

No. 31976

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

10 DEC 1936

Received at London Office

Date of writing Report

19

When handed in at Local Office

4 DEC. 1936

Port of

SUNDERLAND.

No. in Survey held at
Reg. Book

SUNDERLAND.

Date, First Survey

1st Sept.

Last Survey

28th Nov 1936

(Number of Visits

52)

Gross 1096

Tons

Net 577

on the

CORHEATH

Yard No. 341

When built 1936

Built at

Sunderland

By whom built

S. P. Austin & Sons Ltd

Engine No. 2858

When made 1936

Engines made at

Sunderland

By whom made North Eastern Marine Eng. Co. Ltd

Boiler No. 2858

When made 1936

Boilers made at

Sunderland

By whom made North Eastern Marine Eng. Co. Ltd

Registered Horse Power

Owners E. & J. Colliers Ltd

Port belonging to London

Nom. Horse Power as per Rule

131

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, poppet valves H.P. & I.P. Revs. per minute
 Dia. of Cylinders 14 1/2", 24", 41" Length of Stroke 30" No. of Cylinders 3 No. of Cranks 3
 Crank shaft, dia. of journals as per Rule 8 1/2" Crank pin dia. 8 3/4" Crank webs Mid. length breadth shrunk Thickness parallel to axis 5 1/8" & 6 1/2" (H.P.)
 as fitted 8 3/4" Mid. length thickness as per Rule 8 1/2" Thickness around eye-hole 4 5/8" shaft
 as fitted 8 3/4" as fitted 8 3/4" 4 7/8" pin.

Intermediate Shafts, diameter

as per Rule

8.02.

Thrust shaft, diameter at collars

as per Rule

8 3/4"

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

8.96"

Is the

{ tube }

screw

shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes

as per Rule

5.69"

Thickness between bushes

as fitted

5.8"

Is the after end of the liner made watertight in the

propeller boss

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

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

yes

If so, state type

Humboldt gland

Length of Bearing in Stern Bush next to and supporting propeller 3' 1"

Propeller, dia. 11' 3" Pitch 11' 23" No. of Blades 4 Material C.I. Whether Moveable not

Total Developed Surface 46.5 sq. feet

Feed Pumps worked from the Main Engines, No. 2

Via meter

3"

Stroke 1' 3"

Can one be overhauled while the other is at work

yes

Bilge Pumps worked from the Main Engines, No. 2

Di. meter

3"

Stroke 1' 3"

Can one be overhauled while the other is at work

yes

Feed Pumps

No. and size

Two 8' x 6' x 15"

How driven

steam

Pumps connected to the

Main Bilge Line

No. and size

one 9 1/2" x 11" x 18"

How driven

steam

Ballast Pumps, No. and size

one 9 1/2" x 11" x 18"

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

one 3" dia. B.R.

Suctions, connected to both Main Bilge Pumps and Auxiliary

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

yes

In Engine and Boiler Room

one 2 1/2" dia. S.R.

In Holds, &c.

2 1/2" dia. one port, one starboard in each hold.

In Pump Room

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

one 4" dia.

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

one 3 1/2" dia.

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

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

Are all Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

What Pipes pass through the bunkers

How are they protected

Have they been tested as per Rule

What pipes pass through the deep tanks

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

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

MAIN BOILERS, &c.—(Letter for record)

Total Heating Surface of Boilers 2254 sq. ft.

Working Pressure 220 lbs.

Is Forced Draft fitted

No. and Description of Boilers one, cylindrical multibubble

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

If so, is a report now forwarded?

IS A DONKEY BOILER FITTED?

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

PLANS. Are approved plans forwarded herewith for Shafting 24/7/36

Main Boilers

Auxiliary Boilers

Donkey Boilers

Superheaters

General Pumping Arrangements

Oil fuel Burning Piping Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

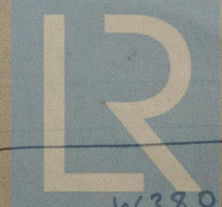
State the principal additional spare gear supplied

One C.I. Propeller, 3 roller bars, 2 long axle carriers, 2 working gear brackets, 20 bridge segments, 20% total number of

joining rings for segments, 10% total number steel flanges, 5% total number studs & nuts, 2% ditto clamps.

The foregoing is a correct description
FOR THE NORTH EASTERN MARINE ENGINEERING CO. LTDArchib. J. Berry
MANAGER

Manufacturer.



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Lloyd's Register
Foundation

W380-0012

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Dates of Survey while building
During progress of work in shops -- 1936. Sep. 1, 8, 15, 18, 21, 24, 25, 26, 28, 29, 30. Oct. 1, 5, 7, 8, 9, 13, 15, 16, 19, 20, 21, 22, 23, 24, 26, 27, 30, 31. Nov. 2, 3, 4, 5, 6, 7, 9, 10, 12, 13, 16, 17, 18, 19, 20, 21, 23, 24, 25, 27, 28
During erection on board vessel --
Total No. of visits 52

Dates of Examination of principal parts—Cylinders 20/10/36 Slides 3/11/36 Pistons 14/11/36 Covers 7/11/36
Pistons 29/10/36 Piston Rods 24/10/36 Connecting rods 5/11/36
Crank shaft 27/10/36 Thrust shaft 27/10/36 Intermediate shafts
Tube shaft Screw shaft 27/10/36 Propeller 2/11/36
Stern tube 23/10/36 Engine and boiler seatings 15/10/36 Engines holding down bolts 25/11/36
Completion of fitting sea connections 24/10/36
Completion of pumping arrangements 27/11/36 Boilers fixed 25/11/36 Engines tried under steam 25/11/36
Main boiler safety valves adjusted 25/11/36 Thickness of adjusting washers 7/16" both 4 1/4" Superheater
Crank shaft material Identification Mark 8989 Thrust shaft material Identification Mark 9009
Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark
Screw shaft, material Identification Mark 9009 Steam Pipes, material Test pressure 660 lbs. Date of Test 20/11/36
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 If so, state name of vessel
General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been constructed under special survey in accordance with the approved plans, Secretary's letters and the requirements of the Rules. Workmanship and materials are good.

The machinery has been efficiently installed and tried under steam and is, in our opinion, eligible for the

NOTATION + L.M.C. 11.36. C.L.

L.R. Home

F. L. L. L.

Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 3 : : When applied for, 4 DEC. 1936
Special ... £ 32 : 15 : :
Donkey Boiler Fee ... £ : : :
Travelling Expenses (if any) £ : : : 11.12.36

Committee's Minute FRI. 18 DEC 1936

Assigned + LMC 12.36
(Spt) CL. OG.



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