

REPORT ON MACHINERY.

No. 17246.

WED. 10 APR. 1918

Received at London Office

Date of writing Report 29 March 1918 When handed in at Local Office 1 April 1918 Port of Greenwich

No. in Survey held at Greenwich, S. Hargov Date, First Survey 28th June, 1916, Last Survey 30 March 1918
Reg. Book.

89 in S. on the Steel screw steamer Ardglass

(Number of Visits 4)

Gross 4617.01.

Net 2932.28.

When built 1918

Master J. J. Kerr. Built at S. Hargov By whom built Russell & Co.

Engines made at Greenwich By whom made John S. Tinsdale & Co. when made 1918

Boilers made at Greenwich By whom made John S. Tinsdale & Co. when made 1918

Registered Horse Power Owners Steamship Ardgary Co. Ltd. Port belonging to Greenwich

Nom. Horse Power as per Section 28 474 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

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

Dia. of Cylinders 26" 42" 70" Length of Stroke 48" Revs. per minute 70 Dia. of Screw shaft as per rule 14.47" Material of screw shaft Steel

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 60"

Dia. of Tunnel shaft as per rule 12.98" Dia. of Crank shaft journals as per rule 15.62" Dia. of Crank pin 15 1/4" Size of Crank webs 25 1/2" 8 1/2" Dia. of thrust shaft under

collars 15 1/4" Dia. of screw 17.6" Pitch of Screw 16.0" No. of Blades 4 State whether moveable Total surface 96 sq ft

No. of Feed pumps 2 Diameter of ditto 7" Stroke 21" Can one be overhauled while the other is at work

No. of Bilge pumps 2 Diameter of ditto 4" Stroke 27" Can one be overhauled while the other is at work

No. of Donkey Engines 3 Sizes of Pumps 18" 10" 6" 8" 4" 6" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 3 1/2" In Holds, &c. 8 1/2" 5 1/2" 10 1/2" 5 1/2"

Fuel oil discharge 7 1/2" 8"

No. of Bilge Injections 3 sizes 8" Connected to condenser, or to circulating pumps Is a separate Donkey Suction fitted in Engine room & size 3 1/2"

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 they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers How are they protected

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

Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from top of stokehold

MILLERS, &c.—(Letter for record) Manufacturers of Steel Glasgow S. & Co. Ltd.

Total Heating Surface of Boilers 7014 sq ft Is Forced Draft fitted No. and Description of Boilers Three large and small

Working Pressure 180 lb Tested by hydraulic pressure to 160 lb Date of test 25 Jan 1918 No. of Certificate 1322

Can each boiler be worked separately Area of fire grate in each boiler 55 1/2 sq ft No. and Description of Safety Valves to

boiler 10 1/2" Area of each valve 8.29 sq in Pressure to which they are adjusted 180 lb Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork 22" Mean dia. of boilers 14.9" Length 11.6" Material of shell plates Steel

Thickness 1 1/4" Range of tensile strength 28-32 Are the shell plates welded or flanged Descrip. of riveting: cir. seams

seams all rivets Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/4" Lap of plates or width of butt straps 18 1/2"

Percentages of strength of longitudinal joint rivets 87.5 plate 85.71 Working pressure of shell by rules 181 lb Size of manhole in shell 16" 12"

of compensating ring 1 1/4" No. and Description of Furnaces in each boiler Three bright Material Steel Outside diameter 46 1/2"

Thickness of plates crown 9 1/8" Description of longitudinal joint welded No. of strengthening rings 6

Working pressure of furnace by the rules 191 lb Combustion chamber plates: Material Steel Thickness: Sides 10 1/16" Back 2 1/16" Top 10 1/16" Bottom 1 1/16"

of stays to ditto: Sides 8 1/2" 8 1/4" Back 8 1/2" 9 1/4" Top 8 1/2" 8 1/4" If stays are fitted with nuts or riveted heads Working pressure by rules 181 lb

Material of stays 1/2" Area at smallest part 1.79 sq in Area supported by each stay 7 sq in Working pressure by rules 193 lb End plates in steam space:

Material Steel Thickness 1 1/2" Pitch of stays 24" 19 1/2" How are stays secured all rivets Working pressure by rules 181 lb Material of stays Steel

at smallest part 8 1/2" Area supported by each stay 462 sq in Working pressure by rules 181 lb Material of Front plates at bottom Steel

Thickness 1 1/2" Material of Lower back plate Steel Thickness 1 1/2" Greatest pitch of stays 13" Working pressure of plate by rules 181 lb

Pitch of tubes 2 1/2" Pitch of tubes 3 1/2" 3 1/4" Material of tube plates Steel Thickness: Front 10 1/16" Back 1 1/16" Mean pitch of stays 9 1/2"

across wide water spaces 10" Working pressures by rules 187 lb Girders to Chamber tops: Material Steel Depth and

Weight of girder at centre 8 1/2" 1 1/2" Length as per rule 51.66 Distance apart 8 1/2" Number and pitch of stays in each 8 1/4"

Working pressure by rules 199 lb Steam dome: description of joint to shell % of strength of joint

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

Working pressure of shell by rules Crown plates Thickness How stayed

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

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

Pressure to which each is adjusted Is Easing Gear fitted

No. of Safety Valve

No. of Visits 5

Date of Report 13. 24. 30. Nov. 8. 15. 20. 27.

Lloyd's Register

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