

be forwarded and a List of

No. 98187

Rpt. 4.

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

19 JAN 1940

Received at London Office JAN 22 1940

Date of writing 19 When handed in at Local Office 19 Port of Newcastle-on-Tyne

No. in Survey held at Wallsend on Tyne Date, First Survey 15.5.39 Last Survey 10-1-1940
 Reg. Book Suff. (Number of Visits 63)

38284 on the S.S. "BEECHWOOD" Tons Gross
 Built at Sunderland By whom built Sir J Laing & Sons Ltd Yard No. 727 When built

Engines made at Wallsend By whom made N.E. Marine Engls (1939) Ltd Engine No. 2940 When made 1940

Boilers made at Wallsend By whom made N.E. Marine Engls (1939) Ltd Boiler No. 2940 When made 1940

Registered Horse Power 365 Owners J.J. Jacobs & Co Ltd Port belonging to London

Nom. Horse Power as per Rule 365 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 Triple Expansion Revs. per minute 59

Dia. of Cylinders 23-38-65 Length of Stroke 42 No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals 12.81 Crank pin dia. 13 Crank webs 1-10" Mid. length thickness 8-8 3/8" shrunk Thickness parallel to axis 8-8 3/8"

Intermediate Shafts, diameter as per Rule 12.2 as fitted 12.12 Thrust shaft, diameter at collars as per Rule 12.81 as fitted 12

Tube Shafts, diameter as per Rule 12.7 as fitted 12.7 Is the tube shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 72 as fitted 75 Thickness between bushes as per Rule 53 as fitted 53 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 yes

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 yes Is an approved Oil Gland or other appliance fitted at the after end of the tube yes

shaft no If so, state type 5-0" Length of Bearing in Stern Bush next to and supporting propeller 5-0"

Propeller, dia. 18-0" Pitch 18-0" No. of Blades 4 Material bronze whether Moveable no Total Developed Surface 113.5 sq. feet

Can one be overhauled while the other is at work yes

Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/2 Stroke 1-10 1/2" Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/2 Stroke 1-10 1/2" Can one be overhauled while the other is at work yes

Feed Pumps { No. and size 2 @ 7 1/2" x 8" x 18" Main Bilge Line { No. and size 1 @ 9" x 11" x 10" 2 @ 3 1/2" How driven Steam Main Engine

Lubricating Oil Pumps, including Spare Pump, No. and size 2 @ 3 1/2"

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 2 @ 3" Eng Room 2 @ 3 1/2" Boiler Room In Holds, &c. 3" for Hold PWS 3 1/2" Main Hold PWS 2 1/2" Main Hold PWS

In Pump Room 3" aft Main hold PWS 3" well suction 3" nos hold PWS

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 7" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5" (Ballast Pump) 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 yes How are they protected yes

What pipes pass through the deep tanks yes 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 Top Platform

MAIN BOILERS, &c.—(Letter for record 3) Total Heating Surface of Boilers 5075 sq. ft. Working Pressure 220 lbs

Is Forced Draft fitted yes No. and Description of Boilers 2SB & 1 Aux SB

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? no If so, is a report now forwarded? yes

Is the donkey boiler intended to be used for domestic purposes only yes

PLANS. Are approved plans forwarded herewith for Shafting yes Main Boilers 22.5.39 Auxiliary Boilers 26.5.39 Donkey Boilers yes

Superheaters 21.6.39 General Pumping Arrangements 17.7.39 Oil fuel Burning Piping Arrangements yes

SPARE GEAR.

Has the spare gear required by the Rules been supplied yes including HP & MP poppet valve spares

State the principal additional spare gear supplied 1. Screw shaft complete 1 set of patent metallic packing

for LP Valve Rod. 1 set of patent rings for MP & LP pistons

2 Main bearing bolts & nuts. Valve lids for main & auxiliary cheeks, screws

7 blow down valves 1 Safety Valve Spring for main & aux boilers

C.I. Propeller Set of pads for thrust block

Sundry Spares for furnaces &c.

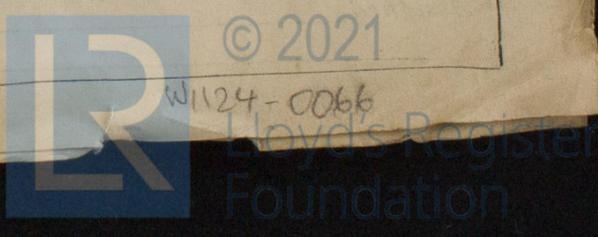
The foregoing is a correct description,
 THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.
John Neill Manufacturer.
 DIRECTOR & GENERAL MANAGER.

If not, state whether, and when, one will be sent

Is a Report also sent on the Hull of the Ship?

ENCLOSURE

1932 T. The words which do not apply should be deleted.



REPORT ON BOILERS

Rpt. 5a.

1939
 During progress of work in shops -- May 15. 16. June 2. 6. 13. July 6. 7. 19. 21. 25. 28. Aug. 4. 9. 15. 28. 29. Sep. 4. 8. 11. 18. 19.
 26. 27. 29. Oct. 2. 4. 6. 9. 10. 11. 13. 17. 18. 20. 23. 24. 25. 26. 27. 30. Nov. 2. 6. 7. 8. 9. 10.
 11. 13. 14. 15. 16. 20. 21. 22. 24. 27. 28. Dec. 6. 7. 8. 1940
 During erection on board vessel --- Jan. 10.
 Total No. of visits 63.

Dates of Examination of principal parts—Cylinders 17-10-39 Slides 25-10-39 Covers 25-10-39
 Pistons 25-10-39 Piston Rods 25-10-39 Connecting rods 25-10-39
 Crank shaft 9-8-39 Thrust shaft 19-7-39 Intermediate shafts 19-9-39
 Tube shaft ✓ Screw shaft 4-10-39 Propeller 2-11-39
 Stern tube 23-10-39 Engine and boiler seatings 27-11-39 Engines holding down bolts 27-11-39
 Completion of fitting sea connections 6-11-39
 Completion of pumping arrangements 10-1-40 Boilers fixed 27-11-39 Engines tried under steam 7-12-39
 Main boiler safety valves adjusted 6/7-12-39 Thickness of adjusting washers P 3/8 7/16 1/2 5/8 3/4 7/8 1 1 1/2 1 3/4 2 1/2 3 1/2 4 1/2 5 1/2 6 1/2 7 1/2 8 1/2 9 1/2 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
 Crank shaft material S Identification Mark RM 9-8-39 Thrust shaft material S Identification Mark 3150 AS 1.6.39
 Intermediate shafts, material S Identification Marks RM 19-9-39 Tube shaft, material ✓ Identification Mark RM 19-7-39
 Screw shaft, material S Identification Mark 3149 ~ 3151 AS Steam Pipes, material S Test pressure 660 Date of Test 13.14.20.21.24.27/11/39

Is an installation fitted for burning oil fuel No 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 Yes If so, have the requirements of the Rules been complied with Yes
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with Yes
 Is this machinery duplicate of a previous case. Yes If so, state name of vessel "Argyll" Rpt 98087

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The Machinery of this vessel has been made & installed under Special Survey in accordance with the approved Plans & the Requirements of the Rules.

The Materials & Workmanship are good & the machinery proved satisfactory under working conditions

The machinery is eligible in my opinion to have the Record + LMC 1-40 2SB (Spt) 7 1 Aux SB. F.D. C.L.

The amount of Entry Fee ... £ 5 : 0 : 0
 Special ... £ 79 : 15 : 0
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 19 JAN 1940
 When received, 23/1/40

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned + Lmb. 1.40
 2 S.B. (Spt) J.D. C.L.
 1 Aux. S.B.

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

No. in Sur Reg. Book. 38284
 Master
 Engines made
 Boilers made
 Nominal Horse
 MULTITU
 Manufacturers
 Total Heating
 No. and Descr
 Tested by hydr
 Area of Firegr
 Area of each s
 In case of donk
 Smallest distan
 Smallest distan
 Largest interna
 Thickness
 long, seams T.
 Percentage of st
 Percentage of st
 Thickness of but
 Material
 Length of plain
 Dimensions of st
 End plates in st
 How are stays s
 Tube plates: Ma
 Mean pitch of st
 Girders to comb
 at centre 11 3/4 x
 in each 3 2
 Tensile strength
 Pitch of stays to d
 Working pressure
 Thickness 15 1/16
 Pitch of stays at
 Working Pressure
 Diameter { At body of or Over threa
 Working pressure
 Diameter { At turned or Over threa

