup>3</sup>/hr. each.
- Foam system. - Deluge system.

All particulars believed to be correct but not guaranteed.

# **Bourbon Offshore**