

REPORT ON MACHINERY.

No. 41538

Date of writing Report 17th Nov 1921 When handed in at Local Office 21st Nov 1921 Port of Glasgow Received at London Office WED. 30 NOV. 1921
No. in Survey held at Glasgow Date, First Survey 8th Dec 1919 Last Survey 16th Nov 1921
Reg. Book. on the Sd. Broomlough (Number of Visits 34)
Master Built at Rutherglen By whom built W. Chalmers & Co. Ltd Tons Gross 311 Net 113
Engines made at Glasgow By whom made Gaultie & Gillespie Ing 10161 when made 1921
Boilers made at Glasgow By whom made A. W. Dalziel (Ing 761) when made 1920
Registered Horse Power Owners Alexander King Ltd Port belonging to Belfast
Nom. Horse Power as per Section 28 62 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 15" x 32" Length of Stroke 24 Revs. per minute 120 Dia. of Screw shaft as per rule 8.5-6-94 Material of screw shaft 1
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 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 32"
Dia. of Tunnel shaft as per rule 8-3-6-445 Dia. of Crank shaft journals as per rule 6-6-6-77 Dia. of Crank pin 6 7/8 Size of Crank webs 10 x 4 1/2 Dia. of thrust shaft under collars 6 7/8 Dia. of screw 8-0 Pitch of Screw 10-6 No. of Blades 4 State whether moveable No Total surface 24 ft²
No. of Feed pumps 1 Diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work
No. of Bilge pumps 1 Diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work
No. of Donkey Engines One Sizes of Pumps 6 x 4 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room + Stokehold 3 @ 2" In Holds, &c. Two @ 2"

No. of Bilge Injections 1 sizes 3 Connected to condenser, or to circulating pump C.P. Is a separate Donkey Suction fitted in Engine room & size Yes 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 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 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 Cold bilge suction How are they protected Strong wood casing
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 No tunnel Is it fitted with a watertight door worked from

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

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers
Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate 15219
Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to each boiler Two spring loaded Area of each valve 5.29 sq. Pressure to which they are adjusted 135 lbs Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers Length 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
bottom Thickness of plates bottom
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

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

W694-0182

Rpt. 5
Date of
No. in
Reg. Bo
Master
Engines
Boilers
Register
MUL
(Letter
Boilers
No. of
safety
Are the
Smalles
Material
Descrip
Lap
rules
boiler
Descrip
plates
Top 8
smalles
Pitch
Area

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

1 Scheel of top bottom end, main bearing & coupling bolts and nuts, 1 scheel of bilge feed pump valves, assorted bolts, nuts & washers.

The foregoing is a correct description,

W. Gillespie

Manufacturer.

Dates of Survey while building
During progress of work in shops -- 1919 Dec 8. 16 1920 Jan 12. 27 Feb 2. 16. 27 Mar 10. 11. 19. 20. 30 May 14. 31 Jun 21 Sep 30 Oct 20 Nov 12 Dec 11. 15. 27 1921 Jan 25
During erection on board vessel --- Feb 7. Mar 7. 25. 30 July 7 Aug 29 Sep 15. 20 Oct 5 Nov 8. 9. 16
Total No. of visits 34.

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 20-4-20 Slides 14-5-20 Covers 15-12-20 Pistons 14-5-20 Rods 12-11-20

Connecting rods 12-11-20 Crank shaft 19-3-20 Thrust shaft 19-3-20 Tunnel shafts — Screw shaft 19-3-20 Propeller 14-5-20

Stern tube 7-2-21 Steam pipes tested 20-9-21 Engine and boiler seatings 30-3-21 Engines holding down bolts 20-9-21

Completion of pumping arrangements 16-11-21 Boilers fixed 20-9-21 Engines tried under steam 8-11-21

Completion of fitting sea connections 30-3-21 Stern tube 30-3-21 Screw shaft and propeller 30-3-21

Main boiler safety valves adjusted 8-11-21 Thickness of adjusting washers P 3/16 S 3/32.

Material of Crank shaft Identification Mark on Do. N° 5031. J.R.W. Material of Thrust shaft Identification Mark on Do. N° 5031. J.R.W.

Material of Tunnel shafts Identification Marks on Do. — Material of Screw shafts Identification Marks on Do. N° 5031. J.R.W.

Material of Steam Pipes Seamless Copper Test pressure 260 lbs

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 "Brambough" ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The engines and boiler of this vessel have

been built under Special Survey and in accordance with the Rules, they have been fitted on board in an efficient manner tried under working conditions and are eligible to be classed with record of + L.M.C. 11-21.

It is submitted that this vessel is eligible for THE RECORD.

+ L.M.C. - 11.21.

C.L.

30/11/21.

MACHINERY CERT.
WRITTEN

The amount of Entry Fee ... £ 2 : 0 :
3/- Special ... £ 9 : 6 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :

When applied for,

25/11/21.

When received,

30-11-21.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + L.M.C. 11.21.

GLASGOW

29 NOV 1921



© 2021

Lloyd's Register
Foundation