

REPORT ON MACHINERY.

No. 8200

Date of writing Report 25th Aug 1919 When handed in at Local Office 10 Port of Belfast THU. 11 SEP
No. in Survey held at Belfast Date, First Survey 17th Oct 1918 Last Survey 19th Aug 1919
Reg. Book. S.S. "Gorica" (ex "Gorica") (Number of Visits 48) Gross 5150
on the Master Built at Belfast By whom built Workman Clark & Co Ltd Net 3150
Engines made at Belfast By whom made when made
Boilers made at By whom made when made
Registered Horse Power Owners British India S. S. Co Ltd Port belonging to Glasgow
Nom. Horse Power as per Section 28 518 517 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Single Screw Triple Expansion of Cylinders 3 No. of Cranks 3
Dia. of Cylinders 27-44-73 Length of Stroke 48 Revs. per minute 78 Dia. of Screw shaft as per rule 14.5 as fitted 15.5 Material of I. Steel
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 No 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 60 1/2
Dia. of Tunnel shaft as per rule 13.3 as fitted 13.5 Dia. of Crank shaft journals as per rule 13.9 as fitted 14.5 Dia. of Crank pin 14 1/2 Size of Crank webs 28 x 9 Dia. of thrust shaft under
collars 14 3/4 Dia. of screw 17-6 Pitch of Screw 16-6 No. of Blades 4 State whether moveable Yes Total surface 102 1/2 sq ft.
No. of Feed pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameter of ditto 4 Stroke 24 Can one be overhauled while the other is at work Yes
No. of Donkey Engines 2 Other size 1 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 4-3 1/2 In Holds, &c. 9-3 1/2 1-3 1/2

No. of Bilge Injections 1 sizes 12 Connected to condenser, or to circulating pump Pump 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 Yes
Are all connections with the sea direct on the skin of the ship Yes-Except main 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 Below
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 Four hold suction How are they protected Wood casings
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 E. Room
Manufacturers of Steel Port Talbot Steel Works

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Port Talbot Steel Works
Total Heating Surface of Boilers 7668 sq ft Forced Draft fitted Yes No. and Description of Boilers 3 Single End Cylinders
Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 24-6-19 No. of Certificate 547
Can each boiler be worked separately Yes Area of fire grate in each boiler 63 1/2 sq ft No. and Description of Safety Valves to
each boiler 2 Direct Spring Area of each valve 9.62 sq Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 2 ft. Mean dia. of boilers 15-6 Length 11-6 Material of shell plates Steel
Thickness 1 1/2 Range of tensile strength 28-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seam Lap S. R.
long. seam P. Butt Lub Diameter of rivet holes in long. seams 1 1/16 Pitch of rivets 9 1/8 Lap of plates or width of butt straps 19 1/2
Per centages of strength of longitudinal joint rivets 88.3 plate 85.6 Working pressure of shell by rules 182 lbs Size of manhole in shell 16-12
Size of compensating ring Plate Flange and Description of Furnaces in each boiler 3-Deighton Material Steel Outside diameter 50 3/8
Length of plain part top 5 Thickness of plates crown 3 1/2 Description of longitudinal joint Weld No. of strengthening rings
bottom 8 Thickness of plates bottom 3 3/2 Working pressure of furnace by the rules 88 lbs Combustion chamber plates: Material Steel Thickness: Sides 3/32 Back 1/16 Top 23/32 Bottom 23/32
Pitch of stays to ditto: Sides 10 1/2 x 9 1/4 Back 9 1/2 x 8 1/2 Top 10 1/2 x 9 1/4 If stays are fitted with nuts or riveted heads Nuts inside Working pressure by rules 180 lbs
Material of stays Steel Area at smallest part 2.3854 Area supported by each stay 98 1/2 sq Working pressure by rules 186 lbs End plates in steam space:
Material Steel Thickness 1 1/2 Pitch of stays 2 1/2 x 2 1/2 How are stays secured Nuts inside Working pressure by rules 180 lbs Material of stays Steel
Area at smallest part 8.2924 Area supported by each stay 45.98 sq Working pressure by rules 187 lbs Material of Front plates at bottom Steel
Thickness 1 1/2 Material of Lower back plate Steel Thickness 3/32 Greatest pitch of stays 13 5/8 Working pressure of plate by rules 189 lbs
Diameter of tubes 2 1/4 Pitch of tubes 4 x 3 1/8 Material of tube plate Steel Thickness: Front 3/32 Back 1/4 Mean pitch of stays 2 x 7 1/4
Pitch across wide water spaces 13 5/8 Working pressures by rules 181 lbs Girders to Chamber tops: Material Steel Depth and
thickness of girder at centre 10 x (8 x 2) Length as per rule 35 1/16 Distance apart 10 5/8 Number and pitch of stays in each 3-9 1/4
Working pressure by rules 182 lbs 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

W48-0028 (1/2)

IS A DONKEY BOILER FITTED? *No* ✓ If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:— *See other sheet* ✓

The foregoing is a correct description,
FOR WORKMAN, CLARK & CO., LIMITED.

J. Cunningham

Manufacturer.

Dates of Survey while building
During progress of work in shops --
During erection on board vessel --
Total No. of visits

1918: - Dec 17 to 19th Aug 1919

Is the approved plan of main boiler forwarded here with *Standard*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *17-18* Covers *5* Pistons *5* Rods *5*
Connecting rods *4-7-19* Crank shaft *10* Thrust shaft *18* Tunnel shafts *5* Screw shaft *2-7-19* Propeller *2-7-19*

Stern tube *2-7-19* Steam pipes tested *25-6-19* Engine and boiler seatings *8-8-19* Engines holding down bolts *8-8-19*

Completion of pumping arrangements *19-8-19* Boilers fixed *8-8-19* Engines tried under steam *12-8-19*

Completion of fitting sea connections *2-7-19* Stern tube *29-7-19* Screw shaft and propeller *29-7-19*

Main boiler safety valves adjusted *12-8-19* Thickness of adjusting washers *8-13-32*

Material of Crank shaft *L. Steel* Identification Mark on Do. *LLOYDS R.J.B. 30-5-19* Material of Thrust shaft *do* Identification Mark on Do. *LLOYDS R.J.B. 27-6-19*

Material of Tunnel shafts *do* Identification Marks on Do. *LLOYDS R.J.B. 13-6-19* Material of Screw shafts *do* Identification Marks on Do. *LLOYDS R.J.B. 2-7-19*

Material of Steam Pipes *W. Iron* ✓ Test pressure *600 lbs sq*

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

Have the requirements of Section 49 of the Rules been complied with ✓

Is this machinery duplicate of a previous case *Yes* ✓ If so, state name of vessel *S. Ballygally Head*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel has been constructed under Special Survey, and in accordance with the Rules. The workmanship, and the materials are of good description, and on trial in Belfast Lough the machinery worked satisfactorily. In my opinion, it is eligible for records + L.M.C. 8-19, with notation "Forced Draft" and "Electric Light"

It is submitted that
this vessel is eligible for
THE RECORD + L.M.C. 8.19. F.D.

The amount of Entry Fee ... £ *3* : *0* :
Special ... £ *45* : *18* :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, *6-9-1919*
When received, *12-9-1919*

Committee's Minute TUE 16 SEP 1919

Assigned

R. F. Beven
Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register
Foundation

Belfast

S.S. Gograg

Auxiliary Pumps

1 Ballast	10 1/2" x 14" x 24" ✓
2 Feed	10 1/2" x 8" x 24" ✓
1 General	9 1/2" x 7" x 18" ✓
1 Ash Ejector	12" x 8" x 10" ✓
1 Sighting	6" x 6" x 15" ✓

Principal Items of Spare Gear

1 Propeller Shaft	✓
1 Propeller	✓
1/2" Crank Shaft	✓
1 Eccentric Strap	✓
1 Top end brass	✓
1 - and 1 bottom half main bearing	✓
2 Connecting Rod top end bolts & nuts	✓
2 - - - - - bottom - - - - -	✓
2 Main bearing bolts & nuts	✓
6 Shaft coupling bolts & nuts	✓
2 Feed Pump Valves	✓
2 Rife	✓
3 Main feed Check Valves	✓
3 Donkey	✓
50 Bolts & nuts assorted	✓
6 Studs of each size in Barker mountings	✓
6 Cy lindes cover studs & nuts	✓
6 Steam chest - - - - -	✓
Bars flat & round iron	✓
12 Condenser tubes & 50 ferrules	✓
6 Air Pump valves	✓
1 Feed pump escape valve spring	✓
12 Barker tubes plain	✓
Set of gear for Auxiliary Pumps.	✓

C. P. Bennett