

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Received at London Office

29 OCT 1936

Date of writing Report

19

When handed in at Local Office

28 OCT. 1936

Port of

Sunderland

No. in Survey held at

Sunderland

Date, First Survey

8th June

Last Survey

22 Oct 1936

Reg. Book

on the

"NORTHWOOD"

(Number of Visits 50)

Tons } Gross
Net

Built at

Burntisland

By whom built

Burntisland S.S. Cold

Yard No.

202

When built

1936

Engines made at

Sunderland

By whom made

The North Eastern Marine Engineering Co. Ltd.

Engine No.

2835

When made

1936

Boilers made at

Sunderland

By whom made

The North Eastern Marine Engineering Co. Ltd.

Boiler No.

2835

When made

1936

Registered Horse Power

Owners

J. Constable S.S. Line Ltd

Port belonging to

Middlebrook

Nom. Horse Power as per Rule

101

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

No.

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines

Triple Expansion (H.P. poppet valves)

Revs. per minute

97 1/2

Dia. of Cylinders

13 x 21 x 36

Length of Stroke

27"

No. of Cylinders

3

No. of Cranks

3

Crank shaft, d.a. of journals

as per Rule

7 3/8"

Crank pin dia.

7 1/8"

Crank webs

Mid. length breadth

13"

Thickness parallel to axis

4 3/16"

Intermediate Shafts, diameter

as per Rule

as fitted

6.955"

Thrust shaft, diameter at collars

as per Rule

as fitted

7.3"

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

7.88"

Is the

tube

screw

shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes

as per Rule

as fitted

535"

Thickness between bushes

as per Rule

as fitted

401"

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

shut

No

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller

2' 10"

Propeller, dia.

11' 2"

Pitch

10.2

No. of Blades

4

Material

C.I.

whether Movable

No

Total Developed Surface

49 sq. feet

Feed Pumps worked from the Main Engines, No.

2

Diameter

2 1/4"

Stroke

15"

Can one be overhauled while the other is at work

Yes

Bilge Pumps worked from the Main Engines, No.

2

Diameter

2 1/4"

Stroke

15"

Can one be overhauled while the other is at work

Yes

Feed Pumps

No. and size

2 - 6" x 4" x 6"

How driven

Steam

Pumps connected to the

No. and size

One

8" x 9" x 8"

Main Bilge Line

How driven

Steam

Ballast Pumps, No. and size

One 8" x 9" x 8"

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

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

Bi-ge Pumps;—In Engine and Boiler Room

One 2 1/2" E.R.

In Holds, &c.

2 - 2" Jow Hold

In Pump Room

2 - 3" Jow Hold

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

One 3"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

One 3"

Are all the Bilge Suction Pipes in holds and turn l 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

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

See Link Report

How are they protected

Wood covering

What pipes pass through the 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

None

Is it fitted with a watertight door

worked from

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

Total Heating Surface of Boilers

1871 sq. ft.

Is Forced Draft fitted

No

No. and Description of Boilers

One Cylindrical Multitubular

Working Pressure

200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

Yes

IS A DONKEY BOILER FITTED?

Yes

If so, is a report now forwarded?

Yes

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

No

PLANS. Are approved plans forwarded herewith for Shafting

(If no, state date of approval)

Superheaters

Hvoacelle

General Pumping Arrangements

Retained for present use

Auxiliary Boilers

Donkey Boilers

Retained for present use

Oil fuel Burning Piping Arrangements

Retained for present use

SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

one cast iron propeller

The foregoing is a correct description,

FOR THE NORTH EASTERN MARINE ENGINEERING

Manufacturer.

Archd. J. Berry.

MANAGER



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Lloyd's Register Foundation

003788 - 003799 0122

Dates
of Survey
while
building

During progress of
work in shops - -

During erection on
board vessel - -

Total No. of visits

1936 June 8, 9, 11, 19 July 3, 9, 13, 16 Aug 4, 5, 6, 7, 11, 12, 14, 17, 19, 21, 24, 25, 27, 28, 31 Sep 1,
4, 8, 9, 10, 15, 16, 17, 18, 21, 22, 24, 26, 28, 29, 30 Oct 1, 5, 6, 7, 8, 9, 13, 14, 19, 20, 22

Dates of Examination of principal parts—Cylinders 4/15/36

Slides 2/9/36 Pistons 30/9/36 Covers 18/9/36

Pistons

18/9/36

Piston Rods

2/8/36

Connecting rods

21/8/36

Crank shaft

18/9/36

Thrust shaft

18/9/36

Intermediate shafts

✓

Tube shaft

✓

Screw shaft

4/9/36

Propeller

21/9/36

Stern tube

30/8/36

Engine and boiler seatings

28/9/36

Engines holding down bolts

14/10/36

Completion of fitting sea connections *in full Rpt.*

Completion of pumping arrangements 20/10/36

Boilers fixed

13/10/36

Engines tried under steam

19/10/36

Main boiler safety valves adjusted 19/10/36

Thickness of adjusting washers

5/16" Port, 3/8" Starboard, 1/4" Super Keel

Crank shaft material

S. A. Steel

Identification Mark

8829

Thrust shaft material

S. A. Steel

Identification Mark

8846

Intermediate shafts, material

✓

Identification Marks

✓

Tube shaft, material

✓

Identification Mark

✓

Screw shaft, material

S. A. Steel

Identification Mark

8846

Steam Pipes, material

S. A. Steel

Test pressure

600 lb/sq in

Date of Test

9/10/36

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

not

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.)

The machinery of this vessel has been constructed under Special Survey, in accordance with approved plans and the Secretary's letters and the requirements of the Rules. Workmanship and materials are good.

The machinery has been securely fitted on board and tried under steam with satisfactory results and is eligible, in our opinion, for the notation

+ L.M.C. 10.36., T.B. Cl.

The amount of Entry Fee ... £ 3 : : When applied for,
Special ... £ 15 : 5 : 19
Donkey Boiler Fee ... £ : : :
Travelling Expenses (if any) £ : : :
31.10.36 2/11

M. Caldwell I.R. Home
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 3 NOV 1936

Assigned

+ L.M.C. 10.36

CL



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