

Port of Hull

Received at London Office FRI. 19 OCT 1906

No. in Survey held at

Hull Goole

Date, first Survey

May 21st

Last Survey

9th Oct

1906

Reg. Book.

19th Suff on the

Shel Se. H. Grebe

(Number of Visits 29)

Master

Built at

Goole

By whom built

Goole S. O. R. Co. Ltd

Tons Gross 172

Net 52

When built 1906

Engines made at

Hull

By whom made

Messrs Earles Co. Ltd

when made 1906

Boilers made at

Hull

By whom made

Messrs Earles Co. Ltd

when made 1906

Registered Horse Power

Owners Kelsall Bros. & Buching, Ltd.

Port belonging to Hull

Nom. Horse Power as per Section 28

53

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

No

ENGINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders 12" ~ 20" ~ 32"

Length of Stroke

21"

Revs. per minute

105

Dia. of Screw shaft

as per rule 6.75"

Material of screw shaft

Iron

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

No

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

Two separate liners

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

No

Length of stern bush

32 1/4"

Dia. of Thrust shaft

as per rule 5.68"

Dia. of Crank shaft journals

as per rule 5.96"

Dia. of Crank pin

6

Size of Crank webs

11 1/2" x 4"

collars

6 1/2"

Dia. of screw

8" ~ 9"

Pitch of Screw

9" ~ 6" to 10" ~ 6"

No. of Blades

4

State whether moveable

No

Total surface

26 sq

No. of Feed pumps

1

Diameter of ditto

2 1/2"

Stroke

10"

Can one be overhauled while the other is at work

No. of Bilge pumps

1

Diameter of ditto

2 1/2"

Stroke

10"

Can one be overhauled while the other is at work

No. of Donkey Engines

One

Sizes of Pumps

4" x 2 3/4" x 4"

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

In Engine Room

Two two inches

In Holds, &c.

One 2" to hold, One 2" to tank, +

Ejector suction from Eng. Room Bilge, hold, tank, and discharge on deck

No. of Bilge Injections

1

sizes

3 1/2"

Connected to condenser, or to circulating pump

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 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

hold tank suction

How are they protected

wood casing

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

22.8.06

of Stern Tube

22.8.06

Screw shaft and Propeller

22.8.06

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record 5)

Manufacturers of Steel Hoelder Bergwerks Herten Verein

Total Heating Surface of Boilers

900 sq

Is Forced Draft fitted

No

No. and Description of Boilers

One Cyl. Multi

Working Pressure

160 lbs

Tested by hydraulic pressure to

320 lbs

Date of test

17.9.06

No. of Certificate

1504

Can each boiler be worked separately

Area of fire grate in each boiler

24.5 sq

No. and Description of Safety Valves to

each boiler

Two Spring

Area of each valve

3.14 sq

Pressure to which they are adjusted

165 lbs

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

12"

Mean dia. of boilers

10" ~ 6"

Length

9" ~ 6"

Material of shell plates

Steel

Thickness

27/32"

Range of tensile strength

28 ~ 32

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

L. D.

long. seams

D. A. S. I. R.

Diameter of rivet holes in long. seams

1 1/2"

Pitch of rivets

5 3/8"

Lap of plates or width of butt straps

11 1/2"

Per centages of strength of longitudinal joint

rivets 86.7

plate 80.2

Working pressure of shell by rules

160 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

30" x 28" x 3/2"

No. and Description of Furnaces in each boiler

Two plain

Material

Steel

Outside diameter

2' ~ 10"

Length of plain part

top 5' ~ 10"

Thickness of plates

crown 2 1/2"

bottom 3/2"

Description of longitudinal joint

Welded

No. of strengthening rings

0

Working pressure of furnace by the rules

185 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

5/8"

Back

5/8"

Top

5/8"

Bottom

5/8"

Pitch of stays to ditto: Sides

8 1/2" x 8 1/2"

Back

10" x 9"

Top

8 1/2" x 7 1/2"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

164 lbs

Material of stays

Steel

Diameter at smallest part

1 1/2"

Area supported by each stay

72.75 sq

Working pressure by rules

194 lbs

End plates in steam space:

Material

Steel

Thickness

7/8"

Pitch of stays

15" x 15"

How are stays secured

D. Nuts

Working pressure by rules

161 lbs

Material of stays

Steel

Diameter at smallest part

2 5/16"

Area supported by each stay

225 sq

Working pressure by rules

187 lbs

Material of Front plates at bottom

Steel

Thickness

7/8"

Material of Lower back plate

Steel

Thickness

7/8"

Greatest pitch of stays

14"

Working pressure of plate by rules

190 lbs

Diameter of tubes

3"

Pitch of tubes

4 5/8" x 4 3/8"

Material of tube plates

Steel

Thickness: Front

7/8"

Back

1 1/2"

Mean pitch of stays

9"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

161 lbs

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

7 1/4" x 1 1/2"

Length as per rule

2' ~ 2"

Distance apart

7 1/2"

Number and pitch of stays in each

2 ~ 8 1/2"

Working pressure by rules

228 lbs

Superheater or Steam chest; how connected to boiler

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If 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

Foundation

W1461-012

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No.	Description	Made at	By whom made	When made	Where fixed
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of Safety
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
If fitted with easing gear	If steam from main boilers can enter the donkey boiler	Dia. of donkey boiler	Length		
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams		
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating	Per centage of strength of joint	Rivets
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	Plates
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates	Description of joint	
Working pressure of furnace by rules	Thickness of furnace crown plates	Stayed by			
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

SPARE GEAR. State the articles supplied:—Two each top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set coupling bolts and nuts, one set each, air, circulating, feed and bilge pump valves, and a quantity of assorted bolts and nuts etc.

The foregoing is a correct description,

FOR EARLE'S

Manufacturer.

Dates of Survey while building: During progress of work in shops—1906: May 21, 29, Jun 1, 8, 13, 18, 25, 27, Jul 2, 11, 17, 21, 27, Aug 13, 16, 22, 23, Sep 12, 14, 17, 18, 19, 26, 27, 28, 29. During erection on board vessel—Oct 1, 3, 9. Total No. of visits 29.

Is the approved plan of main boiler forwarded herewith *sent on with Rpt 8th 1884*

Dates of Examination of principal parts—Cylinders 17.7.06 Slides 2.7.06 Covers 2.7.06 Pistons 2.7.06 Rods 21.7.06 Connecting rods 21.7.06 Crank shaft 25.6.06 Thrust shaft 25.6.06 Tunnel shafts Screw shaft 16.8.06 Propeller 16.8.06 Stern tube 16.8.06 Steam pipes tested 28.9.06 Engine and boiler seatings 26.9.06 Engines holding down bolts 29.9.06 Completion of pumping arrangements 3.10.06 Boilers fixed 1.10.06 Engines tried under steam 1.10.06 Main boiler safety valves adjusted 1.10.06 Thickness of adjusting washers $\frac{3}{8}$ " ~ $\frac{3}{8}$ "

Material of Crank shaft Steel Identification Mark on Do. 1713 ATG Material of Thrust shaft Iron Identification Mark on Do. 1716 ATG Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Iron Identification Marks on Do. 1712 ATG Material of Steam Pipes Solid drawn Copper Test pressure 400 lbs per sq. inch

General Remarks (State quality of workmanship, opinions as to class, &c.) The engines and boiler of this vessel have been constructed under special survey in accordance with the Rules. The materials and workmanship are good. The boiler tested by hydraulic pressure, and with the engines placed on board and tested under steam. They are now in good order and safe working condition, and respectfully submitted as being eligible in my opinion to be classed with the record of *L.M.C. 10.06* in the Register Book.

The engines and boiler as above are similar to those fitted on the "Boote" 726 in supplement to Register Book.

It is submitted that this vessel is eligible for THE RECORD *L.M.C. 10.06*

The amount of Entry Fee. £ 1 : : : When applied for. 18/10/1906
Special .. £ 8 : : :
Donkey Boiler Fee .. £ : : :
Travelling Expenses (if any) £ 12 8 : : :
When received 27/12/1906

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

Committee's Minute

Assigned

OCT. 23 1906

+ L.M.C. 10.06

MACHINERY CERTIFICATE
WRITTEN.



Lloyd's Register
Foundation