

REPORT ON MACHINERY.

No. 72512

Received at London Office

V.29.1919

28 NOV 1919

of writing Report

When handed in at Local Office

Part of Newcastle on Tyne

in Survey held at South Shields

Date, First Survey 19th Dec 1918

Last Survey 20th Nov 1919

Book.

(Number of Visits 6)

787 on the SS "Yregusis" ex SS "War Aconite"

Gross 5298
Net 3229

ster A.C. Burlace Built at Sunderland

By whom built W. Darnford & Sons Ltd

When built 1918

ines made at Glasgow

By whom made Harland & Wolff Ltd

when made 1918

lers made at Sunderland

By whom made W. Darnford & Sons Ltd

when made 1918

istered Horse Power 369

Owners Hain SS. Co. Ltd. (E. Hain & Son, Agents)

Port belonging to

er Horse Power as per Section 28 517

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

INES, &c.—Description of Engines

Triple expansion

No. of Cylinders 3

No. of Cranks 3

of Cylinders 27, 44, 73

Length of Stroke 48

Revs. per minute 47

Dia. of Screw shaft

as per rule 14.66 Material of screw shaft S

the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made water tight

the propeller boss

Yes

If the liner is in more than one length are the joints burned

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

s are fitted, is the shaft lapped or protected between the liners

Length of stern bush 5'-0 1/2"

of Tunnel shaft

as per rule 13.33

Dia. of Crank shaft journals

as per rule 14.66

Dia. of Crank pin 14 1/2"

Size of Crank webs 9x22 1/2"

Dia. of thrust shaft under

rs 14 3/4"

Dia. of screw 17'-6"

Pitch of Screw 16'-6"

No. of Blades 4

State whether moveable

No

Total surface

98.2 sq ft

of Feed pumps 2

Diameter of ditto 4"

Stroke 24"

Can one be overhauled while the other is at work

Yes

of Bilge pumps 2

Diameter of ditto 4"

Stroke 24"

Can one be overhauled while the other is at work

Yes

of Donkey Engines 3

Sizes of Pumps

General Service 9 1/2 x 7 x 18"

Ballast 10 1/2 x 14 x 24"

No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 3 1/2"

In Holds, &c.

Two 3 1/2" in Nos 1, 2, 3, holds & 1 in No 4

ed 3 1/2"

in Tunnel well 3" dia

Bilge Injections

size 10 1/2"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size 4 1/2"

All the bilge suction pipes fitted with roses

Yes

Are the roses in Engine room always accessible

Yes

Are the sluices on Engine room bulkheads always accessible

Yes

All connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

Both

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

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

Are pipes carried through the bunkers

Hold Suctions

Yes

How are they protected

Wood casing

All Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Yes

Is Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Top platform

ERS, &c.—(Letter for record S)

Manufacturers of Steel

Yes

Heating Surface of Boilers 7668 sq ft

Is Forced Draft fitted

Yes

No. and Description of Boilers

3 Single Ended

ing Pressure 180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

Yes

No. of Certificate

Yes

Each boiler be worked separately

Yes

Area of fire grate in each boiler

63.3 sq ft

No. and Description of Safety Valves to

boiler

Two Spring

Area of each valve

9.6 sq in

Pressure to which they are adjusted

185 lbs

Least distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

15'-6"

Length

11'-6"

Material of shell plates

S

ness 1/4"

Range of tensile strength

28/32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

3 Lap

seams 2 B.S. Y. Rivets

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

9 1/2"

Lap of plates or width of butt straps

19 1/2"

antages of strength of longitudinal joint

rivets 88.3

plate 85.6

Working pressure of shell by rules

182

Size of manhole in shell

16" x 12"

of compensating ring

Flanged

No. and Description of Furnaces in each boiler

3 Single

Material

S

Outside diameter

50 3/4"

of plain part

top

Thickness of plates

bottom

9 1/2"

Description of longitudinal joint

Welded

No. of strengthening rings

Yes

ing pressure of furnace by the rules

188 lbs

Combustion chamber plates: Material

S

Thickness: Sides

23/32"

Back

1/16"

Top

23/32"

Bottom

23/32"

of stays to ditto: Sides

10 5/8 x 9 1/4"

Back

10 1/4 x 8 3/4"

Top

10 5/8 x 9 1/4"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

181

ial of stays

Steel

Area at smallest part

2.39

Area supported by each stay

99.3

Working pressure by rules

216

End plates in steam space:

Steel

Thickness

1 1/2"

Pitch of stays

21 3/4 x 21 1/4"

at smallest part

8.29

Area supported by each stay

473

Working pressure by rules

182

Material of Front plates at bottom

Steel

Thickness

27/32"

Greatest pitch of stays

13 5/8"

Working pressure of plate by rules

187

er of tubes

23/4"

Pitch of tubes

4 x 3 3/8"

Material of tube plates

Steel

Thickness: Front

31/32"

Back

3/4"

Mean pitch of stays

9 7/8"

across wide water spaces

13 5/8"

Working pressures by rules

182

Girders to Chamber tops: Material

Steel

Depth and

width of girder at centre

10 x 1 3/4"

Length as per rule

35 1/2"

Distance apart

10 5/8"

Working pressure by rules

188

Steam dome: description of joint to shell

Yes

% of strength of joint

Yes

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Yes

itch of rivets

Working pressure of shell by rules

Yes

Crown plates

Thickness

How stayed

Yes

PERHEATER. Type

None

Date of Approval of Plan

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:— *Two bolts + nuts for connecting rod top end. Two bolts + nuts for connecting rod bottom. Two bolts + nut for main bearings. Six bolts + nuts for shaft couplings. One feed pump section + one discharge valve. One bilge pump section and one discharge valve. Three main check valves. Three donkey for check valves. 24 Assorted bolts + nuts. Side expander cover studs + nuts. Steam chest cover studs + nuts. 12 junkering studs + nuts. 5 Bars of iron $3/8$ " $1/2$ " $5/8$ " $3/4$ " and 1"*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - - }
Total No. of visits

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *21/10/19* Slides *21/10/19* Covers *21/10/19* Pistons *21/10/19* Rods *21/10/19*
Connecting rods *21/10/19* Crank shaft *21/10/19* Thrust shaft *21/10/19* Tunnel shafts *21/10/19* Screw shaft *20/10/19* Propeller *20/10/19*
Stern tube *20/10/19* Steam pipes tested *✓* Engine and boiler seatings *21/10/19* Engines holding down bolts *21/10/19*
Completion of pumping arrangements *21/10/19* Boilers fixed *21/10/19* Engines tried under steam *✓*
Completion of fitting sea connections *20/10/19* Stern tube *20/10/19* Screw shaft and propeller *20/10/19*
Main boiler safety valves adjusted *14/11/19* Thickness of adjusting washers *9/16 1/2 9/16 9/16 9/16 9/16*
Material of Crank shaft *Steel* Identification Mark on Do. *BC* Material of Thrust shaft *Steel* Identification Mark on Do. *BC*
Material of Tunnel shafts *✓* Identification Marks on Do. *BC* Material of Screw shafts *✓* Identification Marks on Do. *BC*
Material of Steam Pipes *Iron* Test pressure *✓*

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 Section 49 of the Rules been complied with *✓*

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *Standard A Type*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been constructed under the supervision of British Corporation Surveyors in accordance with the approved plans and Specification for the A Type of Standard Vessel*

The machinery has been examined and found in good order see Report No.

Certificate (if required) to be sent to

The amount of Entry Fee ... £ : : When applied for, 19
Special *As to have 3/4* ... £ *40* : :
Donkey Boiler Fee ... £ : : When received, 19
Travelling Expenses (if any) £ : : *29/11 20/11/19*

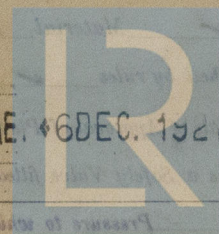
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

L.M.B. 11.19

F.D.



© 2019

Lloyd's Register Foundation

DEC. 6 DEC. 1921