

Received at London Office

Date of writing Report 9. 7. 1921 When handed in at Local Office 9. 7. 1921 Port of Glasgow
No. in Survey held at Glasgow Date, First Survey 17. 3. 1920 Last Survey 7. 7. 1921
Reg. Book. 815 "Tiger" (Number of Visits 45)
on the
Master Built at Glasgow By whom built Fairfield 330 E.C. 2 (1902) Tons } Gross
Engines made at Glasgow By whom made Fairfield 330 E.C. 2 (1902) when made 1921 } Net
Boilers made at Glasgow By whom made Fairfield 330 E.C. 2 (1902) when made 1921
Registered Horse Power Owners Port belonging to
Nom. Horse Power as per Section 28 347 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 23 1/2 - 38 - 62 Length of Stroke 42 Revs. per minute 75 Dia. of Screw shaft as per rule 5 7/8 Material of screw shaft 3
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 No If two
liners are fitted, is the shaft lapped or protected between the liners No Length of stern bush 4. 10"
Dia. of Tunnel shaft as per rule 11. 5/8 Dia. of Crank shaft journals as per rule 12. 1/6 Dia. of Crank pin 12 3/4 Size of Crank webs 8. 1/2 Dia. of thrust shaft under
collars 12 3/8 Dia. of screw 16. 0 Pitch of Screw 15. 3 No. of Blades 4 State whether moveable No Total surface 807
No. of Feed pumps 2 Diameter of ditto Stroke Can one be overhauled while the other is at work Yes
No. of Bilge pumps 2 Diameter of ditto 3 1/2 Stroke 21 Can one be overhauled while the other is at work Yes
No. of Donkey Engines 2 Sizes of Pumps 3 1/2 and 6. 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps
In Engine Room 1. 3 1/2 and 2. 3 1/2 In Holds, &c. 1. 3 on 1st. of Fore Peak Tank
No. of Bilge Injections 1 sizes 8 Connected to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size 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 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 None How are they protected —
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 Is it fitted with a watertight door No worked from —

BOILERS, &c.—(Letter for record 5) Manufacturers of Steel Steel Co. of Scotland
Total Heating Surface of Boilers 512 Is Forced Draft fitted Yes No. and Description of Boilers 2 Single Ended
Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 3. 12. 20 No. of Certificate 15613
Can each boiler be worked separately Yes Area of fire grate in each boiler 63. 37 No. and Description of Safety Valves to
each boiler Double Spring Area of each valve 9. 62 Pressure to which they are adjusted 185 Are they fitted with easing gear Yes
Smallest distance between boilers or uptakes and bunkers or woodwork 48 Mean dia. of boilers 15. 6 Length 11. 6 Material of shell plates S
Thickness 17/64 Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams DR
long. seams TRIDBS Diameter of rivet holes in long. seams 19/32 Pitch of rivets 9/16 Top of plates or width of butt straps 18 7/8
Per centages of strength of longitudinal joint rivets 86. 46 plate 85. 95 Working pressure of shell by rules 18 Size of manhole in dia 16 x 12
Size of compensating ring flanged No. and Description of Furnaces in each boiler 3 Corrugated Material S Outside diameter 50 3/16
Length of plain part top Thickness of plates crown 19/32 Description of longitudinal joint weld No. of strengthening rings —
bottom Thickness of plates bottom 11/16 Top 23/32 Bottom 23/32
Working pressure of furnace by the rules 183 Combustion chamber plates: Material S Thickness: Sides 23/32 Back 11/16 Top 23/32 Bottom 23/32
Pitch of stays to ditto: Sides 9 1/2 x 9 1/4 Back 9 1/2 x 8 3/4 Top 10 1/2 x 9 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 196
Material of stays S Area at smallest part 203. 236 Area supported by each stay 98. 28 Working pressure by rules 184 End plates in steam space:
Material S Thickness 1 1/32 Pitch of stay 2 1/4 x 2 1/4 How are stays secured DN Working pressure by rules 189 Material of stays S
Area at smallest part 7. 224 Area supported by each stay 473. 55 Working pressure by rules 86 Material of Front plates at bottom S
Thickness 3/32 Material of Lower back plate S Thickness 3/16 Greatest pitch of stays 3 3/8 x 8 3/4 Working pressure of plate by rules 205
Diameter of tubes 2 3/4 Pitch of tubes 4 x 3 7/8 Material of tube plates S Thickness: Front 3/32 Back 3/4 Mean pitch of stays 9 7/8
Pitch across wide water spaces 13 1/8 Working pressures by rules 191 Girders to Chamber tops: Material S Depth and
thickness of girder at centre 9 3/4 x 7 1/8 Length as per rule 2. 11 1/8 Distance apart 10 1/8 Number and pitch of stays in each 3-9 1/4
Working pressure by rules 199 Steam dome: description of joint to shell Yes % 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 both ends for top end, ditto for bottom end, 2 Main Bearing both, one set of Coupling both, one set of Feed Belge Pump both, 1 set of Piston Rings, a quantity of worked both ends, Iron of various sizes

The foregoing is a correct description,
For THE FAIRFIELD SHIPBUILDING

AND ENGINEERING CO., LIMITED.

R. Strachan Manufacturer.

ASSISTANT MANAGER.

Dates of Survey while building { During progress of work in shops - - 1920 Mar 17 Apr 7 May 26 27 Aug 27 Sep 20 22 Oct 18 25 27 Nov 13 14 15 17 22 25 Dec 2 3 (1921) Jan 20 27
During erection on board vessel - - Feb 7 15 17 21 24 26 28 Mar 3 7 11 16 25 29 Apr 5 7 13 15 18 22 28 May 24 July 6 7
Total No. of visits 45

Is the approved plan of main boiler forwarded herewith *Yes*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 14, 2, 21 Slides 3, 1, 21 Covers 25, 11, 20 Pistons 25, 11, 20 Rods 1, 11, 21

Connecting rods 1, 11, 21 Crank shaft 18, 16, 20 Thrust shaft 2, 12, 20 Tunnel shafts ✓ Screw shaft 7, 2, 21 Propeller 7, 2, 21

Stern tube 7, 2, 21 Steam pipes tested 7, 2, 21 Engine and boiler seatings 17, 2, 21 Engines holding down bolts 22, 4, 21

Completion of pumping arrangements 22, 4, 21 Boilers fixed 18, 4, 21 Engines tried under steam 7, 7, 21

Completion of fitting sea connections 24, 2, 21 Stern tube 24, 2, 21 Screw shaft and propeller 24, 2, 21

Main boiler safety valves adjusted 22, 4, 21 Thickness of adjusting washers PV 3/8 SV 5/16 PV 5/16 SV 11/32

Material of Crank shaft S Identification Mark on Do. 602 MC Material of Thrust shaft S Identification Mark on Do. 602 PS

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts S Identification Marks on Do. 602 WGM

Material of Steam Pipes Steel Test pressure 540 lb

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. These Engines & Boilers have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. The Machinery has been tried under steam & found satisfactory & is in my opinion eligible for the record of LMC 7, 21 & fitted for oil fuel 7, 21. F.P. above 150°F

It is submitted that this vessel is eligible for THE RECORD. + LMC 7, 21 F.P. CL Fitted for Oil Fuel 7, 21 F.P. above 150°F

Reel

15/7/21

GRD

MACHINERY CERT.
WRITTEN 18/8/21

The amount of Entry Fee ... £ 5 : - :
Special ... £ 77 : 1 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 12/7/21
When received, 17/8/21

W. Gordon - Muirhead & J.D. Boyle Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW: 12 JUL 1921

Assigned + LMC 7, 21

MACHINERY CERT.
WRITTEN 13/7/21
issued 18/8/21

Fitted for oil fuel 7, 21, F.P. above 150°F

Rpt. 13.

RE

Port of

No. in on

Reg. Book

82016.S. Bu

Owners A/S

Yard No. 60

DESCRIPTION

1-W.H. ALLEN SON

1-CROMPTON & CO

Capacity of Dyn

Where ^{AGE} Dynan

Position of Main

Positions of au

If fuses are fit

circuits

If vessel is wire

Are the fuses of

Are all fuses fit

are perman

Are all switches

Total number of

AFT -

FORWARD - 7

ENG. & BOILER

MIDSHIPS -

NAVIGATION

2 Mast ho

2 St

3 - (5 Lig

If are lights, wha

Where are the st

DESCRIPTION

Main cable carrying

Main cable carrying

Branch cables car

Branch cables car

Branch cables car

Leads to lamps car

Cargo light cables c

DESCRIPTION

LEAD COVE

TUBING.

Joints in cables, ho

Are all the joints of

positions, non

Are there any joint

How are the cables

CASING TO UP