

REPORT ON OIL ENGINE MACHINERY.

No. 40331
10 JUN 1958

Received at London Office

of writing Report 30th May 1958 When handed in at Local Office 3rd 6th 1958 Port of Glasgow
 in Survey held at Glasgow Date, First Survey 24th Jan: 1952 Last Survey 14th May 1958
 Book. Number of Visits 134
 on the Single Screw vessel Mr. "Blanford" Tons Gross 1251H Net 7385
 at Glasgow By whom built Messrs Harland & Wolff Ltd Yard No. 1H5H When built 1953
 rines made at Glasgow By whom made Messrs Harland & Wolff Ltd Engine No. 1H5H When made 1953
 key Boilers made at Belfast By whom made Messrs Harland & Wolff Ltd Boiler No. 1H5H When made 1953
 ke Horse Power 8700 Owner Blanford Shipping Co Ltd Port belonging to London
 V. Power as per Rule 1740 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 de for which vessel is intended Oil tanker

ENGINES, &c. —Type of Engines Opposed piston, eccentric crosshead 2 or 4 stroke cycle 2 Single or double acting Single
 rimum pressure in cylinders 700 lb/p² Diameter of cylinders 750^{mm} Length of stroke 1500+500^{mm} No. of cylinders 7 No. of cranks 7
 an Indicated Pressure 6.5 kg/cm² Ahead Firing Order in Cylinders 1-7-2-5-4-3-6 Span of bearings, adjacent to the crank, measured
 m inner edge to inner edge 1532^{mm} Is there a bearing between each crank Yes Revolutions per minute 120
 ywheel dia 2773.17^{mm} Weight 13030 kg Moment of inertia of flywheel ($H = \frac{1}{2} \pi R^4 L$) 64.300 Kg.cm.² Means of ignition Compression Kind of fuel used Heavy oil
 ank shaft, Solid forged dia. of journals as per Rule Crank pin dia 575^{mm} Crank webs Mid. length breadth 1340^{mm} Thickness parallel to axis shrunk
All built as fitted 575^{mm} Mid. length thickness 300^{mm} Thickness around eye hole 307^{mm}
 ywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as fitted
 as fitted 1' 5 1/4" as fitted 550^{mm}
 ube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the screw shaft fitted with a continuous liner Yes
 as fitted 1' 9" as fitted 1' 5 1/4"
 onze Liners, thickness in way of bushes as per Rule Thickness between bushes as fitted Is the after end of the liner made watertight in the
 opeller 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
 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-
 rrosive Shrink 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
 d of tube shaft No If so, state type ✓ Length of bearing in Stern Bush next to and supporting propeller 7' 0"
 opeller, dia 17' 6" Pitch 15' 3" No. of blades 4 Material Brass whether moveable No Total developed surface 125 sq. feet
 ment of inertia of propeller (lbs.in² or Kg.cm.²) 23600 kg.m² Kind of damper, if fitted ✓
 ethod of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of
 brication forced Thickness of cylinder liners 59^{mm} Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled
 lagged with non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned
 ck to the engine funnel Cooling Water Pumps, No. 1 S.W. Ballast pump Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
 ilge Pumps worked from the Main Engines, No. None Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓
 umps connected to the Main Bilge Line (No. and size Bilge (7' 8" x 8") Gun service (16" x 10" x 16") Ballast (11" x 14" x 15")
 How driven Steam Steam Steam
 the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
 rangements ✓
 allast Pumps, No. and size 1 of 11" x 14" x 15" Power Driven Lubricating Oil Pumps, including spare pump, No. and size 260 T/Hr. 2-Eng driven 2-Stand by
 re two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both main bilge pumps and auxiliary
 lge pumps, No. and size:—In machinery spaces 1 of 10" 5 of 7" x 2 of 4" In pump room 1 of 16"
 holds, &c. 2 of 8" 3 of 4" 1 of 4" 1 of 5" x 1 of 3" Cofferdam
 ndependent Power Pump Direct Suctions to the engine room bilges, No. and size 1 of 3" x 2 of 2 1/2"
 re all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Yes Are the bilge suction in the machinery spaces led from easily
 ccessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes
 re all Sea Connections fitted direct on the skin of the Ship Yes Are they fitted with valves or cocks Valves Are they fixed
 efficiently high on the ship's side to be seen without lifting the platform plates Yes Are the overboard discharges above or below the deep water line Above
 re 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
 That pipes pass through the bunkers ✓ How are they protected ✓
 That pipes pass through the deep tanks ✓ Have they been tested as per Rule ✓
 re all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 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
 paces, or from one compartment to another Yes Is the shaft tunnel watertight No tunnel Is it fitted with a watertight door ✓ worked from ✓
 f a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓
 ain Air Compressors, No. 3 No. of stages 2 diameters 280 x 245 stroke 130 driven by Steam
 auxiliary Air Compressors, No. 1 Steam only 1 of 52.82 No. of stages 2 Capacity 5 ft³/min stroke ✓ driven by Electric motor
 mall Auxiliary Air Compressors, No. ✓ No. of stages ✓ diameters ✓ stroke ✓ driven by ✓
 That provision is made for first charging the air receivers Steam driven air compressor
 scavenging Air Pumps, No. 2 Roots blowers Capacity 414 ft³/min @ 4135 RPM stroke ✓ driven by Main engine
 Auxiliary Engines crank shafts, diameter as per Rule as fitted No. 2 Position Fore end engine room Starboard
 Have the auxiliary engines been constructed under special survey Yes Is a report sent herewith Yes

AIR RECEIVERS:—Have they been made under survey. Yes State No. of report or certificate X 533
Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes
Injection Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓
Seamless, welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure ✓
Starting Air Receivers, No. See Total cubic capacity 650 cu. ft. Internal diameter 6' 6 3/8" thickness 1 3/16"
Seamless, welded or riveted longitudinal joint Welded Material Steel Range of tensile strength 29/33 1/2 Working pressure Actual 356 lb.
2 Auxiliary & 1 Spare
IS A DONKEY BOILERS FITTED Yes If so, as reports now forwarded Yes
Is the donkey boiler intended to be used for domestic purposes only No
PLANS. Are approved plans forwarded herewith for shafting Yes Receivers No Separate fuel tanks Yes
(If not, state date of approval)
Donkey boilers Yes General pumping arrangements Yes Pumping arrangements in machinery space Yes
Oil fuel burning arrangements Yes
Have Torsional Vibration characteristics been approved Yes Date of approval 13th March 1953

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes
State the principal additional spare gear supplied No

The foregoing is a correct description,

FOR HARMAND AND SONS, LIMITED Manufacturer.
Dates of Survey while building
During progress of work in shops - - 1952 Jan 24. Mar 11. 12. Apr 8. 25. May 14. June 2. 5. 19. 24. July 1. Aug 8. 12. Sep 8. 11. 19. 22. 24. 26. 30. Oct 1. 2. 3. 6. 7. 8. 9. 10. 14. 15. 16. 17. 20. 21. 22. 23. 24. 27. 28. 30. 31. Nov. 4. 5. 6. 7. 12. 13. 14. 17. 18. 19. 20. 21. 24. 25. Dec. 3. 5. 8. 9. 12. 16. 17. 18. 19. 22. 23. 24. 30.
During erection on board vessel - - (1953) Jan 6. 7. 8. 9. 15. 20. 21. 23. 26. 27. 28. Feb 5. 6. 9. 10. 11. 17. 26. 27. Mar 2. 3. 5. 6. 9. 10. 11. 12. 13. 16. 17. 18. 19. 20. 23. 24. 25. 26. 27. 30. 31.
Apr. 1. 2. 3. 4. 9. 10. 12. 14. 18. 16. 17. 20. 21. 22. 23. 24. 27. 28. 29. 30. May 6. 11. 12. 14.
Total No. of visits 134
Dates of examination of principal parts—Cylinders 21/10/52 Covers 21/10/52 Pistons 27/10/52 Rods 27/10/52 Connecting rods 6/11/52
Crank shaft 20/10/52 Flywheel shaft ✓ Thrust shaft 17/10/52 Intermediate shafts 17/10/52 Tube shaft ✓
Screw shafts ✓ Propeller 9/12/52 Stern tube 21/11/52 Engine seatings 23/3/53 Engine holding down bolts 23/3/53
Completion of fitting sea connections 8/11/53 Completion of pumping arrangements 12/5/53 Engines tried under working conditions 14/5/53
Crank shaft, material S.M.O.H. Identification mark LLOYDS 66 10/10/52 Flywheel shaft, material ✓ Identification mark ✓
Thrust shaft, material S.M.O.H. Identification mark S.1735 2/11/51 Intermediate shafts, material S.M.O.H. Identification marks EB 3343 9/5/52
Tube shaft, material ✓ Identification mark ✓ Screw shaft, material S.M.O.H. Identification mark EB 3772 5/5/52
Identification marks on air receivers No 573 & 574 LLOYDS TEST 584 W.P. 356 lb. J.B.S. 18-12-52

Welded receivers, state Makers' Name New Holland & Wolff La Beepel
Is the flash point of the oil to be used over 150°F Yes
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with Yes
Description of fire extinguishing apparatus fitted Steam smothering, Minimax extinguishers, Air outlets fitted with fire flaps
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo Tanker 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 Yes If so, state name of vessel "Bollsta"

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 approved plans, & Secretary's Letter. Materials & workmanship
are good. The machinery has been efficiently installed on board the vessel, tried under
working conditions with satisfactory results.
The machinery is eligible in my opinion to be classed in the Register Book with the
record of L.M.C. 5/53. also notation of T.S.C.L. 5/53.

The amount of Entry Fee ... £ 277 - 153 10
Special ... £ : :
Donkey Boiler Fee... £ : :
Travelling Expenses (if any) £ : :
When applied for 19 JUN 1953
When received 19

E. Cranshaw
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 9 JUN 1953
Assigned + L.M.C. 5.53 Oil Engine
3 DB-180 lb.



© 2021

Lloyd's Register
Foundation