

70.000 tdw Arctic Shuttle Tanker MT "Vasily Dinkov"

Aker Arctic



HEAVY INDUSTRIES



Samsung Heavy Industries is building a pioneering trio of Arctic tankers for the Russian owner Sovcomflot, the first vessel of this series has been delivered at the end of 2007. These icebreaking shuttle tankers will transport crude oil in Russian arctic region - from the Varandey terminal, in the new oilfields of the Pechora Sea, to Murmansk without icebreaker's assistance for the first time in the world.

Naryanmarneftegaz - a joint venture with LUKoil and ConocoPhillips for onshore oil production in Timan Pechora region - started in early 2005 developing a direct marine export system together with Aker Arctic. These extensive studies and model testing led to the preliminary design of the vessels now being constructed by Samsung Heavy

Industries, a vessel that combines two functions, the breaking of ice and carrying oil with the technology introduced by Aker Arctic. Further to a developed concept design, SHI has made a cooperation agreement with the Finnish consultancy Aker Arctic Technology in 2005, in order to apply the double-acting concept. Finally, SHI won the first contract for the developed 70,000 dwt vessels, which are capable on carrying 85,300 m³ of oil and breaking ice both forward and astern on November 11th, 2005. "Vasily Dinkov" is able to break ice up to 1.5 m thick with a 0.2 m snow cover at a speed of 3 knots either forward or astern. The icebreaking and open water performance have been verified by the model ship tank test in the Finnish AARC's and the Swedish SSPA's model basins. Primary power is supplied by three

main diesel-alternators: two of 11,200 kW and one of 4,200 kW. Two other generators are also be installed, a 1,000 kW set for harbour use and a 640 kW emergency unit. Current is generated at 6.6 kW but transformed to 440V and 220V, 60 Hz, for some duties. Individual deepwell pumps are installed in all 10 cargo tanks (10 x 800 m³/h) and the two slop tanks (2 x 400 m³/h). Stainless steel heating coils are fitted in all these spaces, and the bottom and deck head of each tank is coated with pure epoxy, while loading will take place over the bow at a rate of 10,000 m³/h.

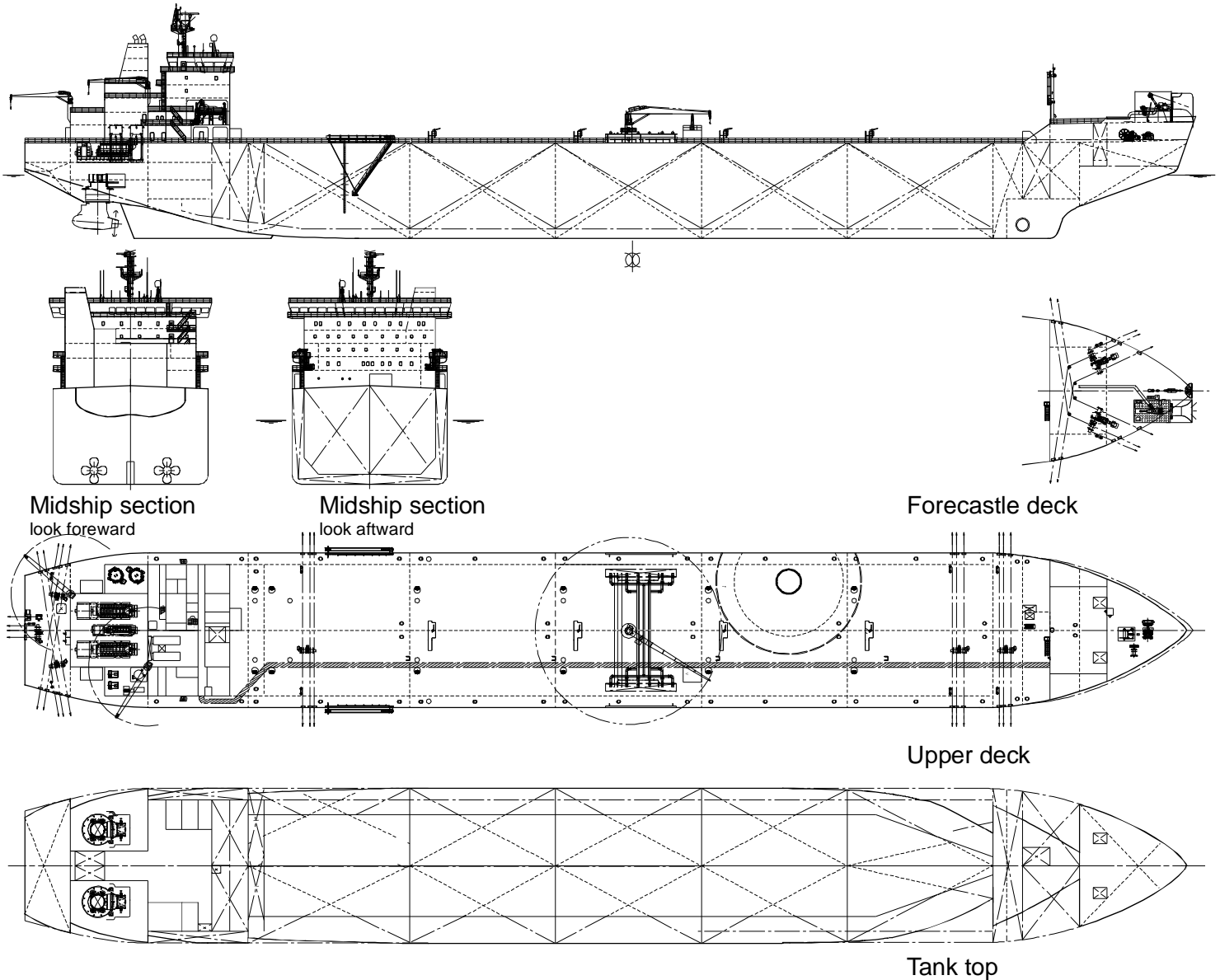
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General arrangement



Main dimensions

Length over all	258,0 m
Length b.p.	234,7 m
Length w.l.	245,0 m
Breadth, moulded	34,0 m
Depth, moulded	21,0 m
Design draught, moulded	14,0 m
Scantling draught, moulded	14,0 m

Deadweight about
70.000 tonnes

Diesel-electric machinery
2 x Wärtsilä 16 V 38
1 x Wärtsilä 6 R 38
2 x 10 MW Azipod drives

Service speed 15,4 knots

Dual class
RMRS KM +LU6, +1A1 "Oil tanker" (ESP) with exclusive approval for shaft power
ABS +A1(E), Oil Carrier, SH, SHCM, +AMS, +ACCU, VEC, SPM, MIBS, ESP, Baltic Ice Class Equivalent to RS Ice Class LU6 Ice Breaking Tanker

Flag: Russian
Owner:
OAO Sovkomflot, Moscow
Builder: Samsung Heavy Industries, Geoje Shipyard, Busan, Korea,
Newbuilding Nos 1660-62

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