

# 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

Hallsend-on-Tyne

Date, First Survey

26 Feb/1929

Last Survey

Jan 6<sup>th</sup> 1930

Reg. Book.

(Number of Visits 61)

on the **New Steel S.S. "Wearwood"**

Tons } Gross 4598  
Net 2795

built at

Widlington Quay

By whom built Northumberland & B Coy (1929) Ltd. Yard No. H12.

When built 1929/30

Engines made at

Hallsend-on-Tyne

By whom made North Eastern M.E. & S. Co. Ltd.

Engine No. 2695

when made 1930

Boilers made at

Hallsend-on-Tyne

By whom made North Eastern M.E. & S. Co. Ltd.

Boiler No. 2695

when made 1930

Registered Horse Power

Owners

Port belonging to

nom. 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**

No. of Cylinders

2H x 39 x 66

Length of Stroke **H5**

No. of Cranks

3

No. of Cranks

3

Crank shaft, dia. of journals

as per Rule 13.07"  
as fitted 13.18"

Crank pin dia. **13.38"**

Crank webs

Mid. length breadth **23"**  
Mid. length thickness **8.36"** shrunk

Thickness parallel to axis **8.316"**  
Thickness around eye-hole **8.316"**

Intermediate Shafts, diameter

as per Rule 12.4"  
as fitted 12.58"

Thrust shaft, diameter at collars

as per Rule 13.07"  
as fitted 13.318"

Tube Shafts, diameter

as per Rule  
as fitted

Screw Shaft, diameter

as per Rule 13.658"  
as fitted 14"

Is the <sup>tube</sup> screw shaft fitted with a continuous liner **Yes**

Bronze Liners, thickness in way of bushes

as per Rule 1.22"  
as fitted 1.3"

Thickness between bushes

as per Rule 5K1  
as fitted 66

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 **2 1/2"**

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

Bilge Pumps worked from the Main Engines, No.

**2**

Diameter **4"**

Stroke **2 1/2"**

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 21"**

How driven **Steam**

Pumps connected to the

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"**

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

**1 @ 10 1/2" x 12 1/2" x 21"**

How driven **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.**

In Holds, &c.

**No 1 2 @ 3";**

**No 2 2 @ 3 1/2";**

**No 3 2 @ 3";**

**No 4 2 @ 3";**

Tunnel well **1 @ 2 1/2"**

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

**1 @ 10"**

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size

**1 @ 4 1/2"**

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 laid 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 **main below 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 suction**

How are they protected **wood cased**

What pipes pass through the deep tanks

**wire**

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 **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 **top platform**

## MAIN BOILERS, &c.

(Letter for record **S**) Total Heating Surface of Boilers

**6619 (total)**

Is Forced Draft fitted

**Yes**

No. and Description of Boilers

**2 Main 1 Aux. S.E.**

Working Pressure **200 lbs**

IS A REPORT ON MAIN BOILERS NOW FORWARDED? **Yes**

**2 SB. 1 Amt**

IS A DONKEY BOILER FITTED? **No**

If so, is a report now forwarded? **Yes**

## PLANS.

Are approved plans forwarded herewith for Shafting **No**

Main Boilers **Yes**

Auxiliary Boilers **Yes**

Donkey Boilers **Yes**

Superheaters **Standard**

General Pumping Arrangements **Yes**

Oil fuel Burning Piping Arrangements **Yes**

## SPARE GEAR.

State the articles supplied:— **Two each bolts + nuts for top + bottom ends + main bearings, 1 set coupling bolts, 1 tail shaft, 1 C.I. propeller, set of feed bilge pp valves, 1/2 set springs for L.P. piston, 12 piston bolts, 1 set aux feed pump valves, 1 set ballast pp valves, 100 bolts + nuts assorted, 1 set H.P. valve pump + springs, quantity of iron plates + bars.**

THE NORTH EASTERN MARINE ENGINEERING CO., LTD.  
The foregoing is a correct description.

*W. Campbell Allen*  
SECRETARY.

Manufacturer.



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Lloyd's Register

010369-010377-0307

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.  
 Dates of Survey while building }  
 During erection on board vessel - - - }  
 8. 11. 16. 21. 25. 28. Nov. 13. 18. 26. Dec. 5. 6. 10. 20. Jan. 4. 6. 1930  
 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 20-8-29 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 19-11-29 Engines holding down bolts 5-12-29  
 Completion of fitting sea connections 19-11-29  
 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 P<sub>1</sub> 1/8" S<sub>1</sub> 3/16" P<sub>2</sub> 1/8" S<sub>2</sub> 1/16" P<sub>3</sub> 1/8" S<sub>3</sub> 1/16" Aux B 3/32" Noth  
 Crank shaft material O.K. Steel Identification Mark 2695 W.B. Thrust shaft material O.K. Steel Identification Mark 2865 W  
 Intermediate shafts, material O.K. Steel Identification Marks 2865 W.B. Tube shaft, material ✓ Identification Mark ✓  
 Screw shaft, material O.K. Steel Identification Mark 2865 W.B. 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 + dmb 1.30 25B(FD) 1AmB.  
 CL.  
 J. B. 157/30.

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 + dmb. 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.