

The world's first LNG-powered icebreaker Polaris delivered

Arctech Helsinki Shipyard delivered the most powerful newcomer in the Finnish Icebreaker fleet, icebreaker Polaris, to the Finnish Transport Agency on September 28th, 2016. The Finnish Transport Agency handed the vessel over to Arctia Icebreaking Oy. The prototype vessel built at Helsinki Shipyard is designed to serve for at least 50 years in icebreaking, oil recovery and sea rescue operations. Previous time an Finnish icebreaker with similar size range was completed in year 1994.

Icebreaker Polaris is a masterpiece of the Finnish shipbuilding expertise. Innovative design is used for the vessel's hull form and propulsion unit arrangement, and the vessel is able to use either liquefied natural gas or low sulphur diesel oil as fuel. The vessel complies with the international IMO Tier III emission standards and special requirement for Sulphur emissions in the Baltic Sea. The vessel is equipped with three Azipod propulsion units rotating 360° which enables first-rate maneuvering qualities. The icebreaking capacity of Polaris is 1,8 m at speed of 3,5 kt.

"Icebreaker Polaris is extremely versatile vessel what concerns her technical properties. She can operate in all ice conditions in the Baltic Sea and use in all circumstances either gas or diesel oil as fuel. We are proud we had this opportunity to build the vessel that will serve the Finnish winter navigation in coming decades", commented the **Managing Director of Arctech Helsinki Shipyard Esko Mustamäki**.

Main Particulars

Length: 110 m

Breadth: 24.4 m

Draught, design: 8 m

Speed: 17 kn

Gross Tonnage: 9300

Deadweight: 3000 t

Crew: 16 (+8)

Classification: Lloyd's Register

Ice class: PC4

Diesel-electric propulsion

Main engines Wärtsilä 2x 6000 kW, 2x 4500 kW, 1x 1280 kW, Dual fuel
Azimuth prop. units ABB Azipod 2x 6500 kW (stern), 1 x 6000 kW (bow)

LNG tanks: 2 x 400 m³

Oil recovery capacity: 1400 m³

Towing winch: 300 m, 110 t

Bollard pull: 214 t

Icebreaking capability 3.5 kn / 1.8 m

Customer: Finnish Transport Agency

Video: [Building of icebreaker Polaris](#)

Images of Polaris: <http://arctech.fi/news-and-media/press-images>

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***Arctech Helsinki Shipyard Inc.** specializes in arctic shipbuilding technology, e.g. building icebreakers and other arctic offshore and special vessels. The shipyard is a forerunner in developing and applying technological innovations and has 150 years' experience in shipbuilding. Arctech employs approximately 550 shipbuilders. www.arctech.fi*