

REPORT ON MACHINERY.

No. 32830
MON. AUG. 22 1921

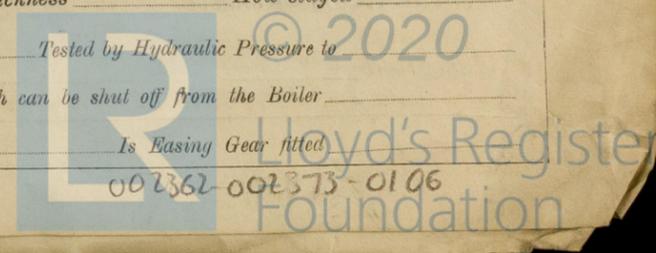
Received at London Office

Date of writing Report 28/7/21 When handed in at Local Office 28/7/21 Port of Hull
 No. in Survey held at Hull Date, First Survey 11.8.20 Last Survey 22.6-1921
 Reg. Book. on the S.S. "KENRIX" (Number of Visits 33)
 Master Built at Salby By whom built Behrens & Sons When built 1921
 Engines made at Aberdeen By whom made Lewis & Co. when made 1920
 Boilers made at Hull By whom made B. J. Holmes & Co. Ltd when made 1921
 Registered Horse Power Owners R. Rix & Sons Ltd. Port belonging to Hull
 Nom. Horse Power as per Section 28 87 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 13-23-37 Length of Stroke 26 Revs. per minute 115 Dia. of Screw shaft 7.88 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 36"
 Dia. of Tunnel shaft 7.04 Dia. of Crank shaft journals 7.39 Dia. of Crank pin 7.2 Size of Crank webs 14x10 Dia. of thrust shaft under collars 7.2
 Dia. of screw 9-7/2 Pitch of Screw 11-0 No. of Blades 4 State whether moveable No Total surface 33 sq
 No. of Feed pumps one Diameter of ditto 2 5/8 Stroke 14 3/4 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps one Diameter of ditto 2 5/8 Stroke 14 3/4 Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 2 DUPLEX Sizes of Pumps 5 1/2 x 3 1/2 x 6 & 7 1/2 x 7 x 8 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 2" dia In Holds, &c. Two 2" dia each compartment
 No. of Bilge Injections one sizes 3 1/2 Connected to condenser, or to circulating pump C.P.P. Is a separate Donkey Suction fitted in Engine room & size Yes 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 Lead suction & water tank How are they protected Strong canvas
 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

BOILERS, &c.—(Letter for record) Manufacturers of Steel See separate report.
 Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers
 Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate
 Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to each boiler
 Area of each valve Pressure to which they are adjusted Are they fitted with easing gear
 Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates
 Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams
 long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
 Per centages of strength of longitudinal joint Working pressure of shell by rules Size of manhole in shell
 Size of compensating ring No. and Description of Furnaces in each boiler Material Outside diameter
 Length of plain part Thickness of plates Description of longitudinal joint No. of strengthening rings
 Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom
 Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules
 Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:
 Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays
 Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom
 Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
 Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
 Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and thickness of girder at centre
 Length as per rule Distance apart Number and pitch of stays in each
 Working pressure by rules 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:— *Two top end, two bottom end, two main beams & one set coupling bolts & nuts, one set air feed & bilge pump valves, & sink ring tubes & nuts, one main & one donkey check valve two valves for donkey pump, one safety valve spring, three condenser tubes, one set firebars, a quantity of bolts & nuts & iron of various sizes.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 19 20: - Aug 4, 12, Sep 27, Oct 26, Dec 24, 29 1921. Jan 3, 6, 14, 20, 21, 24, 26, Feb 4, 12, 14. During erection on board vessel --- 17, 18, 22, 23, 24. Mar 9, 15, 18, 19, 23, 30, Apr 1, 9, Jun 22, Jul 19, 20, 22. Total No. of visits 33

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

Is the approved plan of donkey boiler forwarded herewith *-*

Dates of Examination of principal parts—Cylinders 12/8/20 Slides 12/8/20 Covers 12/8/20 Pistons 12/8/20 Rods 15/3/21 Connecting rods 15/3/21 Crank shaft 24/2/20 Thrust shaft 24/2/20 Tunnel shafts - Screw shaft 11/8/20 Propeller 11/8/20 Stern tube 11/8/20 Steam pipes tested 9/3/21 Engine and boiler seatings 9/3/21 Engines holding down bolts 9/3/21 Completion of pumping arrangements 20/7/21 Boilers fixed 30/3/21 Engines tried under steam 20/7/21 Completion of fitting sea connections 26/10/20 Stern tube 26/10/20 Screw shaft and propeller 26/10/20 Main boiler safety valves adjusted 23/3/21 Thickness of adjusting washers *A 5/8" F 3/2"* Material of Crank shaft *Steel* Identification Mark on Do. *3328* Material of Thrust shaft *Steel* Identification Mark on Do. *3328* Material of Tunnel shafts - Identification Marks on Do. - Material of Screw shafts *Steel* Identification Marks on Do. *3328* Material of Steam Pipes *Copper* Test pressure *400 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 *Yes* If so, state name of vessel *Mersey class.*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel was built under the supervision of the British Corporation for a trader of the Mersey class intended for the Admiralty. The machinery was opened up examined and the results verified after which it was reassembled fitted on board and tried under full working conditions.*

The machinery of this vessel is now in a good & efficient condition & eligible in our opinion to have the record L.M.C. 7-21 marked in Red in the British Register Book (see Secretary's letter dated 8/1/20 letter E)

The amount of Entry Fee ... £ *2-0-0* When applied for, *28/7 1921*
Special ... £ *13-1-0*
Donkey Boiler Fee ... £ : : When received, *7/8 1921*
Travelling Expenses (if any) £ : : *9/8 1921*

*For J. L. Suthead & self.
Glasgow.
Engineer Surveyor to Lloyd's Register of Shipping.*

Committee's Minute *THE 30 AUG. 1921*
Assigned *MACHINERY CERT L.M.C. 8, 21*
WRITTEN



Rpt. 5a.
Date of writing Report
No. in Survey Reg. Book.
on the
Master
Engines made at
Boilers made at
Registered Horse
MULTITUBULAR
(Letter for record)
Boilers
No. of Certificate
safety valves to
Are they fitted with
Smallest distance
Material of shell
Descrip. of rivets
Top of plates
rules 201
boiler 2 Pl
Description of long
plates: Material
Top 11" x 8" If
smallest part 2.
Pitch of stays 8
Area supported
Lower back plate
Pitch of tubes
water spaces
girder at centre
Working pressure
Diameter
Pitch of rivets
SUPERHEATED
Date of Test
Diameter of Safety
GENERAL
special
In comp.
adjusted
Survey Fee
Travelling Ex
Committee's
Assigned

Certificate (if required) to be sent to Hull

The Surveyors are requested not to write on or below the space for Committee's Minutes.