

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

14 JUL 1928

Date of writing Report 12-7-1928 When handed in at Local Office 15 Port of London

No. in Survey held at London Date, First Survey 11-5-28 Last Survey 10-7-1928  
 Reg. Book. S.S. "WATFORD" (Number of Visits 5)

Built at London By whom built Calidon S.B. & E. Co. Ltd. Yard No. 322 Tons Gross   
Net   
 Engines made at Walsland By whom made North Eastern Marine E. Co. Engine No.  When built 1928  
 Boilers made at do By whom made do Boiler No.  when made

Registered Horse Power  Owners Thos. Watts, Watts & Co. Ltd. Port belonging to

Nom. Horse Power as per Rule  Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted

Trade for which Vessel is intended

## ENGINES, &c.—Description of Engines

Dia. of Cylinders  Length of Stroke  No. of Cylinders  Revs. per minute   
 No. of Cranks

Crank shaft, dia. of journals  as per Rule  Crank pin dia.  Crank webs  Mid. length breadth  Thickness parallel to axis   
 as fitted  Mid. length thickness  shrunk  Thickness around eye-hole

Intermediate Shafts, diameter  as per Rule  Thrust shaft, diameter at collars  as per Rule   
 as fitted  as fitted

Tube Shafts, diameter  as per Rule  Screw Shaft, diameter  as per Rule  Is the  tube  shaft fitted with a continuous liner   
 as fitted  as fitted

Bronze Liners, thickness in way of bushes  as per Rule  Thickness between bushes  as per Rule  Is the after end of the liner made watertight in the  
 as fitted  as fitted  propeller boss

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

Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia.  Pitch  No. of Blades  Material  whether Movable  Total Developed Surface  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

Feed Pumps  No. and size  Pumps connected to the  No. and size   
 How driven  Main Bilge Line  How driven

Ballast Pumps, No. and size  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

In Holds, &c. N<sup>o</sup> 1. 2-3", N<sup>o</sup> 2. 2-3 1/2", N<sup>o</sup> 3. 2-3", N<sup>o</sup> 4. 2-3"

Main Water Circulating Pump Direct Bilge Suctions, No. and size  Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size  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

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

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  worked from Upper Deck

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

Total Heating Surface of Boilers

Is Forced Draft fitted  No. and Description of Boilers  Working Pressure

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

IS A DONKEY BOILER FITTED?  If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting  Main Boilers  Auxiliary Boilers  Donkey Boilers   
 (If not state date of approval)

Superheaters  General Pumping Arrangements  Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.



© 2021

Lloyd's Register  
Foundation

W695-01133

25188-011

During progress of work in shops - - }  
 Dates of Survey while building } 1928. MAY. 11. 22. ~~27~~. JUNE 27. JULY 6, 10.  
 During erection on board vessel - - - }  
 Total No. of visits 5.

Dates of Examination of principal parts—Cylinders Slides Covers

Pistons Piston Rods Connecting rods

Crank shaft Thrust shaft Intermediate shafts

Tube shaft Screw shaft Propeller

Stern tube fitted. 22-5-28. Engine and boiler seatings 27-6-28. Engines holding down bolts

Completion of fitting sea connections 22-5-28.

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Crank shaft material Identification Mark Thrust shaft material Identification Mark

Intermediate shafts, material Identification Marks Tube shaft, material Identification Mark

Screw shaft, material Identification Mark Steam Pipes, material Test pressure Date of Test

Is an installation fitted for burning oil fuel 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 If so, state name of vessel

**General Remarks** (State quality of workmanship, opinions as to class, &c.)

For the information of the Committee.  
 This vessel has proceeded to the Tyne where the machinery is to be fitted on board and the vessel completed.  
 The Newcastle Surveyors have been notified

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

The amount of Entry Fee ... £	:	:	When applied for,
Special ... .. £	:	:	19
Donkey Boiler Fee ... £	:	:	When received,
Travelling Expenses (if any) £	:	:	19

*J. J. J. J.*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 24 AUG 1928

Assigned *See Minute on June Rpt 83126 attached*