

REPORT ON MACHINERY.

Received at London Office WED. 15 MAY 1918

Date of writing Report 4th April 18 When handed in at Local Office 19 Port of Yokohama

No. in Survey held at Uraga Date, First Survey 17th Octr Last Survey 27th March, 1918
 Reg. Book. on the S. S. "Shinpo Maru" (Number of Visits 22)

Master Uraga Built at Uraga By whom built Uraga Dock Co. Ltd. Tons 4736 Gross 3397 Net
 When built March, 1918

Engines made at Uraga By whom made Uraga Dock Co. Ltd. when made 1918

Boilers made at Uraga By whom made Uraga Dock Co. Ltd. when made 1918

Registered Horse Power 2500 Owners Kishimoto Kisen Kaisha Port belonging to Nishinomiya

Nom. Horse Power as per Section 28 378 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple expansion surface condensing No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 24 1/2"-40 1/2"-67" Length of Stroke 48" Revs. per minute 78.2 Dia. of Screw shaft as per rule 13.9 Material of Steel
as fitted 14. 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 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 xxxx Length of stern bush 61"

Dia. of Tunnel shaft as per rule 12.5" Dia. of Crank shaft journals as per rule 13.12" Dia. of Crank pin 13 1/2" Size of Crank webs 28x8 1/2" Dia. of thrust shaft under
as fitted 12 3/4" as fitted 13 1/4" collars 13 1/4" Dia. of screw 16ft 9" Pitch of Screw 18 ft No. of Blades 4 State whether moveable Yes Total surface 82.2 sq ft

No. of Feed pumps 2 Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Donkey Engines 4 2 Yamamoto pumps 9 1/2"x7"x21" stroke No. and size of Suctions connected to both Bilge and Donkey pumps
Sizes of Pumps I.G.D. 6"x10"x7 1/2" stroke I. Ballast Pump 8 1/2"x10 1/2"x16" stroke
 In Engine Room 3 each 3 1/2" 1 1/2" Holds, &c. No. 1 hold 2 each 2 1/2", No. 2 hold 2 each 2 1/2"

No. 3 hold One-3 1/2", No. 4 hold One-3 1/2".

No. of Bilge Injections 1 sizes 7" 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 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 None How are they protected xxx

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 Engine Room Top platform

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Worth Bros 3.S.B.

Total Heating Surface of Boilers 6382sqft Forced Draft fitted No No. and Description of Boilers 3 Scotch Multitubular.

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 29-1-18 No. of Certificate U 148

Can each boiler be worked separately Yes Area of fire grate in each boiler 60 sq ft No. and Description of Safety Valves to
 each boiler 2 Spring loaded Area of each valve 8.29sqin 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 12 1/2" Mean dia. of boilers 13ft 9" Length 10 ft Material of shell plates S

Thickness 1.3/16" Range of tensile strength 28-32 Are the shell plates xxxxxx flanged No Descrip. of riveting: cir. seams Double R.
 long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 3/4" Lap of plates or width of butt straps 18 1/2"

Per centages of strength of longitudinal joint 88.9 rivets 85.7 plate Working pressure of shell by rules 194 Size of manhole in shell 16"x 12"

Size of compensating ring 33" x 29" No. and Description of Furnaces in each boiler 3 Morrison Material S Outside diameter 44 1/2"

Length of plain part top xx Thickness of plates 9/16" Description of longitudinal joint weld No. of strengthening rings None
bottom xx bottom "

Working pressure of furnace by the rules 198 Combustion chamber plates: Material S Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8"

Pitch of stays to ditto: Sides 9x7 1/2" Back 8 1/2"x7 1/2" Top 8 1/2"x8" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 192

Material of stays S Area at smallest part 1".79 Area supported by each stay 67.8" Working pressure by rules 192 End plates in steam space:
 Material S Thickness 1" Pitch of stays 16 1/2"x14 1/2" How are stays secured D.Nuts Working pressure by rules 190 Material of stays S

Area at smallest part 4.37" Area supported by each stay 233sqin Working pressure by rules 190 Material of Front plates at bottom S

Thickness 15/16" Material of Lower back plate S Thickness 7/8" Greatest pitch of stays 18.5x7" Working pressure of plate by rules 272

Diameter of tubes 3 1/2" Pitch of tubes 4 3/8" Material of tube plates S Thickness: Front 15/16" Back 3/4" Mean pitch of stays 8 3/4"

Pitch across wide water spaces 13 1/2" Working pressures by rules 197 Girders to Chamber tops: Material S Depth and
 thickness of girder at centre 7 1/2"x1 1/2" Length as per rule 25 3/8" Distance apart 8" Number and pitch of stays in each 2.8 3/4"

Working pressure by rules 227. Steam dome: description of joint to shell xx % of strength of joint xx

Diameter xx Thickness of shell plates xx Material xx Description of longitudinal joint xxx Diam. of rivet holes xxx

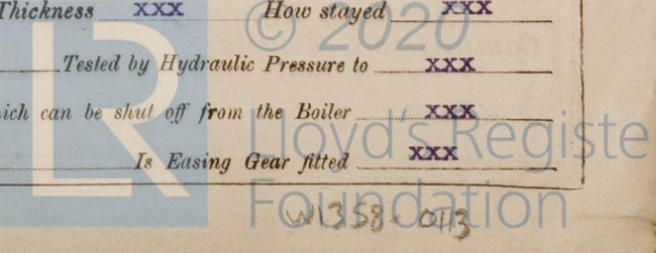
Pitch of rivets xxx Working pressure of shell by rules xxx Crown plates xxx Thickness xxx How stayed xxx

SUPERHEATER. Type xxx Date of Approval of Plan xxx Tested by Hydraulic Pressure to xxx

Date of Test xxx Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler xxx

Material of Safety Valve xxx Pressure to which each is adjusted xxx Is Easing Gear fitted xxx

2m. 116. T.



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

SPARE GEAR. State the articles supplied:— 2 Connecting Rod Bottom end bolts, 4 Top end bolts, 1 Set of Shaft coupling Bolts, 1 Set Main Bearing Bolts, 1 Set Feed and Bilge Pump valves, 1 Set Piston rings, 2 Eccentric Rods, 2 Set Top end Brasses, One circulating Pump Impeller and bronze shaft for same, One Air Pump Rod, A Quantity of bolts and nuts assorted.

The foregoing is a correct description,

Y. Kamura Manufacturer.

Dates of Survey while building { During progress of work in shops - - } Octr 17, Novr 16, 30, Decr 1, 6, 14, 27, Jan 16, 21, Feby 5, 11, 13.
 { During erection on board vessel - - - } Feb 14, 20, 28, March 7, 12, 15, 18, 23, 25, 27.
 Total No. of visits 22. Is the approved plan of main boiler forwarded herewith No

Dates of Examination of principal parts—Cylinders 19-1-18 Slides 20-2-18 Covers 19-1-18 Pistons 20-2-18 Rods 20-2-18
 Connecting rods 20-2-18 Crank shaft 5-2-18 Thrust shaft 5-2-18 Tunnel shafts 5-2-18 Screw shaft 5-2-18 Propeller 28-2-18
 Stern tube 25-1-18 Steam pipes tested 14-18-3-18 Engine and boiler seatings 14-2-18 Engines holding down bolts 28-2-18
 Completion of pumping arrangements 25-3-18 Boilers fixed 28-2-18 Engines tried under steam 27-3-18
 Completion of fitting sea connections 11-2-18 Stern tube 25-1-18 Screw shaft and propeller 5-2-18 - 28-2-18
 Main boiler safety valves adjusted 25-3-18 Thickness of adjusting washers P.B.f 1³/₃₂ I³/₈, S.B.f I¹/₄ a I¹/₄, F.B.f I³/₁₆ a I³/₁₆

Material of Crank shaft S Identification Mark on Do. J.S.C. Material of Thrust shaft S Identification Mark on Do. J.S.C.
 Material of Tunnel shafts S Identification Marks on Do. J.S.C. Material of Screw shafts S Identification Marks on Do. J.S.C.
 Material of Steam Pipes Steel and Copper Test pressure 540 & 360

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. No

Have the requirements of Section 49 of the Rules been complied with Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel Shingo Maru

General Remarks (State quality of workmanship, opinions as to class, &c. The Machinery of this Vessel has been)
built under Special Survey in accordance with the approved plan and the Rules, the Materials and workmanship are good, the Engines having been satisfactorily tried under steam. The Machinery in my opinion being eligible for record LMC 3 - 18.

It is submitted that this vessel is eligible for THE RECORD. + LMC. 3. 18.

JWD
81/5/18

Jas. Cairns
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee	... £ 20.00	When applied for,
Special	... £ 584.00	29.3.19.18
Donkey Boiler Fee	... £ :	When received,
Travelling Expenses (if any)	£ :	1-4-19.18

Committee's Minute WED. 22. MAY. 1918
 Assigned + R. Mc 3.18

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

MACHINERY CERTIFICATE WRITTEN.



Rpt. 13.
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