

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

2 JUL 1930

Date of writing Report 21 June 1930 When handed in at Local Office

Port of West Hartlepool

No. in Survey held at West Hartlepool

Date, First Survey 11 Febry

Last Survey 26 June 1930

Reg. Book.

Supp. on the

SS "THETIS"

(Number of Visits 60)

Gross 4160

Net 2580

When built 1930

Built at Sunderland By whom built Wm Gray & Co Ltd

Yard No. 1037

Engines made at West Hartlepool By whom made Central Marine

Engine No. 1037 when made 1930

Boilers made at ditto By whom made Engine Works

Boiler No. 1037 when made 1930

Registered Horse Power

Owners E. Hadjilias.

Port belonging to Syria

Nom. Horse Power as per Rule 435.

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

Trade for which Vessel is intended Ocean going

ENGINES, &c.—Description of Engines

Dia. of Cylinders 24½-41-68" Length of Stroke 48" No. of Cylinders 3

Revs. per minute 65

Crank shaft, dia. of journals as per Rule 13.505 as fitted 13¾" Crank pin dia. 13¾" Crank webs

Mid. length breadth 19¾"

No. of Cranks 3 8½"

Mid. length thickness 8½"

Thickness parallel to axis 8½"

Thickness around eye-hole 6"

Intermediate Shafts, diameter as per Rule 12.86 as fitted 13"

Thrust shaft, diameter at collars as per Rule 13.505 as fitted 13¾"

Tube Shafts, diameter as per Rule as fitted

Screw Shaft, diameter as per Rule 14.32" as fitted 14¾"

Is the tube screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 7.42 as fitted ¾"

Thickness between bushes as per Rule 5.77 as fitted 7/16"

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

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 no

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 60½"

Propeller, dia. 17-6" Pitch 18-0" No. of Blades 4 Material Bronze whether Moveable no

Total Developed Surface 99 sq. feet

Feed Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 28"

Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 28"

Can one be overhauled while the other is at work yes

Feed Pumps (No. and size 2.9½x7x21 1.9x5x15)

Pumps connected to the Main Bilge Line

(No. and size 2 main 4"x28"/1 13½x15x24")

How driven Steam

How driven Steam

Ballast Pumps, No. and size 1 13½x15x24

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 4 of 3" dia.

Tunnel 1 of 2"

1 of 2½" dia

In Holds, &c. No. 1. 2 of 3" dia.

No. 2 & 3 2 of 3½"

No. 4 2 of 3"

No. 5 2 of 3" dia.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 6"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 of 4½"

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 yes

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

Are they fitted with Valves or Cocks yes

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 none

How are they protected

What pipes pass through the deep tanks none

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 upper deck

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

Total Heating Surface of Boilers 7590 sq. ft

Is Forced Draft fitted no

No. and Description of Boilers 3 single ended

Working Pressure 200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded? yes

PLANS. Are approved plans forwarded herewith for Shafting

Main Boilers previously sent with this report

Auxiliary Boilers

Donkey Boilers

(If not state date of approval)

Superheaters

General Pumping Arrangements yes

Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

2 bolts & nuts for connecting rods top ends.
 2 ditto for bottom ends. 2 main bearing bolts & nuts.
 1 set coupling bolts & nuts. 1 set valves for feed. Hotwell
 and bilge pumps. 6 pads for thrust block. 1 screw shaft.
 1 cast iron propeller. Assorted bolts, nuts and iron.

The foregoing is a correct description.
FOR THE CENTRAL MARINE ENGINE WORKS.

(W. Gray & Co. Ltd.)

MANAGING DIRECTOR C.M.E.W.

Manufacturer.



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Lloyd's Register
Foundation

002543-002549-0073

Dates
of Survey
while
building

During progress of
work in shops - -

During erection on
board vessel - -

Total No. of visits

1930. Feb 11, 24, 25 Mar 4, 5, 6, 10, 11, 12, 13, 14, 17, 18, 20, 24, 25, 27, 28, 31 Apr 1, 2, 4, 7, 8, 9, 10, 11, 14, 15, 16
17, 23, 24, 25, 29, 30 May 1, 2, 5, 6, 7, 8, 9, 12, 14, 15, 19, 20, 22, 23, 27

May 29, 30 June 2, 4, 5, 12, 19, 24, 26

60

Dates of Examination of principal parts—Cylinders 24.3.30—25.4.30 Slides 24.4.30—23.4.30 Covers 24.4.30—4.4.30

Pistons 7.4.30—30.4.30 Piston Rods 28.3.30—29.4.30 Connecting rods 24.2.30—2.5.30

Crank shaft 10.3.30—11.4.30 Thrust shaft 20.3.30—11.4.30 Intermediate shafts 1.4.30—14.5.30

Tube shaft ✓ Screw shaft 1.4.30—14.5.30 Propeller 23.4.30—23.5.30

Stern tube 17.4.30—9.5.30 Engine and boiler seatings 23.5.30 Engines holding down bolts 27.5.30—2.6.30

Completion of fitting sea connections Sunderland

Completion of pumping arrangements 2.6.30 Boilers fixed 27.5.30—12.6.30 Engines tried under steam 26.6.30

Main boiler safety valves adjusted 19.6.30 Thickness of adjusting washers P.P. 5" S 32, C.P. 11" S 32, S.P. 21" S 16

Crank shaft material S.M. Ing. Steel Identification Mark 6343 H Thrust shaft material S.M. I. Stl. Identification Mark 3246 RWF

Intermediate shafts, material S.M. I. Stl. Identification Marks 3192(2) 3553 Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material S.M. I. Stl. Identification Mark 3309 Steam Pipes, material Lap welded Steel Test pressure 600 lb Date of Test 4.6.30

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 ✓

Is this machinery duplicate of a previous case yes If so, state name of vessel S.S. "Atthis"

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

This vessel's machinery has been built and installed under Special Survey.

The materials and workmanship are good.

On completion it was tried under full steam at sea satisfactorily and is now eligible to have the notation
⊕ L.M.C. 6.30.

It is submitted that
this vessel is eligible for
THE RECORD. ⊕ L.M.C. 6.30 Fit.

577/30

The amount of Entry Fee ... £ 5 : - :
Special ... £ 90 : 5 :
Donkey Boiler Fee ... £ - :
Travelling Expenses (if any) £ - :

When applied for,

When received,

R.D. Shilston

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 15 JUL 1930

Assigned

CERTIFICATE WRITTEN



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Lloyd's Register
Foundation

Date of writing Report

No. in Reg. Book

42540 on the

Master

Engines made at

Boilers made at

Nominal Horse Power

MULTITUB

Manufacturers of

Total Heating Surface

No. and Description

Tested by hydraulic

Area of Firegrate

Area of each set

In case of donkey

Smallest distance

Smallest distance

Largest internal

Thickness 12

long. seams J.T.

Percentage of strength

Percentage of strength

Thickness of butt

Material Steel

Length of plain

Dimensions of stay

End plates in stay

How are stays secured

Tube plates: Material

Mean pitch of stay

Girders to combine

at centre 8 3/4

in each Three

Tensile strength

Pitch of stays to

Working pressure

Thickness 1/16

Pitch of stays at

Working Pressure

Diameter { At body

Working pressure

Diameter { At turn

Over three