

REM ARCTIC



Main Particulars

Design VS 485 MK III Arctic

Built/Converted 2015/2020

Yard KLEVEN, NORWAY YARD No 374

Owner Rem Service AS

Flag NOR

Class DNV

DWT 5340,2

Class Notations

DNV X 1A1, Ice-C, DYNPOS AUTR Clean Design, Comf-V(3), EO, LFL*, SF, Oil Rec, Standby vessel (s), dk+, hl(2,8), Naut-OSV(A), ICE-1B, Winterized Basic

Vessel: REM ARCTIC
Ship Design: VS 485 MK III Arctic
Classification: DNV-GL
Builder: Kleven, Norway Yard No 374
Port of Registry: Fosnavåg
Flag: NOR
MMSI: 257982000
IMO Number: 9731250
Delivery: 2015
Call Sign: LNVA3
Owner: Rem Offshore AS
Registered Owner: Rem Service AS
Manager: Rem Maritime AS N-6090 Fosnavåg
Main Dimensions:

Length O.A: 87.22 M
Length P.P: 77.70 M
Breadth: 20.00 M
Keel to Mast: 36.70 M
Max/Summer Draft: 7.16 M
Depth Molded: 8.60 M
Summer Deadweight: 5340.2 T
Summer Displacement: 8697.4 T
Lightship Weight: 3357.21 T
Gross Tonnage: 4609
Net Tonnage: 1718

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Naut-OSV(A), ICE-1B, Winterized Basic
Stand by NMD 200

Machinery and Propeller Plants:

Main Engines/Generators: 4 x Wartsila 9L20 1665kW
Emergency Generator: 1 x Volvo Penta 196 kW
Main Propulsion, fixed pitch: 2 x Steerprop propellers 2200 kW
FWD Azimuth: 1 x Brunvoll 880 kW
FWD Tunnel Thrusters: 2 x Brunvoll 1200 kW

CARGO CAPACITIES NOFO 2009 FULL / USABLE:

Deck Cargo (max load): 2500 Tons (Max 50% FO & FW)
Deck Area: 1000 m² (1st deck/wooden deck) 59.8 m x 16.8m free space, 600 m²
Deck Strength: 10 Tons/m²
Fuel Oil: 888.2 m³ / 780 m³, 1000 m³, 2000 m³ / 1900 m³
Liquid Mud: 694.8 / 625.3 m³, Agitators in all tanks (6 tanks), 1000 m³
Brine: 418.0 m³ / 376.2 m³, (2 tanks), 1000 m³
Base Oil: 203.8 m³ / 183.4 m³, (2 tanks)
Pot Water: 1083.6 m³, 1000 m³ / 950 m³
Drill Water/Ballast: 2215.9 m³, 2000 m³, 2000 m³ / 1900 m³
Special Product/Methanol: 2 x 73.2 m / 65.9 m, 2 x 55.6 m / 50.0 m
Slop: 2 x 93.4 m³ / 84.1 m³
ORO: 1760.9 m³ / 1584.8 m³, (16 tanks)
Cement/Barite/Bentonite: 330.0 m³ / 297.0 m³, (6 tanks / silos)

CARGO CAPACITIES NOFO 2009 FULL / USABLE:

Deck Cargo (max load): 2500 Tons (Max 50% FO & FW)
Deck Area: abt 1000 m² (1st deck/wooden deck) 59.8 m x 16.8m free space
Deck Strength: 10 Tons/m²
Fuel Oil (MGO): 888.2 m³ / 780 m³
Liquid Mud (SG 2,8): 694.8 / 625.3 m³, Agitators in all tanks (6 tanks)
Brine (SG 2,5): 418.0 m³ / 376.2 m³, (2 tanks)
Base Oil: 203.8 m³ / 183.4 m³, (2 tanks)
Pot Water: 1083.6 m³
Drill Water/Ballast: 2215.9 m³
Special Product/Methanol: 2 x 73.2 m / 65.9 m, 2 x 55.6 m / 50.0 m
Slop: 2 x 93.4 m³ / 84.1 m³
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INDICATIVE SPEED & FUEL CONSUMPTION

Full Speed: 15.0 knots 19.8 mt/24 hrs
Service Speed: 12.5 knots 10.0 m³/24 hrs
Economic Speed: 11.0 knots 8.5 m³/24 hrs
DP Operation: 5.3 m³/24 hrs at position keeping 1.6m Hs
St-by at Field: 2.9 m³/24 hrs at one engine
Harbor Mode: 2.0 m³/24 hrs

CARGO HANDLING / MOORING / ANCHOR SYSTEMS

Deck Crane: 1 x Red Rock knuckle crane, SWL 3T – 18M
Cargo Securing Winches: 6 x NDM, CSW-3 Type, SWL 3T
Tugger Winches: 2 x NDM, TU-15 Type, SWL 15T
Capstans: 2 x Pull 100kN, NDM
Windlass: 2 x AW50-50K30, Pull 16T, NDM
Bollards: 11 pcs (10 – SWL 32T / 1 – SWL 46T Fwd)
Rollers: 12 pcs, NDM, 300 NS2585
Anchor Chain: Total 522.5m / 10x27.5m & 9x27.5m
Anchors: 2 x 4050 kg SPEK TYPE

LIFE SAVING EQUIPMENT

Ship Certificate: 25 persons
Life Rafts: 4X 25 persons, (2 on each side)
MOB Boat: WEEDO 700 MK II FRB (28 ft.) for min15 pers.
MOB Davit: Red Rock RDA036 SOLAS approved
Survival Suits: 3 x Full dry insulated, Survival suits according to rules

COMMUNICATION

Navtex: Furuno NX-700, Furuno NX-700A
Radar Transponder: 2 x Jotron Tron SART20, 3 x Jotron Tron SART20
DSC Terminal: Thrane & Thrane Sailor TT6222A
AIS: Furuno FA 150
EPIRB: 2 x Jotron Tron 60S GPS, 2 x Jotron Tron 60S
EPIRB/VDR: Tron 40VDR
Radio Station SSB, MF/HF: 2 x SAILOR 6300 MF/HF Radiotelex, Furuno FS-2575C
VHF Portable GMDSS: 2 x Tron TR 20 / 1 x TRON TR 30, 4 x Jotron Tron TR-20
VHF DSC transceiver: 2 x Sailor RT 6222, 2 x Sailor 6222 VHF DSC
VHF transceiver: 3 x SAILOR 6210, 2 x Furuno FM-8800S
VHF Portable: 3 x DP 4801 ex VHF / Motorola
UHF Portable: 11 x Motorola DP 4801, 2 x Sailor 6248
UHF transceiver: 5 x Motorola DM 4600
VHF Air Band Transceiver: 1 x ICOM IC-A6E

Inmarsat C: 1 x Thrane & Thrane AS Sailor 6110 Mini-C / Inm C No: 425798215
SASA / LRIT: Blue Tracker SASA / LRIT, Furuno Felcom 15
Intercom: Zenitel ACM 144 66/VO, Zenitel Turbine Mini
Sound System: Vingtor VSS V2
Emergency: Vingtor VSP 211 L
PA System: Zenitel VPA 120, 240 and 400
Satellite Communication: VSAT:+47 23 67 68 00 Iridium : + 881677744733
Vessel E-mail: captain@arctic.remoffshore.no, bridge@arctic.remoffshore.no

NAVIGATION

DP System: Kongsberg K Pos DP 22
Joystick System: Kongsberg C-Joy Constant
DP Motion System: 3 x Sea Tex MRU 5
DGPS: 2 x Kongsberg Seatex DPS 700
Cyscan: Lazer Mk 4 (+ 2 reflect. Cylinders on board)
Radius: RADius 1000 Interrogator & 700X Transponder
Bearing System(ADF): 1 x RT 300
Non-Directional Beacon(NDB): 1 x TS-1B
Wind Sensor: 2 x Kongsberg Maritime
Bridge Consoles: Steinsvik Aft, Fwd and both Wings
Operation Control Office: Located on Bridge
Autopilot: Raytheon Anschütz Nautopilot NP5000
Radar 1: Furuno FCR-2139SBB 1 x 10 cm / S band
Radar 2: Furuno FCR-2119BB 1 x 3 cm / X band
Oil Radar: According to NOFO Standard 2009
Echo Sounder: Furuno FE 800
Gyro: 3 x Raytheon Anschütz NG002
Speed repeater: Northrop Grumman Sperry 4891-CA
Speed Log: Furuno GP-150
VDR: Consilium VDR F2 MU
VDR acoustic beacon: 1 x PT9
Bridge Watch: Telemerkki AMS/BNWAS
ECDIS: Furuno Tecdis T – 2138A

ACCOMMODATION

Outfitted for 25 persons in spacious and comfortable facilities
Single Cabins: 11 with bathrooms
Double Cabins: 4 with bathrooms
Four men Cabins: 2 with bathrooms
Hospital: 1 Highest standard
Office: 1 fully outfitted
Day Room: 2 comfortable outfitted
Gymnasium: 1 fully outfitted
Entertainment: In Day Rooms and all Cabins
Antiroll Tank: 1 x Tank aft below 1st deck, 1xTank between A and B deck

PARAMETER	STATUS	COMMENTS
DNV GL Notation	Ice(1B)	Winterized basic- Occasional operation in cold climate for short periods DNVGL-RU-SHIP Pt.6 Ch.6. - Rem Arctic has winterized basic class and all equipment is tested to be able to operate to -20degrees.
Polar Code Category	Category C	Ref. Polar Code/Introduction/2.Definitions – <ul style="list-style-type: none"> Category C ship means a ship designed to operate in open water or in ice conditions less severe than those included in categories A and B. Ice of land origin means ice formed on land or in an ice shelf, found floating in water Open water means a large area of freely navigable water in which sea ice is present in concentrations less than 1/10. No ice of land origin is present1
Ice Operations	Open waters only	Ref.–https://www.canada.ca/en/environment-climate-change/services/ice-forecasts-observations/latest-conditions/glossary.html <ul style="list-style-type: none"> Bergy water - An area of freely navigable water in which ice of land origin is present. Other ice types may be present, although the total concentration of all other ice is less than 1/10.
High latitude - GMDSS	A1+A2+A3+A4+blue SSAS+blue LRIT	Suitable for high latitude
High latitude – DGPS corrections	GPS, GNSS, Radius, Cyscan	GPS could be unreliable in high latitude, and GNSS , Radius , Cyscan shall work sufficiently.
MDLT Barentz	-10 deg Celsius	Ref. Polar Code/Introduction/2.Definitions – <ul style="list-style-type: none"> Mean Daily Low Temperature (MDLT) means the mean value of the daily low temperature for each day of the year over a minimum 10 year period. A data set acceptable to the Administration may be used if 10 years of data is not available
PST Rem Arctic	-20 deg Celsius	Ref. Polar Code/Introduction/2.Definitions – <ul style="list-style-type: none"> Polar Service Temperature (PST) means a temperature specified for a ship which is intended to operate in low air temperature, which shall be set at least 10C below the lowest MDLT for the intended area and season of operation in polar waters.
Icing	Ocasionally	Campaigns are planned to start July till end of October. Icing is expected during the last month of the operations.
Ice breaker eskort operatins	NA	Not planned
Ice navigation operational risk assessment	POLARIS	IB = Category C/Winterized basic RIO shall be equal or grater than 0 RIV-Ice Free=3 RIV-New Ice=2 RIO=(C1xRIV1)+(C2xRIV2)+... (CnxRIVn) RIV-Gray Ice=2 RIV-Gray white Ice=1 C1...Cn – concentrations in thenths of each Ice type RIV-Thin first year Ice 1st stage=0 RIV-Thin second year Ice 2nd stage=-1 RIV-Medium first year less than 1m thick=-1 RIV-Medium first year =-2 RIV-Thick first year=-3 RIV-Second year=-5 RIV-Light multy year=-6 RIV-Heavy multy year=-6
Rescue time	5 days	Polar code minimum
Remoteness	Yes	The operations are in remote area. The operations involve a couple of vessels which can assist each other till assistance from shore arrives
Operation in darkness	Ocasionally	Campaigns are planned to start July till end of October.
Evacutaion to Land/Ice	NA	Operations in open waters

