

REPORT ON MACHINERY.

No. 42873

Received at London Office WED. JUL 4 1923

Date of writing Report 2.7.1923 When handed in at Local Office

Port of Glasgow

No. in Survey held at Coatbridge Date, First Survey 13th March Last Survey 18th June 1923

Reg. Book 4113 On the Machinery for S.S. No. 4/S WHEATHILL (Number of Visits 18)

Master Built at Bideford. By whom built Hansen Ship & Repair Co. Ltd. When built 1923

Engines made at Coatbridge. By whom made Wm. Beardmore & Co. Ltd. No. 590 when made 1923.

Boilers made at Parkhead. By whom made Wm. Beardmore & Co. Ltd. No. 129 when made 1923.

Registered Horse Power Owners Messrs. Fuller & Baker Port belonging to Cardiff

Nom. Horse Power as per Section 28 71. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Compound. No. of Cylinders 2. No. of Cranks 2

Dia. of Cylinders 14" x 36" Length of Stroke 24" Revs. per minute Dia. of Screw shaft as per rule 1.55" Material of screw shaft M.S. as fitted 8 1/2"

Is the screw shaft fitted with a continuous liner the whole length of the stern tube No. 09 Is the after end of the liner made water tight in the propeller boss gland 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 No liners fitted, Cedarwell gland Length of stern bush 3' 0"

Dia. of Tunnel shaft as per rule 6.86" Dia. of Crank shaft journals as per rule 4.21" Dia. of Crank pin 4 1/2" Size of Crank webs 14" x 5" Dia. of thrust shaft under collars 7 1/2" Dia. of screw 9' 0" Pitch of Screw 11' 0" No. of Blades 4 State whether moveable No Total surface 32 sq. ft.

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 2 Sizes of Pumps 7x4x8 7x7x8 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2-2 1/4 Eng Room for Eng Room aft In Holds, &c. 2-2 1/4

No. of Bilge Injections 1 sizes 3" Connected to condenser, or to circulating pump Air pump a separate Donkey Suction fitted in Engine room & size Yes 3"

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 Hold suction How are they protected Under plates

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 None Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers 1334 sq. ft. Is Forced Draft fitted No. No. and Description of Boilers one cylindrical single ended

Working Pressure 130 lbs. Tested by hydraulic pressure to Date of test 8.6.23 No. of Certificate 16275

Can each boiler be worked separately Area of fire grate in each boiler 40.25 sq. ft. No. and Description of Safety Valves to each boiler 1-2 1/2 Double Spring Loaded Area of each valve 5.94 sq. in. Pressure to which they are adjusted Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork 10" Mean dia. of boilers 12' 0" Length 20' 6" Material of shell plates

Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams

long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps

Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell

Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter

Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom

Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays

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

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules 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 Compound 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

In a Report also sent on the Hull of the Ship



