

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office - 8 OCT. 1926

Date of writing Report 7-10-1926 When handed in at Local Office 7-10-1926 Port of Middlesbrough  
 No. in Survey held at Middlesbrough Date, First Survey 16th March Last Survey 7-10-1926  
 Reg. Book. on the S.S. CHEVYCHASE (Number of Visits 34)  
 Built at Middlesbrough By whom built Smith's Dock & Co. Ltd Yard No. 818 Tons <sup>Gross</sup> 1926 <sub>Net</sub>  
 Engines made at Middlesbrough By whom made Smith's Dock & Co. Ltd Engine No. 286 when made 1926  
 Boilers made at Martlepool By whom made Richardsons, Westgarth & Co. Ltd Boiler No. D167 when made 1926  
 Registered Horse Power Owners Steel Steam Shipping & Co. Ltd Port belonging to Newcastle  
 Nom. Horse Power as per Rule 266 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes  
 Trade for which Vessel is intended

**ENGINES, &c.**—Description of Engines Triple expansion inverted Revs. per minute 73  
 Dia. of Cylinders 21-35-57 1/2 Length of Stroke 42 No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 11.22 as fitted 11 1/2 Crank pin dia. 11 1/2 Crank webs Mid. length breadth 18 1/2 Thickness parallel to axis 7 1/2  
 as fitted 11 1/2 Mid. length thickness 7 1/2 shrunk Thickness around eye-hole 5 1/2  
 Intermediate Shafts, diameter as per Rule 10.69 as fitted 10 3/4 Thrust shaft, diameter at collars as per Rule 11.22 as fitted 11 1/2  
 Tube Shafts, diameter as per Rule 12.02 as fitted 12 1/2 Is the tube screw shaft fitted with a continuous liner Yes  
 Screw Shaft, diameter as per Rule 12.02 as fitted 12 1/2  
 Bronze Liners, thickness in way of bushes as per Rule .664 as fitted 1/16 Thickness between bushes as per Rule .498 as fitted 1/16 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 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 Light fit  
 If two liners are fitted, is the shaft lapped or protected between the liners One liner Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft No  
 Length of Bearing in Stern Bush next to and supporting propeller 4-11 1/2  
 Propeller, dia. 16-0 Pitch 15-2 No. of Blades 4 Material C.I. whether Moveable No Total Developed Surface 77 sq. feet  
 Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/4 Stroke 22 Can one be overhauled while the other is at work Yes  
 Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/4 Stroke 22 Can one be overhauled while the other is at work Yes  
 Feed Pumps No. and size 1 @ 6x4 1/2 x 6 Pumps connected to the Main Bilge Line No. and size 1 @ 10x11x10  
 How driven Steam, 1-2 injectors How driven Steam  
 Ballast Pumps, No. and size 1 @ 10x11x10 Lubricating Oil Pumps, including Spare Pump, No. and size None  
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 1 @ 4" 3 @ 2 1/2"  
 In Holds, &c. No 1 Hold 2 @ 2 1/2" No 2 Hold 2 @ 2 1/2" No 3 Hold 2 @ 2 1/2" No 4 Hold 2 @ 2 1/2"  
Tunnel well 1 @ 2 1/4"

**Main Water Circulating Pump Direct Bilge Suctions, No. and size** 6" 1 @ 4" **Independent Power Pump Direct Suctions to the Engine Room Bilges,**  
 No. and size 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 Chain below not 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  
 What Pipes pass through the bunkers None How are they protected Yes  
 What pipes pass through the deep tanks None Have they been tested as per Rule Yes  
 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 Deck

**MAIN BOILERS, &c.**—(Letter for record S) Total Heating Surface of Boilers 4554  
 Is Forced Draft fitted No No. and Description of Boilers 2 Single ended Working Pressure 180 lbs  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** Yes  
**IS A DONKEY BOILER FITTED?** No If so, is a report now forwarded? No  
**PLANS.** Are approved plans forwarded herewith for Shafting Yes Main Boilers No Auxiliary Boilers Yes Donkey Boilers Yes  
 Superheaters Yes General Pumping Arrangements With Hull Rte Oil fuel Burning Piping Arrangements Yes

**SPARE GEAR.** State the articles supplied:— 1 Best iron propeller, 1 set of coupling Bolts, 2 chain bearing bolts and nuts, 2 Bottom end bolts and nuts, 2 Top end bolts and nuts, 1 set of Bilge pump valves and seats, 1 set of Feed pump valves and seats, 20 assorted bolts and nuts, 1/2 cut of assorted iron bars, 1/2 cut of assorted iron plates, 1 set of oil pump valves, 3 Boiler tubes, 3 Condenser tubes, 10 firebars, 12 gauge glasses and washers, 1 chain check valve, 1 auxiliary check valve, 12 funk ring bolts, 1/2 set of Donkey pump valves, 1/2 set Ballast pump valves.

The foregoing is a correct description,  
 FOR SMITH'S DOCK COMPANY, LTD.

*W. Stevens* Manufacturer.  
 Engine Works Manager.



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 Foundation

1926  
 During progress of work in shops - - Mar. 16. Apr. 12. 15. 19. 28. May 1. 3. 7. 12. 18. 20. 26. 28. Jun. 1. 4. 7. 14. 18. 21. 29. July 12. Aug. 23. Sep. 1. 3. 13. 15.  
 21. 23. 24. 27. Oct. 1. 5. 6. 7.  
 Dates of Survey while building }  
 During erection on board vessel - - - }  
 Total No. of visits 34/

Dates of Examination of principal parts—Cylinders 3-5-26 Slides 1-6-26 Covers 1-6-26  
 Pistons 20-5-26 Piston Rods 20-5-26 Connecting rods 18-5-26  
 Crank shaft 7-4-26 Thrust shaft 12-7-26 Intermediate shafts 12-7-26  
 Tube shaft ✓ Screw shaft 12-7-26 Propeller 12-7-26  
 Stern tube 12-7-26 Engine and boiler seatings 3-9-26 Engines holding down bolts 27-9-26  
 Completion of fitting sea connections 3-9-26  
 Completion of pumping arrangements 7-10-26 Boilers fixed 21-9-26 Engines tried under steam 7-10-26  
 Main boiler safety valves adjusted 7-10-26 Thickness of adjusting washers 1 1/2" 2 1/4" 2 5/8" 3 1/4" 3 1/2"  
 Crank shaft material Ingot Steel Identification Mark 954 Thrust shaft material Ingot Steel Identification Mark 955  
 Intermediate shafts, material Ingot Steel Identification Marks 6678/9/8a, 1045/6/7. shaft, material ✓ Identification Mark ✓  
 Screw shaft, material Ingot Steel Identification Mark 1048 Steam Pipes, material S.D. Steel Test pressure 540 LBS. Date of Test 16-7-26  
 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 ✓ No ✓ If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been constructed under Special Survey in accordance with the approved plans and rules of this Society.  
 The materials and workmanship are good, the machinery has been properly fitted and secured on board the vessel, and on completion tried under steam and found satisfactory.  
 The safety valves have been adjusted under steam and tested for accumulation.  
 In my opinion the machinery of this vessel is eligible to have the record of L.M.C. 10.26 in the Register Book.  
 Note: This vessel is fitted with Electric Light and Wireless.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 10.26. CL.

Arthur W. Oxford.  
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 4 : 0 :  
 Special 3/6 FEE ... £ 38 : 18 :  
 Donkey Boiler Fee ... £ ✓ : ✓ :  
 Travelling Expenses (if any) £ - : - :  
 When applied for, 19...  
 When received, 16. 10. 26

Committee's Minute TUES. 12 OCT 1926

Assigned + L.M.C. 10.26 CL

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

