MULTIFUNCTIONAL ICEBREAKING SUPPLY VESSELS

VITUS BERING AND ALEKSEY CHIRIKOV

ARCTECH HELSINKI SHIPYARD has built multifunctional icebreaking supply vessels NB 506 Vitus Bering and NB 507 Aleksey Chirikov for Russia's largest shipping corporation Sovcomflot. The vessels supply the Sakhalin-1 Arkutun-Dagi oil and gas field in Far East Russia in year round operation.

The vessels are similar in design, measuring 99.9 m in length and 21.7 m in breadth and they have accommodation spaces for 22 crew members, 28 special persons and 195 evacuees.

The vessels represent the next generation of multifunctional icebreaking supply vessels and they are designed for the extreme environmental conditions of the Sakhalin area. They operate in thick drifting ice in temperatures as cold as minus 35 C°. The vessels are capable for ice management and escorting purposes and they are equipped to carry various types of cargo and to perform operations related to oil spill recovery, firefighting, ocean towing as well as stand-by and rescue. The icebreaking capability of the vessels is extremely high, they are able to operate independently in 1.7 meter thick level ice, and penetrate consolidated 20 m deep ice ridges.

The vessels have a specially designed stern to navigate in ice and a diesel-electric machinery, with twin azimuthing podded type rudder propeller units for propulsion. The power generation station consists of four main diesel generator sets with a total power of 18 MW. The rudder propellers ensure reliable reversing capability and excellent manoeu-

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WE MAKE YOU BREAK THE ICE

vrability even in the most difficult ice conditions. For manoeuvring and position keeping, two bow tunnel thrusters are provided.

TECHNICAL SPECIFICATIONS

Length	99.9 m
Length in waterline	93.9 m
Breadth maximum	21.7 m
Draught, at design waterline	7.6 m
Deadweight at design draught, abt.	3950 t
Installed power	18,0 MW
Propulsion power	13,0 MW
Speed	15 knots
Speed at 1.5 m level ice	3.0 knots
Bollard pull	more than 128 tonnes
Crew	22 + 28
GT	7487
Cargo deck	700 m²
Range	40 days
Classification: Dual class LR and RMRS	
LR Class notation: +100A1 Icebreaker, Offshore Tug/Supply Ship, Fire-Fighting Ship 1, WDL, RD, IWS*, Winterisation H(-35) B(-35), +LMC, UMS, DP (AM), NAV1, OIL RECOVERY, EP, ShipRight ACS(B)	
LR Descriptive class notation: COMF –C (3) (DNV), Standby Vessel (195) (DNV), Ice Class (DNV Icebreaker ICE – 10)	
RMRS Class notation: KM ⍟ Icebreaker6 1 AUT1 OMBO FF3WS DYNPOS-1 EPP ANTI-ICE special purpose ship / supply vessel	

ARCTECH HELSINKI SHIPYARD INC. specializes in arctic shipbuilding technology and building of icebreakers, arctic offshore 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 agreement was signed 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.

SOVCOMFLOT GROUP (SCF), Russia's largest shipping company is a world leader in the maritime transportation of hydrocarbons and provides support for shelf exploration and oil & gas production. The SCF fleet (owned and chartered) includes 161 vessels with a combined deadweight of 12 million tonnes. It specializes in the transportation of hydrocarbons from areas with challenging icy conditions and a third of the fleet's vessels have a high ice class. Sovcomflot supports large-scale offshore energy projects in Russia and the rest of the world, including: Sakhalin-I, Sakhalin-II, Varandey, Tangguh, Escobar, and Peregrino. The company is registered in Saint-Petersburg and has representative offices in Moscow, Novorossiysk, Murmansk, Vladivostok, London, Limassol, Madrid, Singapore and Dubai. www.scf-group.ru