

Rpt. 4.

REPORT ON MACHINERY

No. 6031

14 JUL 1921

Date of writing Report 12th July 1921When handed in at Local Office 12th July 1921

Received at London Office

No. in Survey held at Falmouth.

Port of Falmouth

Date, First Survey 7th JuneLast Survey 6th July 1921.

Reg. Book. 76753. on the SS "BARON LOVAT" ex "WOLFSBURG"

(Number of Visits 11)

Master Not yet appointed Built at Geestemunde By whom built J.C. Techlenborg A.G.

Tons Gross 6185

Net 3815

Engines made at Geestemunde By whom made J.C. Techlenborg A.G.

When built 1915

Boilers made at Geestemunde By whom made J.C. Techlenborg A.G.

when made 1915

Registered Horse Power 703 Owners H. Hogarth & Sons

when made 1915

Nom. Horse Power as per Section 28 703

Is Refrigerating Machinery fitted for cargo purposes No

Port belonging to Ardrossan

Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 31½, 50¾, 82¾ Length of Stroke 55½

Revs. per minute

Dia. of Screw shaft as per rule

Material of screw shaft

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

Is the after end of the liner made water tight

in the propeller boss 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

Dia. of Tunnel shaft as per rule 15.93

Dia. of Crank shaft journals as per rule 16.72

Dia. of Crank pin 16¾

Size of Crank webs 6" thick

collars 16½ Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps 2 Diameter of ditto 4¾ Stroke 28"

Can one be overhauled while the other is at work

No. of Bilge pumps 2 Diameter of ditto 4¾ Stroke 28"

Can one be overhauled while the other is at work

No. of Donkey Engines 4 Sizes of Pumps See back of Report

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

In Engine Room 4 - 3½" Tunnel 1-3½" Tunnel Well 1-3½" In Holds, &c. 10 - 3½"

No. of Bilge Injections 1 sizes 10" Connected to condensers, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

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

Are they Valves or Cocks

Are the Discharge Pipes above or below the deep water line

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

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

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

How are they protected

What pipes are carried through the bunkers

None

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

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

Dates of examination of completion of fitting of Sea Connections

of Stern Tube

Screw shaft and Propeller

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from Top platform in E.R.

BOILERS, &c.—(Letter for record N)

Manufacturers of Steel

Total Heating Surface of Boilers 9920

Is Forced Draft fitted

No. and Description of Boilers

A. S.E.

Working Pressure 199 lbs

Tested by hydraulic pressure to

270

Date of test

G.L. Surveyors

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

56.5 ft

No. and Description of Safety Valves to

each boiler 2 Direct Spring

Area of each valve

12.56"

Pressure to which they are adjusted

204 lbs

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

24"

Mean dia. of boilers

14-8"

Length

11-1¾"

Material of shell plates

Thickness 1¾" Range of tensile strength 27.9-33 tons

Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams

long. seams Treble

Diameter of rivet holes in long. seams

1½"

Pitch of rivets

9¾"

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets 87.8

plate 84

Working pressure of shell by rules

210

Size of manhole in shell 16" longitudinally

Size of compensating ring 41¾" x 1½"

No. and Description of Furnaces in each boiler

3 Morion

Material S

Outside diameter

Length of plain part top

Thickness of plates crown

5½"

Description of longitudinal joint

Welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

222

Combustion chamber plates: Material

S

Thickness: Sides

43/64"

Back

43/64"

Top

Pitch of stays to ditto: Sides

7½" x 8½"

Back

7½" x 7½"

Top

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

Material of stays

Diameter at smallest part

1.91

Area supported by each stay

59"

Working pressure by rules

290

End plates in steam space:

Material S

Thickness

1½"

Pitch of stays

15 x 14½"

How are stays secured

DN. Loose M

Working pressure by rules

Diameter at smallest part

3

Area supported by each stay

219"

Working pressure by rules

336"

Material of Front plates at bottom

S

Thickness 1½"

Material of Lower back plate

S

Thickness

15/16"

Greatest pitch of stays

13¾"

Working pressure of plate by rules

Pitch across wide water spaces

14"

Working pressures by rules

222

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

10½" x 22" x ¾"

Length as per rule

33

Distance apart

7½"

Number and pitch of stays in each

3 x 7½"

Working pressure by rules

223 Superheater or Steam chest; how connected to boiler

Schmidt type

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

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

Working pressure of end plates

Area of safety valves to superheater

1.91

Are they fitted with easing gear

Yes

Lloyd's Register

Foundation

5910-847m

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	
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									
Material of shell plates	Thickness		Range of tensile strength			Dia. of donkey boiler		Length		
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:— 2 each, Top End, Bottom End, & Main Bearing Bolts & Nuts.
2 sets of Coupling bolts, 1 set each of Feed & Belter Pump Valves, Assorted bolts & nuts,
& iron of various sizes. 1 set each of HP, IP & LP piston rings, 1 HP valve spindle, 1 Air pump
rod, 1 set each Crank pin & Top end brasses, $\frac{1}{3}$ of Crank shaft, 2 MB Safety Valve springs etc
The foregoing is a correct description.

Particulars of Dredge Pumps Feed pump Weir type (double) $11\frac{3}{4} \times 8\frac{5}{8} \times 23\frac{5}{8}$ - Ballast pump
 Dates of Survey while building { During progress of work in shops - -
 { During erection on board vessel - - -
 Total No. of visits { $13\frac{3}{4} \times 15\frac{3}{4} \times 23\frac{5}{8}$ - General service $7\frac{1}{8} \times 5\frac{1}{2} \times 5\frac{3}{4}$

Dates of Examination of principal parts—		Cylinders	Slides	Covers	Pistons	Rods
Connecting rods	Crank shaft	Thrust shaft	Tunnel shafts	Screw shaft	Propeller	
Stern tube	Steam pipes tested	Engine and boiler seatings	Engines holding down bolts			
Completion of pumping arrangements	Boilers fixed	Engines tried under steam				
Main boiler safety valves adjusted	6/7/21	Thickness of adjusting washers	Slide Bl. 9/16 5/16 Port. 5/16 2 3/4" Centre 11/32" 25/64" Fore 11/32" 3/8"			
Material of Crank shaft	Identification Mark on Do.	Material of Thrust shaft	Identification Mark on Do.			
Material of Tunnel shafts	Identification Marks on Do.	Material of Screw shafts	Identification Marks on Do.			
Material of Steam Pipes	Steel	Test pressure				

General Remarks (State quality of workmanship, opinions as to class, &c. (Please see Bremen Lpt No 456 also Sec Ltr 16-6-21) — With the exception of the screw shaft, stern tube & propeller, ^{& sea cocks,} all the working parts of the engines have been opened out examined & found to be in good order, & in accordance with the requirements of the Rules. — The boilers have been examined throughout & found to be in good order, & the scattlings in accordance with the approved plan. The pumping arrangements, except the sea cocks, have been examined & found to be in good order & in accordance with the approved plan. — To complete the survey the propeller, stern tube, screw shaft & sea cocks remain to be examined, & the particulars verified. The machinery is eligible in my opinion to receive record of LMC 7.2! when the survey has been completed as above. (The survey will probably be completed at a Bristol Channel port, but definite arrangements have not yet been made.)

The amount of Entry Fee		.. £	When applied for.
Special	£	19..
Donkey Boiler Fee	£	When received.
Travelling Expenses (if any)	£		19..

Committee's Minute

Assigned

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

Lloyd's Register
Foundation