



# ADMIRAL SCHMIDT: Mini Capesize bulker

Shipbuilder: ..... **Shanghai Shipyard Co, Ltd. China**  
Vessel's name: ..... **Admiral Schmidt**  
Owner/Operator: ..... **Arctic Shipping & Trading SA**  
Country: ..... **Latvia**  
Designer: ..... **Shanghai Merchant Ship Design & Research Institute (SDARI)**  
Country: ..... **China**  
Model test establishment used: **CSSRC / HSVA**  
Flag: ..... **Bahamas**  
IMO number: ..... **9838838**  
Total number of sister ships already completed (excluding ship presented): ..... **1**  
Total number of sister ships still on order: ..... **nil**

Built as the first of two Polar class 'mini Capesize' bulkers by China Shipbuilding Industry Corporation's Shanghai Shipyard for Estonian owner Platano Eesti OÜ, *Admiral Schmidt* marked the entry into the bulk sector for an owner who previously operated only reefers. The ship was designed by SDARI with input from newbuilding project managers SeaQuest Marine Project Management Ltd. The initial order was for two ships plus one option not exercised. The second vessel, *Vitus Bering*, was delivered in October 2019.

The dimensions of 249.97m loa, 43m beam and draught of 14.3m allows the ship to pass easily through the New Panama locks. Designed to operate in temperatures as low as -25°C, the 104,553dwt *Admiral Schmidt* features an icebreaker bow with no bulb and winterised equipment including four 40tonne cranes located on the starboard side of the vessel. The vessel has a double hull and is ice-classed to DNV GL PC6. The ship's size and extent of its ice-strengthening will allow it an extremely wide-ranging operational area.

The cranes are an unusual feature on a ship of this size but have been included as the ship is intended to operate in Arctic waters, calling at ports that are not well equipped with cargo handling facilities. The ship has seven holds and hatches, making it more akin to a Panamax than a typical nine-hold Capesize vessel. Although primarily intended for bulk cargoes (including several dangerous cargoes), the ship can carry project cargo and 152TEU on upper deck and 35,000tonnes of steel coils in cargo holds.

Power for *Admiral Schmidt* comes from a single HHM-built WinGD 7X62-B two-stroke main engine which, unusually for a bulk carrier, is connected to a controllable pitch propeller. Tier III NOx emissions are controlled by HP SCR. At maximum continuous revolutions, the engine can output 18,620kW but will mostly operate at 60% and 86rpm to give an operational speed of 14knots. Fuel consumption is around 37.5tonnes of MGO per day.

## TECHNICAL PARTICULARS

Length oa: ..... abt. 250m

Length bp: ..... 241.79m  
Breadth moulded: ..... 43m  
Depth moulded to main deck: ..... 21.8m  
Width of double skin side: ..... 1.3m  
bottom: ..... 2.35m  
Draught scantling: ..... 14.5m  
design: ..... 13m  
Gross: ..... 66,291gt  
Displacement: ..... 126,357.6t  
Lightweight: ..... 21,804.6t  
Deadweight scantling: ..... 104,553t  
design: ..... 89,808.7t  
Block co-efficient (please state relevant draught): ..... 0.8157  
Speed, service: ..... 14.08knots (60% MCR)  
Cargo capacity (m<sup>3</sup>) Grain: ..... 130,468.4m<sup>3</sup>  
Liquid volume: ..... Refrigerated storage:  
Bunkers (m<sup>3</sup>) Heavy oil: ..... 3,005.1m<sup>3</sup>  
Diesel oil: ..... 1,025.7 m<sup>3</sup>  
Water ballast: ..... 41,216.8m<sup>3</sup>  
Daily fuel consumption (tonnes/day) Main engine only: ..... 37.5t/d  
Auxiliaries: ..... 4.7t/d  
Classification society and notations: ..... DNV-GL +1A, Bulk carrier, BC(A), CSR, Hold 2, 4 and 6 may be empty, GRAB(30), COAT-PSPC (B), BIS, LCS, CLEAN (Tier III), Recyclable, E0, BWM-T, TMON(Oil lubricated), ESP, PC(6), DG(B), DBC  
% high-tensile steel used in construction: .. 80%  
Propulsion Design: ..... WinGD  
Model: .. WinGD W7X62-B TIER III WITH HP SCR Low Load Tuning + SPC  
Manufacturer: ..... HHM  
Number: ..... 1  
Type of fuel: ..... HFO (380 cSt/50°C) MGO  
Output of each engine: ..... CSR (0.6 CMCR) 9,960kW x 86rpm  
Is this a diesel-electric or hybrid?: ..... No  
Propeller(s) Material: ..... Cu-Ni-Al  
Designer/Manufacturer: ..... Wärtsilä  
Number: ..... 1  
Fixed/Controllable pitch: ..... Controllable  
Diameter: ..... 7.9m  
Speed: ..... 86rpm  
Diesel-driven alternators Number: ..... 3  
Engine make/type: ..... CME-MAN 6L23/30H  
Type of fuel: ..... HFO (380 cSt/50°C) MGO  
Alternator make/type: : ..... CMXD/HFC6 508-84E

Output/speed of each set: ..... 1,125kVA  
Boilers Number: ..... 2  
Type: ..... FMV-VS/CMB-VS  
Make: ..... SAACKE  
Output, each boiler: .... 5,000kg/h @ 0.7 Mpa;  
2,500kg/h + 1,400kg/h @ 0.7Mpa  
Stern appendages/special rudders: .... Ice skate,  
Becker Schilling rudder  
Deck machinery  
Cargo cranes/cargo gear Number: ..... 4  
Make: ..... MacGregor  
Type: ..... Electro-hydraulic  
Performance: ..... 40t SWL  
Other cranes Number: ..... 1  
Make: ..... CSSC Luzhou Zhenjiang  
Marine Auxiliary Machinery Co.Ltd  
Type: ..... Electric  
Tasks: ..... Provision  
Performance: ..... 5t  
Mooring equipment Number: ..... 6  
Make: ..... MacGregor  
Type (electric/hydraulic/steam): ..... Electric  
Special lifesaving equipment Number of each and capacity: ..... 1 free-fall  
lifeboat 27  
Make: ..... Jiaoyan  
Type: : ..... JYM-FN-6.65  
Cargo/capacity Hatch covers Design: ..... MacGregor  
Manufacturer: ..... Hudong  
Type: ..... Upper deck  
Containers Total TEU capacity: ..... 152  
On deck: ..... 152  
Ballast control system Make: ..... Pleiger  
Type: ..... Electric-hydraulic package  
Ballast water treatment system Make: ..... Sunrui  
Capacity: ..... 1,800m<sup>3</sup>/h(per set); 2 sets  
Complement Officers: ..... 13  
Crew: ..... 11  
Supermarines/Spare: ..... 2  
Suez/Repair Crew: ..... 1  
Single/double/other rooms: ..... Single rooms  
Navigation and other equipment Bridge control system Make: ..... Nabtesco (M/E remote  
control system)  
Type: ..... M-800-V  
Is bridge fitted for one-man operation? ..... Yes  
Radars Number: ..... 2  
Make: ..... Furuno  
Model(s) wave band: ..... S-band and X-band  
Fire detection system Make: ..... Consilium  
Type: ..... Salvico cargo  
Fire extinguishing systems Cargo holds: ..... CO<sub>2</sub>  
Make/Type: ..... NK  
Engine room: ... CO<sub>2</sub>; low pressure water mist  
Make/Type: ..... NK  
Cabin: ..... Sea water / portable  
Public spaces: ..... Sea water / portable  
Waste disposal plant Incinerator Make: Teamtec ..... Model: OG200CS  
Waste compactor Make: Shanghai Dizhou... Model: DZ10T10  
Sewage plant Make: JOWA ..... Model: STP2016-40  
Efficiency Required EEDI value: ..... 3.51  
Attained EEDI vaue: ..... 3.23  
Installed Fuel Meters: .... M/E flow meter: 1 set  
(max.120 l/min); D/G flow meter: 2 sets  
(max.120 l/min); Boiler flow meter: 2 sets  
Other installed monitoring tools: .... Shaft power  
meter (torque + thrust), draughts  
Performance Monitoring Regime: ..... Ship  
performance monitoring system  
Contract date: ..... 30 May 2017  
Launch/float-out date: ..... 27 March 2019  
Delivery date: ..... 6 September 2019

