

## REPORT ON MACHINERY

No. 28358

THU. MAR. 18. 1915

Received at London Office

Date of writing Report

10

When handed in at Local Office

17. 3. 15 Port of

Date, First Survey 28-5-14 Last Survey 22-2-1915

(Number of Visits 49

Gross 227

Tons Net 89

When built 1915

Survey held at

Book

on the

Stm Trawler "Commander Horton".

Built at

Goole

By whom built

Goole S &amp; R. G. Ltd

as made at

Hull

By whom made

Amos &amp; Smith, Ltd (no. 2558) when made 1915

as made at

Hull

By whom made

Amos &amp; Smith, Ltd when made 1915

Horse Power

Owners

Hellyers S. F. Co. Ltd.

Port belonging to

Hull

Horse Power as per Section 28

47

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

LINES, &amp;c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

of Cylinders

10 x 16 3/4 x 28

Length of Stroke

24

Revs. per minute

Dia. of Screw shaft

as per rule 7.22

Material of

Iron

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

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

in the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

yes

If two

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

yes

Length of stern bush

2-8"

of Tunnel shaft

as per rule 5.74

Dia. of Crank shaft journals

as per rule 6.03

Dia. of Crank pin

6 1/2

Size of Crank webs

12 1/2 x 4 1/2

Dia. of thrust shaft under

6 1/2

Dia. of screw

10-0

Pitch of Screw

8-6

No. of Blades

4

State whether moveable

no

Total surface

38 sq

Feed pumps

1

Diameter of ditto

2 1/2

Stroke

11

Can one be overhauled while the other is at work

yes

Bilge pumps

1

Diameter of ditto

2 1/2

Strokes

11

Can one be overhauled while the other is at work

yes

Donkey Engines

1

Sizes of Pumps

6 x 3 x 6

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

Engine Room

2-2

one forward &amp; one aft

In Holds, &amp;c.

2-2 Ballast tank and

main hold

Bilge Injections

1

size

2 1/2

Connected to condenser, or to circulating pump

condenser

Is a separate Donkey Suction fitted in Engine room &amp; size 2" ejector

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

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

yes

Are they Valves or Cocks

both

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

Are the Blow Off Cocks fitted with a spigot and brass covering plate

they each fitted with a Discharge Valve always accessible on the plating of the vessel

yes

How are they protected

Wood casing

yes

pipes are carried through the bunkers

Hold

Suctions

yes

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

yes

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

of examination of completion of fitting of Sea Connections

17-12-14

of Stern Tube

17-12-14

Screw shaft and Propeller

17-12-14

Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from

LERS, &amp;c.—(Letter for record

S)

Manufacturers of Steel

Phoenix

Alt.

Horder

Verein

Horde

Heating Surface of Boilers

760

Is Forced Draft fitted

no

No. and Description of Boilers

one single ended

Working Pressure

200

Tested by hydraulic pressure to

400

Date of test

9-11-14

No. of Certificate

3037

each boiler be worked separately

yes

Area of fire grate in each boiler

25.5 sq

No. and Description of Safety Valves to

boiler

2 spring loaded

Area of each valve

3-14 sq

Pressure to which they are adjusted

200 lbs

Are they fitted with easing gear

least distance between boilers or uptakes and bunkers or woodwork

7"

Mean dia. of boilers

125 1/8"

Length

9-4

Material of shell plates

S

Range of tensile strength

29/33 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

seams

TRDBS

Diameter of rivet holes in long. seams

1 3/32

Pitch of rivets

7-4"

Lap of plates or width of butt straps

16 1/4"

centages of strength of longitudinal joint

101

Working pressure of shell by rules

201

Size of manhole in shell

of compensating ring

9" x 15"

No. and Description of Furnaces in each boiler

2 plain

Material

steel

Outside diameter

35 1/32"

th of plain part

top 66"

Thickness of plates

crown 3/4"

Description of longitudinal joint

Working pressure of furnace by the rules

230

Combustion chamber plates: Material

steel

Thickness: Sides

23"

Back

16"

Top

16"

Bottom

23"

h of stays to ditto: Sides

8 3/4 x 8 1/2

Back

8 1/2 x 8

Top

8 1/2 x 8 1/4

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

240

erial of stays

steel

Diameter at smallest part

erial

steel

Thickness

1 1/8"

Pitch of stays

16 x 12

How are stays secured

DN4W

Working pressure by rules

208

Material of stays

steel

material at smallest part

5-05

Area supported by each stay

192 sq

Working pressure by rules

273

Material of Front plates at bottom

steel

ckness

1"

Material of Lower back plate

steel

Thickness

meter of tubes

3 1/4"

Pitch of tubes

4 3/4 x 4 1/2"

Material of tube plates

steel

Thickness: Front

1"

Back

3/8"

Mean pitch of stays

9 1/4"

ch across wide water spaces

13 3/4"

Working pressures by rules

203

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

8 1/4 x 1 3/4"

Length as per rule

308

Distance apart

8 1/2"

Working pressure by rules

214

Superheater or Steam chest; how connected to boiler

yes

Can the superheater be shut off and the boiler worked

separately

yes

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

yes

Lloyd's Register



IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

✓

SPARE GEAR.

State the articles supplied:—

Two top end bolts & nuts, two bottom end bolts & nuts, two main bearing bolts & nuts, one set of coupling bolts & nuts, one set of feed, bilge, & air pump valves, one main & one donkey check valve, a quantity of bolts & nuts & iron of various sizes.

The foregoing is a correct description,

FOR AMOS & SMITH LTD.

B. J. Wilson

Manufacturer.

Secretary.

Dates of Survey while building: During progress of work in shops: 1914: May 28, Jun 23, July 3, 25, 27, 31, Aug 21, 24, 26, 28, Sep 4, 9, 10, 15, 18, 21, 23, 25, 29. During erection on board vessel: Oct 1, 7, 9, 14, 20, 23, 27, 29, Nov 4, 9, 11, 26, Dec 3, 11, 17, 22, 29, 1915, Jan 2, 5, 7, 15, 21, 25, 27, 29, Feb 6, 16, 18, 22. Total No. of visits: 49.

Is the approved plan of main boiler forwarded herewith?

yes

" " " donkey " " "

Dates of Examination of principal parts: Cylinders 2-1-15, Slides 7-1-15, Covers 7-1-15, Pistons 2-1-15, Rods 2-1-15, Connecting rods 2-1-15, Crank shaft 29-12-14, Thrust shaft 29-12-14, Tunnel shafts 14-12, Screw shaft 11-11-14, Propeller 11-11-14, Stern tube 11-11-14, Steam pipes tested 29-1-15, Engine and boiler seatings 17-12-14, Engines holding down bolts 27-1-15, Completion of pumping arrangements 18-2-15, Boilers fixed 3-2-15, Engines tried under steam 6-2-15, Main boiler safety valves adjusted 6-2-15, Thickness of adjusting washers 3/8", Port & Starboard, Material of Crank shaft steel, Identification Mark on Do. 29-12-14, Material of Thrust shaft steel, Identification Mark on Do. 14-12, Material of Tunnel shafts, Identification Marks on Do., Material of Screw shafts Iron, Identification Marks on Do. 1374 FLS, Material of Steam Pipes Copper, Test pressure 400 lbs per sq in, 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 Section 49 of the Rules been complied with?

Is this machinery duplicate of a previous case?

yes

If so, state name of vessel

Commander Holbrook.

General Remarks

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

The machinery of this

vessel has been constructed under special survey in accordance with the approved plans & the rules of this Society; the materials & workmanship are good; the boiler & steam pipes have been tested as above by hydraulic pressure & found sound & good. The machinery has been properly fitted & secured on board, & on completion tried under steam & found satisfactory. The safety valves have been adjusted under steam & tested for accumulation, which did not exceed 210 lbs. In my opinion the vessel is eligible for the record - LMC 2, 15.

It is submitted that this vessel is eligible for THE RECORD + LMC. 2, 15.

The amount of Entry Fee ... £ 8 : - : When applied for, 17.3.1915  
Special ... £ 8 : - :  
Donkey Boiler Fee ... £ ✓ : - :  
Travelling Expenses (if any) £ ✓ : - :  
When received, 31 Mar 1915

Committee's Minute

FRI. MAR. 19. 1915

Assigned

+ LMC 2, 15

P. Fitzgerald.

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2020

Lloyd's Register Foundation