

# Icebreaking Supply and Standby Vessel **Fesco Sakhalin**

Aker Arctic



## **Icebreaking stand-by and supply vessel for Far-Eastern Shipping Company (FESCO)**

**In 2003, Far-Eastern Shipping Company PLC (FESCO), Russia, placed an order at Aker Yards Oy, Helsinki for an icebreaking stand-by and supply vessel for the Sakhalin-1 project in Russia, following evaluation by ExxonMobil, operator of the Sakhalin-1 project. The vessel was delivered in May 2005, and is operating in the harsh Okhotsk Sea environment in the Sakhalin area in the Far-East of Russia.**

The vessel has a length over all of 100 metres and a deadweight of 4.000 dwt. The shaft power is 13 MW and the ship is fitted with azimuthing electric propulsion.



The ship design is based on the “double-acting” concept for icebreakers, which was developed by Aker Arctic.

The “double-acting” concept has now become an industry standard. In this concept the vessel meets the most difficult ice conditions moving with the ship’s stern first, using azimuthing electric propulsion. By this, less power is needed and the ship’s bow can be optimised for efficient open water operation. The operating conditions in the Sakhalin area are demanding with freezing temperatures down to -40 degrees C and difficult ice conditions with ice ridges up to 20 metres deep and solid ice exceeding 1,5 meters in thickness.



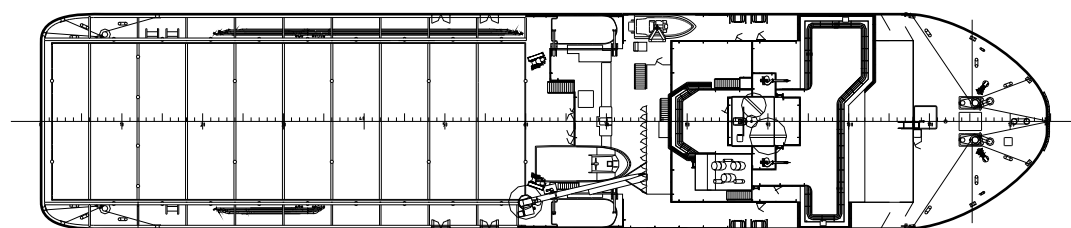
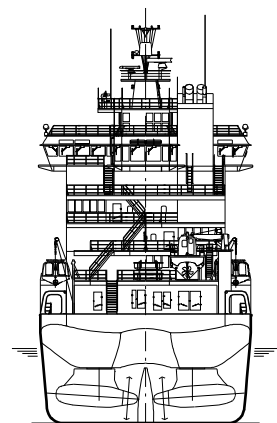
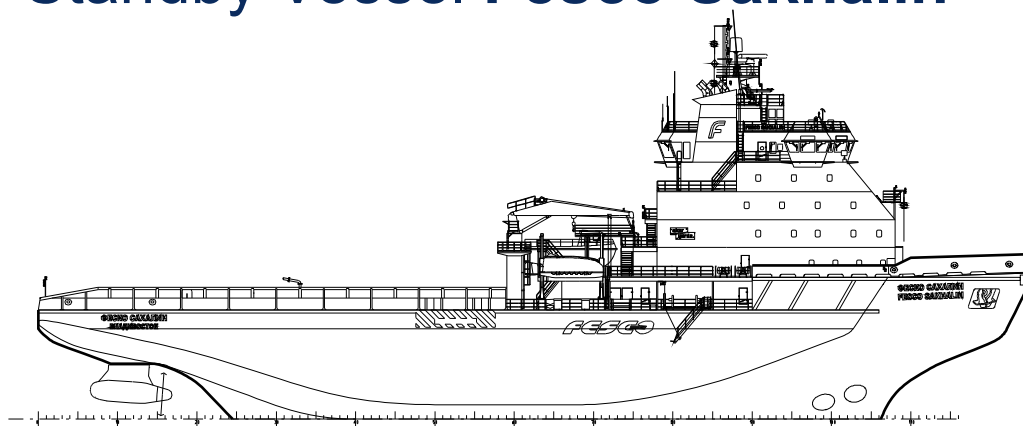
The current ship design is a result of the long term R&D activity by AARC.

This activity started already in 1989 with research on the operational conditions offshore Sakhalin and has continued in form of different research and development tasks for the potential operators and oil companies in the area and in co-operation with several Russian organisations.

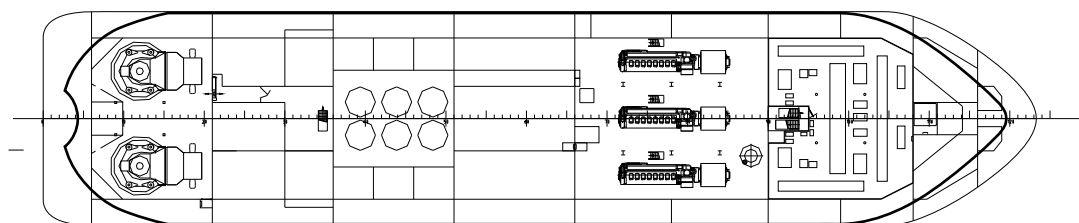
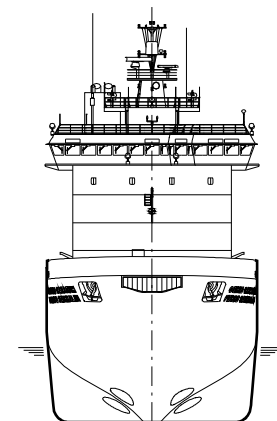
The platform supply vessels operated by Prisco Swire Offshore Ltd. for Sakhalin 2 project were built by Aker Yards AS and are equipped with Aquamaster ARC 1.0 thrusters and operate also on the “double-acting” concept.

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Aker Arctic



Main deck



Tween deck

## Main particulars

Length OA 99,9 m  
 Breadth max 21,2 m  
 Draught 7,5 m  
 Speed 16,7 kn  
 Gross Tonnage 6 900  
 Deadweight 4 200 t  
 Crew (max) 40 persons  
 Classification DNV  
 +1A1, Ice-10 Icebreaker Supply Vessel,  
 Fire Fighter I, OILREC, SF, De Ice, EO,  
 DYNPOS- AUT, Naut-06, DK(+), HL (2.0)  
 Diesel-electric propulsion  
 Main engines 3 x 5 800 kW, 600 rpm  
 Azimuth prop. units 2 x 6 500 kW  
 Bow thrusters 2 x 1 100 kW  
 Harbour engine 1 x 1 080 kW, 1000 rpm

Cargo capacity  
 liquids / bulk 1500 t  
 deck cargo 1000 t, 700 m<sup>2</sup>  
 Fire fighting capacity 2 monitors x 1200 m<sup>3</sup>/h  
 Rescue capacity 150 evacuees  
 Owner Far-Eastern Shipping Company  
 Builder Aker Finnyards Inc. Helsinki (2005)

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