

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 28 MAR 1935

Date of writing Report 26th March, 1935 When handed in at Local Office 26th March, 1935 Port of NEWCASTLE-ON-TYNENo. in Survey held at Newcastle-on-Tyne
Reg. Book.

Date, First Survey 19 Feb/1930

Last Survey 23 3. 1935

(Number of Visits 71.)

91068 on the STEEL S.S.

"ROXBURGH"

Built at Burntisland By whom built Burntisland L.B. Co. Ltd.

Yard No. 164

Tons Gross 4241
Net 2637

When built 1935.

Engines made at Wallsend-on-Tyne

By whom made North Eastern Mar. Eng. Co. Ltd.

Engine No. 2752

When made 1935

Boilers made at Wallsend-on-Tyne

By whom made North Eastern Mar. Eng. Co. Ltd.

Boiler No. 2752

When made 1935

Registered Horse Power

Owners B. J. Sutherland & Co. Ltd.

Port belonging to Newcastle-on-Tyne

Nom. Horse Power as per Rule 335

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

Revs. per minute 58

Dia. of Cylinders 22½"-37"-63"

Length of Stroke 45"

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals

as per Rule 12.7"

as fitted 13"

Crank webs

Mid. length breadth 22½"

shrunk

Thickness parallel to axis 8"

Intermediate Shafts, diameter

as per Rule 12.1"

as fitted 12 3/8"

Thrust shaft, diameter at collars

as per Rule 12.7"

as fitted 13"

Tube Shafts, diameter

as per Rule —

as fitted —

Screw Shaft, diameter

as per Rule 13.6"

as fitted 14 1/4"

Is the

tube screw shaft fitted with a continuous liner

Yes.

Bronze Liners, thickness in way of bushes

as per Rule 23/32"

as fitted 3/4"

Thickness between bushes

as per Rule 17/32"

as fitted 9/16"

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 fits full length

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 No

If so, state type —

Length of Bearing in Stern Bush next to and supporting propeller 4'-11"

Propeller, dia. 18'-2"

Pitch 18'-5"

No. of Blades 4

Material Bronze

whether Malleable No

Total Developed Surface 108.4 sq. feet

Feed Pumps worked from the Main Engines, No. Two

Diameter 3½"

Stroke 24"

Can one be overhauled while the other is at work Yes.

Bilge Pumps worked from the Main Engines, No. Two

Diameter 3½"

Stroke 24"

Can one be overhauled while the other is at work Yes.

Feed Pumps

No. and size

One 7'x6'x8" Dup. + One 6'x4'x6" Dup.

Pumps connected to the

No. and size

One 10'x12'x12" Duplex.

How driven

Steam

Main Bilge Line

How driven

Steam

Ballast Pumps, No. and size

One 10'x12'x12" Duplex

Lubricating Oil Pumps, including Spare Pump, No. and size

None

Are two independent means arranged for circulating water through the Oil Cooler

None

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room 4@2½" and 1@2½" to Tunnel Well.

In Pump Room

In Holds, &c. N°1 Hold 2@3"; N°2 Hold 2@3½"; N°3

Hold 2@3"; After Hold Well 1@3".

Main Water Circulating Pump Direct Bilge Suctions, No. and size

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size One @ 4½"

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 above & below.

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 No 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

worked from Upper deck.

MAIN BOILERS, &c.—(Letter for record S)

Total Heating Surface of Boilers 5445 sq. ft.

Is Forced Draft fitted No

No. and Description of Boilers Three Single Ended

Working Pressure 210 lbs./sq. in.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes.

IS A DONKEY BOILER FITTED? No

If so, is a report now forwarded? —

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

PLANS.

Are approved plans forwarded herewith for Shafting —

Main Boilers Yes

Auxiliary Boilers —

Donkey Boilers —

Superheaters —

(If not state date of approval)

General Pumping Arrangements Yes

Oil fuel Burning Piping Arrangements —

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes.

State the principal additional spare gear supplied One Cast Iron Propeller, one main feed check valve, spares for Poppet Valves etc.

The foregoing is a correct description.

Kempbell
SECRETARY.

Manufacturer.



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Lloyd's Register
Foundation

W1131-0164

1930
 Feb. 19. Mar. 28. Apr. 11. 14. 24. 25. May 16. 28. June 2. 4. 16. July 2. 3. 10. 14. 15. 17. 23. 24. 29. 31. Aug. 18.
 1931
 11. 15. 20. 21. 22. Sep. 1. 8. Oct. 3. 30. April 20. Aug. 12. Dec. 13. 14. 19. 20. 27. Jan. 4. 9. 10. 11. 14. 15. 16. 17. 18. 21. 23. 23.
 1934
 28. 29. 31. Feb. 4. 7. 8. 11. 14. 18. 21. 25. 27. 28. Mar. 4. 7. 11. 12. 14. 15. 23.
 1935

Dates of Survey while building
 During progress of work in shops --
 During erection on board vessel ---
 Total No. of visits 71.

Dates of Examination of principal parts—Cylinders 21.1.35 Slides 23.1.35 Covers 21.1.35
 Pistons 8.2.35 Piston Rods 8.2.35 Connecting rods 8.2.35
 Crank shaft 4.1.35 Thrust shaft 11.2.35 Intermediate shafts 11.2.35
 Tube shaft — Screw shaft 11.2.35 Propeller 11.2.35
 Stern tube 28.7.30 Engine and boiler seatings 8.1.35 (Lth.) Engines holding down bolts 12.3.35
 Completion of fitting sea connections 8.1.35 (Lth.)
 Completion of pumping arrangements 15.3.35 Boilers fixed 12.3.35 Engines tried under steam 23.3.35
 Main boiler safety valves adjusted 14.3.35 Thickness of adjusting washers P 5 1/16 S 5 1/16 C 1 1/32 S 9 3/32 P 1 1/32 S 4 1/32
 Crank shaft material Stal Identification Mark 2752WB.24.7/30 Thrust shaft material Stal Identification Mark 3499WB.28
 Intermediate shafts, material Stal Identification Mark (3482.3482. 3499.3499. Tube shaft, material — Identification Mark 10.1.35
 Screw shaft, material Stal Identification Mark 3499WB.24.7.30 Steam Pipes, material 40 Stal Test pressure 630 lbs/sq. in. Date of Test 7.3.35
 Is an installation fitted for burning oil fuel 20 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 — 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 20 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 Rules and Approved Plans; the materials and workmanship are good. The machinery has been satisfactorily installed in the vessel, examined under working conditions and found satisfactory and is eligible, in my opinion, for classification, and to have the record L.M.C. 3.35 - C.L. in the Register Book.

The amount of Entry Fee ... £ 5 : 0 : 0 When applied for, 27 MAR 1935
 Special ... £ 75 : 5 : 0
 Donkey Boiler Fee ... £ : : : When received, 29.3.35
 Travelling Expenses (if any) £ : : :
 Committee's Minute FRI. 5 APR 1935
 Assigned + L.M.C. 3.35
 Ch

A. B. Forster
 Engineer Surveyor to Lloyd's Register of Shipping.