

# TECHNICAL SPECIFICATION

## MPSV «NEFRIT» / МПС «НЕФРИТ»

### UT 745 E



**IMO no:** 9297773  
**Call sign:** UBDW8 / УБДВ8  
**MMSI:** 273292650

#### MAIN DESCRIPTION

**Type:** UT 745 E  
**Classification:** **RINA:** C† supply vessel -heavycargo (wetherdeck), fire-fighting ship- 1, unrestricted navigation  
**Additional Notation** † AUT-UMS; GREEN PLUS; DMS; CONF; † DYNAPOS DP2; HEAVYCARGO (HOLDi, 2,8 kN/m³); HELIDECK  
**Yard:** Aker Tulcea / Langsten A/S  
**Yard built no:** 193  
**Place built:** Tomrefjord  
**Country built:** Norway  
**Keel laid:** 27.01.2003  
**Delivered:** 05.02.2004  
**Flag:** RUSSIA  
**Port of registry:** BOLSHOI PORT ST. PETERSBURG

#### MEASUREMENT

**RINA:** 101774  
**Length overall:** 90,70 m  
**Length BPP:** 80,40 m  
**Breath moulded:** 18,80 m  
**Depth moulded:** 7,60 m  
**Draught max:** 6,20 m  
**Gross tonnage GT:** 3963 t  
**Corresponding DWT:** 3660 t  
**Net tonnage NT:** 1438 t  
**Owner:** West Trading Group OU  
**ISM/TECH-Responsible:** LLC ALLIANCE / ООО «Альянс»

#### CARGO CAPACITY

**Deck cargo:** 1700 T  
**Deck area:** 850 m²  
**Deck strength:** 10,0 t/m²  
**Fuel (gasoil):** 1288,30 m³  
**Liquid Mud:** 600,80 m³ (2,5 S.G.)  
**Brine:** 751,60 m³  
**Drill water / Ballast:** 2678,70 m³  
**Base Oil:** 296,50 m³  
**Fresh Water:** 744,90 m³  
**Slop:** 406,80 m³

#### DISCHARGE RATES

**Loading/Discharge station:** 2 each side. 5"- 4" WECO connection/reducer  
**Fuel discharge rate:** 2 pumps a' 250 m³/hour, 9 bar, Hydr.driven  
**Mud discharge rate:** 2 pumps a' 100 m³/hour, 24 bar, Hydr.driven  
**Brine discharge rate:** 2 pumps a' 100 m³/hour, 24 bar, Hydr.driven  
**Drill water discharge rate:** 2 pumps a' 250 m³/hour, 9 bar, Hydr.driven  
**Base Oil discharge rate:** 2 pumps a' 150 m³/hour, 9 bar, Hydr.driven  
**Fresh Water discharge rate:** 2 pumps a' 250 m³/hour, 9 bar, Hydr.driven  
**Slop discharge rate:** 1 pump a' 150 m³/hour, 9 bar, Hydr.driven  
**Bilge / Fire pump:** 2 pumps 64 m³/hour, El. motor  
**Emergency fire pump:** 1 pump 34 m³/hour, El. motor

#### MACHINERY / PROPULSION

**Main Engine set 1:** 2 x RRMB C25: 33L6A, 1740 kW - 900 RPM  
**Main Engine set 2:** 2 x RRMB C25: 33L6A, 1740 kW - 900 RPM  
**Propulsion Aft:** 2 x RRM AZP 120/86-320/US305CP 2500kW

**Total BHP:** 9333 BHP  
**Total Kw:** 6960 kW

**Bow Thruster 1:** R&R, TT 2200 DNP-SS-CP, 241 rpm 883 kW  
**Azimuth Thruster Forward:** R&R, TCNS 73/50-180, 304 rpm 883 kW

**Main Generators set 1:** 2 x ABB AM6 630 S08, 2070 kVA  
**Main Generators set 2:** 2 x ABB AM6 630 S08, 2070 kVA  
**Emergency Generator:** CAT 3408 TM Capacity 370,0 kW  
**Shore Connection:** 3 x 440V, 250A

**PERFORMANCE / CONSUMPTION**

Max. Speed/Consumption:	14 knots, 28 m <sup>3</sup>
Service Speed/Consumption:	12 knots, 19 m <sup>3</sup>
Economical Speed/Consumption:	9 knots, 11 m <sup>3</sup>
DP Standby – 2DG:	8 m <sup>3</sup>
Port Consumption - 1DG:	3.5 m <sup>3</sup>
Standby Mode/Port - EDG:	2 m <sup>3</sup> (without boiler)

**ACCOMODATION**

Cabins/Beds:	13 single / 27 double / 2 four-man cabin
Crew/Passengers:	66 persons (9 crew+57 special personnel)
Mess/Dayroom:	1 mess room & 2-day room
Cool store/Freezer:	8,4m <sup>2</sup> / 9,4m <sup>2</sup>
Dry Provision:	11,7m <sup>2</sup>

**DECK / MULTIPURPOSE EQUIPMENT**

Tugger winch:	Rauma Brattvåg AKM4112, 2 x 12 tons	Towing pins:	1 x 250 tons Karm
Crane 1:	2 x TTS Marine deck crane Port & Stbd side	Stern Roller:	1 x Hydrakraft stern roller
Capacity 1:	3 tons at 12 m		
Crane 2:	1 x Hydralift Offshore crane (NOV)		
Capacity 2:	SWL Main hoist 70 tons/ Whip hoist 10 tons		
Anchors conventional:	Stockless Bower Anchors, 2 x 3300 Kg		
Chain cables conventional:	Stud link chain cable 577 m: PS-12, SB-9		
Windlass:	1 x Anchor windlass type RRM BRATTVÅG BFMG63.044		
Capstans:	2 x Capstan type RRM Brattvåg CM4110		
Fast winch:	Hydralift 5T AHC Winch, SWL: 5 T, Weight: 12500 kg, Wire dim: 26mm / 2000m, 10 layers, Lifting speed: 108m/min, Oil pressure (brake): 60 bar, Power supply 440		

**RESCUE EQUIPMENT**

Helicopter Deck:	Design for Super Puma AS 332 L2, max 9300 kg	Radar transponders:	2 x Kannad Rescuer
Rescue class:	Fire Fighter I	Emergency Beacon:	Samyung SEP-500
Reception:	Heli reception, 18,7 m <sup>2</sup> /18 seats	GMDSS VHF's:	3 x Samyung STV-160
Hospital:	17,0 m <sup>2</sup> incl. Toilet	Survival Suits:	83 Viking
Fire Fighting equipment:	FLEXIFOG, CO <sup>2</sup> and misc.	Life Jackets:	79 + 5 (79 adult + 5 children)
MOB Boats:	Merlin NORSAFE type 6,15 for 6 persons	Life rafts:	8 x 25 persons Viking
Rescue Regulation:	NMD regulation		

**NAVIGATION AND COMMUNICATION EQUIPMENT**

Radar 3 cm:	1 x Furuno FR-2115 X-band ARPA	GMDSS Sea Area:	A3
Radar 10 cm:	1 x Furuno FAR-2835 S-band ARPA	MF/HF Radio:	1 x Furuno FS-2570 MF/HF/DSC. SSB 250 W simpl
Gyro:	3 x Anschutz STD 22 gyrocompass	DSC Receiver:	1 x included in MF/HF SSB
Autopilot:	1 x Anschutz Pilotstar D	VHF 1:	1 x Sailor RT 4822 VHF-DSC simplex
Chart Plotter:	1 x Transas 3000	VHF 2:	1 x Sailor RT 4822 VHF-DSC simplex
Navtex:	1 x Furuno NX-500	VHF 3:	1 x Sailor RT 4722 VHF-DSC duplex
Joystick:	5 x Poscon II	Portable VHF:	4 x iCOM + 4 Motorola
AIS:	1 x Sailor 6280	Sat C 1:	1 x Furuno Felcom 15
VDR:	1 x Furuno VR-5000	Sat C 2:	1 x Furuno Felcom 18 (LRIT & SSAS)
SSAS/LRIT:	1 x Felcom 18	VSAT Data/Phone link:	2 x phone line, 256kb upstream / 512Mb downstream
Echo Sounder:	1 x Furuno FE-700	Intercom System:	Yes
Speed log:	1 x Furuno DS-80 doppler log	Helibeacon:	1 x TS-20B
Satellite Navigator (GPS):	1 x NSR GNSS Navigator	Helilanding Information:	1 x SeaTex HMS 100
DP:	1 x DYNPOS AUTR, Kongsberg SDP 21	Helicopter comm:	2 x ICOM-IC A 110, 2 x ICOM BC-119N Portable
DP Reference 1:	1 x HiPAP 501		
DP Reference 2:	DPS 700, Inmarsat/Spotbeam/IALA/UHF		
DP Reference 3:	Fanbeam 4 MDL, 1 x MRU 2 / 1 x MRU 5		
Wind Sensors:	2 x Obserment, OMC 139		