

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

JAN 24 1940

Date of Copying Report 17TH JAN. 1940 When handed in at Local Office 18TH JAN. 1940 Port of GREENOCKNo. in Survey held at GREENOCK.
Reg. Book.Date, First Survey 10TH APRIL 1939. Last Survey 17TH JANUARY 1940
(Number of Visits 63.)

on the TEMPLE ARCH.

Tons { Gross 5138.19
Net 3039.37.
When built 1940-1

Built at PORT GLASGOW By whom built MESSRS. LITHGOWS LD.

Yard No. 929.

Engines made at GREENOCK

By whom made MESSRS. RANKIN & BLACKMORE LD.

Engine No. 462

When made 1940

Boilers made at

By whom made

Boiler No. 462.

When made 1940

Registered Horse Power

Owners TEMPLE. S. S. CO. LD.

Port belonging to LONDON.

Nom. Horse Power as per Rule 482.

Is Refrigerating Machinery fitted for cargo purposes No.

Is Electric Light fitted YES

Trade for which Vessel is intended

FOREIGN.

ENGINES, &c.—Description of Engines TRIPLE EXPANSION

Revs. per minute 75

Dia. of Cylinders 22½"-36"-65"

Length of Stroke 48"

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals

as per Rule 13.44"

as fitted 13.75"

Crank pin dia. 13.75"

Crank webs

Mid. length breadth 20½"

shrunk

Thickness parallel to axis 8½"

Intermediate Shafts, diameter

as per Rule

12.8"

as fitted

13.125"

Thrust shaft, diameter at collars

as per Rule

13.44"

as fitted

13.75"

Tube Shafts, diameter

as per Rule

Screw Shaft, diameter

as per Rule

14.32"

as fitted

14.75"

Is the { tube } shaft fitted with a continuous liner {

Yes.

Bronze Liners, thickness in way of bushes

as per Rule

.736"

as fitted

.75"

Thickness between bushes

as per Rule

.552"

as fitted

.625"

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

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

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 59.5"

Propeller, dia. 18-3"

Pitch 17-3"(MAX)

No. of Blades 4

Material BRONZE.

whether Moveable No.

Total Developed Surface 108 sq. feet

Feed Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work YES

Feed Pumps { No. and size

3(7"-9.5"x21")

(6"-4.5"x6")

(8"-5"x8")

Pumps connected to the

No. and size

ONE. 9"-12" x 12".

How driven

STEAM.

Main Bilge Line

How driven

STEAM.

Ballast Pumps, No. and size ONE. 9"-12" x 12"

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

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

ONE. 2½" E.R. STARD.

2.-2½" E.R. PORT.

In Holds, &c.

No. 1 2-3" DIA.

No. 2. 2-3½" DIA.

CROSS BUNKER. 2-2½" DIA.

In Pump Room

TUNNEL. ONE. 2" DIA.

No. 3. 2-3" DIA.

No. 4. 2-3" DIA.

TUNNEL WELL. ONE-2½" DIA.

Main Water Circulating Pump Direct Bilge Suctions, No. and size ONE. 8½" DIA.

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size ONE. 4.¾" 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.

MAIN. BELOW

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 OTHERS 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 BILGE SUCTIONS

How are they protected WOOD CASING

What pipes pass through the deep tanks

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

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 E.R. PLATFORM.

MAIN BOILERS, &c.—(Letter for record 5.)

Total Heating Surface of Boilers (MAIN. 5508. AUXLY. 1576) TOTAL. 7084 sq. ft.

Which Boilers are fitted with Forced Draft 2 MAIN & AUXLY.

Which Boilers are fitted with Superheaters 2 MAIN.

No. and Description of Boilers 2 MAIN & ONE AUXLY. SINGLE. ENDED

Working Pressure

230 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?

Can the donkey boiler be used for domestic purposes only

PLANS. Are approved plans forwarded herewith for Shafting YES.

Main Boilers YES.

Auxiliary Boilers YES.

Donkey Boilers

(If not state date of approval)

Superheaters N.E.M. APPROVED TYPE.

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 PROPELLER SHAFT. FITTED WITH. CONTINUOUS LINER.

MARK ON SHAFT.

No 8745

M.C. 6.12.39.

The foregoing is a correct description.
RANKIN & BLACKMORE, LTD.,

Managing Director.

Manufacturer.



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Lloyd's Register
Foundation

004430-004458-0102

(1939) APRIL 10. 13. MAY 5. 10. 12. 14. 23. 26. 31. JUNE 2. 6. 9. 13. 15. 19. 22. 26. JULY 12. 14. 20. 24. 31. AUGUST 2. 4. 11. 14. 15. 17. 24. 29. 31. SEPT 5. 12. 13. 18. 28. OCT 6. 12. 14. 24. 31. NOV. 10. 15. 17. 22. 24. 28. 29. 30. DEC. 1. 6. 12. 15. 18. 19. 22. 26. 29.

(1940) JAN. 9. 10. 12. 14.

Dates of Survey while building

During progress of work in shops - -

During erection on board vessel - - -

Total No. of visits 63

Dates of Examination of principal parts—Cylinders HP. 8.4.39 MP. 20.7.39 Slides 12.9.39. Covers 13.9.39.

Pistons 29.8.39. Piston Rods 31.8.39. Connecting rods 31.8.39.

Crank shaft 4.8.39 Thrust shaft 31.8.39. Intermediate shafts 6.10.39.

Tube shaft / Screw shaft 13.11.39. Propeller 13.11.39.

Stern tube 10.11.39 Engine and boiler seatings 27.11.39 Engines holding down bolts 12.12.39.

Completion of fitting sea connections 27/11/39.

Completion of pumping arrangements 17/1/40 Boilers fixed 6.12.39 Engines tried under steam 29.12.39.

Main boiler safety valves adjusted 29.12.39 Thickness of adjusting washers Port S. 11/32" Supht. 3/8" STAR P S 3/8" Supht. 11/32" Auxly S 3/8" No 8745

Crank shaft material S.M. STEEL. Identification Mark M.C. 4.8.39. Thrust shaft material S.M. STEEL. Identification Mark M.C. 31.8.39.

Intermediate shafts, material S.M. STEEL. Identification Marks No 8604 M.C. 6.10.39 Tube shaft, material / Identification Mark /

Screw shaft, material S.M. STEEL. Identification Mark M.C. 13.11.39 Steam Pipes, material S.D. STEEL. Test pressure 690 lb/sq. in. Date of Test 14.11.39 to 27.12.39.

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 No

Is this machinery duplicate of a previous case YES If so, state name of vessel DORNOCH. Glasgow

General Remarks (State quality of workmanship, opinions as to class, &c. These engines and boilers have been built under Special Survey, in accordance with the approved plans. The materials and workmanship are good. They have now been securely fitted in the Vessel, tried under steam and found satisfactory.

The machinery is eligible, in my opinion, for the record of:-

✱ L.M.C. 1.40. T.S.-C.L. and the Notation of 2.S.B.(Spt) and one Auxly.

The amount of Entry Fee ... £ 5 : 0 : When applied for,

Special ... £ 97 : 6 : 1940 JAN 19 1940.

Donkey Boiler Fee ... £ : : When received,

Travelling Expenses (if any) £ : : 7/2/ 1940.

Committee's Minute GLASGOW 23 JAN 1940

Assigned -/- Linc 1.40

2 SB (Spt) 1 Auxly

M. Caldwell.

Engineer Surveyor to Lloyd's Register of Shipping.