

REPORT ON MACHINERY.

No. 9353

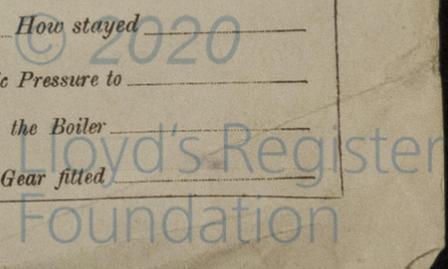
Received at London Office 3 JUN 1925

Date of writing Report 7-6-25 When handed in at Local Office 10-6-25 Port of Belfast
 No. in Survey held at Belfast Date, First Survey June 1925 Last Survey June 1925
 Reg. Book. New Steel S.S. Ervington Court (Number of Visits 1)
 Master Belfast Built at Belfast By whom built Hobson Clark & Co. Ltd. Tons Gross 192.17 Net 189.39
 Engines made at Belfast By whom made Hobson Clark & Co. Ltd. when made 1925
 Boilers made at Belfast By whom made Hobson Clark & Co. Ltd. when made 1925
 Registered Horse Power 474 Owners Court Lines Ltd. Port belonging to London
 Nom. Horse Power as per Section 28 474 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders Three No. of Cranks Three
 Dia. of Cylinders 10" x 12" x 10" Length of Stroke 18" Revs. per minute 67 Dia. of Screw shaft 13.0" Material of screw shaft Steel
 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 yes 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 yes
 If two liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 5'-0"
 Dia. of Tunnel shaft 12.25" Dia. of Crank shaft journals 13.49" Dia. of Crank pin 11.4" Size of Crank webs 8 1/8" Dia. of thrust shaft under collars 11" Dia. of screw 14'-6" Pitch of Screw 14'-0" No. of Blades 4 State whether moveable no Total surface 98.4
 No. of Feed pumps 2 Diameter of ditto 11 1/2" Stroke 24" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 11 1/2" Stroke 24" Can one be overhauled while the other is at work yes
 No. of Donkey Engines Seven Sizes of Pumps 10, 8, 6, 4, 3, 2 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room ER. 2@3", DR. 2@3", Spec 1@1 1/2" In Holds, &c. No 1 - 2@3", No 2 2@3"
 No. of Bilge Injections 4 sizes 8" Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes 1 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 yes
 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
 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 suction How are they protected wood casings
 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 top platform

BOILERS, &c.—(Letter for record Y) Manufacturers of Steel Phoenix Foundry Works
 Total Heating Surface of Boilers 4101.4 Is Forced Draft fitted yes No. and Description of Boilers (3 SE) 3 Single ended.
 Working Pressure 180 lbs. Tested by hydraulic pressure to 320 lbs. Date of test 20-3-25 No. of Certificate 859
 Can each boiler be worked separately yes Area of fire grate in each boiler 66.125 No. and Description of Safety Valves to each boiler 2 Spring loaded Area of each valve 5.94 high lift. Pressure to which they are adjusted 185 lbs. Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 2'-6" Mean dia. of boilers 15'-6" Length 11'-0" Material of shell plates Steel
 Thickness 1 1/4" Range of tensile strength 28 to 32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.R.
 long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 13/16" Lap of plates or width of butt straps 18 7/8"
 Per centages of strength of longitudinal joint: rivets 85.9 Working pressure of shell by rules 181.5 Size of manhole in shell 16" x 12"
 Size of compensating ring 2-9 3/4" x 26 3/8" No. and Description of Furnaces in each boiler 3 am Material Steel Outside diameter 4'-1 1/4"
 Length of plain part top 19" Thickness of plates bottom 37" Description of longitudinal joint weld No. of strengthening rings 1
 Working pressure of furnace by the rules 18 1/2 Combustion chamber plates: Material Steel Thickness: Sides 1 1/2" Back 1 3/4" Top 1 1/2" Bottom 1 1/2"
 Pitch of stays to ditto: Sides 8 x 9" Back 9 1/2 x 9 1/2" Top 8 x 10" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 186.3 lbs.
 Material of stays Iron Area at smallest part 1.732.03 Area supported by each stay 84.4 Working pressure by rules 180 lbs. End plates in steam space: Material Steel Thickness 1 3/16" Pitch of stays 19 1/4 x 21 1/2" How are stays secured D.N. Wash Working pressure by rules 182.5 lbs. Material of stays Steel
 Area at smallest part 6.66 Area supported by each stay 384.4 Working pressure by rules 189 lbs. Material of Front plates at bottom Steel
 Thickness 3/8" Material of Lower back plate Steel Thickness 3/8" Greatest pitch of stays 15 1/2" x 8" Working pressure of plate by rules 18 1/2 lbs.
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates Steel Thickness: Front 3 1/8" Back 1 3/16" Mean pitch of stays 11 1/8"
 Pitch across wide water spaces 11 1/4" x 8 1/4" Working pressures by rules 203 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 20 1/2" x 3 1/4" Length as per rule 2'-10 1/2" Distance apart 10" Number and pitch of stays in each 3 @ 8"
 Working pressure by rules 185 lbs. Steam dome: description of joint to shell none % of strength of joint 100
 Diameter 11 1/2" Thickness of shell plates 1 1/2" Material Steel Description of longitudinal joint none Diam. of rivet holes 1 1/4"
 Pitch of rivets 8 13/16" Working pressure of shell by rules 181.5 Crown plates none Thickness 1 1/2" How stayed none

SUPERHEATER. Type none Date of Approval of Plan 1925 Tested by Hydraulic Pressure to 180 lbs.
 Date of Test 1925 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes
 Diameter of Safety Valves 1 1/2" Pressure to which each is adjusted 180 lbs. Is Easing Gear fitted yes



IS A DONKEY BOILER FITTED? no If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two each bolts + nuts for top + bottom ends + main bearings. One set coupling bolts. One set feed + bilge pump valves. Tail shaft + cast iron propeller complete. One set (Lockwood + Carlisle) rings for all pistons + piston valves. Quantity of assorted bolts nuts + iron.

The foregoing is a correct description,
 FOR WORKMAN, CLARK & CO., LIMITED,
 J. Cunningham Manufacturer.

Dates of Survey while building: During progress of work in shops: 1924 June 6, 17, 23 July 4, 7, 9 Aug 13, 21, 25, 26 Sept 2, 4, 8, 16, 18, 23, 25, 30 Oct 1, 6, 8, 10, 17, 24, 30, 31
 During erection on board vessel: Nov 7, 11, 12, 20, 24, 27, 28 Dec 1, 3, 9, 10, 15, 16, 17, 31 1925 Jan 6, 7, 13, 19, 22, 27 Feb 3, 5, 9, 18, 20, 23 Mar 5, 6
 Total No. of visits: May 1, 4, 6, 8, 9, 12, 13, 14, 15, 20, 28 June 1 = 81 Is the approved plan of main boiler forwarded herewith yes.

Dates of Examination of principal parts—Cylinders 31-3-25 Slides 20-2-25 Covers 20-2-25 Pistons 23-2-25 Rods 28-11-24
 Connecting rods 28-11-24 Crank shaft 4-12-24 Thrust shaft 12-3-25 Tunnel shafts 12-3-25 Screw shaft 30-3-25 Propeller 30-3-25
 Stern tube 14-5-25 Steam pipes tested 23-3-25 & 25-3-25 Engine and boiler seatings 8-5-25 Engines holding down bolts 8-5-25
 Completion of pumping arrangements 14-5-25 Boilers fixed 14-5-25 Engines tried under steam 28-5-25
 Completion of fitting sea connections 14-4-25 Stern tube 14-4-25 Screw shaft and propeller 14-4-25
 Main boiler safety valves adjusted 20-5-25 Thickness of adjusting washers P.B. 2 1/2, 5 3/4, C.B. 2 1/8, 5 3/8, S.B. 1 1/2, 5 1/2
 Material of Crank shaft Steel Identification Mark on Do. 1146 W.B. Material of Thrust shaft Steel Identification Mark on Do. 541 W.B.
 Material of Tunnel shafts Steel Identification Marks on Do. 545, 546, 547 all W.B. Material of Screw shafts Steel Identification Marks on Do. W 547 W.B.
 Material of Steam Pipes Solid drawn steel Test pressure 600 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? No If so, state name of vessel Barrington Court
 Builder Jungshun Co., Cheaters = F.D.

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This Machinery has been built under Special Survey. Materials and workmanship good. Hydraulic tests satisfactory. The whole of the machinery is efficiently installed & tried in the vessel and has been tried under steam & is in good & safe working conditions & eligible in my opinion to be classed & have records. **LMC 6-25.**
 Tail shaft C.L. Forced Draught (F.D.) & It in the Register Book.

Independent Pumps.
 2 Ballast duplex 8 x 10 1/4 x 10, 1 centrifugal circulating pp 11" suction x 3-3 dia impeller.
 1 evaporator feed duplex 3 1/2 x 2 1/4 x 3 1/2, 1 General service duplex 8 x 6 x 8, 2 Wain feed pps. 4" x 9 1/2" x 21"
 It is submitted that this vessel is eligible for THE RECORD. + LMC 6.25. FD. CL

The amount of Entry Fee ... £ 5 : 0 : 0
 Special Donkey Boiler Fee ... £ 96 : 2 : 0
 Travelling Expenses (if any) £ : :
 When applied for, June 1925
 When received, 8/6/25

William Dutton
 Engineer Surveyor to Lloyd's Register of Shipping.
 4/6/25

Committee's Minute Assigned
 + Lmc 6.25
 J.D. G.



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