

REPORT ON MACHINERY.

No. 77502

Received at London Office WED. 6 FEB 1918

Date of writing Report 24th 1918 When handed in at Local Office 28 FEB 1918 Port of

Survey held at Northwich Date, First Survey May 10th 1917 Last Survey 26th 1918
Reg. Book. Support the S.S. "Peronne" (Number of Visits 20)

Master J.A. Watkins Built at Northwich By whom built Messrs Yarwood & Sons Tons { Gross 207 Net 132 }
Engines made at Northwich By whom made Messrs Yarwood & Sons When built 1918

Boilers made at 0 By whom made 0 when made 1918

Registered Horse Power 32 Owners R.J. Park Port belonging to London
Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

Engines, &c.—Description of Engines Vertical Compound No. of Cylinders Two No. of Cranks Two
Dia. of Cylinders 13" 27" Length of Stroke 18" Revs. per minute 150 Dia. of Screw shaft as per rule 5.95 Material of screw shaft as fitted 5.625 (stabilized) (Material of the liner) made water tight

the screw shaft fitted with a continuous liner the whole length of the stern tube holiner Is the after end of the liner made water tight
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 17 1/4" (approx)

Dia. of Tunnel shaft as per rule 5.47 5.21 Dia. of Crank shaft journals as per rule 5.47 5.12 Dia. of Crank pin 5 1/2" Size of Crank webs 3 1/4 x 6 1/4" Dia. of thrust shaft under
collars 5 1/2" Dia. of screw 6-8" Pitch of Screw 8-0" No. of Blades 4 State whether movable Y No Total surface 16 1/2 sq"

No. of Feed pumps one Diameter of ditto 2" Stroke 9" Can one be overhauled while the other is at work Y
No. of Bilge pumps one Diameter of ditto 2" Stroke 9" Can one be overhauled while the other is at work Y
No. of Donkey Engines one Sizes of Pumps 5 1/2 x 3 1/2 x 5" Duplex No. and size of Suctions connected to both Bilge and Donkey pumps
in Engine Room Two 2" suction In Holds, &c. Two 2" suction in hold

No. of Bilge Injections one sizes 2 1/2" Connected to condenser or to circulating pump Y Is a separate Donkey suction fitted in Engine room & size Y 2"
Are all the bilge suction pipes fitted with roses Y Are the roses in Engine room always accessible Y Are the sluices on Engine room bulkheads always accessible Y
Are all connections with the sea direct on the skin of the ship Y Are they Valves or Cocks both
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Y 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 Y Are the Blow Off Cocks fitted with a spigot and brass covering plate Y
That 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 Y
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Y
Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Beardmore & Co. Ltd. Colville
Total Heating Surface of Boilers 5690 Is Forced Draft fitted no No. and Description of Boilers one Cylindrical Multit.
Working Pressure 125 lb Tested by hydraulic pressure to 250 lb Date of test 29.8.17 No. of Certificate 2030

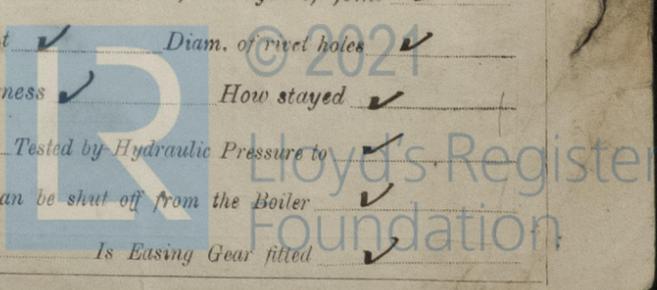
Can each boiler be worked separately Area of fire grate in each boiler 28 sq' No. and Description of Safety Valves to
each boiler two Spring loaded Dia. of each valve 3" Pressure to which they are adjusted 130 lb Are they fitted with easing gear Y
Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean dia. of boilers 9'0" Length 9'0" Material of shell plates Stab
Thickness 11/16" Range of tensile strength 28-32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams overlap
Long. seams J.R. Double butts Diameter of rivet holes in long. seams 15/16" Pitch of rivets 5" Lap of plates or width of butt straps 1-3 1/4"
Percentages of strength of longitudinal joint rivets 129 plate 89 Working pressure of shell by rules 149 lb Size of manhole in shell 16 x 12"

Size of compensating ring Machell No. and Description of Furnaces in each boiler two plain Material Stab Outside diameter 2-11 1/4"
Length of plain part top 5.5 bottom 5.1 Thickness of plates crown 3 7/8" bottom 3 7/8" Description of longitudinal joint welded No. of strengthening rings one partial
Working pressure of furnace by the rules 171 lb Combustion chamber plates: Material Stab Thickness: Sides 9/16" Back 9/16" Top 5/8" Bottom 5/8"
Pitch of stays to ditto: Side 8 1/2 x 8 3/4" Back 9 x 9" Top 11 1/2 x 8 1/2" stays are fitted with nuts or riveted heads nuts Working pressure by rules 135 lb

Material of stay Steel Area at smallest part 150 sq' Area supported by each stay 810 sq' Working pressure by rules 148 lb End plates in steam space:
Material Steel Thickness 13/16" Pitch of stays 17 x 12" How are stays secured nuts & washers Working pressure by rules 170 lb Material of stays stab
Area at smallest part 3.73 sq' Area supported by each stay 228 sq' Working pressure by rules 170 lb Material of Front plates at bottom Stab
Thickness 13/16" Material of Lower back plate Steel Thickness 13/16" Greatest pitch of stays as per plan Working pressure of plate by rules 135 lb
Diameter of tubes 3 1/4" Pitch of tubes 4 1/4 x 4 1/4" Material of tube plate Stab Thickness: Front 13/16" Back 11/16" Mean pitch of stays 10 7/8"
Pitch across wide water spaces 16" Working pressures by rules 150 lb Girders to Chamber tops: Material Stab Depth and
Thickness of girder at centre 7 x 2 2 3/4" Length as per rule 2-3 1/2" Distance apart 11 1/2" Number and pitch of stays in each Two 28 lb
Working pressure by rules 130 lb 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

006749-006759-0287



IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied: *Two top & two bottom end bolts & nuts, set of coupling bolts, set of feed & bilge pump valves, 2 main bearing bolts, assorted bolts & nuts & iron of various sizes.*

The foregoing is a correct description,
W. J. YARWOOD & SONS, LTD.

Albert Yarwood Manufacturer.

Dates of Survey while building: During progress of work in shops - *1917 May 10. 18. June 1. 29. July 26. Aug 1. 9. 27. 29. Sept 12. Oct 1. 10. 23. Nov 1. 20. 29. Dec 17.* During erection on board vessel - *1918 Jan 1. 29. Feb 8.* Total No. of visits *20.* Is the approved plan of main boiler forwarded herewith *Yes*

Dates of Examination of principal parts: Cylinders *10/5/17* Slides *10/5/17* Covers *10/5/17* Pistons *12/5/17* Rods *18/5/17*
Connecting rods *18/5/17* Crank shaft *16/17* Thrust shaft *16/17* Tunnel shafts *✓* Screw shaft *18/5/17* Propeller *29/6/17*
Stern tube *10/5/17* Steam pipes tested *20/10/17 (Thall)* Engine and boiler seatings *10/5/17* Engines holding down bolts *12/9/17*
Completion of pumping arrangements *1/1/17* Boilers fixed *10/10/17* Engines tried under steam *29/1/18*
Completion of fitting sea connections *29/6/17* Stern tube *29/6/17* Screw shaft and propeller *29/6/17*
Main boiler safety valves adjusted *29/1/18* Thickness of adjusting washers *P 19/32 S 24/32*
Material of Crank shaft *Steel* Identification Mark on Do. *✓* Material of Thrust shaft *Steel* Identification Mark on Do. *✓*
Material of Tunnel shafts *✓* Identification Marks on Do. *✓* Material of Screw shafts *Steel* Identification Marks on Do. *✓*
Material of Steam Pipes *Copper, solid drawn* Test pressure *250 lb 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 *no* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c. *The Machinery of this vessel was partly constructed before it was arranged to class the vessel. It has been examined during erection, & on completion, examined under steam & found satisfactory.*

(In signs of shafting etc, see Low letter 24/5/17 herewith, also letter from Owners 24/5/17.)

The vessel is in our opinion eligible for record of LMC 2.18.

It is submitted that this vessel is eligible for THE RECORD. LMC 2.18.

J.P.R.
6.3.18.

The amount of Entry Fee ... £ *1.0.0* When applied for. *1 MAR 1918*
Special ... £ *8.0.0*
Donkey Boiler Fee ... £ : : When received. *3 MAR 1918*
Travelling Expenses (if any) £ *5.2.0* 2-11-18

John Dykes & J. Milton
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **LIVERPOOL** - 5 MAR 1918
Assigned *L No 6 2: 18*



Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.