

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

10 JAN 1930

Date of writing Report

When handed in at Local Office

8/1/ 1930 Port of

NEWCASTLE-ON-TYNE

No. in Survey held at

Kallsend-on-Tyne

Date, First Survey

26 Feb/1929 Last Survey

Jan 6th 1930

Reg. Book.

(Number of Visits 61)

on the New Steel S.S. "Wearwood"

Gross 4578 Tons

Net 2795 Tons

built at Willington Quay. By whom built Northumberland & B. Co. (1929) Ltd. Yard No. H12.

When built 1929/30.

Engines made at Kallsend-on-Tyne By whom made North Eastern Marine & Co. Ltd. Engine No. 2695

when made 1930

Boilers made at Kallsend-on-Tyne By whom made North Eastern Marine & Co. Ltd. Boiler No. 2695

when made 1930

Registered Horse Power

Owners

Port belonging to

Com. Horse Power as per Rule

H32.

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

yes.

Trade for which Vessel is intended Ocean going, General cargo.

ENGINES, &c.—Description of Engines Triple expansion

Revs. per minute 62.

Dia. of Cylinders 24 x 39 x 66 Length of Stroke 45

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals as per Rule 13.07"

as fitted 13.07"

Crank pin dia. 13.38"

Mid. length breadth 23"

Thickness parallel to axis 8 3/16"

as fitted 13.07"

as fitted 13.07"

Mid. length thickness 8.36"

shrunken

Thickness around eye-hole 8 3/16"

Intermediate Shafts, diameter as per Rule 12.4"

as fitted 12.5/8"

Thrust shaft, diameter at collars as per Rule 13.07"

as fitted 13.3/8"

Tube Shafts, diameter as per Rule

as fitted

Screw Shaft, diameter as per Rule

as fitted 14"

Is the tube shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes as per Rule

as fitted 1/8"

Thickness between bushes as per Rule

as fitted 6/16"

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

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 shaft

no

Length of Bearing in Stern Bush next to and supporting propeller

4'-9"

Propeller, dia. 14'-9"

Pitch 14'-3"

No. of Blades 4

Material Iron

whether Moveable

no

Total Developed Surface 100 sq. feet

Feed Pumps worked from the Main Engines, No. 2

Diameter 3 1/2"

Stroke 24"

Can one be overhauled while the other is at work

yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 24"

Can one be overhauled while the other is at work

yes

Feed Pumps No. and size 1 @ 9 1/2" x 12 1/2" x 12"

How driven Steam

Pumps connected to the

Main Bilge Line

No. and size 2 as above

How driven Main Engines

Ballast Pumps, No. and size 1 @ 10 1/2" x 12 1/2" x 21"

How driven Steam

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

2 as above

How driven Main Engines

Steam

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

4 @ 3" dia.

No. 1 2 @ 3"

No. 2 2 @ 3"

No. 3 2 @ 3"

No. 4 2 @ 3"

In Holds, &c. Tunnel well 1 @ 7 1/2"

No. 1 2 @ 3"

No. 2 2 @ 3"

No. 3 2 @ 3"

No. 4 2 @ 3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 10"

No. and size 1 @ 10"

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

yes

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 @ 10"

No. and size 1 @ 10"

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

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

yes

Are they fitted with Valves or Cocks

both

Are the Overboard Discharges above or below the deep water line

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

yes

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

yes

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

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

yes

How are they protected

wood cased

Have they been tested as per Rule

What Pipes pass through the bunkers

Bilge suction

How

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

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

yes

Is the Shaft Tunnel watertight

yes

Is it fitted with a watertight door

What Pipes pass through the deep tanks

none

Have they been tested as per Rule

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1929 Feb. 26 Mar. 11, 12. Apr. 3, 12, 18, 23, 24, 30. May 2, 8, 10, 15, 17, 24, 28, 29, 30, 31. June 5, 11.
 During progress of work in shops - - -
 12, 20. July 2, 9, 18, 19, 25. Aug. 2, 8, 22, 26, 27, 30. Sep. 10, 13, 16, 17, 20, 23, 25, 26, 30. Oct. 1, 3.
 8, 11, 16, 21, 25, 28. Nov. 13, 18, 26. Dec. 5, 6, 10, 20. Jan. 4, 6.
 1930
 During erection on board vessel - - -
 Total No. of visits 61.

Dates of Examination of principal parts—Cylinders 10-9-29 Slides 26-9-29 Covers 5-9-29
 Pistons 5-9-29 Piston Rods 4-10-29 Connecting rods 4-10-29
 Crank shaft 30-8-29 Thrust shaft 30-8-29 Intermediate shafts 21-10-29
 Tube shaft ✓ Screw shaft 18-11-29 Propeller 11-10-29
 Stern tube 13-9-29 Engine and boiler seatings 13-11-29 Engines holding down bolts 5-12-29
 Completion of fitting sea connections 13-11-29
 Completion of pumping arrangements 20-12-29 Boilers fixed 5-12-29 Engines tried under steam 10-12-29
 Main boiler safety valves adjusted 10-12-29 Thickness of adjusting washers PA 13 3/8", SA 3 1/8" P 15 1/2" Suprs P 1 1/2", S 3/8". Aux B 3/8" both
 Crank shaft material O.K. Steel Identification Mark 2695 WP. Thrust shaft material O.K. Steel Identification Mark 2865 W
 Intermediate shafts, material O.K. Steel Identification Marks 2865 WP Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material O.K. Steel Identification Mark 2865 WP Steam Pipes, material S.D. Steel Test pressure 65 lbs. Date of Test 13-9-29
 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 carrying and burning oil fuel been complied with ✓
 Is this machinery duplicate of a previous case No 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. Materials & workmanship good. Hydraulic tests satisfactory. The whole of the machinery has been efficiently installed & fixed in the vessel & has been tried under steam & found to be in good & safe working condition & eligible in my opinion to be classed & have records + L.M.C. 1-30. Tail Shaft C.L. & E. It in the Register Books.

It is submitted that
 this vessel is eligible for
 THE RECORD. + L.M.C. 1-30 2SB(F.D.)
 1 Aug 8.
 CL.
 15/1/30.

The amount of Entry Fee ... £ 5 : 0 0
 Special ... £ 89 : 16 0
 Donkey Boiler Fee ... £ ✓ :
 Travelling Expenses (if any) £ ✓ :
 When applied for, ED JAN 1930
 When received, 13.1.30

William Butts.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI, 17 JAN 1930
 Assigned + L.M.C. 1-30 CL.
 J.D.

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