

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 6-8-42 When handed in at Local Office 24 OCT 1942 Port of HULL Received at London Office 15 OCT 1942
 No. in Survey held at HULL Date, First Survey 5.2.42 Last Survey 17.9.1942
 Reg. Book. DEXTEROUS (Number of Visits 58)
 on the STEAM TUG Gross Tons 601 Net Tons 3
 Built at SELBY By whom built Cochrane & Sons Ltd Yard No. 1247 When built 1942
 Engines made at HULL By whom made Chas. D. Holmes & Co. Ltd Engine No. 1619 When made ?
 Boilers made at HULL By whom made Chas. D. Holmes & Co. Ltd Boiler No. 1619 When made ?
 Registered Horse Power ✓ Owners The Admiralty Port belonging to ✓
 Nom. Horse Power as per Rule 222 Is Refrigerating Machinery fitted for cargo purposes — Is Electric Light fitted Yes
 Trade for which Vessel is intended Government Service

ENGINES, &c.—Description of Engines Triple Expansion CONTRACI. Revs. per minute 122
 Dia. of Cylinders 17-28-46 Length of Stroke 33 No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 9.46 as fitted 9 5/8 Crank pin dia. 9 5/8 Crank webs Mid. length breadth — Thickness parallel to axis 6 1/8
 as per Rule 9.46 as fitted 9 5/8 Mid. length thickness — shrunk Thickness around eye-hole 4 7/16
 Intermediate Shafts, diameter as per Rule 9.01 as fitted 9 1/4 Thrust shaft, diameter at collars as per Rule 9.46 as fitted 9 5/8
 Tube Shafts, diameter as per Rule — as fitted — Screw Shaft, diameter as per Rule 9.99 as fitted 10 1/4 Is the tube shaft fitted with a continuous liner Yes
 Bronze Liners, thickness in way of bushes as per Rule .601 as fitted 2 1/32 Thickness between bushes as per Rule .45 as fitted 17/32 Is the after end of the liner made watertight in the propeller boss Yes
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length
 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 aft No
 If so, state type — Length of Bearing in Stern Bush next to and supporting propeller 4 1/2
 Propeller, dia. 11-9 Pitch 12-0 No. of Blades 4 Material Cl whether Movable Solid Total Developed Surface 52 sq. feet
 Main Engines, No. 2 Diameter 3 Stroke 18 Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 Stroke 18 Can one be overhauled while the other is at work Yes
 Feed Pumps { No. and size One 7"x5"x6" Duplex Pumps connected to the { No. and size Two 3"x18" One 7"x7"x8" Hand pump
 How driven Independent Beam Main Bilge Line { How driven Main Eng. Ejector. No. Cofferdam
 Ballast Pumps, No. and size One 7"x7"x8" Lubricating Oil Pumps, including Spare Pump, No. and size NONE
 Are two independent means arranged for circulating water through the Oil Cooler NONE Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 2 @ 2 1/2" and 3" 8mm Ejector, and four 1 1/2" suction in gutterways.
 Pump Room Cofferdam One @ 2" In Holds, &c. One each in the following @ 2" Dia:—Fore peak
 Late ballast port & staid, Apr. Peak

Main Water Circulating Pump Direct Bilge Suctions, No. and size 6" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 3" 8mm Ejector 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
 All Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Yes, both
 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 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
 At Pipes pass through the bunkers NONE How are they protected —
 At pipes pass through the deep tanks NONE Have they been tested as per Rule —
 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 NONE Is it fitted with a watertight door — worked from —

IN BOILERS, &c.—(Letter for record 5) Total Heating Surface of Boilers 3550 sq. ft.
 Which Boilers are fitted with Forced Draft All Which Boilers are fitted with Superheaters NONE
 and Description of Boilers One S.B. Working Pressure 210 lb / sq. in.
 A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 A DONKEY BOILER FITTED? No If so, is a report now forwarded? —
 Are approved plans forwarded herewith for Shafting 10-1-40 Main Boilers 20-10-39 Auxiliary Boilers NONE Donkey Boilers NONE
 (If not state date of approval)
 Superheaters NONE General Pumping Arrangements 13-5-40 Oil fuel Burning Piping Arrangements 26-4-40

SPARE GEAR.
 Is the spare gear required by the Rules been supplied Yes
 Is the principal additional spare gear supplied
 Tipend bolts & nuts. 1 set Lockwood, Carlsle rings and Springs for Pistons & Piston Valves. OIL FUEL SPARE GEAR
 Bottom end do Boiler Tubes. 4 Gray 12 Plain. 2 Thermometers
 Main bearing do 1 Piston Rod 6 Burner Bodies
 Ser Coupling Bolts. 1 Valve Rod. 6 " Caps.
 Safety Valve Spring 1 Main Check Valve 36 " Nozzles.
 Condenser Tube 1 Auxiliary Check Valve. 36 " Diaphragms.
 do Ferrule 6 Fire brick baffle
 Ser. Fire & Bilge Pump Valves. 12. Gauge Glasses.
 Ser. Air pump Valves.

The foregoing is a correct description.
 FOR CHARLES D. HOLMES & CO., LTD.
 Manufacturer.
 011912-011926-0013



"DEXTEROUS"

Dates of Survey while building

During progress of work in shops - - During erection on board vessel - - - Total No. of visits	1942. Feb. 5. 6. Mar. 3. 7. 9. 10. Apr. 17. May 5. 12. 22. 29. June 5. 15. 18. 22. 25. 30. July 8. 9. 10. 11. 15. 16.
	20. 21. 22. 23. 24. 25. 27. 31. Aug. 5. 7. 12. 13. 14. 15. 17. 18. 19. 20. 21. 24. 25. 26. 28. 29. 31.
	Sept. 1. 2. 3. 4. 7. 10. 13. 16. 17.

58.

Dates of Examination of principal parts—Cylinders 9/7/42 11/7/42 16/7/42 Slides 27-7-42. Covers 9/7/42 11/7/42 16/7/42

Pistons 25/7/42 17/7/42 Piston Rods 17/7/42 Connecting rods 17/7/42

Crank shaft 22/6/42 Thrust shaft 5/5/42 Intermediate shafts 3/3/42

Tube shaft ✓ Screw shaft 10.3.42 Propeller 17/4/42

Stern tube 7.3.42 Engine and boiler seatings 17.4.42 Engines holding down bolts 17-8-42

Completion of fitting sea connections 17.4.42

Completion of pumping arrangements 31.8.42 Boilers fixed 12.8.42 Engines tried under steam 31.8.42

Main boiler safety valves adjusted 31.8.42 Thickness of adjusting washers F 7/16" A 5/8"

Crank shaft material M.S. Identification Mark 7380 CP 3-4-42 Journal 7381 CP 3-4-42 Thrust shaft material M.S. Identification Mark 7378 CP 3/4/42 1637 JS 5/5/42

Intermediate shafts, material M.S. Identification Marks 338 CP 5/12/41 1637 13-5-42 Tube shaft, material No. no. Identification Mark —

Screw shaft, material M.S. Identification Mark 6206 JFC 31/10/41 W 1207 Steam Pipes, material Steel Test pressure 630 lb Date of Test 25/8/42

Is an installation fitted for burning oil fuel Yes. Is the flash point of the oil to be used over 150°F. Yes.

Have the requirements of the Rules for the use of oil as fuel been complied with Yes.

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 No.

Is this machinery duplicate of a previous case Yes. If so, state name of vessel FRISKY. Hul. Rpt. 51413.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this vessel has been constructed in accordance with the approved plans, the Specification, and the Society's Rules, of material supplied by firms approved by the Society.

The Workmanship and Material are good

The Machinery and Auxiliaries have been fitted aboard and, when tried under steam at or near full power as practicable in the basin, were found satisfactory in every respect.

The Vessel is eligible, in our opinion, to have the Record of L.M.C 9,42. C.L. and the Identification of T. 3 Cy. 17", 28", 46" — 33". 222 NH 1 S.B. 210 lb 10". 3 Cf. H.S. 3550. F.D. Fitted for oil fuel 9,42. F.P. above 150°F.

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

The amount of Entry Fee ... £ : : 14 on 06/11/42

Special ... £ 120 - : : 19

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : 19

J. A. ... W. S. Shields
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **FRI. 6 NOV 1942**
 Assigned *Fitt. for oil fuel etc*
JD, Ch,