

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 27 JAN 1937

Date of writing Report 20th Jan, 1937. When handed in at Local Office 25th Jan, 1937. Port of Malmö
 No. in Survey held at Landskrona Date, First Survey 6th Dec. 1935 Last Survey 18th Jan. 1937
 Reg. Book No. 87486 on the Single Screw Steamer "BELE" (Number of Visits 66)
 Tons { Gross 1237
 Net 638
 Built at Landskrona By whom built Öresundsvarvet Aktiebolag Yard No. 42 When built 1937
 Engines made at Landskrona By whom made Öresundsvarvet Aktiebolag Engine No. 42 when made 1937
 Boilers made at Göteborg By whom made Lindholm - Molala Boiler No. 2578 + 2579 when made 1937
 Registered Horse Power 975 Owners Stockholms Rederiaktiebolag Svea Port belonging to Stockholm
 Nom. Horse Power as per Rule 182 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended Stockholm - London - Stockholm.

ENGINES, &c.—Description of Engines Triple expansion 33 1/2" Revs. per minute 95
 Dia. of Cylinders 470 x 760 x 1230 mm. Length of Stroke 850 mm. No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 250 mm. Crank pin dia. 260 mm. Crank webs Mid. length breadth 378 mm. Thickness parallel to axis 160 mm.
 as fitted 250 mm. Mid. length thickness shrunk Thickness around eye-hole 110 mm.
 Intermediate Shafts, diameter as per Rule 238 mm. Thrust shaft, diameter at collars as per Rule 250 mm.
 as fitted 240 mm. as fitted 250 mm.
 Tube Shafts, diameter as per Rule shrunk Screw Shaft, diameter as per Rule 287 mm. Is the { tube } shaft fitted with a continuous liner { no liner }
 as fitted shrunk as fitted 290 mm. Is the { screw } shaft fitted with a continuous liner { no liner }
 Bronze Liners, thickness in way of bushes as per Rule shrunk Thickness between bushes as per Rule shrunk Is the after end of the liner made watertight in the
 as fitted shrunk as fitted shrunk propeller boss shrunk If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner shrunk
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive shrunk
 If two liners are fitted, is the shaft lapped or protected between the liners shrunk Is an approved Oil Gland or other appliance fitted at the after
 end of the tube shaft shrunk Length of Bearing in Stern Bush next to and supporting propeller 1360 mm.
 Propeller, dia. 2560 mm. Pitch 4350 mm. No. of Blades 4 Material bronze whether Moveable No Total Developed Surface 40.9 sq. feet
 Feed Pumps worked from the Main Engines, No. 2 Diameter 75 mm. Stroke 420 mm. Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 75 mm. Stroke 420 mm. Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size 2-6" x 4 1/4" x 6" Duplex. 1 Inject. Pumps connected to the { No. and size 2-6" x 6" Duplex & 7" x 8" x 8" Duplex.
 How driven Steam Main Bilge Line How driven Steam
 Ballast Pumps, No. and size 1-7" x 8" x 8" Duplex Lubricating Oil Pumps, including Spare Pump, No. and size 1-3 1/2" x 3" x 4" Duplex.
 Are two independent means arranged for circulating water through the Oil Cooler shrunk Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 3-2 1/2" 1-2 1/2" in middle of tunnel. 1-2 1/2" in tunnel well.
 In Holds, &c. 2-3" in fore hold. 2-3" and 2-2 1/2" in after hold.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-5" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-3 1/2" 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 No. See Sec. Ltr. of the 23-12-36
 Are all Sea Connections fitted direct on the skin of the ship Yes at bilge in E. room. Are they fitted with Valves or Cocks No
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Overboard Discharges above or below the deep water line Below
 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 pass through the bunkers. None How are they protected shrunk
 What pipes pass through the deep tanks shrunk Have they been tested as per Rule shrunk
 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 Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper eng. platform.

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2 x 1166 = 2332 m² = 2510 sq. ft.
 Is Forced Draft fitted Yes No. and Description of Boilers 2 multitubular Working Pressure 14 kg. cm²
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes. See Göteborg Rpt. 5a, No. 10785!
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? shrunk

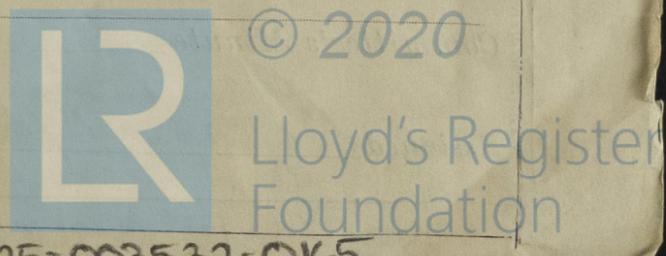
PLANS. Are approved plans forwarded herewith for Shafting 14-4-1936 Main Boilers 20-11-1935 Auxiliary Boilers shrunk Donkey Boilers shrunk
 Superheaters 8-2-1936 General Pumping Arrangements 30-1 & 4-12-1936 Oil fuel Burning Piping Arrangements shrunk

SPARE GEAR. State the articles supplied:—2 crosshead bearing bolts and nuts. 2 crank pin bearing bolts and nuts. 2 main bearing bolts and nuts. 1 set of coupling bolts and nuts for one coupling. 1 set of feed and bilge pump valves. 1 set of piston rings for H.P., I.P. and L.P. pistons. 6 studs and nuts for cylinder covers and 4 ditto for slide valve covers. 1 air pump rod and 2 valves. 1 impeller wheel with shaft for the circulating pumps. 1 complete valve for donkey and ballast pump. 1 propeller shaft and 1 propeller (of cast steel). 1 set of check valves for main and donkey feed valves. 4 safety valve springs. 12 watergauge glasses and packings. 10 ordinary and 3 stay tubes. Wire bars for one furnace. A quantity of assorted bolts and nuts. Iron of various sizes.

The foregoing is a correct description,

ÖRESUNDSVARVET
AKTIEBOLAG
to aftersdell

Manufacturer.
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Hbg: - 6/12, 19/12, 21/12, 30/12-1935, 15/1, 22/1, 1/2, 3/2, 6/2, 13/2, 14/2, 5/3, 17/3, 13/3, 26/3, 28/3, 30/3, 7/4, 23/4, 27/4, 30/4, 3/5, 8/5, 20/5, 4/6, 9/6, 12/6, 13/6, 15/6, 18/6, 23/6
 27/6, 7/7, 6/7, 21/7, 22/7, 30/7, 31/7, 14/8-1936 Mmro: - 23/7, 8/8, 18/8, 31/8, 9/9, 12/9, 11/10, 8/10, 17/10-1936

Dates of Survey while building
 During erection on board vessel - - - Mmro: - 20/10, 26/10, 4/11, 4/11, 12/11, 25/11, 1/12, 1/12, 8/12, 8/12, 11/12, 16/12, 16/12, 23/12-1936, 5/1, 13/1, 16/1, 18/1-1937
 Total No. of visits 66

Dates of Examination of principal parts - Cylinder 6/12, 19/12, 21/12, 30/12-1935, 15/1, 22/1, 1/2, 3/2, 6/2, 13/2, 14/2, 5/3, 17/3, 13/3, 26/3, 28/3, 30/3, 7/4, 23/4, 27/4, 30/4, 3/5, 8/5, 20/5, 4/6, 9/6, 12/6, 13/6, 15/6, 18/6, 23/6 Slides 23/3, 28/3, 7/4-1936 Covers 19/12, 30/12-1935, 15/1, 22/1-1936
 Pistons 13/2, 14/2, 13/3, 28/10-1936 Piston Rods 15/1, 12/12, 13/3, 28/3-1936 Connecting rods 15/1, 13/2, 13/3-1936
 Crank shaft 27/12-1935, 9/2, 13/2, 7/4, 9/10-1936 Thrust shaft 24-7-1936 Intermediate shafts 14-10-1936
 Tube shaft ✓ Screw shaft 1-10-1936 Propeller 1-10-1936
 Stern tube 1-10-1936 Engine and boiler seatings 19/9 - 26/9, 1936 Engines holding down bolts 20/10, 26/10-1936
 Completion of fitting sea connections 1-10-1936
 Completion of pumping arrangements 16-1-1937 Boilers fixed 24-7-1936 Engines tried under steam 18-1-1937
 Main boiler safety valves adjusted 5-1-1937 Thickness of adjusting washers Stop mnts.
 Crank shaft material Steel Identification Mark 1064/5/6 LLOYD'S T/12/5-10-36 Thrust shaft material Steel Identification Mark 26 JCD 24-7-36 LLOYD'S
 Intermediate shafts, material Steel Identification Marks 108/9/10/11, 1018 SPARE SCREW Thrust shaft, material Steel Identification Mark 5282, AS 25-11-36 LLOYD'S AB 14-10-36
 Screw shaft, material Steel Identification Mark 5281 AS 1-10-36 Steam Pipes, material Steel Test pressure 45 kg. cm² Date of Test 8-12-1936
 Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. ✓
 Have the requirements of the Rules for carrying and burning oil fuel been complied with ✓
 Is this machinery duplicate of a previous case ✓ If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery of this vessel has been built under Special Survey in accordance with the Rules and the approved plans.

It is recommended that the machinery of this vessel be classed in the Register Book of this Society, viz: - ~~MC~~ LMC 1.39 09.
 2 SB (2 Spt). Boiler pressure 200 lbs. per sq. inch.
 Boring as per reports enclosed herewith.

Certificate to be sent to Surveyor's Office, Malmö.

The amount of Entry Fee ... \$ Kr. : 54.60 When applied for,
 1/5 of Special & DB. inst... \$ Kr. : 165.62 25th Jan, 1937.
 1/5 of Donkey Boiler Fee due to Hbg. \$ Kr. : 331.24 When received,
 Travelling Expenses (if any) £ : 3.2 37th 4/2

For Mr. G. Westergren, late Mr. T. Åkersson & sons
 Asundon, A. Barring
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned Secy. Mmro. Rph 1527 + LMC 1-37 Spt
 20, 09.

TUE 9 FEB 1937

