

Rpt. 4.

REPORT ON MACHINERY.

38644
No. 38658

Received at London Office

APR. 16. 1919

Date of writing Report

19

When handed in at Local Office

5-4-

1919

Port of Glasgow

Date, First Survey 23-5-18

Last Survey 4-4-

1919

(Number of Visits 25)

No. in Survey held at Glasgow

Reg. Book. on the Machinery for "Strath" Trawler "John Huns"

Master

Built at Paisley

By whom built J. Gullerton, Sons & Co.

When built 1919

Engines made at Coatbridge

By whom made Beardmore & Co. Ltd. 533

when made 1919

Boilers made at Glasgow

By whom made A. W. Dalglish & Co. 428

when made 1919

Registered Horse Power

75

Owners H. M. Government

Port belonging to

Nom. Horse Power as per Section 28

75.5

Is Refrigerating Machinery fitted for cargo purposes

90

Is Electric Light fitted

90

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 12" 20" 34"

Length of Stroke 23"

Revs. per minute 112

Dia. of Screw shaft

as per rule 6.85"

Material of I.S.

Is 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

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

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

Length of stern bush 2'-6"

Dia. of Tunnel shaft

as per rule 6.121"

Dia. of Crank shaft journals

as per rule 6.42"

Dia. of Crank pin 6 3/4"

Size of Crank webs 12 3/4 x 4 3/4 Dia. of thrust shaft under

collars 6 3/4"

Dia. of screw 8'-4"

Pitch of Screw 11'-6"

No. of Blades 4

State whether moveable

no

Total surface 29 sq.

No. of Feed pumps 1

Diameter of ditto 2 3/8"

Stroke 12"

Can one be overhauled while the other is at work

No. of Bilge pumps 1

Diameter of ditto 2 3/8"

Stroke 12"

Can one be overhauled while the other is at work

No. of Donkey Engines 1

Sizes of Pumps

5 1/4 x 3 1/2 x 3" Duplex

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

In Engine Room 1-2"

In Holds, &c.

2" Shushwell and Halsepool

No. of Bilge Injections 1

sizes 3"

Connected to condenser, or to circulating pump

C.A.

Is a separate Donkey Suction fitted in Engine room & size

yes 2"

Are 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

None

Are all connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

Both valves & cocks

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

Yes

Are the Discharge Pipes above or below the deep water line

Above & below

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 are carried through the bunkers

Howard suction

How are they protected

Wood & steel trunkway

Are 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 the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

-

worked from

BOILERS, &c.—(Letter for record 8) Manufacturers of Steel

Total Heating Surface of Boilers

1368 sq.

Is Forced Draft fitted

Yes

No. and Description of Boilers

1 Return Tube Single ended

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

each boiler

Pair Spring loaded

Area of each valve

5.9 sq.

Pressure to which they are adjusted

185

No. and Description of Safety Valves to

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

8"

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

bottom

Thickness of plates

crane

bottom

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber

Material

Thickness: Sides

Back

Top

Bottom

Working pressure by rules

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

End plates in steam space:

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of stays

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of Front plates at bottom

Area at smallest part

Area supported by each stay

Working pressure by rules

Working pressure of plate by rules

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Steam dome: description of joint to shell

% of strength of joint

Diam. of rivet holes

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

How stayed

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

Is Easing Gear fitted

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pressure to which each is adjusted

Is Easing Gear fitted

004505-009513-0341

IS A DONKEY BOILER FITTED? *No.*

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

SPARE GEAR. State the articles supplied:—

As per Admiralty Specification now all placed on board & checked.

The foregoing is a correct description,

WILLIAM BEARDMORE & CO., LIMITED.

Manufacturer.

per R. Shedd

Dates of Survey while building { During progress of work in shops - - 1918 May 23-30 Nov 14-28 Dec 5-12-17 19 24 (1919) Jan 8-10-15-20-22-28 Feb 3-10-14-17-23
During erection on board vessel - - - March 14-31 April 1-2-4
Total No. of visits 25

Is the approved plan of main boiler forwarded herewith *yes.*
" " " donkey " " "

Dates of Examination of principal parts—Cylinders 5-12-18 Slides 23-12-18 Covers 5-12-18 Pistons 12-12-18 Rods 12-12-18
Connecting rods 28-1-19 Crank shaft 12-12-18 Thrust shaft 3-2-19 Tunnel shafts 3-2-19 Screw shaft 3-2-19 Propeller
Stern tube 15-1-19 Steam pipes tested 31-3-19 Engine and boiler seatings 14-3-19 Engines holding down bolts 1-4-19

Completion of pumping arrangements 1-4-19 Boilers fixed 1-4-19 Engines tried under steam 4-4-19

Completion of fitting sea connections 24-3-19 Stern tube 24-3-19 Screw shaft and propeller 24-3-19

Main boiler safety valves adjusted 2-4-19 Thickness of adjusting washers *Pin 11/32 dia 13/32*

Material of Crank shaft M. S. Identification Mark on Do. *Lloyd's 2616 HB* Material of Thrust shaft M. S. Identification Mark on Do. *Lloyd's 2616 HB*

Material of Tunnel shafts M. S. Identification Marks on Do. *Lloyd's 2616 HB* Material of Screw shafts M. S. Identification Marks on Do. *Lloyd's 2616 HB*

Material of Steam Pipes *Copper.* Test pressure *360 lbs sq*

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 *H.M. Steam Trawler William Hunter*

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

The Machinery has been built under special survey, in accordance with the approved Admiralty Specification & has now been fitted into the vessel, tried under full working conditions & found satisfactory. The workmanship & materials are good. The Machinery is eligible, in my opinion, to have notation. T.H.M.C. 4-19.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 4-19

*Boiler Fee £6-2-6
Fitting out Fee £6-2-6 } £24-10-0
Machinery Fee 12-5-0*

The amount of Entry Fee ... £ : : When applied for, 15-4-19
Special ... £ : :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : When received, 6-6-19

Committee's Minute *GLASGOW 15 APR 1919*

Assigned *+ L.M.C. 4-19*

John Barr. Esq. H. Copeman
Engineer Surveyor to Lloyd's Register of Shipping.

Wm. D. Ferguson

Lloyd's Register
Foundation