

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office MAY 18 1937

Date of writing Report 19 When handed in at Local Office 13-5-1937 Port of MIDDLESBROUGH.

No. in Survey held at SOUTH BANK. Date, First Survey 1 Feby Last Survey 29. 4. 1937.
 Reg. Book. on the steam trawler 'LOCH OSKAIG' (Number of Vents 25) Tons Gross 534.
 Built at South Bank. By whom built Smith Dock Co. Ld. Yard No. 1026. When built 1937.
 Engines made at do. By whom made do. Engine No. 491. when made 1937.
 Boilers made at West Hartlepool By whom made Richardson, Westgate, L. Boiler No. D. 491 when made 1937.
 Registered Horse Power Owners The Caledonian Fishing Co. Ltd. Port belonging to Hull
 Nom. Horse Power as per Rule 146. 141 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted ye.
 Trade for which Vessel is intended Fishing

ENGINES, &c.—Description of Engines Triple expansion. Revs. per minute 130 ✓
 Dia. of Cylinders 14½. 24. 41½ Length of Stroke 27 ✓ No. of Cylinders 3. No. of Cranks 3.
 Crank shaft, dia. of journals as per Rule 8.21. Crank pin dia. 8½ ✓ Mid. length breadth 11½ ✓ Thickness parallel to axis 5½ ✓
 as fitted 8½ ✓ Crank webs Mid. length thickness 5¾ ✓ shrunk Thickness around eye-hole 3½ ✓
 Intermediate Shafts, diameter as per Rule 7.82. Thrust shaft, diameter at collars as per Rule 8.21 ✓
 as fitted 8 ✓ as fitted 8½ ✓
 Tube Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 8.72. Is the shaft fitted with a continuous liner? Ye.
 as fitted 9½ ✓ as fitted 8¾ ✓
 Bronze Liners, thickness in way of bushes as per Rule 9½. Thickness between bushes as per Rule 19. Is the after end of the liner made watertight in the
 as fitted 19. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ✓
 propeller boss Ye. 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 ✓
 If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube
 shaft no If so, state type Length of Bearing in Stern Bush next to and supporting propeller 13.8 ✓
 Propeller, dia. 10.6 ✓ Pitch 10.6 ✓ No. of Blades 4. Material C.I. whether Moveable no. Total Developed Surface 461 sq. feet
 Feed Pumps worked from the Main Engines, No. 1 Diameter 3½ Stroke 14½ Can one be overhauled while the other is at work ✓
 Bilge Pumps worked from the Main Engines, No. 1 Diameter 3½ Stroke 14½ Can one be overhauled while the other is at work ✓
 Feed Pumps { No. and size 1-6 x 4½ x 6 Duplex. Pumps connected to the { No. and size 1-6 x 4½ x 6 Duplex & EJECTOR. ✓
 { How driven STEAM Main Bilge Line { How driven
 Ballast Pumps, No. and size 2-6 x 4½ x 6 Duplex. Lubricating Oil Pumps, including Spare Pump, No. and size ✓
 Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 2-2 ✓
 In Holds, &c. 2-2½ SLUSH WELLS; 1-2 FISH ROOM; 1-2 FOR STORE. ✓

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-4½ ✓ Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1-2½ to EJECTOR. Are all the Bilge Suction Pipes in holds and lower deck fitted with strum-boxes Ye. ✓
 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 Ye. ✓
 Are all Sea Connections fitted direct on the skin of the ship Ye. ✓ Are they fitted with Valves or Cocks Both ✓
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Ye. ✓ Are the Overboard Discharges above or below the deep water line above. ✓
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Ye. ✓ Are the Blow Off Cocks fitted with a spigot and brass covering plate Ye. ✓
 What Pipes pass through the bunker Steam to wind & wash doors. ✓ How are they protected Steel casing & lugs. ✓
 What pipes pass through the deep tanks ✓ Have they been tested as per Rule Ye. ✓
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Ye. ✓
 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 Ye. ✓ Is the Shaft Tunnel watertight none. ✓ Is it fitted with a watertight door worked from ✓

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 2688 f. ✓
 Is Forced Draft fitted no No. and Description of Boilers 1 S.B. Working Pressure 225 lbs. ✓
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? Ye. ✓
 IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? ✓

PLANS. Are approved plans forwarded herewith for Shafting 27. 11. 36. Main Boilers. Auxiliary Boilers. Donkey Boilers.
 Superheaters 6. 10. 33. General Pumping Arrangements 9. 1. 37 Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:— As per Rules + 1 C.I. propeller, 1 oct air pump valves & seats, 1 main check valve, 1 auxiliary check valve, 1 suction & 1 discharge valve for each auxiliary pump, 1 fecal pump plungers with wear & plane bush, 1 centrifugal pump impeller shaft, 6 junk ring studs, 2 bottom end and 2 top end bolts & nuts for centrifugal pump, 3 Condenser tubes & 20 ferrules 6 piston bolts & nuts 3 Boiler tubes.

The foregoing is a correct description,
 FOR SMITH'S DOCK CO. LTD.
 A. Warley.
 Manufacturer.

Dates of Survey while building
 During progress of work in shops --- 1937 Feb. 1. 5. 8. 10. 15. 17. 18. 24 Mar 3. 10. 15
 During erection on board vessel --- 17. 18. 19. 22. 25 Apr 2. 6. 19. 21. 22. 23. 24. 28. 29.
 Total No. of visits 25

Dates of Examination of principal parts—Cylinders 15.3.37. Slides 15.3.37. Covers 15.3.37.
 Pistons 15.3.37. Piston Rods 26.2.37. Connecting rods 10.3.37.
 Crank shaft 10.3.37. Thrust shaft 5.2.37. Intermediate shafts 5.2.37.
 Tube shaft / Screw shaft 5.2.37. Propeller 15.3.37.
 Stern tube 10.3.37. Engine and boiler seatings 10.3.37. Engines holding down bolts 2.4.37.
 Completion of fitting sea connections 15.3.37. Boilers fixed 19.4.37. Engines tried under steam 29.4.37.
 Completion of pumping arrangements 26.4.37. Thickness of adjusting washers port 3/8" 3/16" 1/2" super heated 1/4"
 Main boiler safety valves adjusted 26.4.37. Crank shaft material S.M. Steel Identification Mark JAC 2.37. Thrust shaft material S.M. Steel Identification Mark JAC 2.37.
 Intermediate shafts, material S.M. Steel Identification Marks JAC 2.37. Tube shaft, material / Identification Mark /
 Screw shaft, material S.M. Steel Identification Mark JAC 2.37. Steam Pipes, material steel Test pressure 675 lbs Date of Test 22.4.37.
 Is an installation fitted for burning oil fuel / 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 /
 Is this machinery duplicate of a previous case / No. If so, state name of vessel /

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 our opinion, eligible for classification with record + L.M.C. 4.37.

The amount of Entry Fee ... £ 300.00 When applied for, 14.5.1937
 Special ... £ 18.12.0.
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : : 1.7.37

M. J. M. A. & P. Colloff
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned + dmb. 4.37 Spt
 FRI 28 MAY 1937

