

Received at London Office WED OCT 46 1920

Date of writing Report 30. 9. 1920 When handed in at Local Office 30. 9. 1920 Port of Glasgow
No. in Survey held at 15 on the T/S Lady Denison - Bender Date, First Survey 23rd Sept 1919 Last Survey 15th Sept 1920
Reg. Book. (Number of Visits 4)
Master Built at Glasgow By whom built Fairfield S.B.E.C. 22. 6. 97 When built 1920
Engines made at Glasgow By whom made Fairfield S.B.E.C. 22. 6. 97 when made 1920
Boilers made at Glasgow By whom made Fairfield S.B.E.C. 22. 6. 97 when made 1920
Registered Horse Power Owners Eastern Telegraph Co Port belonging to London
Nom. Horse Power as per Section 28 352 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c. Description of Engines Triple Expansion (2 Shs) No. of Cylinders 6 No. of Cranks 6
Dia. of Cylinders 15 1/2 - 25 - 44 Length of Stroke 30 Revs. per minute 120 Dia. of Screw shaft as per rule 8.9 as fitted 9 1/8 Material of screw shaft S
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 3 - 8 1/8"
Dia. of Tunnel shaft as per rule 8.5 as fitted 8 3/8 Dia. of Crank shaft journals as per rule 8.244 as fitted 8 3/8 Dia. of Crank pin 8 1/2 Size of Crank webs 6 1/2 Dia. of thrust shaft under collars 8 3/8 Dia. of screw 11 - 0 Pitch of Screw 12.3 No. of Blades 3 State whether moveable No Total surface 33.24
No. of Feed pumps 1 Dia. of ditto 7 Stroke 8 Can one be overhauled while the other is at work Yes
No. of Bilge pumps 4 Diameter of ditto 3 3/4 Stroke 14 Can one be overhauled while the other is at work Yes
No. of Donkey Engines 2 Sizes of Pumps 8 + 9 + 8 1/2 + 4 1/2 + 3 + 6 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 4 Sh. Room: 6 - 3" : 1 Sh. 4" In Holds, &c. 2 - 3" in each
1 - 3" Tunnel well
No. of Bilge Injections 2 sizes 6 Connected to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size 4"
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 below
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 Bilge, Ballast How are they protected Steel Corrugated
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 U.E. Platform

BOILERS, &c. (Letter for record S) Manufacturers of Steel The Steel Coy of Scotland Ltd
Total Heating Surface of Boilers 5676 Is Forced Draft fitted Yes No. and Description of Boilers 3 Single Ended
Working Pressure 180 Tested by hydraulic pressure to 320 Date of test 29. 11. 19 No. of Certificate 15621, 15624
Can each boiler be worked separately Yes Area of fire grate in each boiler 47.58 No. and Description of Safety Valves to each boiler Double Spring Area of each valve 4.66 Pressure to which they are adjusted 185 Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 13.6 Length 10-11 Material of shell plates S
Thickness 1 1/8" Range of tensile strength 28/32 Are the shell plates welded or flanged Descrip. of riveting: cir. seams DR
long. seams TRIDBS Diameter of rivet holes in long. seams 13/16 Pitch of rivets 8 3/8 Width of butt straps 18"
Per centages of strength of longitudinal joint rivets 90.29 plate 85.82 Working pressure of shell by rules 183.5 Size of manhole in shell 16 x 12
Size of compensating ring 33 1/2 x 29 1/2 x 13/16 No. and Description of Furnaces in each boiler 3 Corrugated Material S Outside diameter 4 1/38
Length of plain part top Thickness of plates crown 7 9/16 Description of longitudinal joint Welded No. of strengthening rings
bottom Thickness of plates bottom 7 9/16
Working pressure of furnace by the rules 213 Combustion chamber plates: Material S Thickness: Sides 1 1/16 Back 3/8 Top 1 1/16 Bottom 1 1/16
Pitch of stays to ditto: Sides 9 3/4 x 7 1/2 Back 8 x 7 1/2 Top 9 3/4 x 7 1/2 If stays are fitted with nuts or riveted heads Yes Working pressure by rules 216
Material of stays S Area at smallest part 13.145 Area supported by each stay 6.73 Working pressure by rules 189 End plates in steam space:
Material S Thickness 1" Pitch of stays 18 x 13 3/4 How are stays secured DN Working pressure by rules 183 Material of stays S
Area at smallest part 4 11 Area supported by each stay 247.5 Working pressure by rules 180 Material of Front plates at bottom S
Thickness 7/8 Material of Lower back plate S Thickness 27/32 Greatest pitch of stays 13 1/2 x 8 Working pressure of plate by rules 236
Diameter of tubes 2 1/2 Pitch of tubes 33/4 x 33/4 Material of tube plates S Thickness: Front 7/8 Back 13/16 Mean pitch of stays 9 3/8
Pitch across wide water spaces 13 1/2 Working pressures by rules 183 Girders to Chamber tops: Material S Depth and thickness of girder at centre 6 1/4 x 3/8 Length as per rule 24 1/2 Distance apart 4 1/2 Number and pitch of stays in each 2 at 9 3/4
Working pressure by rules 207 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

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

✓

SPARE GEAR. State the articles supplied:— 2 connecting rod top end bolts & nuts: 2 connecting rod bottom end bolts & nuts: 4 main bearing bolts: 1 set of feed & bilge pump valves: complete set of piston rings for each size cylinder: a quantity of assorted bolts & nuts: iron of various sizes: 1 set of top & bottom end brasses: 1 spare section of Crank shaft: 1 spare tail shaft: 1 A.P. & 1 200 L.P. eccentric straps 3 valve spindles: 1 piston rod

The foregoing is a correct description,

For THE FAIRFIELD SHIPBUILDING

AND ENGINEERING CO., LIMITED,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1919: Sep 23 Oct 2.9.13 22.27 Nov 4.10.19 21.24.27 Dec 11.12.29.31 (1920) Jan 14.20.22.30 Feb 3.9.18 23.24.27 Mar 3.17.22
During erection on board vessel -- 1920: Aug 6 Sep 10.15
Total No. of visits 44.

Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " " ✓

Dates of Examination of principal parts—Cylinders 30.1.20 Slides 27.11.19 Covers 17.12.20 Pistons 10.11.19 Rods 22.10.19
Connecting rods 22.10.19 Crank shaft 12.12.19 Thrust shaft 23.2.20 Tunnel shafts 21.4.20 Screw shaft 18.2.20 Propeller 18.2.20
Stern tube 12.12.19 Steam pipes tested 24.2.20 Engine and boiler seatings 27.5.20 Engines holding down bolts 6.8.20
Completion of pumping arrangements 6.8.20 Boilers fixed 2.7.20 Engines tried under steam 10.9.20
Completion of fitting sea connections 27.5.20 Stern tube 27.5.20 Screw shaft and propeller 27.5.20
Main boiler safety valves adjusted 6.8.20 Thickness of adjusting washers FV 1/4 AV 3/16 FV 7/16 AV 7/16 FV 7/16 AV 7/16
Material of Crank shaft S Identification Mark on Do. LLOYDS Material of Thrust shaft S Identification Mark on Do. LLOYDS
Material of Tunnel shafts S Identification Marks on Do. WGM Material of Screw shafts S Identification Marks on Do. WGM
Material of Steam Pipes Steel Test pressure 540

Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150°F. Yes

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

Is this machinery duplicate of a previous case No If so, state name of vessel ✓

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

The machinery of this vessel has been built under special survey, the material and workmanship being good, and proved satisfactory on steam trial.

It is submitted that this vessel be eligible for a record of + L.M.C. 9.20 in the Register Book, also a notation of "Fitted for oil fuel. F.P. above 150°F."

It is submitted that this vessel is eligible for

THE RECORD + L.M.C. 9.20 F.P.

Fitted for oil fuel 9.20 F.P. above 150°F.

Roll

9/10/20

APL

MACHINERY CERT
WHITTEN
6-10-20

The amount of Entry Fee ... £ 3:0:0
Special ... £ 39:12:0
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 5/10/1920
When received, 20.11.1920

A. T. Thomas & Co. Ltd. London & Newcastle
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW

5-007 1920

Assigned + L.M.C. 9.20 F.P.
Carrying Oil Fuel re.



© 2020

Lloyd's Register
Foundation