ICEBREAKER FREJ

Frej is designed as an escort icebreaker for the purpose of handling all possible conditions of ice in the Baltic Sea and Gulf of Bothnia. In the last few years Frej has been refitted with new towing equipment, has upgraded it’s safety equipment and has had an extensive reconditioning of all systems in the engine department. All of this made to extend the life span of the icebreaker another 20 years.

**Machinery**

- **Total power**: 25,000 hp
- **Main engines**: 5x12 cylinder Wärtsilä S.E.M.T. Pielsticket PC 2.2 each 5,000 hp
- **Main propellers**
  - **Total power**: 16240 kW/22 000 hp
  - **Fore**: 2 x Stromberg GTOUL 180/856 each 3210 kW
  - **Aft**: 2 x Stromberg GTOUL 180/856 each 4910 kW
- **Rudder**: 2 pcs
- **Speed in open water**: 18 kts - approx 80 m³ HFO/24 hours
- **Normal sea speed**: 12 kts - approx 20 m³ HFO/24 hours
- **Ice breaking capability of 1.2 m level ice at 3 knots**
- **Auxiliary engines and generators**
  - **Diesel generator**: 4 x Wärtsilä 624 TS each 900 hp
  - **Propeller Motor generator**: 5 x Stromberg GTOUL 135/455 D1
  - **Emergency generator**: 1 x Wärtsilä 424 TS 480 hp
  - **Supply system**: 690/400/230V - 50Hz
- **Heeling pumps**: 3 x Karhula V 110 Z, electric pumps each with a capacity of 13 800 m³/h. The heeling pumps allows the ship to heel from one side to another with a maximum angle of 13° in 45 seconds.
Vessel details

Bollard pull
Continuous forward 180 tonnes.

Towing equipment
Rolls Royce towing winch TW 2500/1000. Pull power 120-140 tonnes.
Break hold 250 tonnes.

Life saving equipment
MOB 1 x Noreq-RRB-500
Lifeboat 2 x Schat Harding KISS 700, 50 persons each.
Liferaft 4 x Unitor DL liferaft, 25 persons each.

Accommodation
Single cabin 27
Double cabin 17
Other Sauna, gym, hospital, dayroom, helicopter pad and conference room.

Navigational equipment
GMDSS Sailor
ARPA Consilium Selesmar
ECDIS Consilium Selesmar
Echo sounder Skipper
Gyro compass Anschütz
Weather station SMHI
AIS SAAB
GPS Furuno

Tank capacities
Fresh water 290 m³
Heavy fuel oil 1,400 m³
Diesel 700 m³
Luboil 140 m³

Potable water produced onboard.

Contact the vessel
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Building yard OY Wärtsilä AB, Helsinki, Finland in year 1975

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