

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Received at London Office

THU. 27 FEB. 1924

Date of writing Report 11th February 1924 When handed in at Local Office 19 Port of Copenhagen
 Date in Survey held at Hjog and Copenhagen Date, First Survey 21st April 1923 Last Survey 9th January 1924
 No. in Survey Book 2911 on the Stul S. S. SCOTIA (Number of Visits 28)
 Tons Gross 2381.20
Net 1386.71
 Yard No. 9 When built 1923-24
 Engines made at Rossian By whom made Gebriider Sachsenberg Engine No. 421 when made 1921
 Boilers made at Rossian By whom made Gebriider Sachsenberg Boiler No. 1427/28 when made 1921
 Registered Horse Power 378 Owners Akts De Founede Kulimportaere Port belonging to Copenhagen
 Nom. Horse Power as per Rule 378 277 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c. Description of Engines Triple Expansion
 Dia. of Cylinders 22 1/16 x 35 1/16 x 61 Length of Stroke 1000 mm Revs. per minute 80 No. of Cylinders 3 No. of Cranks
 Dia. of Crank shaft journals as per rule Dia. of Crank pin 37 3/8 Mid. length breadth as per rule Thickness parallel to axis
 as fitted see Bremen Report No 487 Mid. length thickness as per rule Thickness around eye-hole
 Diameter of Propeller shaft as per rule Diameter of Tunnel shaft as per rule Diameter of Screw shaft as per rule Is the Screw shaft
 as fitted see Bremen Report No 487 as fitted see Bremen Report No 487 as fitted see Bremen Report No 487

Is the after end of the liner made watertight in the propeller boss yes
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with plastic material insoluble in water and non-corrosive yes
 Is an approved appliance fitted at the after end of the shaft to permit it being efficiently lubricated yes
 Length of Stern Bush 1380 mm Diameter of Propeller 14' 8"
 Diameter of Propeller 14' 9" No. of Blades 4 State whether Moveable no Total Surface 68 square feet.
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto as per rule Can one be overhauled while the other is at work
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto as per rule Stroke as per rule Can one be overhauled while the other is at work

Total number and size of power driven Feed and Bilge Auxiliary Pumps A duplex Worthington pump 200 x 135 x 150 mm and a feed injector.
 No. and size of Pumps connected to the Main Bilge Line The main bilge pumps, the ballast pump duplex 275 x 275 x 300 mm, and the bilge auxiliary pump 200 x 135 x 150 mm.
 No. and size of Ballast Pumps One duplex Worthington 275 x 275 x 300 mm No. and size of Lubricating Oil Pumps, including Spare Pump 1
 Are two independent means arranged for circulating water through the Oil Cooler yes No. and size of suction connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 4 off 2 1/4" diam. and in Holds, &c. in fore hold 2 off 3 3/4" diam. - in after hold 2 off 3" diam.
in the double bottom tanks 3 1/2", 3" and 2 1/2" arranged as shown on the approved plan.

No. and size of Main Water Circulating Pump Bilge Suctions one off 6" diam. No. and size of Donkey Pump Direct Suctions
 to the Engine Room Bilges one off 4" to the ballast pump Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes yes
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks valves except blow off cocks from the boilers.
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 What Pipes are carried through the bunkers none How are they protected yes
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another yes Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from upper deck through
 MAIN BOILERS, &c. — (Letter for record S) Total Heating Surface of Boilers 4550 sq ft
 Is Forced Draft fitted no No. and Description of Boilers 2 cylindrical multitubular Working Pressure 13 kg/cm² = 185 lbs. per sq. in.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? yes

PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers yes Auxiliary Boilers none Donkey Boilers none
 General Pumping Arrangements yes Oil fuel Burning Piping Arrangements none
 SPARE GEAR. State the articles supplied:— One propeller shaft with nut. - One cast iron propeller. - One 1" x 10" crank shaft. - One piston rod. - One slide valve spindle. - 1 set of packing rings for the pistons. - 1 set of packing rings for piston slide valves. - 1 pair of connecting rod brasses. - 2 pair of cross head brasses. - 2 main bearing bolts and nuts. - 2 connecting rod bottom end bolts and nuts. - 4 connecting rod top end bolts and nuts. - 1 set of coupling bolts and nuts. - One air pump rod. - 1 set of air pump valves. - 1 set of feed check valve discs. - 1 set of valve discs and seats for the main feed pumps and bilge pumps. - 1 set of valve discs for the ballast pump and donkey engine pump. - 2 springs for the feed pump escape valves. - 1 spring for the cylinder cover escape valve. - 2 springs for the boiler safety valves. - 10% of the number of the cylinder and slide valve cover, and air pump cover studs and nuts. - 18 condenser tubes and 36 screw ferrules. - 12 plain and 3 stay tubes for boilers. - 6 patent boiler tube stoppers. - 24 plugs & 6 dogs for the Schmidt's patent superheaters. - 1/2 set of fire bars. - 12 water gauge glasses. - a quantity of assorted bolts and nuts. - Iron of various sizes.

The foregoing is a correct description,
 AKTIESELSKABET
 KJØBENHAVNS FLYDEOK OG SKIBSVÆRFT.
 Manufacturer.
 A. Uggertose.
 © 2020 Lloyd's Register Foundation
 W463-0014

Rpt. 4.
 Date of writing R...
 No. in Survey Reg. Book. 0911 on the
 Master
 Engines made
 Boilers made
 Registered Ho
 Nom. Horse Po
 NGINES,
 Dia. of Cylind
 Is the screw s
 in the propell
 between the be
 liners are fitte
 Dia. of Tunnel
 collars 295 m
 No. of Feed p
 No. of Bilge p
 No. of Donkey
 In Engine Ro
 No. of Bilge In
 Are all the bilg
 Are all connect
 Are they fixed
 Are they each
 What pipes a
 Are all Pipes
 Are the Bilge
 Is the Screw
 BOILERS,
 Total Heating
 Working Pr
 Can each boil
 each boiler 2
 Smallest dista
 Thickness 2 1/2
 long. seams 4
 Per centages
 Size of compe
 Length of pl
 Working pres
 Pitch of stay
 Material of
 Material of
 Area at sm
 Thickness 2 1/2
 Diameter of
 Pitch across
 thickness of
 Working pr
 Diameter
 Pitch of rive
 SUPERH
 Date of Test
 Diameter of

Dates of Survey while building
 During progress of work in shops - -
 During erection on board vessel - -
 Total No. of visits 26.

21/4, 7/6, 27/6, 24/8, 17/9, 26/9, 27/9, 11/10, 17/10, 18/10, 25/10, 29/10, 30/10, 29/11, 1/12, 3/12, 17/12, 19/12, 27/12, 28/12, 31/12, 1923, 3/1, 4/1, 5/1, 19/1, 1924

Dates of Examination of principal parts - Cylinders
 Covers
 Connecting rods
 Tunnel shafts
 Stern tube
 Completion of pumping arrangements
 Completion of fitting sea connections
 Main boiler safety valves adjusted
 Material of Crank shaft
 Material of Thrust shaft
 Material of Tunnel shafts
 Material of Screw shafts
 Material of Steam Pipes
 Is an installation fitted for burning oil fuel
 Have the requirements of the Rules for carrying and burning oil fuel been complied with
 Is this machinery duplicate of a previous case

Pistons
 Crank shaft
 Screw shaft
 Engine and boiler seatings 24/8, 26/9, 23.
 Engines holding down bolts 29/10 & 30/10, 23.
 Boilers fixed 18/10, 23.
 Stern tube 27/9, 23.
 Thickness of adjusting washers Starboard Boiler Port valves 2 1/2" Starb valves 1 1/2" Port valves 1 1/2" Starb valves 2 1/2"
 Engines tried under steam 31 & 5/1, 24.
 Screw shaft and propeller 29/9 & 19/12, 23.
 Identification/Mark on Do.
 Identification Mark on Do.
 Identification Marks on Do.
 Identification Marks on Do. *Starboard Shaft LLOYD'S N° 421 & 7. 25. 4. 21.*
 Test pressure 555 lbs per square inch. Date of Test 3/12, 23.
 Is the flash point of the oil to be used over 150°F.
 If so, state name of vessel *SS SPICA. Bremen Report N° 490 and Copenhagen Report N° 6652.*

General Remarks (State quality of workmanship, opinions as to class, &c.)
*In accordance with the Rules for Special Survey we have examined the material and workmanship of the installation of the machinery from the commencement of the work until the final test under steam and found it good in every respect. -
 On the trial trip the main and auxiliary machinery was tested under full power working condition and found to work satisfactorily. -*

Recommend the vessel's machinery to have notation in the Register Book of *LMC-1.24. CL*

It is suggested that this vessel is eligible for THE RECORD. + LMC 1.24. CL

Date of build of Eng^s 1903.
 Not for R.R.K.

J.W.D.
 20/2/24
C.M.S.

A.C. Fitch
 Engineer/Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ : :
 Special ... £ 550.00 : :
 Donkey Boiler Fee ... £ 132.00 : :
 Electric lighting Installation ... £ 203.25 : :
 Travelling Expenses (if any) ... £ 18.2.19.24 : :
 When applied for, 2nd February 24.
 When received, 18.2.19.24.

Committee's Minute THE MAR 4 1924
 Assigned + L.M.C. 1.24
 C.L.

Certificate to be sent to Surveyor Office, Copenhagen.
 The Surveyors are requested not to write on or below the space for Committee's Minute.

