



AHTS NAVIGATOR Z – Specifications

10800BHP, 67m, 140T BP, DP2, FIFI 1

ABOUT

The AHTS Navigator Z, is a Damen AHTS 6815 anchor handling tug supplier, built in 2009 and classed by DNV as 1A Fire Fighter (I) Offshore Service Vessel (AHTS) DPS(2) E0 OILREC TMON.

Two Caterpillar CAT C280-12 main engines of 4,060 kW each (8,120 kW total) drive controllable pitch propellers in optima nozzles, for a bollard pull of 140 tonnes and a maximum speed of 14 knots.

A Rolls Royce ICON Class 2 DP system with triple redundant controllers, a Brattvaag waterfall winch rated 150 t pull and 250 t brake, Fire Fighting Class I and oil recovery capability equip her for anchor handling, towing, supply and standby work.

KEY FEATURES

DNV Classed AHTS – DP2

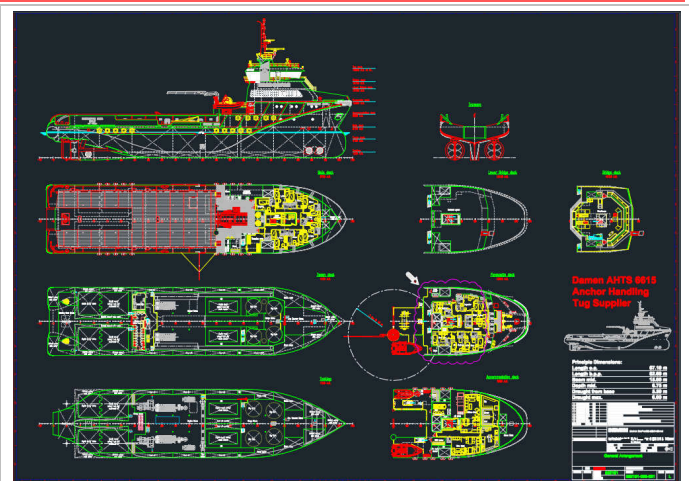
140T Bollard Pull

Fire Fighter Class I – OILREC

Accommodation for 28 persons

150t pull first layer, 250t brake capacity

Rolls Royce ICON DP Class 2



NAVIGATOR Z

DESIGN	DAMEN AHTS 6815
TYPE	ANCHOR HANDLING, TUG, SUPPLY, FIRE FIGHTING I, OILREC
CLASSIFICATION	DNV 1A FIRE FIGHTER(I) OFFSHORE SERVICE VESSEL (AHTS) DPS(2) E0 OILREC TMON
OWNER	NAVIGATOR Z OWNER INC.
PORT OF REG.	PANAMA
FLAG	PANAMA
MMSI	352978180
IMO NO	9451599
YEAR BUILT	2009
CALL SIGN	3E2413

MEASUREMENTS

LENGTH O.A.	67.20 m
LENGTH B.P.P	62.50 m
BREADTH MOULDED	15.00 m
DEPTH MOULDED	6.75 m
DRAFT MAX (INCL. SKEG)	6.00 m
FREEBOARD, MIN @ MAX DRAFT	1.25 m
DEADWEIGHT	1950 t.
GROSS TONNAGE	2485
NET TONNAGE	745

PERFORMANCE / CONSUMPTION

BOLLARD PULL	140 t
MAX. SPEED	14 knots / 26 m3 / day
CRUISING SPEED	11 knots / 19 m3 / day
BEST ECO SPEED	9 knots / 12 m3 / day
TOWING @ 50% OF BP	17 m3 / day
TOWING @ 85% OF BP	23 m3 / day
DP < 20 KN WIND, < 2 M SEAS	11 m3 / day
DP 20-30 KN WIND, 2-3 M SEAS	14 m3 / day

ACCOMMODATION 28 PERSONS

CABINS	7 x single cabins 3 x double cabins 1 x triple cabin 3 x quadruple cabins	TOTAL	28 beds / 14 cabins
OFFICERS MESS	1 off	CREW MESS	1 off
GALLEY (FULLY EQUIPPED)	1 off	HOSPITAL (FULLY EQUIPPED)	1 off
FREEZE AND COLD STORE	Yes	CHANGING ROOM	Yes

CARGO CAPACITIES

FREE DECK AREA	419.3m ²
DECK STRENGTH	5 t/m ²
DECK LOAD	900 t.
FUEL OIL	910 m ³
POTABLE WATER	295 m ³
BALLAST / DRILL WATER	775 m ³
LIQUID MUD / BRINE	455 m ³
RECOVERED OIL	205 m ³
DRY BULK	170 m ³
CHAIN LOCKERS	135 m ³

DISCHARGE RATES

BALLAST / DRILL WATER	120 m ³ /h at 8.0 bar
FUEL OIL	2x120 m ³ /h at 9.0 bar
FRESH WATER	1x120 m ³ /h at 9.5 bar
DRY BULK	2 x compressor, 23.5 m ³ /min each at 6.0 bar
LIQUID MUD / BRINE	2x75 m ³ /h each at 20.0 bar

MACHINERY/PROPULSION

MAIN ENGINES	2 x Caterpillar CAT C280-12, 4060 kW each
TOTAL POWER	8,120 kW at 1000 rpm
SHAFT GENERATORS	2 x 1000 ekW at 1800 rpm, 440 V, 60 Hz
DIESEL GENERATORS	2 x CAT C18-TA, 408 ekW each at 1800 rpm, 440 V, 60 Hz
EMERGENCY GENERATOR	1 x CAT C9-TA, 163 ekW at 1800 rpm, 440 V, 60 Hz
BOW THRUSTERS	2 x tunnel thrusters, 450 ekW, 1300 mm, CPP each
STERN THRUSTER	1 x tunnel thruster, 450 ekW, 1300 mm, CPP

PROPELLERS / STEERING

2 X 3400 MM CONTROLLABLE PITCH PROPELLERS IN OPTIMA NOZZLES
 2 X HIGH EFFICIENCY BECKER RUDDERS

DP/JOYSTICK CONTROL

DP CONTROL SYSTEM	Rolls Royce ICON Class 2 DP, triple redundant controllers
POSITION REFERENCE SYSTEMS	2 x DGPS, 1 x CyScan
SENSORS	2 x wind sensors, 2 x MRU
INDEPENDENT JOYSTICK SYSTEM	Rolls Royce ICON
POWER MANAGEMENT SYSTEM	Praxis
ALARM AND MONITORING SYSTEM STATION	Praxis
KEEPING: ALL THRUSTERS AT 100%STATION	Current 1.5 kn, wind 42 kn @ 90°
KEEPING: ALL THRUSTERS AT 85%STATION	Current 1.5 kn, wind 37 kn @ 90°
KEEPING: ALL THRUSTERS AT 50%	Current 1.5 kn, wind 33 kn @ 90°

ANCHOR HANDLING EQUIPMENT CAPACITY

1 X BRATTVAAG AH & TOWING WINCH, WATERFALL TYPE SL150WX-B2T	150 t pull 1st layer / 250 t brake
1 X DECLUTCHABLE TOWING DRUM	800 mm dia. x 2090 mm dia. x 1600 mm length
1 X DECLUTCHABLE AH DRUM (TWO COMPARTMENTS, DIVIDING FLANGE)	800 mm dia. x 2090 mm dia. x 650+650 mm length
AH DRUM WIRE CAPACITY	2 x 460 m of 64 mm dia.
BRAKES	Band brakes of robust design
BRAKE AND CLUTCH CONTROL	Manual / remote controlled
BRAKE HOLDING LOAD	250 t on towing drum 1st layer 250 t on AH drum 1st layer
LOADCELL	In brake links
2 X CABLE LIFTERS FOR 81 MM RIG CHAIN	Fitted outside the AH drum
2 X CHAIN LOCKERS	69 m3 each / 515 m each of 81 mm chain
1 X BRATTVAAG WIRE STORE REEL, FOR WIRE TYPE LALMX 63010	Dia. 800 mm / dia. 2200 mm x 2200 mm
WIRE STORE REEL: TWO COMPARTMENTS, COMPACT DIVIDING FLANGE	1100 m of 64 mm wire rope Compartment 2: 460 m of 64 mm wire rope
1 SET KARM TOWING PINS TYPE 130554 (BP UP TO 160 T)	L 2500 mm x W 1770 mm x H 2045 mm
2 X KARM FORK SHARK JAWS	MBL up to 250 t
SHARK JAW INSERTS	77-102 mm, 61-85 mm, 50-65 mm, 32-46 mm
SHARK JAW DIMENSIONS	L 2500 mm x W 1770 mm x H 2045 mm

TOWING / AH DRUM PERFORMANCE

LOW SPEED, 1ST LAYER: 150 T	0 - 7.5 m/min
LOW SPEED, 1ST LAYER: 96 T	0 - 11.2 m/min
LOW SPEED, 1ST LAYER: 42 T	0 - 22.6 m/min
LOW SPEED LOWERING	0 - 23.6 m/min
LOW SPEED CONTROLLED DYNAMIC BRAKING: 28 - 210 T	0 - 27 m/min
HIGH SPEED, 1ST LAYER: 61 T	0 - 18.8 m/min
HIGH SPEED, 1ST LAYER: 38 T	0 - 28.2 m/min
HIGH SPEED, 1ST LAYER: 17 T	0 - 56.9 m/min
HIGH SPEED LOWERING	0 - 59.4 m/min
HIGH SPEED CONTROLLED DYNAMIC BRAKING: 11 - 83 T	0 - 69 m/min

MOORING & DECK EQUIPMENT

2 X BRATTVAAG TUGGER WINCHES TYPE AKMX2210	10 t pull, one fixed drum with band brake
TUGGER DRUM DIMENSIONS	ø380 mm x ø800 mm x 500 mm length
TUGGER DRUM CAPACITY	390 m of dia. 22 mm wire
TUGGER BRAKE CONTROL / SPOOLING	Manually operated / from underside of drum
TUGGER WINCHES 1ST LAYER, 10 T PULL	0 - 19 m/min
TUGGER WINCHES LIGHT LINE	0 - 70 m/min
TUGGER WINCHES LOWERING	0 - 76 m/min
1 X TELESCOPIC HYDRAULIC CRANE	SWL 6.4 t @ 5.08 m 3.0 t @ 10 m

LIFERAFT / RESCUE BOAT

1 X SURVITEC DSB DSB-420 IRB RESCUE BOAT	40 BHP outboard engine 1000 kg with 6 persons, port side
1 X NED-DECK MARINE DAVIT SCH 12-3.5 R RH	SWL 1200 kg, port side
1 X DELTA 6.5 M 'SEAHAWK' FAST RESCUE BOAT	230 hp diesel engine with jet, max. speed 34 knots
1 X NED-DECK MARINE DAVIT PRHE	SWL 3000 kg, stbd side

FIRE FIGHTING CLASS ONE (I)

FIRE FIGHTING CLASS	Class One (I)
2 X FIFI PUMPS, DRIVEN BY PORT & STBD MAIN ENGINES	1300 m3 each, total 2600 m3, remote control
2 X FIRE MONITORS FJM-200 EL MV	20,000 l/min @ 16 bar, jet and fog remote controlled and manual override
SELF PROTECTION SYSTEM	Sprinklers around the accommodation

NAVIGATION AND COMMUNICATION EQUIPMENT

GPS	2 off	ECDIS	Dual
S-BAND RADAR	Furuno	X-BAND RADAR	Furuno
AUTOPILOT	Yes	ECHOSOUNDER	Yes
SPEED LOG	Yes	NAVTEX	Yes
INMARSAT C	2 off	MF/HF	Yes
DSC VHF	3 off	EPIRB	Yes
SARTS	Yes	STARLINK	Yes

GENERAL ARRANGEMENT

