

# ICEBREAKER FREJ

Call sign SBPT  
 IMO 735 9668  
 MMSI 265 068 000  
 Ice class 1A S Ice breaker  
 classed acc. to SOLAS/  
 International cert.

## Main dimensions

Length o.a 104.70 m  
 Beam 23.80 m  
 Draught 8.30 m  
 Air draught 45.50 m  
 Displacement 7,800 t



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. Pielstick 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 m<sup>3</sup> HFO/24 hours  
 Normal sea speed 12 kts - approx 20 m<sup>3</sup> 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 m<sup>3</sup>/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.

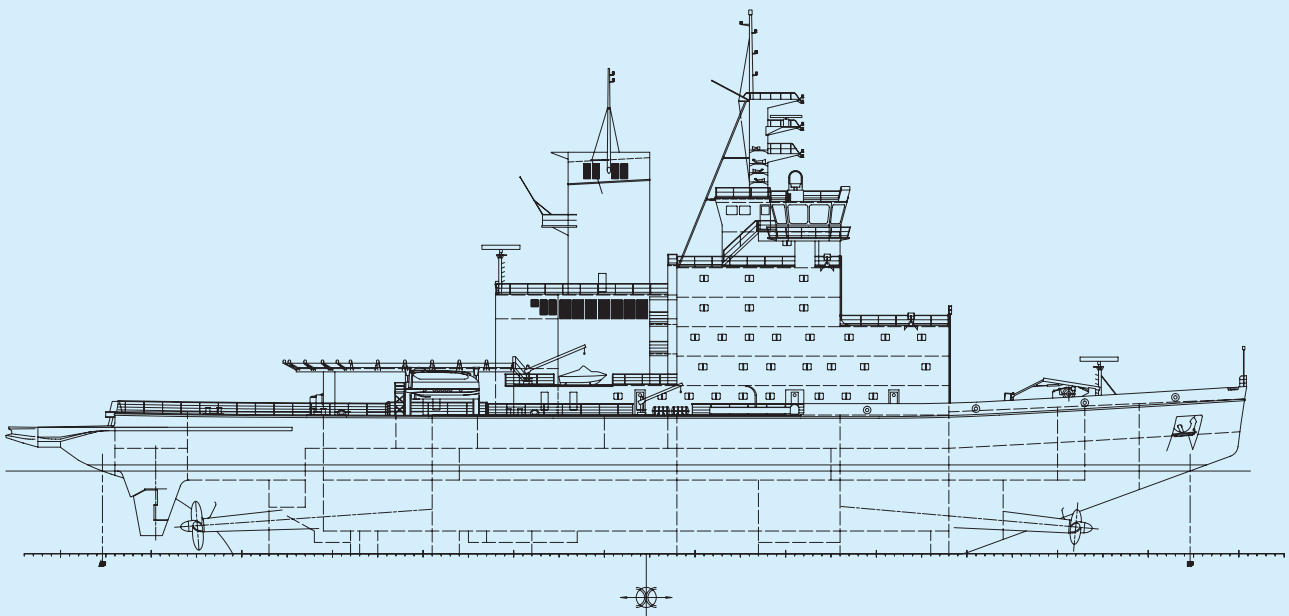
Navigational equipment  
GMDSS Sailor  
ARPA Consilium Selesmar  
ECDIS Consilium Selesmar  
Echo sounder Skipper  
Gyro compass Anschüts  
Weather station SMHI  
AIS SAAB  
GPS Furuno

### Tank capacities

Fresh water 290 m<sup>3</sup>  
Heavy fuel oil 1,400 m<sup>3</sup>  
Diesel 700 m<sup>3</sup>  
Luboil 140 m<sup>3</sup>

Potable water produced  
onboard.

Contact the vessel  
bridge@fej.sjofartsverket.se



Building yard OY Wärtsilä AB, Helsinki, Finland in year 1975