

REPORT ON MACHINERY.

No. 17726

Date of writing Report 28th Oct 1920 When handed in at Local Office 29th Oct 1920 Port of Grainock Received at London Office WED. NOV. 3rd 1920

No. in Survey held at Grainock Date, First Survey 6th Aug 1919 Last Survey 28th Oct 1920
Reg. Book. on the Screw Steamer 'STAUR' (Number of Visits 106)

Master H. Sands Built at Grainock By whom built Grainock Dockyard Co Ltd Tons {Gross 508.5
Net 316.1 When built 1920

Engines made at Grainock By whom made Rankine and Blackmore Ltd when made 1920

Boilers made at Grainock By whom made Rankine and Blackmore Ltd when made 1920

Registered Horse Power 565 Owners Fearnley and Eger Port belonging to Christiana
Nom. Horse Power as per Section 28 565 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 27.45.74 Length of Stroke 51 Revs. per minute 75 Dia. of Screw shaft as per rule 15.16 Material of screw shaft I.S.
as fitted 15.1/2

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 jointed 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 no If two liners are fitted, is the shaft lapped or protected between the liners no Length of stern bush 63

Dia. of Tunnel shaft as per rule 13.66 Dia. of Crank shaft journals as per rule 14.34 Dia. of Crank pin 14.1/2 Size of Crank webs 27.3/4 x 9.1/2 Dia. of thrust shaft under collars 14.1/2 Dia. of screw 18-3 Pitch of Screw 18-0 No. of Blades 4 State whether moveable no Total surface 110.5

No. of Feed pumps 1 Diameter of ditto 8 Stroke 24 Can one be overhauled while the other is at work yes
Woodson 4.1/2 28

No. of Bilge pumps 2 Diameter of ditto 4.1/2 Stroke 28 Can one be overhauled while the other is at work yes

No. of Donkey Engines 3 Sizes of Pumps 4.1/2 x 6, 6 x 8, 12 x 12 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 5-3.1/2 Bore, Tumbler 1-3.1/2 Bore In Holds, &c. Forward Holds and Cases
Bunker 6-3.1/2 Bore, Aft Holds 4-3.1/2 Bore

No. of Bilge Injections 1 sizes 7 Connected to condenser, or to circulating pump CP Is a separate Donkey Suction fitted in Engine room & size yes 3.1/2

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 Outboard line

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 none How are they protected no

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, Eng. Room.

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel Steel Co of Scotland Ltd, D. Colville & Son, Ltd.

Total Heating Surface of Boilers 8517 Is Forced Draft fitted yes No. and Description of Boilers 3, Cyl. Single End.

Working Pressure 180 lb Tested by hydraulic pressure to 360 lb Date of test 25.8.20 No. of Certificate 1484

Can each boiler be worked separately yes Area of fire grate in each boiler 62.0 No. and Description of Safety Valves to each boiler 2, Spring Area of each valve 11.04 Pressure to which they are adjusted 185 lb Are they fitted with easing gear yes

Smallest distance between boilers on uptakes and bunkers on woodwork 2-0 Mean dia. of boilers 15-6 Length 12-6 Material of shell plates S.

Thickness 1.1/4 Range of tensile strength 28/32 Tons Are the shell plates welded or flanged no Descrip. of riveting: End. seams LBR, long. seams DBS/TR. Diameter of rivet holes in long. seams 1.5/16 Pitch of rivets 9/8 Lap of plates on width of butt straps 18.1/2

Per centages of strength of longitudinal joint 88.5 Working pressure of shell by rules 182 lb Size of manhole in shell 16 x 12
plate 88.6

Size of compensating ring 30.1/2 x 26.1/2 x 1.1/4 No. and Description of Furnaces in each boiler 3, Dighton Material S. Outside diameter 48.1/4

Length of plain part top 1.1/2 Thickness of plates bottom 1.1/2 Description of longitudinal joint Weld No. of strengthening rings no

Working pressure of furnace by the rules 182 Combustion chamber plates: Material S. Thickness: Sides 4/64 Back 39/64 Top 1/64 Bottom 3/4

Pitch of stays to ditto: Sides 9/8 x 8/8 Back 8/8 x 8/8 Top 9/8 x 8/8 Are stays fitted with nuts or riveted heads nuts Working pressure by rules 185 lb

Material of stays S. Area at smallest part 1.77 Area supported by each stay 76.42 Working pressure by rules 186 End plates in steam space: Material S. Thickness 1.9/32 Pitch of stays 21 x 19 How are stays secured DN Working pressure by rules 184 Material of stays S.1

Area at smallest part 7.24 Area supported by each stay 399 Working pressure by rules 188 Material of Front plates at bottom S.

Thickness 1.3/16 Material of Lower back plate S. Thickness 1.3/16 Greatest pitch of stays 12.1/2 x 8.1/4 Working pressure of plate by rules 202

Diameter of tubes 2.3/4 Pitch of tubes 4 x 3.7/8 Material of tube plates S. Thickness: Front 1.3/16 Back 3/4 Mean pitch of stays 9.13/16

Pitch across wide water spaces 1.3/2 Working pressures by rules 222 lb Girders to Chamber tops: Material S. Depth and thickness of girder at centre 1.1/2 x 1.1/2 Length as per rule 40.4/64 Distance apart 9.1/8 Number and pitch of stays in each 4 @ 8.1/8

Working pressure by rules 188 Steam dome: description of joint to shell none % of strength of joint no

Diameter no Thickness of shell plates no Material no Description of longitudinal joint no Diam. of rivet holes no

Pitch of rivets no Working pressure of shell by rules no Crown plates no Thickness no How stayed no

UPERHEATER. Type none Date of Approval of Plan no Tested by Hydraulic Pressure to no

Date of Test no Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler no

Diameter of Safety Valve no Pressure to which each is adjusted no Is Easing Gear fitted no

Lloyd's Register of Shipping
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