

REPORT ON MACHINERY.

Received at London Office

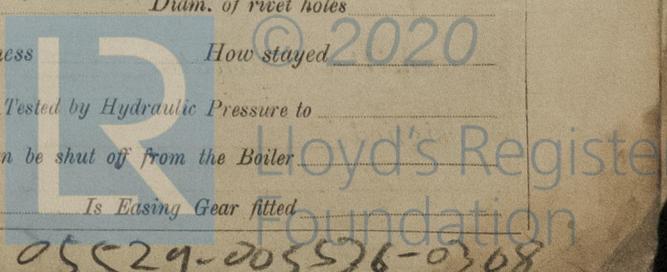
of writing Report 3rd Febr. 1921 When handed in at Local Office 19 Port of Kobe THU. 2 JUN. 1921 April 1-21
 in Survey held at Kobe Date, First Survey 1st Dec 1919 Last Survey 6th Jan 1921 see over
 of Book. on the Steel Single Screw Steamer "CHERIBON MARU" (Number of Visits 32)
 ater Built at Kobe By whom built Mitsubishi Zosen Kaisha Ltd. When built 1920
 Gines made at Kobe By whom made Mitsubishi Zosen Kaisha Ltd. when made 1920
 ilers made at do By whom made do when made 1920
 gistered Horse Power Owners NANYO YUSEN KAISHA LTD. Port belonging to Kobe
 m. Horse Power as per Section 28 342 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes

GINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks 3
 u. of Cylinders 23" + 38" + 64" Length of Stroke 48 Revs. per minute about 80 Dia. of Screw shaft as per rule 14.497 Material of Forged steel
the screw shaft fitted with a continuous liner the whole length of the stern tube without Liner Is the after end of the liner made water tight
 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
 been the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ✓ If two
 rs are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 5'-1/2" (white metal)
 u. of Tunnel shaft as per rule 12.495 Dia. of Crank shaft journals as per rule 13.118 Dia. of Crank pin 14" Size of Crank webs 25 1/2" x 8" Dia. of thrust shaft under
 ars 13 1/2" Dia. of screw 16'-6" Pitch of Screw 17'-3" No. of Blades 4 State whether moveable yes Total surface 76 sq. ft. approx.
 of Feed pumps Two Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work yes + with independent feed pumps
 of Bilge pumps Two Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work yes
 of Donkey Engines Three Sizes of Pumps 2 sets MUMFORD FEED 8x6x21 BALL WORTHINGTON 8x10x8 No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room Three @ 3 1/2" In Holds, &c. No. 1 - two 3 1/2" No. 2 - two 3 1/2" No. 3 - two 3 1/2" No. 4 - two 3 1/2" Tunnel Well one 2 1/2"
 of Bilge Injections 1 sizes 7" Connected to condenser, or to circulating pump Circ. P. Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2"
 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
 all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Larger Valves; Smaller Cocks.
 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
 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
 at pipes are carried through the bunkers ✓ How are they protected ✓
 all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes
 the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top platform of Eng. Rm.

PLATES, &c.—(Letter for record S.) Manufacturers of Steel Leeds Forge Co. (Plates + Furnaces) Nippon Steel Works (stay bars + Rivets)
 Heating Surface of Boilers Two @ 2197 sq. ft. Is Forced Draft fitted yes No. and Description of Boilers Two S.E. Scotch Boilers
 Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 22.7.20 No. of Certificate LLOYD'S TEST 600 LBS WF 200 LBS 22.7.20 R
 each boiler be worked separately yes Area of fire grate in each boiler 54.3 sq. feet. No. and Description of Safety Valves to
 boiler Two Spring Loaded Area of each valve 19.34" Pressure to which they are adjusted 205 lbs. Are they fitted with easing gear yes
 least distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 14'-0" Length 11'-6" Material of shell plates steel
 thickness 1 3/8" Range of tensile strength 28-32 tons Are the shell plates welded or flanged Heather Descrip. of riveting: cir. seams double riveted
 seams double riveted Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 9 1/2" Lap of plates or width of butt straps 20 1/2"
 percentages of strength of longitudinal joint 84.6% Working pressure of shell by rules 221 lbs. Size of manhole in shell 12 x 16 (diam)
 of compensating ring 33x37x1 1/2" flgs. No. and Description of Furnaces in each boiler 3 Leeds Bull Material steel Outside diameter 3'-9 3/8"
 thickness of plain part top 1 1/2" bottom 1 1/4" Thickness of plates 9/16" Description of longitudinal joint Welded No. of strengthening rings ✓
 working pressure of furnace by the rules 209 lbs. Combustion chamber plates: Material steel Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 1 1/16"
 of stays to ditto: Sides 7 1/2" x 11" Back 9" x 9 1/4" Top 7" x 11 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 214 lbs.
 material of stays steel Area at smallest part 2.03 Area supported by each stay 7 1/2" x 11" Working pressure by rules 221 lbs. End plates in steam space:
 material steel Thickness 1 3/32" Pitch of stays 20" x 18" How are stays secured double nuts + small washers Working pressure by rules 214 lbs. Material of stays steel
 at smallest part 3 3/8" dia black Area supported by each stay 360 Working pressure by rules 222 lbs. Material of Front plates at bottom steel
 thickness 3 1/32" Material of Lower back plate steel Thickness 3 1/32" Greatest pitch of stays 16" x 11" Working pressure of plate by rules 223 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 1/32" Back 2 7/32" Mean pitch of stays 13 1/2" x 6.56 (mean)
 across wide water spaces 13 3/4" Working pressures by rules 203 lbs. Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 10 1/4" x 5 1/4" x 2 Length as per rule 2'-8" Distance apart 11 1/2" Number and pitch of stays in each 3 @ 7"
 working pressure by rules 225 lbs. Steam dome: description of joint to shell None % of strength of joint

Superheater. Type None Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Pressure to which each is adjusted _____ Is Easing Gear fitted _____

005529-205576-0308



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

- 2 Connecting rod top end bolts + nuts.
- 2 Connecting rod bottom end bolts + nuts.
- 2 Main bearing bolts.
- 1 Set of coupling bolts.
- 1 Set of Feed + Bilge pump valves.
- 1 Set of Piston springs.

- Quantity of assorted bolts.
- Iron of various sizes.
- air pump rod.
- 2 Eccentric rods (pair)
- Three Valve spindles H.P. I.P. L.P.
- 2 Safety valves, springs etc.

The foregoing is a correct description,

M. Haraiishi
 KOBE WORKS, MITSUBISHI ZOSEN KAISHA, LTD. Manufacturer.

Dates of Survey while building
 During progress of work in shops --- 1919 Dec 1, 6, 8, 17; 1920 Jan 15, 20, 30; Feb 13, 16, 19; Mar 18, 20, 26; Apr 6, 8, 9, 17, 22; May 1, 6, 12, 14, 20, 24, 27, 28, 31;
 During erection on board vessel --- June 5, 7, 8, 14, 17, 18; July 7, 22, 23; Aug 4, 20, 21, 23, 27; Sept 1, 3, 4, 7, 8, 11, 15, 22; Jan 6, 1921 also March 8, April 10
 Total No. of visits 53. Is the approved plan of main boiler forwarded herewith? Yes

Dates of Examination of principal parts—Cylinders 12-5-20 Slides 7-6-20 Covers 7-6-20 Pistons 7-6-20 Rods 4-8
 Connecting rods 7-6-20 Crank shaft 26-5-20 Thrust shaft 6-5-20 Tunnel shafts 4-5-20 Aug 1920 Screw shaft 30-6-20 Propeller 30-8
 Stern tube Steam pipes tested 11-9-20 Engine and boiler seatings 30-8-20 Engines holding down bolts 11-9-20
 Completion of pumping arrangements 18-9-20 Boilers fixed 15-9-20 Engines tried under steam 18-9-20 overhaul 22-
 Completion of fitting sea connections 18-9-20 Stern tube 30-8-20 Screw shaft and propeller
 Main boiler safety valves adjusted 15-9-20 Thickness of adjusting washers
 Material of Crank shaft Steel Identification Mark on Do. Lloyd's 26-5-20 J.B.R. Material of Thrust shaft steel Identification Mark on Do. Lloyd's 30-6-20 J.B.R.
 Material of Tunnel shafts Steel Identification Marks on Do. Lloyd's 4-5-20 J.B.R. Material of Screw shafts steel Identification Marks on Do. Lloyd's 30-6-20 J.B.R.
 Material of Steam Pipes Copper Test pressure 400 lb.
 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? If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The machinery has been made & fitted under special survey in accordance with the requirements of the Rules & the materials & workmanship have been found to be in an opinion the machinery is eligible for record of L.M.C. 1. 21. see above.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 4. 21. FD

Roll 11/6/21
 J.R.R.

Certificate (if required) to be sent to

The amount of Entry Fee ... £ 30
 Special ... £ 658
 Donkey Boiler Fee ... £
 Travelling Expenses (if any) £
 When applied for, Jan 8 1921
 When received, Feb 7 1921

W. G. L. M.
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. 16 SEP. 1921
 Assigned + L.M.C. 4. 21
 F.D.

