



16 MW ICEBREAKER

NB-509 FOR RUSSIAN MINISTRY OF TRANSPORT

ARCTECH HELSINKI SHIPYARD is building a 16 MW icebreaker for the Russian Ministry of Transport. The vessel will be operated by the Federal State Unitary Enterprise Rosmorport and it will be used in year-round operation in the Baltic Sea and during summer season in the Arctic seas. The vessel will be able to operate in

temperatures as cold as -40°C and the maximum icebreaking capability with the speed of ca. 3.5 knots will be 1.5 m.

The main tasks of the vessel are icebreaking and assisting of heavy-tonnage vessels in ice, towing of vessels and other floating structures in ice and open water. The vessel can

also be used for firefighting, assisting of distressed vessels and cargo transportation.

The icebreaker will measure 119.8 m in length and 27.5 m in breadth. The four main diesel generator sets have the total power of 27 MW. The total propulsion power is 18 MW consisting of two full-circle azimuth thrusters.



TECHNICAL SPECIFICATIONS

Length	119.8 m
Length in waterline	104.0 m
Breadth maximum	27.5 m
Draught, at design waterline	8.5 m
Deadweight at design draught, abt.	5340 t
Installed power	27 MW
Propulsion power	18 MW
Speed	17 knots
Speed at 1.0 m level ice	3.5 knots
Crew	35+1
Special personnel	22
GT	11 650
Cargo deck	800 m ² , 33 TEU
Range	11 000 nautical miles

Classification: RMRS

Class notation:

KM ⚙ Icebreaker6 [2] AUT1-ICS FF2 EPP ECO BWM HELIDECK Special purpose ship

Hull ice strengthening, rudder propellers, Icebreaker7

WE MAKE YOU BREAK THE ICE

ARCTECH HELSINKI SHIPYARD INC. specializes in arctic shipbuilding technology and building of icebreakers, arctic off-shore and other special vessels. Arctech is a joint-venture owned with equal shares by STX Finland Oy and United Shipbuilding Corporation JSC. The company combines the expertise of the two major shipbuilding companies and unites the marine industry clusters of Russia and Finland. The joint venture was founded in December 2010 and Arctech started its operation in April 2011. The shipyard has though a long history. Helsinki Shipyard was established in 1865 and ships have been built in the same location for almost 150 years. Arctech is located nearby the centre of Helsinki and has approximately 400 employees.

PROJECT NB 509 is being built in cooperation with JCS Vyborg Shipyard and Arctech Helsinki Shipyard as the subcontractor. The vessel belongs to a series of three new buildings ordered by the Russian Ministry of Transport from Vyborg Shipyard. The icebreaker being built at Arctech is the second vessel of the series. The design and purchasing of major components will be provided by Vyborg Shipyard as well as 40 % of the vessels hull blocks. Arctech will be responsible for the construction, outsourcing of 60 % of the hull blocks, outfitting and commissioning of the vessel. The icebreaker will be delivered to the client in August 2015.