

REPORT ON MACHINERY.

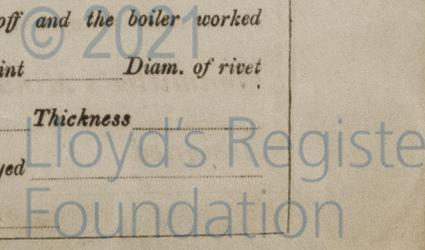
Received at London Office

TUE. 29 OCT. 1918

Date of writing Report 10 When handed in at Local Office 10 Port of Kobe
 No. in Survey held at Osaka and Innoshima Date, First Survey Jan'y 22 Last Survey June 3rd 1918
 Reg. Book. on the Steel Single Screw Steamer "Taibu Maru" (Number of Visits 1)
 Master A Sakaguchi Built at Innoshima By whom built Osaka Iron Works Ltd. Tons { Gross 6100-89
 Net 4484-71
 When built 1918
 Engines made at Osaka By whom made Osaka Iron Works Ltd. when made 1918
 Boilers made at Osaka By whom made Osaka Iron Works Ltd. when made 1918
 Registered Horse Power _____ Owners Uchida Kisen Kabushiki Kaisha Port belonging to Anapasaki
 Nom. Horse Power as per Section 28 553 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 27" 45" 75" Length of Stroke 51" Revs. per minute 65 Dia. of Screw shaft 15-27" Material of Steel
 as fitted 15 1/2" screw shaft)
 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 fitted tightly
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 5'-6"
 Dia. of Tunnel shaft 13-69" Dia. of Crank shaft journals 14-35" Dia. of Crank pin 4 7/8" Size of Crank webs 9 1/4 x 27 1/2" Dia. of thrust shaft under
 collars 14 7/8" Dia. of screw 18-3" Pitch of Screw 18-3" No. of Blades 4 State whether moveable Yes Total surface 100 sq feet
 No. of Feed pumps Two Diameter of ditto 4" Stroke 27" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps Two Diameter of ditto 4 1/2" Stroke 27" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Three Sizes of Pumps 3.50, 7 1/2 x 5 1/2 x 6, 10 1/2 x 8 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 3 1/2" Boiler Room 2 @ 3 1/2" + 2 @ 2 1/4" Holds, &c. 3 1/2" 6 on side of each hold
 No. of Bilge Injections 1 sizes 9" dia Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 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 None
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Larger: valves Smaller: 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 Tank air pipes How are they protected Strong wood 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 April 25 of Stern Tube April 25 Screw shaft and Propeller April 25
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper parting of Engine Room

BOILERS, &c.—(Letter for record S) Manufacturers of Steel North Brothers & Co. Substituted Allegheny Steel Co. Description of Plates Bars - Bridge plates etc
 Total Heating Surface of Boilers 8100 sq ft Is Forced Draft fitted Yes No. and Description of Boilers Three Single ended
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 4.3.18 and 4.2.18 No. of Certificate 1405, 1405, 1405
 Can each boiler be worked separately Yes Area of fire grate in each boiler 63 1/4 sq ft No. and Description of ALJ Safety Valve
 each boiler Two Spring loaded Area of each valve 3" dia Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork ✓ Mean dia. of boilers 15-0" Length 12-0" Material of shell plates Steel
 Thickness 1 5/16" Range of tensile strength 26 to 28 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams DRL
 long. seams TR DBS Diameter of rivet holes in long. seams 1 5/16" Pitch of rivets 9" Lap of plates or width of butt straps 1'-7 1/2"
 Per centages of strength of longitudinal joint rivets 85 Working pressure of shell by rules 188 Size of manhole in shell 12" x 16"
 plate 85-4
 Size of compensating ring 2'-10 x 3'-2 x 1 1/2" No. and Description of Furnaces in each boiler Three Description Material Steel Outside diameter 4'-0 1/4"
 Length of plain part ✓ Thickness of plates 9/32" Description of longitudinal joint Weld No. of strengthening rings ✓
 Working pressure of furnace by the rules 195 Combustion chamber plates: Material Steel Thickness: Sides 7/8" Back 5/8" Top 5/8" Bottom 7/8"
 Pitch of stays to ditto: Sides 8 1/4" x 8 1/2" Back 8 1/2" x 8 1/2" Top 8" x 9" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 187 lbs
 Material of stays Steel Diameter at smallest part 1.790" Area supported by each stay 72 1/4" Working pressure by rules 222 End plates in steam space:
 Material Steel Thickness 1 1/32" Pitch of stays 18 x 20 How are stays secured 8 Nuts Working pressure by rules 193 lbs Material of stays Steel
 Diameter at smallest part 7.50 Area supported by each stay 18 x 20 Working pressure by rules 204 Material of Front plates at bottom Steel
 Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 14" (14 x 8 1/2" plates) Working pressure of plate by rules 180 lbs
 Diameter of tubes 3" Pitch of tubes 4 1/4" x 4 1/8" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 10"
 Pitch across wide water spaces 13 1/4" Working pressures by rules 180 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 9 3/4" x 1 3/4" Length as per rule 33 1/2" Distance apart 9" Number and pitch of stays in each 3 @ 8"
 Working pressure by rules 192 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 _____



VERTICAL DONKEY BOILER—

Manufacturers of Steel

No. _____ Description No Donkey boiler

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 _____ Radius of do. _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:—

2 Connecting rod top and bolts & nuts, 2 Connecting rod bottom end bolts and nuts
 2 main bearing bolts, 1 set of coupling bolts, 1 set of feed and cold pumps
 valves. 1 set of piston springs. Assorted bolts and nuts and sheet iron
 The foregoing is a correct description. Spare Propeller shaft, 1 spare propeller blade,
 slide valve rod and eccentric rod for each engine. Air pump rod. Three safety valve springs. Condenser tubes etc.

Dates of Survey while building
 During progress of work in shops - - - - -
 During erection on board vessel - - - - -
 Total No. of visits _____

Jan 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Feb 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Mar 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Apr 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, May 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, Jun 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 15.

Is the approved plan of main boiler forwarded herewith _____

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders 22/1/18 Slides 22/1/18 Covers 24/1/18 Pistons 24/1/18 Rods 14/5/18

Connecting rods 11/5/18 Crank shaft 16/3/18 Thrust shaft 19/2/18 Tunnel shafts 1/3/18 Screw shaft 21/5/18 Propeller 17.5.18

Stern tube 6/3/18 Steam pipes tested 4th May/18 Engine and boiler seatings 25/4/18. Engines holding down bolts 17/5/18

Completion of pumping arrangements 27/5/18. Boilers fixed 17/5/18. Engines tried under steam 27/5/18

Main boiler safety valves adjusted 3/6/18. Thickness of adjusting washers lock nuts.

Material of Crank shaft Steel. Identification Mark on Do. LLOYD 10.3.18. Material of Thrust shaft Steel Identification Mark on Do. LLOYD 19.2.18

Material of Tunnel shafts Steel Identification Marks on Do. LLOYD 12.18 ALT. R. Material of Screw shafts Steel Identification Marks on Do. LLOYD 18.1.18

Material of Steam Pipes Steel. Test pressure 570 lbs.

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery has been made and fitted under special survey in accordance with the requirements of the rules. And the materials and workmanship have been found good.

The Machinery is in my opinion eligible for the record of L.M.C. 6.18.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 6.18 F.D.

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

The amount of Entry Fee .. £ 30.00. When applied for, _____

Special .. £ 7.15.00. _____

Donkey Boiler Fee .. £ : : _____

Travelling Expenses (if any) £ : : _____

Committee's Minute _____

Assigned _____

FRI 1-NOV 1918

+ L.M.C. 6.18

F.D.



Certificate (if required) to be sent to

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