

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 16 JUN 1926

Date of writing Report 19 When handed in at Local Office 9/6/26 Port of NEWCASTLE-ON-TYNE

No. in Survey held at Walker-on-Tyne Reg. Book. Date, First Survey 27 Aug 1925 Last Survey 1 June 1926 (Number of Visits 82)

on the TWIN SCREW STEAMER DOMINIA
Built at Walker-on-Tyne By whom built Swan Hunter & Wigham Richardson Ltd Yard No. 1216
Engines made at Walker By whom made S. H. W. R. Ltd Engine No. 1216 when made 1926
Boilers made at Walker By whom made S. H. W. R. Ltd Boiler No. 1216 when made 1926
Registered Horse Power Owners Telegraph Construction & Maintenance Ltd Port belonging to London
Nom. Horse Power as per Rule 932 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which Vessel is intended Ocean going Cable Steamer

ENGINES, &c.—Description of Engines Twin Screw Triple Expansion
Dia. of Cylinders 24-40½-66 Length of Stroke 45 No. of Cylinders 6 No. of Cranks 3, each engine
Crank shaft, dia. of journals as per Rule 13.02 as fitted 13 5/8 Crank pin dia. 13 5/8 Crank webs Mid. length breadth 21 Thickness parallel to axis 8 1/2
Intermediate Shafts, diameter as per Rule 12.40 as fitted 12 7/8 Thrust shaft, diameter at collars as per Rule 13.02 as fitted 13 7/8
Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 13.788 as fitted 14 1/2 Is the shaft fitted with a continuous liner Yes
Bronze Liners, thickness in way of bushes as per Rule .72 as fitted 7/8 Thickness between bushes as per Rule .54 as fitted 13/16 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
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 Yes
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
Propeller, dia. 16' 8" Pitch 16'-6" No. of Blades 4 Material Bronze whether Moveable Yes Total Developed Surface 92 sq. feet
Feed Pumps worked from the Main Engines, No. None Diameter Stroke Can one be overhauled while the other is at work
Bilge Pumps worked from the Main Engines, No. None Diameter Stroke Can one be overhauled while the other is at work
Feed Pumps No. and size two, weirs 1 1/2 x 15 1/2 x 24 Pumps connected to the No. and size one, 13 1/2 x 16 x 26 Camout.
Pumps How driven Auxiliary feed 6 x 9 x 15 Steam Main Bilge Line How driven two 9 x 8 x 18 Camout
Ballast Pumps, No. and size one, 13 1/2 x 16 x 26 Steam 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 4 9 3/2 2-2 1/2 from oil well, 1-2 1/2 tunnel well
In Holds, &c. no 1 hold 2 of 3" After Hold 2 of 3" Lower Deck Suctions Forward 2 of 2 1/2 Lower Deck Suctions Aft 2 of 2 1/2
Main Water Circulating Pump Direct Bilge Suctions, No. and size 2 of 9" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one of 5 1/4"
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 Sea Connections fitted direct on the skin of the ship Yes 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 Yes Are the Overboard Discharges above or below the deep water line both
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 (Oil Fuel Bunkers) How are they protected By a separate Tunnel
What pipes pass through the deep tanks 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 Yes Is it fitted with a watertight door Yes

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 2 for 13,423 sq ft, 3 aft 13,9963 Total 14,197 sq ft
Is Forced Draft fitted Yes No. and Description of Boilers 5. S. E. Cyl. Multicellular Working Pressure 200 lb
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
IS A DONKEY BOILER FITTED? No If so, is a report now forwarded?
PLANS. Are approved plans forwarded herewith for Shafting No Main Boilers Yes Auxiliary Boilers None Donkey Boilers None
Superheaters General Pumping Arrangements Yes Oil fuel Burning Piping Arrangements Yes

SPARE GEAR. State the articles supplied:—Two top end bolts and nuts, two bottom end bolts and nuts, Spare Coupling bolts and nuts, Set of beaplate bearing bolts and nuts, Set of feed and Bilge pumps, Valves, 2 quantity of assorted bolts and nuts, Iron of various sizes, Two top end bearings, one bottom end bearing, 3 eccentric sheaves, 2 sets of eccentric stops, 3 Valve spindles, HP piston valve distance piece, Spare air pump, locknut and head Valve complete, One propeller shaft complete, 2 Bronze propeller blades, 1 set studs 9 nuts for 1 blade, 1 Patent tube drawer, 6 Holding down bolts & nuts, 12 Junk ring bolts & nuts, 12 Cyl. Cover studs & nuts, 8 Valve chest studs & nuts, 6 Slide rod gland studs, 6 Piston rod gland studs, 3 sets Piston packing rings & springs, 1 Spring each six escape Valve, 1 set valves & seats for General Service & Ballast pumps, 25 Condenser tubes, 100 Screwed ferrules, 24 Boiler tubes, 2 large & 2 small Safety Valve springs, 70 Gauge glasses & 100 India rubber rings for same, 1 MP Slide Valve & 1 L. P. Slide Valve.

The foregoing is a correct description,
FOR SWAN, HUNTER & WIGHAM RICHARDSON, LTD.

G. J. Dwyer
DIRECTOR Manufacturer.



1925
 During progress of work in shops - - Aug. 27. 31. Sep. 1. 7. 11. 16. Oct. 2. 9. 21. 23. 26. 29. Nov. 4. 10. 16. 18. 25. Dec. 2. 3. 7. 8. 9. 11. 15. 17. 1926
 25. 27. 28. 29. 30. Feb. 2. 3. 4. 7. 9. 11. 13. 15. 16. 18. 19. 22. 23. 24. 26. Mar. 1. 2. 3. 4. 5. 8. 9. 11. 15. 16. 17. 18. 19. 23.
 24. 30. Apr. 7. 9. 13. 14. 15. 16. 19. 20. 21. 22. 23. May 4. 19. 28. June 1.
 During erection on board vessel - -
 Total No. of visits 82

HP estimated 30000

Dates of Examination of principal parts—Cylinders 8.1.26 2.1.26 13.1.26 11.1.26 Slides 2/1/26 8.1.26 25.1.26 Covers 8 June 26 13.1.26

Pistons 13.1.26 26.10.25 Piston Rods 13.1.26 21.10.25 Connecting rods 21.10.25

Crank shaft 25.1.26 17.11.25 9.4.26 Thrust shaft 27.1.26 14.1.26 17.12.25 Intermediate shafts 27.1.26 14.1.26

Tube shaft Screw shaft 27.1.26 3.12.25 Propeller 24.2.26 28 May 26

Stern tube 28 July 26 27.1.26 Engine and boiler seatings 24.2.26 Engines holding down bolts 7.3.26 9 April 26

Completion of pumping arrangements 19 May 1926 Boilers fixed 9 April 26 Engines tried under steam 19 May 1926

Main boiler safety valves adjusted 19 May 1926 Thickness of adjusting washers Lloyds 2374 CRH, LGS. 11.2.26 / 2385 CRH Lloyds 2502 CRH, 24.11.25 / 2392/3

Crank shaft material Steel Identification Mark LGS. 11.2.26 Thrust shaft material Steel Identification Mark LGS. 27.1.26

Intermediate shafts, material Steel Identification Marks LGS. 27.1.26 Tube shaft, material Identification Mark 1.3.26

Screw shaft, material Steel Identification Mark LGS. 15.2.25 Steam Pipes, material Steel Test pressure 600 lb Date of Test 21.4.26

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 carrying and burning oil fuel been complied with Yes

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 machinery and Boilers built under Special Survey the material and workmanship found good and efficient.

The Engines and Boilers Satisfactorily fitted up on board the Vessel, Tested under Steam (Vessel at moonings) and during sea trials and found satisfactory -

This Vessel is now in my opinion eligible for the notation of + LMC. 6.26 (IN RED) to be made in the Register Book. Fitted for oil burning 6.26 flash point of oil to be used over 150°F, forced draught, Tail Shafts. (C L).

Compressor's Rungs. Boiler Safety Valves

N ^o I Boiler, aft Starboard,	5/16	5/16
N ^o II. " aft Centre	3/8	5/16
N ^o III. " aft port	1/4	1/4
N ^o IV. " fwd Starboard	9/32	9/32
N ^o V. " fwd Port	F 1/4	A. 9/32

It is submitted that this vessel is eligible for THE RECORD. + LMC 6.26. FD. CL. Fitted for oil fuel 6.26. F.P above 150°F.

L. G. Shalleross
 17/6/26
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £	6	When applied for,	10/6/1926
Special ... £	121	When received,	17/6/26
Donkey Boiler Fee ... £			
Travelling Expenses (if any) £			

FRI 25 JUN 1926

Committee's Minute

Assigned + LMC 6.26 F.D. CL
 Fitted for Oil Fuel 6.26 F.P above 150°F

