

REPORT ON MACHINERY.

No. 26774
MON. OCT. 6-1913

Received at London Office

Date of writing Report *1st Oct* 1913. When handed in at Local Office

2/10/13 Port of

Date, First Survey

Apr 25th

(Number of Visits

Last Survey *Sep. 24th 1913*No. in Survey held at
Reg. Book.Sup. H. on the *Le K. "Bridlington"*.

Master

Built at

Hull

By whom built

Bochram & Sons Ltd

Tons

Gross 205

Net 82

When built

1913.

Engines made at

Hull

By whom made

C. D. Holmes & Co.

when made

1913.

Boilers made at

Hull

By whom made

C. D. Holmes & Co.

when made

1913.

Registered Horse Power

Owners

Hull Ship. Fishing & Ice Co. Ltd

Port belonging to

Hull

Nom. Horse Power as per Section 28

50

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

10-17-28

Length of Stroke

24

Revs. per minute

Dia. of Screw shaft

7 1/4"

Material of

2"

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*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

Length of stern bush

36"

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

Dia. of Tunnel shaft

5-7 1/2"

Dia. of Crank shaft journals

6-0 1/2"

Dia. of Crank pin

6 1/2"

Size of Crank webs

4" x 12 1/2"

Dia. of thrust shaft under

collars

6 1/2"

Dia. of screw

10-6

Pitch of Screw

8-6"

No. of Blades

4

State whether moveable

no

Total surface

30"

No. of Feed pumps

1

Diameter of ditto

2 1/4"

Stroke

11"

Can one be overhauled while the other is at work

No. of Bilge pumps

1

Diameter of ditto

2 1/4"

Stroke

11"

Can one be overhauled while the other is at work

No. of Donkey Engines

1

Sizes of Pumps

6 x 4 1/4 x 6

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

In Engine Room

Two 2" One forward, one aft.

In Holds, &c.

*One 2" to Main hold, one 2" to**forecastle, 3" ejector*

No. of Bilge Injections

1

sizes

3"

Connected to condenser, or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

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

no

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 Suctions

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

5.7.13

of Stern Tube

5.7.13

Screw shaft and Propeller

5.7.13

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

worked from

yes

BOILERS, &c.—(Letter for record

Manufacturers of Steel

Messrs Phoenix & Alder & Horder Verein. Harde

Total Heating Surface of Boilers

835

Is Forced Draft fitted

yes

No. and Description of Boilers

One single ended

Working Pressure

200lbs.

Tested by hydraulic pressure to

400lbs.

Date of test

30.8.13

No. of Certificate

2010

Can each boiler be worked separately

yes

Area of fire grate in each boiler

27.37

No. and Description of Safety Valves to

each boiler

Two spring loaded

Area of each valve

3.14

Pressure to which they are adjusted

200lbs.

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

8"

Mean dia. of boilers

10-9"

Length

9-3"

Material of shell plates

S

Thickness

3/32"

Range of tensile strength

29

Are the shell plates welded or flanged

yes

Descrip. of riveting: cir. seams

10.12"

long. seams

J.R.O.B.

Diameter of rivet holes in long. seams

1 1/16"

Pitch of rivets

7 1/4"

Lap of plates or width of butt straps

16 1/4"

Per centages of strength of longitudinal joint

93.9

Working pressure of shell by rules

203

Size of manhole in shell

16 x 12"

Material

S

Outside diameter

3-2 1/2"

Size of compensating ring

7" x 3 1/2"

No. and Description of Furnaces in each boiler

2 plain

Material

S

Description of longitudinal joint

welded

No. of strengthening rings

yes

Length of plain part

5-9"

Length of plain part

5-1 1/2"

Thickness of plates

15-4"

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

201

Combustion chamber plates: Material

S

Thickness: Sides

1/16"

Pitch of stays to ditto: Sides

8 1/2 x 8 1/2"

Back

8 1/4 x 8 1/4"

Top

7 1/2 x 8 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

202

End plates in steam space:

Material of stays

S

Diameter at smallest part

2.07

Area supported by each stay

72

Working pressure by rules

290

Material of stays

S

Thickness

15-4"

Pitch of stays

13 1/2 x 13"

How are stays secured

one by one

Working pressure by rules

237

Material of Front plates at bottom

S

Diameter at smallest part

4.30"

Area supported by each stay

175.0"

Thickness

15-4"

Material of Lower back plate

S

Thickness

15-4"

Greatest pitch of stays

14 x 8 3/8"

Working pressure of plate by rules

227

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2 x 4 3/4"

Material of tube plates

S

Thickness: Front

15-4"

Back

7/8"

Mean pitch of stays

9 1/2 x 9"

Pitch across wide water spaces

13 3/4"

Working pressures by rules

229

Girders to Chamber tops: Material

S

Depth and

2-8 1/2"

thickness of girder at centre

8 x 1 1/2"

Length as per rule

29.875

Distance apart

7 1/2"

Number and pitch of stays in each

Working pressure by rules

205

Superheater or Steam chest; how connected to boiler

*Can the superheater be shut off and the boiler worked**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

If stiffened with rings

Distance between rings

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 Plates
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	
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	Radius of do.	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 & bottom end connecting rod bolts nuts, two main bearing bolts nuts, one set of coupling bolts nuts, one set each feed & bilge pump valves. Iron of various sizes, a quantity of assorted bolts, nuts, etc.*

The foregoing is a correct description,
p. pro CHARLES D. HOMES & CO. LTD. 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
	1913. Apr 25. Jun 27. July 3. 5. 10. 18. 23. 25. 30. Aug 8. 15. 16. 19. 25. 29. 30. Sep 2. 3.	Sep 16. 19. 23. 24	22	yes

Dates of Examination of principal parts	Cylinders	Slides	Covers	Pistons	Rods
Connecting rods	15.8.13.	Crank shaft	29.8.13.	Thrust shaft	2.9.13.
Stern tube	27.6.13.	Steam pipes tested	16.9.13.	Engine and boiler seatings	5.7.13.
Completion of pumping arrangements	16.9.13.	Boilers fixed	16.9.13.	Engines holding down bolts	16.9.13.
Main boiler safety valves adjusted	19.9.13.	Thickness of adjusting washers	PV 3/8. SV 7/16.		
Material of Crank shaft	S.	Identification Mark on Do.	1079	Material of Thrust shaft	S.
Material of Tunnel shafts	✓	Identification Marks on Do.	✓	Material of Screw shafts	S.
Material of Steam Pipes	Solid drawn Copper	Test pressure	400 lbs hyd. press.		

General Remarks (State quality of workmanship, opinions as to class, &c. *The engines & boiler of this vessel have been constructed under special survey in accordance with the rules. The materials & workmanship are sound & good. The boiler tested by hydraulic pressure, & with the engines secured on board & tested under steam. They are now in good order & safe-working condition, and respectfully submitted as being eligible in my opinion to be classed with the notation of LMC 9.13 in the Register book.*

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 9.13.

The amount of Entry Fee	£ 1	When applied for,	3/10.13
Special	£ 8 0 0	When received,	31/10/13
Donkey Boiler Fee	£		
Travelling Expenses (if any)	£ 4		
Committee's Minute			
Assigned			

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