

REPORT ON MACHINERY.

No. 11641

Received at London Office SAT 14 JUL. 1923

Date of writing Report 19 When handed in at Local Office 12th July 1923. Port of Middlesbrough

No. in Survey held at Glasgow and Middlesbrough Date, First Survey 4th June Last Survey 12th July 1923

Reg. Book. on the Steel Screw Steamer HOOKWOOD. (SS N^o 51) (Number of Visits 13)

Master Built at Haverton Hill By whom built Furness S B & Co Ltd Tons Gross Net When built

Engines made at Glasgow By whom made Ross & Duncan N^o 1113 when made 1923

Boilers made at do By whom made do when made 1923

Registered Horse Power Owners Port belonging to

Net. Horse Power as per Section 28 156 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion (See G.L. Rpt N^o 42795 No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 17" - 27½" - 46" Length of Stroke 33" Revs. per minute Dia. of Screw shaft as per rule 9.85" Material of screw shaft S as fitted 10.3½"

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

Is 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 Yes If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 40½"

Dia. of Tunnel shaft as per rule 8.62" Dia. of Crank shaft journals as per rule 9.05" Dia. of Crank pin 9¼" Size of Crank webs 17½" x 6" Dia. of thrust shaft under

collars 9½" Dia. of screw 12 - 3" Pitch of Screw 12 - 6" No. of Blades 4 State whether moveable No Total surface 50 sq ft

No. of Feed pumps 2 Diameter of ditto 2¼" Stroke 16½" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 3" Stroke 16½" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps 6 x 8 x 8 6 x 4½ x 6 duplex No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 3 @ 2½" In Holds, &c. 2 @ 3" in forehold, 3 @ 3" in aft hold

Tunnel well one @ 2½"

No. of Bilge Injections 1 sizes 4" Connected to condenser or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 3½"

Are all the bilge suction pipes fitted with roses Yes Are the valves in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible None

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

What pipes are carried through the bunkers Suction to fore hold How are they protected Wood ceiling

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

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top platform

OILERS, &c.—(Letter for record S) Manufacturers of Steel Colvilles

Total Heating Surface of Boilers 2806 sq ft Is Forced Draft fitted No No. and Description of Boilers Two single ended

Working Pressure 180 lbs Tested by hydraulic pressure to 320 lbs Date of test 7-6-23 No. of Certificate 16273-16274

Can each boiler be worked separately Yes Area of fire grate in each boiler 39.5 sq ft No. and Description of Safety Valves to

each boiler Two Spring loaded Area of each valve 4.9 sq ft Pressure to which they are adjusted 182 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 1'-6" Mean dia. of boilers 12'-0" Length 10'-6" Material of shell plates S

Thickness 1" Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams D.R

Long. seams T.R.D.B.S Diameter of rivet holes in long. seams 1" Pitch of rivets 7" Lap of plates or width of butt straps 14½"

Per centages of strength of longitudinal joint rivets 86.4 Working pressure of shell by rules 182 Size of manhole in shell 16" x 12"

plate 85.7

Size of compensating ring 30½" x 26½" No. and Description of Furnaces in each boiler 2 Morison Material S Outside diameter 3'-7½"

Length of plain part top bottom Thickness of plates crown bottom 9½" Description of longitudinal joint weld No. of strengthening rings

Working pressure of furnace by the rules 189 Combustion chamber plates: Material S Thickness: Sides 11/16" Back 5/8" Top 11/16" Bottom 11/16"

Pitch of stays to ditto: Sides 9½" x 9" Back 8½" x 8½" Top 9½" x 9" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 187

Material of stays S Area at smallest part 2.07 sq ft Area supported by each stay 85.5 sq ft Working pressure by rules 195 End plates in steam space:

Material S Thickness 1" Pitch of stays 16" x 17" How are stays secured D.N.L.W Working pressure by rules 197 Material of stays S

Area at smallest part 4.57 sq ft Area supported by each stay 272 sq ft Working pressure by rules 182 Material of Front plates at bottom S

Thickness 7/8" Material of Lower back plate S Thickness 27/32 Greatest pitch of stays 14" x 8½" Working pressure of plate by rules 216

Diameter of tubes 3¼" Pitch of tubes 4½" x 4½" Material of tube plates S Thickness: Front 7/8" Back 3/4" Mean pitch of stays 10"

Pitch across wide water spaces 14" Working pressures by rules 183 Girders to Chamber tops: Material S Depth and

thickness of girder at centre 7" x 13¼" Length as per rule 30½" Distance apart 9" Number and pitch of stays in each 2 - 9½"

Working pressure by rules 214 Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

2415-0088

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Lloyd's Register
Foundation

If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— Two each of Top and bottom end connecting rod bolts, in Sur
and nuts, two Main bearing bolts and nuts, one set of coupling bolts and nuts, one set g. Book.
Main and donkey feed check valves, set of Main feed and bridge valves, one safety valve on
spring, set of spare links for Piston rings, 6 Junk ring bolts, one C & I Propeller, quantities made
of assorted bolts & nuts and repairing iron, Crank shaft gauge, Propeller gauge, Silers made
and stoppers & minor gear. gistered F
m. Horse

The foregoing is a correct description,

See Glasgow Report N^o 42795

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1920 Jan 4, 14, July 7 Sept 29 Oct 19 Nov 8, 25, 30 Dec 27 1921 Jan 21st 26 Feb 2, 8, 14, 22, Mar 9, 18, 23, Apr 5, 13, 20, 28
 { During erection on board vessel - - May 10, 18, Aug 11, Sept 13, 23 Nov 10, 21, 1922 Mar 11, 22, 26, Apr 5, 9, 16, 26, 30, May 7, 11, 15, 18, 24, 28, 31, June 5, 7 +
 { Total No. of visits 46 + 13 = 59.

Is the approved plan of main boiler forwarded herewith *Yes*

Is the approved plan of main boiler forwarded herewith

“ “ “ *donkey* “ “ “

Dates of Examination of principal parts—Cylinders 9/5-6-23 Slides 9/5-6-23 Covers 9/5-6-23 Pistons 9/18-5-23 Rods 9/18-5-23 of Bilge
Propeller 9/5-6-23 of Donk

Connecting rods 46 18-5-23 Crank shaft 46 18-5-23 Thrust shaft 46 28-5-23 Tunnel shafts 46 28-5-23 Screw shaft 46 5-8-25 Propeller 46 5-8-25 Engine

Stern tube 5-6-23 Steam pipes tested 26/7/8-6-23 Engine and boiler seatings 28-6-23 Engines holding down bolts 5-7-23

Completion of pumping arrangements 3-7-23 Boilers fixed 3-7-23 Engines tried under steam 4-7-23 of Bilge

Completion of fitting sea connections 12-6-23 Stern tube 13-6-23 Screw shaft and propeller 13-6-23 " all the b

Main boiler safety valves adjusted 4-7-23 Thickness of adjusting washers Port Boiler 1/8 SV 32. St Boiler 1/8 SV 32 all com

Material of Crank shaft S Identification Mark on Do. 1113 JSC Material of Thrust shaft S Identification Mark on Do. 1113 JSC

Material of Tunnel shafts S Identification Marks on Do. 113 HC
586 Material of Screw shafts S Identification Marks on Do. 1113 S.S they each

Material of Steam Pipes Solid drawn Copper (4 bore No 79) Test pressure 360 lbs. at pipes

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. ✓ all P₁

Have the requirements of Section 49 of the Rules been complied with ☒ *yes* *no* *not applicable*

Is this machinery duplicate of a previous case yes. If so, state name of vessel S.S. Bishopston (Sa. 16 Dec 42) the Ser

General Remarks (State quality of workmanship, opinions as to class, &c. The Machinery of this vessel which

General Remarks (State quality of material, etc.)

was built under special survey (See Ltr rpt A-42/95) has now been rking

Secured on board, in accordance with the rules, the safety valves adjusted, and each

The Engines, Boilers and Auxiliaries examined under steam, and all found boilers

1851-1852

satisfactory.

The working condition, and handle seam

The Machinery is in a good and safe working condition.

the vessel eligible in my opinion to have the notation of SEMI / as of con

Register Book.

king

It is submitted that

this vessel is eligible for
THE RECORD # 1 MC 7 23 C1

THE RECORD. 7 LHC 7.20. CL

... a at

16/7/23

below 1 meter

The amount of Entry Fee ... \$: : ☒ When applied for.

Special ... ¹²/₅ ... £ 7 : 16 : 0 13.7. 1923. C. E. Wilkes

Donkey Boiler Fee ... £ : : When received.

Travelling Expenses (if any) £ : : 6. 4. 23

Committee's Minute

Committee's Minute

The Assigned 7 dmlb / 1.23 2

FRI. 14 SEP. 1923 CERTIFICATE TUE. AUG. 21 1923

WRITTEN.