

Rpt. 4.

D FROM

YOK

REPORT ON MACHINERY.

No. 57708.

25 MAY 1906

Port of LIVERPOOL.

Received at London Office SAT. 26 MAY 1906

No. in Survey held at *lytham*Date, first Survey *23 Jan*Last Survey *19th May* 1906.Reg. Book *66* on the *S.S. "Cicorgarth"*(Number of Visits *10*.)

Master

Built at *lytham*By whom built *lytham J. B. & Co. Ltd*

Tons

Gross

Net

When built *1906.5.*Engines made at *lytham*By whom made *lytham J. B. & Co. Ltd*when made *1906.5.*Boilers made at *lytham*By whom made *lytham J. B. & Co. Ltd*when made *1906.5.*

Registered Horse Power

Owners *Leahurst Ltd*Port belonging to *Southampton.*Nom. Horse Power as per Section 28 *60*Is Refrigerating Machinery fitted for cargo purposes *No.*Is Electric Light fitted *No.*

ENGINES, &c.—Description of Engines

*Compound Inverted*No. of Cylinders *2*No. of Cranks *2*Dia. of Cylinders *15" - 32"*Length of Stroke *21"*Revs. per minute *120*

Dia. of Screw shaft

as per rule *6.55*Material of *iron*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 *2'6"*

Dia. of Tunnel shaft

as per rule *6.18*

Dia. of Crank shaft journals

as per rule *6.43*Dia. of Crank pin *6'2"*Size of Crank webs *10'2" x 3'2"*

Dia. of thrust shaft under

collars *6'2"*Dia. of screw *4'6"*Pitch of Screw *11'6"*No. of Blades *3*State whether moveable *No*Total surface *22'6"*No. of Feed pumps *1*Diameter of ditto *2'4"*Stroke *10'2"*Can one be overhauled while the other is at work *✓*No. of Bilge pumps *1*Diameter of ditto *2'4"*Stroke *10'2"*Can one be overhauled while the other is at work *✓*No. of Donkey Engines *1*Sizes of Pumps *5" x 3'2" x 5"*

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room *Two 2" dia*In Holds, &c. *six 2" dia.*No. of Bilge Injections *1*sizes *2'2"*Connected to condenser, or to circulating pump *pump*Is a separate Donkey Suction fitted in Engine room & size *1-2" dia*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 *valves & cocks.*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 *Main Steam pipe*How are they protected *stout iron 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.*Dates of examination of completion of fitting of Sea Connections *29/3/06.*of Stern Tube *29/3/06.*Screw shaft and Propeller *29/3/06.*Is the Screw Shaft Tunnel watertight *✓*Is it fitted with a watertight door *✓*worked from *✓*BOILERS, &c.—(Letter for record *3*)Manufacturers of Steel *David Bealville & Sons.*Total Heating Surface of Boilers *1220'6"*Is Forced Draft fitted *No*No. and Description of Boilers *one cylindrical multitubular*Working Pressure *130 lbs.*Tested by hydraulic pressure to *260 lbs.*Date of test *21/3/06.*No. of Certificate *1801*Can each boiler be worked separately *✓*Area of fire grate in each boiler *33'6"*

No. and Description of Safety Valves to

each boiler *two direct spring*Area of each valve *4'9"*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 *15"*Mean dia. of boilers *11'6"*Length *10'5"*Material of shell plates *steel*Thickness *3/4"*Range of tensile strength *24/32 tons*Are the shell plates welded or flanged *No*Descrip. of riveting: cir. seams *A.R. lap.*long. seams *A.R. butt*Diameter of rivet holes in long. seams *15/16"*Pitch of rivets *4"*Lap of plates or width of butt straps *13"*

Per centages of strength of longitudinal joint

rivets *86.6*Working pressure of shell by rules *131 lbs.*Size of manhole in shell *16" x 13"*Size of compensating ring *1" x 8"*No. and Description of Furnaces in each boiler *2 plain*Material *steel*Outside diameter *3'4"*

Length of plain part

top *6'4"*

Thickness of plates

crown *21/32"*Description of longitudinal joint *welded*No. of strengthening rings *none*Working pressure of furnace by the rules *116 lbs.*Combustion chamber plates: Material *steel*Thickness: Sides *9/16"*Back *9/16"*Top *9/16"*Bottom *9/16"*Pitch of stays to ditto: Sides *9'8 1/2"*Back *9'8 1/2"*Top *9'8 1/2"*If stays are fitted with nuts or riveted heads *nuts*Working pressure by rules *135 lbs.*Material of stays *steel*Diameter at smallest part *1'2 1/4"*Area supported by each stay *81"*Working pressure by rules *118 lbs.*

End plates in steam space:

Material *steel*Thickness *13/16"*Pitch of stays *16"*How are stays secured *nuts & washers*Working pressure by rules *132 lbs.*Material of stays *steel*Diameter at smallest part *3'6 1/4"*Area supported by each stay *256"*Working pressure by rules *139 lbs.*Material of Front plates at bottom *steel*Thickness *3/4"*Material of Lower back plate *steel*Thickness *5/8"*Greatest pitch of stays *9'13"*Working pressure of plate by rules *210 lbs.*Diameter of tubes *3 1/2"*Pitch of tubes *4 1/2"*Material of tube plates *steel*Thickness: Front *3/4"*Back *3/4"*Mean pitch of stays *10 1/16"*Pitch across wide water spaces *15"*Working pressures by rules *140 lbs.*Girders to Chamber tops: Material *steel*

Depth and

thickness of girder at centre *4'2 1/4"*Length as per rule *2'3"*Distance apart *8 1/2' + 9"*Number and pitch of stays in each *2-9"*Working pressure by rules *138 lbs.*Superheater or Steam chest; how connected to boiler *✓*

Can the superheater be shut off and the boiler worked

separately *✓*Diameter *✓*Length *✓*Thickness of shell plates *✓*Material *✓*Description of longitudinal joint *✓*

Diam. of rivet

holes *✓*Pitch of rivets *✓*Working pressure of shell by rules *✓*Diameter of flue *✓*Material of flue plates *✓*Thickness *✓*If stiffened with rings *✓*Distance between rings *✓*Working pressure by rules *✓*End plates: Thickness *✓*How stayed *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*Working pressure of end plates *✓*Area of safety valves to superheater *✓*Are they fitted with easing gear *✓*

VERTICAL DONKEY BOILER—

Manufacturers of Steel

No.	Description	Made at	By whom made	When made	Where fixed
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of Safety
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
If fitted with easing gear	If steam from main boilers can enter the donkey boiler	Dia. of donkey boiler	Length		
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams		
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating	Per centage of strength of joint	Rivets Plates
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates	Description of joint	
Working pressure of furnace by rules	Thickness of furnace crown plates	Stayed by			
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

SPARE GEAR. State the articles supplied:— One set of coupling bolts and nuts, two top end bolts and nuts, two bottom end bolts and nuts, two main bearing bolts and nuts, feed and lidge pump valves, assorted bolts and nuts.

The foregoing is a correct description,

THE LYTHAM SHIPBUILDING and
ENGINEERING COMPANY, LIMITED.

Manufacturer.

SECRETARY

Dates of Survey while building	During progress of work in shops - -	1906. Jan'y 23. 26. Feb'y 6. 16. 28.	March 21. 29. April 15. May 10. 19.
	During erection on board vessel - -		
Total No. of visits		10	

Is the approved plan of main boiler forwarded herewith Yes.

Dates of Examination of principal parts—Cylinders	23/4/06.	Slides	6/2/06.	Covers	6/2/06.	Pistons	21/3/06.	Rods	21/3/06.
Connecting rods	21/3/06.	Crank shaft	18/4/06.	Thrust shaft	18/4/06.	Tunnel shafts	18/4/06.	Screw shaft	21/3/06.
Stern tube	21/3/06.	Steam pipes tested	10/5/06.	Engine and boiler seatings	29/3/06.	Engines holding down bolts	10/5/06.		
Completion of pumping arrangements	19/5/06.	Boilers fixed	18/4/06.	Engines tried under steam	19/5/06.				
Main boiler safety valves adjusted	19/5/06.	Thickness of adjusting washers	10 5/16" 3 5/16"						
Material of Crank shaft	Iron	Identification Mark on Do.	424	Material of Thrust shaft	Iron	Identification Mark on Do.	424		
Material of Tunnel shafts	Iron	Identification Marks on Do.	424	Material of Screw shafts	Iron	Identification Marks on Do.	424		
Material of Steam Pipes	Copper	Test pressure	260 lbs.						

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 are of good description, the boiler has been tested by hydraulic pressure to 260 lbs, the safety valves afterwards adjusted under steam to 135 lbs. and the machinery tried under steam and found satisfactory and the vessel is eligible in my opinion for the notification + L. M. C. 5, 06.

It is submitted that
this vessel is eligible for
THE RECORD

L. M. C. 5. 06.

The amount of Entry Fee..	£ 1 : 0 : 0	When applied for	25 MAY 1906
Special	£ 9 : 0 : 0	When received	12-6-06
Donkey Boiler Fee	£ :		
Travelling Expenses (if any)	£ 4 : 0 : 0		

Committee's Minute

LIVERPOOL. 25 MAY 1906

Assigned

L. M. C. 5. 06.

MACHINERY CERTIFICATE
WRITTEN. 26.5.06

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

TUES. 30 OCT. 1906

© 2020

Lloyd's Register
Foundation