

REPORT ON MACHINERY.

No. 28422

Received at London Office

FRI. APR. 16. 1915

Date of writing Report

19

When handed in at Local Office

15-4-15 Port of

Hull

No. in Survey held at

Hull

Date, First Survey

31-7-14

Last Survey

30-3-

1915

Reg. Book.

(Number of Visits 50)

49 on the Steam Trawler "Lord Fisher"

Master

Built at

Beverley

By whom built

Cook, Welton, & Gemmell

Tons

Gross 357

Net

162

When built

1915

Engines made at

Hull

By whom made

Amos & Smith (No 2617)

when made

1915

Boilers made at

Hull

By whom made

Amos & Smith

when made

1915

Registered Horse Power

Owners

Imperial S.F. Co. Ltd

Port belonging to

Hull

Nom. Horse Power as per Section 28

87

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

13, 22½, 37

Length of Stroke

24

Revs. per minute

114

Dia. of Screw shaft

as per rule 7.72

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

-

If two

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

-

Length of stern bush

40"

Dia. of Tunnel shaft

as per rule 6.82

Dia. of Crank shaft journals

as per rule 7.16

Dia. of Crank pin

7¾

Size of Crank webs

15x4¾

Dia. of thrust shaft under

collars

7¾

Dia. of screw

9-6

Pitch of Screw

10-9

No. of Blades

4

State whether moveable

No. of Feed pumps

1

Diameter of ditto

3"

Stroke

13"

Can one be overhauled while the other is at work

-

No. of Bilge pumps

1

Diameter of ditto

3"

Stroke

13"

Can one be overhauled while the other is at work

-

No. of Donkey Engines

2+1-2½

Sizes of Pumps

6x3x6 + 6¼x6½x6

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

-

In Engine Room

two 2" dia.

In Hold, &c.

Forehold, fishroom, & spare

fishroom, each one - 2" dia.

Forward & aft slush wells, each one, 3" dia.

-

No. of Bilge Injections

1 size 3"

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

2½" gdn

-

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

-

Are 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

yes

Are the Discharge Pipes 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 are carried through the bunkers

ford hold suction

How are they protected

wood casings

-

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

-

Dates of examination of completion of fitting of Sea Connections

5-10-14

of Stern Tube

5-10-14

Screw shaft and Propeller

5-10-14

-

Is the Screw Shaft Tunnel watertight

-

Is it fitted with a watertight door

-

worked from

-

-

BOILERS, &c.—(Letter for record

S)

Manufacturers of Steel

Phoenix

Alt. Horder

Verrein

Horder

Total Heating Surface of Boilers

1476

Is Forced Draft fitted

no

No. and Description of Boilers

one single ended

-

Working Pressure

200 lb

Tested by hydraulic pressure to

400 lb

Date of test

23-2-15

No. of Certificate

3060

Can each boiler be worked separately

-

Area of fire grate in each boiler

48.5 sq

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

4.9 sq

Smallest distance between boilers or uptakes and bunkers or woodwork

abt 7"

Mean dia. of boilers

156"

Length

10-6"

Material of shell plates

S

Thickness

1½"

Range of tensile strength

29/33 ton

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

D.R.

long. seams

TRDBS

Diameter of rivet holes in long. seams

1¾"

Pitch of rivets

8¾"

Lap of plates or width of butt straps

17¾"

Per centages of strength of longitudinal joint

rivets 87

plate 85.9

Working pressure of shell by rules

201

Size of manhole in shell

12"x16"

Size of compensating ring

9x1½"

No. and Description of Furnaces in each boiler

3 plain

Material

S

Outside diameter

38¾"

Length of plain part

top 80"

Thickness of plates

crown 25"

Description of longitudinal joint

welded

No. of strengthening rings

-

Working pressure of furnace by the rules

200

Combustion chamber plates: Material

S

Thickness: Sides

11/16"

Back

11/16"

Top

11/16"

Bottom

¾"

Pitch of stays to ditto: Sides

9½x8"

Back

8¾x8¾"

Top

9¼x8½"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

208

Material of stays

S

Diameter at smallest part

2.07"

Area supported by each stay

78.5"

Working pressure by rules

237

End plates in steam space

-

Material

S

Thickness

1½"

Pitch of stays

17½x17"

How are stays secured

nuttied

Working pressure by rules

201

Material of stays

S

Diameter at smallest part

7.24"

Area supported by each stay

298"

Working pressure by rules

252

Material of Front plates at bottom

S

Thickness

1¼"

Material of Lower back plate

S

Thickness

15/16"

Greatest pitch of stays

14x8¾"

Working pressure of plate by rules

229

-

Diameter of tubes

3½"

Pitch of tubes

4¾"

Material of tube plates

S

Thickness: Front

1¼"

Back

¾"

Mean pitch of stays

9½"

Pitch across wide water spaces

14"

Working pressures by rules

201

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

9½x1¾"

Length as per rule

34"

Distance apart

9½"

Number and pitch of stays in each

three

8½"

Working pressure by rules

215

Superheater or Steam chest; how connected to boiler

-

Can the superheater be shut off and the boiler worked

-

separately

-

Diameter

-

Length

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; one set of coupling bolts & nuts; two main bearing 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.

E. J. Robinson

Manufacturer.

Secretary.

Dates of Survey while building { During progress of work in shops -- 1914 - July 31 Aug 21 26 28 Sep 21 23 25 29 30 Oct 1 2 5 9 23 27 Nov 3 4 5 11 13 24
During erection on board vessel -- 28 Dec 1 5 8 11 15 18 22 24 29 1915 Jan 1 7 11 15 21 27 Feb 2 10 18 24 23 Mar 1 6
Total No. of visits 50

Is the approved plan of main boiler forwarded herewith

no ✓

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 10-2-15 Slides 18-2-15 Covers 10-2-15 Pistons 10-2-15 Rods 18-2-15

Connecting rods 18-2-15 Crank shaft 18-2-15 Thrust shaft 11-11-14 Tunnel shafts 18-2-15 Screw shaft 2-10-14 Propeller 2-10-14

Stern tube 2-10-14 Steam pipes tested 15-3-15 Engine and boiler seatings 5-10-14 Engines holding down bolts 16-3-15

Completion of pumping arrangements 30-3-15 Boilers fixed 16-3-15 Engines tried under steam 23-3-15

Main boiler safety valves adjusted 23-3-15 Thickness of adjusting washers 13/32 F4A.

Material of Crank shaft Steel Identification Mark on Do. 18-2-15 PE Material of Thrust shaft steel Identification Mark on Do. 18-11-14

Material of Tunnel shafts steel Identification Marks on Do. 18-2-15 PE Material of Screw shafts iron Identification Marks on Do. 1370 FLS 18-11-14

Material of Steam Pipes Copper Test pressure 400 lbs per 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 Sir John French.

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 boilers & 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 208 lbs.

In my opinion the vessel is eligible for the record + LMC 3.15.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 3.15.

JWD
16/4/15

A.P.R.

The amount of Entry Fee ... £ 1 : - :
Special ... £ 13 : 1 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : 3 :
When applied for, 15/4/15
When received, 14/5/15 15/5/16

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

Committee's Minute TUE. APR. 20. 1915

Assigned

+ LMC 3.15

MACHINERY CERTIFICATE
10172



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Lloyd's Register
Foundation