

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office SEP 3 1940

Date of writing Report 19 When handed in at Local Office 2/8/40 Port of NEWCASTLE-ON-TYNE  
 No. in Survey held at Newcastle on Tyne Date, First Survey 19 Jan Last Survey 1<sup>st</sup> Aug 1940  
 Reg. Book. on the "ECEABAT" (Number of Visits 78.) Tons {Gross 691 Net 265  
 Built at Newcastle By whom built Swan, Hunter & Wigham Richardson Ltd Yard No. 1662 When built 1940-  
 Engines made at ditto. By whom made ditto Engine No. 1662 When made 1940  
 Boilers made at ditto. By whom made ditto Boiler No. 1662 When made 1940  
 Registered Horse Power 132 Owners Port belonging to  
 Nom. Horse Power as per Rule 132 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES.  
 Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines 3 Cyl. Triple Exp. Recip. Revs. per minute 225.  
 Dia. of Cylinders 12+19+31" Length of Stroke 21" No. of Cylinders 3 No. of Cranks 3  
 Crank shaft, dia. of journals as per Rule 6.09" Crank pin dia. 7 1/8" Crank webs Mid. length breadth shrunk Thickness parallel to axis 4 5/16"  
 as fitted 6 7/8" Crank webs Mid. length thickness Thickness around eye-hole 3 3/4" at journals  
 Intermediate Shafts, diameter as per Rule 5.8" Thrust shaft, diameter at collars as per Rule 6.09" {3 3/4" at pins  
 as fitted 7 1/8" as fitted 7.125"  
 Tube Shafts, diameter as per Rule 6.425" Is the screw shaft fitted with a continuous liner Yes  
 as fitted 6 3/4"  
 Bronze Liners, thickness in way of bushes as per Rule 16/32" Thickness between bushes as per Rule 12/32" Is the after end of the liner made watertight in the propeller boss Yes  
 as fitted 17/32" as fitted 15/32" If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner In one piece.  
 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 tight fit  
 If two liners are fitted, is the shaft lapped or protected between the liners No 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 33 1/2"  
 Propeller, dia. 7'6" Pitch 5'6" No. of Blades 4 Material M.B.Z. whether Moveable No Total Developed Surface 20 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 —  
 Independent Feed Pumps No. and size Two 8 1/2" x 6" x 13" simplex Pumps connected to the Main Bilge Line {No. and size Two, one Ballast 6" x 7" x 9" dup; one C.S.P. 6" x 6" x 6" dup  
 How driven Steam all steam driven 75 ton/hour 4 ton/hour  
 Ballast Pumps, No. and size one 6" x 7" x 9" duplex Lubricating Oil Pumps, including Spare Pump, No. and size None  
 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 Two 3" dia. & 2 of 2" dia.  
 In Pump Room Three; 2 at Centre, & P+S wings each 2 1/2".  
 also one 3" Ejector Suction worked by Ballast Pump discharge.

Main Water Circulating Pump Direct Bilge Suctions, No. and size One 6" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size one 3" dia.  
 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 pass through the bunkers None How are they protected —  
 What 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 now (machinery off) Is it fitted with a watertight door — worked from —

MAIN BOILERS, &c.—(Letter for record 5.) Total Heating Surface of Boilers 2554 sq. ft.  
 Is Forced Draft fitted Yes 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? None If so, is a report now forwarded? —

PLANS. Are approved plans forwarded herewith for Shafting 19/12/39 Main Boilers 15/12/39 Auxiliary Boilers — Donkey Boilers —  
 (If not state date of approval) 22/12/39  
 Superheaters — General Pumping Arrangements 22/2/40 & 15/3/40 Oil fuel Burning Piping Arrangements —  
 Pumping Arrangements in E.R. 3/1/40  
 SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes  
 State the principal additional spare gear supplied 20 Condenser tubes, 40 condenser tube ferrules + packing

NOTE.—The records which do not apply should be deleted.

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

G. J. Keenan DIRECTOR, Manufacturer.



008953 - 008963 - 0096

1940  
 Jan. 19. 31. Feb. 8. 9. 16. 22. 23. 27. 28. 29. Mar. 4. 5. 6. 7. 11. 12. 14. 18. 19. 20. 21. 26. 27. 28. 29. Apr. 2.

Dates of Survey while building  
 During progress of work in shops --- 3. 4. 5. 8. 9. 10. 16. 18. 19. 26. 29. May 1. 2. 3. 6. 7. 8. 10. 14. 16. 20. 21. 22. 31. June 4. 5. 6. 7. 10. 11. 13. 14. 15.  
 During erection on board vessel --- 17. 18. 19. 20. 21. 24. 26. 28. July 1. 2. 4. 5. 9. 10. 12. 16. 22. 29. Aug. 1.  
 Total No. of visits 78.

Dates of Examination of principal parts—Cylinders 14/3/40 Slides 19/6/40 Covers 14/3/40  
 Pistons 19/6/40 Piston Rods 19/6/40 Connecting rods 19/6/40  
 Crank shaft 19/6/40 Thrust shaft 1/5/40 Intermediate shafts 21/5/40  
 Tube shaft --- Screw shaft 6/5/40 Propeller 10/6/40  
 Stern tube 6/6/40 Engine and boiler seatings (1) 13/6/40; (2) 20/6/40 Engines holding down bolts 28/6/40  
 Completion of fitting sea connections 10/6/40  
 Completion of pumping arrangements 10/7/40 Boilers fixed 28/6/40 Engines tried under steam 12/7/40 + 1/8/40  
 Main boiler safety valves adjusted 12/7/40 Thickness of adjusting washers Forw'd Blr 1 1/2" aft Blr 1 1/2" Forw'd 7/16" aft 7/16"  
 Crank shaft material O.H.F.S. Identification Mark 8614 AW 19/6/40 Thrust shaft material O.H.F.S. Identification Mark 980. T.T.  
 Intermediate shaft material O.H.F.S. Identification Marks 1309 HDB. Tube shaft material --- Identification Mark ---  
 Screw shaft material O.H.F.S. Identification Mark 1310 HDB Steam Pipes material S.D. Steel Test pressure 540 lbs Date of Test 26/4/40  
 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 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 built under Special Survey in accordance with the Society's Rules and approved plans, satisfactorily installed on board and tried under steam under working conditions. The materials and workmanship are good.  
 The machinery of this vessel is eligible, in my opinion, to be classed with this Society and to have the record + LMC 8.40 and notations 2. SB. 180h FD. TS. Cl.

Newcastle-on-Tyne

The amount of Entry Fee ... £ 3 : 0 :  
 Special ... £ 33 : 0 :  
 Donkey Boiler Fee ... £ : :  
 Travelling Expenses (if any) £ : :  
 When applied for, 31 Aug 1940  
 When received, 9th Sept 1940

A Watt  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned + LMC 8.40 FDCL

