

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 18 AUG 1933

Date of writing Report 17.8.1933 When handed in at Local Office 17.8.1933 Port of MIDDLESBROUGH.
 No. in Survey held at SOUTH BANK. Date, First Survey 12 April Last Survey 16.8.1933.
 Reg. Book. on the steam hawler "DERBY COUNTY" (Number of Visits)
 Built at SOUTH BANK. By whom built Smiths Dock Co. Ltd. Yard No. 954. Tons { Gross 399.
 Engines made at do. By whom made do. Engine No. 419. When built 1933. Net 150.
 Boilers made at Hantlepool By whom made Richards and Wrought Boilers No. 219. When made 1933.
 Registered Horse Power 176. Owners Consolidated Fisheries Ltd. Port belonging to GRIMSBY.
 Nom. Horse Power as per Rule 125.4 Is Refrigerating Machinery fitted for cargo purposes no. Is Electric Light fitted Y.
 Trade for which Vessel is intended Fishing

ENGINES, &c.—Description of Engines Triple Expansion Revs. per minute 130.
 Dia. of Cylinders 13½" 22½" 39" Length of Stroke 26" No. of Cylinders 3. No. of Cranks 3.
 Crank shaft, dia. of journals as per Rule 7.74" as fitted 7½" Crank pin dia. 8" Crank webs Mid. length breadth 11½" Thickness parallel to axis 4½"
 Intermediate Shafts, diameter as per Rule 7.37" as fitted 7½" Thrust shaft, diameter at collars as per Rule 7.74" as fitted 7½" Thickness around eye-hole 3½"
 Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 8.18" as fitted 8½" Is the tube shaft fitted with a continuous liner Y.
 Bronze Liners, thickness in way of bushes as per Rule 35/64" as fitted 9/16" Thickness between bushes as per Rule 32" as fitted 16" Is the after end of the liner made watertight in the propeller boss Y.
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Y.
 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 Y.
 If two liners are fitted, is the shaft lapped or protected between the liners Y. Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft Y.
 Propeller, dia. 9'-9" Pitch 10'-3" No. of Blades 4. Material C.S. whether Moveable no. Total Developed Surface 38½ sq. feet
 Feed Pumps worked from the Main Engines, No. 1 Diameter 3" Stroke 13½" Can one be overhauled while the other is at work Y.
 Bilge Pumps worked from the Main Engines, No. 1 Diameter 3" Stroke 13½" Can one be overhauled while the other is at work Y.
 Feed Pumps { No. and size 1-6" x 3½" x 6"; 1-6" x 4" x 6" Pumps connected to the { No. and size 1-6" x 4" x 6" also EJECTOR.
 How driven DUPLEX STEAM, DUPLEX STEAM, Main Bilge Line How driven DUPLEX STEAM.
 Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size Y.
 Are two independent means arranged for circulating water through the Oil Cooler Y. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 2-2" Y.
 In Pump Room Y. In Holds, &c. 2-2½" to Sludge Tank 1-2" to Forward Store.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-4" Independent Power Pump Direct Suctions to the Engine Room Bilges.
 No. and size 1-2" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Y.
 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 Y.
 Are all Sea Connections fitted direct on the skin of the ship Y. Are they fitted with Valves or Cocks both Y.
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Y. Are the Overboard Discharges above or below the deep water line above Y.
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Y. Are the Blow Off Cocks fitted with a spigot and brass covering plate Y.
 What Pipes pass through the bunkers winch & windlass steam pipes How are they protected lagging & wood casing Y.
 What pipes pass through the deep tanks no deep tanks Have they been tested as per Rule Y.
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Y.
 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 Y. Is the Shaft Tunnel watertight none. Is it fitted with a watertight door Y. worked from Y.

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2300 sq. ft. Y.
 Is Forced Draft fitted no. No. and Description of Boilers 1 S.B. Working Pressure 225 lbs. Y.
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Y.
 IS A DONKEY BOILER FITTED? no. If so, is a report now forwarded? Y.
 Is the donkey boiler intended to be used for domestic purposes only Y.

PLANS. Are approved plans forwarded herewith for Shafting 13.3.33. Main Boilers 8.3.33. Auxiliary Boilers Y. Donkey Boilers Y.
 (If not state date of approval)
 Superheaters 30.3.33. General Pumping Arrangements 7.3.33. Oil fuel Burning Piping Arrangements Y.

SPARE GEAR.

Has the spare gear required by the Rules been supplied Y.
 State the principal additional spare gear supplied 1 C.S. propeller, 1 safety valve spring, 1 spring for each escape valve, 1 main & 1 donkey check valve lid, 1 oil air pump valve, 6 piston bolts & nuts, 3 boiler & 3 condenser tubes.

The foregoing is a correct description,

FOR SMITH'S DOCK COMPANY LTD

Manufacturer.

Engine Works Manager

003895-003905-0015

Lloyd's Register
Foundation

1933: Apr 12 21 26 27 28 May 2 8 9 17 22 25 30 June 1 7 9 13 19 22 27 28 29 30 July 3 10 12
 During progress of work in shops - - 13 18 19
 Dates of Survey while building During erection on board vessel - - 1933: July 31 Aug 1 3 5 9 10 14 16
 Total No. of visits 36

Dates of Examination of principal parts—Cylinders 19. 6. 33. Slides 30. 6. 33. Covers 19. 6. 33
 Pistons 19. 6. 33 Piston Rods 19. 6. 33. Connecting rods 30. 6. 33.
 Crank shaft 22. 6. 33. Thrust shaft 22. 6. 33. Intermediate shafts 28. 4. 33.
 Tube shaft ✓ Screw shaft 28. 4. 33. Propeller 10. 7. 33.
 Stern tube 13. 7. 33. Engine and boiler seatings 13. 7. 33. Engines holding down bolts 1. 8. 33
 Completion of fitting sea connections 13. 7. 33.
 Completion of pumping arrangements 9-8-33. Boilers fixed 1. 8. 33. Engines tried under steam 10-8-33.
 Main boiler safety valves adjusted 10-8-33. Thickness of adjusting washers $\text{Stand } \frac{3}{8}'' \text{ Port } \frac{25}{64}'' \text{ Superheater } \frac{5}{16}''$
 Crank shaft material S.M. Steel Identification Mark ^{LLOYDS NO 1367} 28.4.33 C.R.R. Thrust shaft material S.M. Steel Identification Mark ^{LLOYDS NO 1388} 28.4.33 C.R.R.
 Intermediate shafts, material S.M. Steel Identification Marks ^{LLOYDS NO 1387} 28.4.33 C.R.R. Tube shaft, material ✓ Identification Mark
 Screw shaft, material S.M. Steel Identification Mark ^{LLOYDS NO 1387} 28.4.33 C.R.R. Steam Pipes, material Steel Test pressure 675 lbs. Date of Test 5. 8. 33.
 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 the use of oil as fuel been complied with ✓
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo No. If so, have the requirements of the Rules been complied with ✓
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with ✓
 Is this machinery duplicate of a previous case Yes. If so, state name of vessel S.T. "ARSENAL"

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The materials and workmanship are good.
 This machinery has been built under special survey in accordance with the Rules and Approved Plans; it has been securely fitted aboard and tested under working conditions with satisfactory results and is, in my opinion, eligible for classification with Recd + L.M.C. P.33.

The amount of Entry Fee ... £ 2-8-0 When applied for, (Net)
 Special ... £ 9-12-0 17. 8. 1933 (Net)
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) £ : : 2-10- 19. 33

Committee's Minute TUE. 22 AUG 1933
 Assigned + Lmb 8.33 CL

P. J. M. A. J. Brooke Smith
 Engineer Surveyor to Lloyd's Register of Shipping.