

REPORT ON BOILERS.

No. 2803.

Received at London Office

MON. JUN. 14 1920

Writing Report 28th Apr. 1920 When handed in at Local Office 19 Port of Kobe

Survey held at Kobe Date, First Survey 3rd Sept 1919 Last Survey 27th April 1920

Book. on the Steel Single Screw Steamer "CHINA MARU" (Number of Visits 23) Gross 5869.86 Tons Net 4266.26

S. Karaki Built at Kobe By whom built Kawasaki Dockyard Co. Ltd. When built 1920

Made at Kobe By whom made Kawasaki Dockyard Co. Ltd. When made 1920

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Indicated Horse Power N.H.P. 440 Owners The Kawasaki Kisen Kaisha, Ltd. Port belonging to Kobe

WATER TUBULAR BOILERS ~~MAN~~ AUXILIARY OR DONKEY. Manufacturers of Steel AM. SPIRAL PIPE CO.

For record S Total Heating Surface of Boilers 1132^{sq} Is forced draft fitted yes No. and Description of

ONE S. E. AUXY. BOILER Working Pressure 200 Lbs. Tested by hydraulic pressure to 400 Lbs. Date of test 16-2-20

Certificate LLOYD'S TEST WT. 400 LBS WP. 200 Can each boiler be worked separately yes Area of fire grate in each boiler 33 No. and Description of

valves to each boiler TWO DIRECT SPRING Area of each valve 5.93^{sq} Pressure to which they are adjusted 205 Lbs.

Boiler fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Least distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 10'-10" Length 10'-6"

Material of shell plates STEEL Thickness 1" Range of tensile strength 28 TO 32 TONS Are the shell plates welded or flanged No

Method of riveting: cir. seams DOUB. RIV. long. seams DOUBLE STRAPS Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 6 3/32" 3 3/4"

Width of plates or width of butt straps 14 1/2" x 1" Per centages of strength of longitudinal joint rivets 95.2 Working pressure of shell by plate 84.6

Size of manhole in shell 12" x 16" Size of compensating ring (7 1/4" FLANGE) 1" No. and Description of Furnaces in each

TWO MORISON Material STEEL Outside diameter 40 1/4" Length of plain part top Thickness of plates crown 9/16" bottom bottom

Description of longitudinal joint WELD No. of strengthening rings ✓ Working pressure of furnace by the rules 218 Lbs. Combustion chamber

Material STEEL Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 7 x 8 1/2" Back 7 13/16 x 8 1/8"

8" x 8" If stays are fitted with nuts or riveted heads NUTS Working pressure by rules 213 Lbs. Material of stays STEEL Area at

largest part 1.79^{sq} Area supported by each stay 64^{sq} Working pressure by rules 223 Lbs. End plates in steam space: Material STEEL Thickness 7/8"

How are stays secured DOUB. NUTS Working pressure by rules 202 Lbs. Material of stays STEEL Area at smallest part 5.27^{sq}

supported by each stay 15 1/4" x 14 1/2" Working pressure by rules 248 Lbs. Material of front plates at bottom STEEL Thickness 3/4" Material of

back plate STEEL Thickness 3/4" Greatest pitch of stays 15" APPROX. Working pressure of plate by rules 237 Lbs. Diameter of tubes 3 1/4"

of tubes 4 3/4" MEAN. Material of tube plates STEEL Thickness: Front 7/8" Back 3/4" Mean pitch of stays 8 3/4" Pitch across wide

spaces 13 3/4" DOUB. 5/8" Working pressures by rules 266 Lbs. Girders to Chamber tops: Material STEEL Depth and thickness of

at centre 8" x 3/4" (TWO) Length as per rule 26 5/8" Distance apart 8" Number and pitch of Stays in each 3 @ 7"

Working pressure by rules 246 Lbs. Steam dome: description of joint to shell NONE % of strength of joint

Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____

Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

Superheater. Type ✓ 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 _____

Kawasaki Dockyard Co., Ltd. The foregoing is a correct description,
 S. Ota Kano Manufacturer.

During progress of work in shops: 1919 Sept. 3, 15; Oct. 9, 14, 16, 23; Dec. 13; 1920 Jan. 16, 22, 24, 26, 27, 28. Is the approved plan of boiler forwarded herewith yes ✓

During erection on board vessel: Feb. 2, 6, 13, 16. Total No. of visits 23

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The Boiler has been made and fitted under special Survey. The Rules have been complied with materials and workmanship found good. The vessel is eligible for record one S. E. Auxiliary Boiler 200-lbs.

Survey Fee ... Included in When applied for 13th Apr. 1920

Travelling Expenses (if any) ✓ Agency fee When received 20th Apr. 1920.

Committee's Minute FRI. JUN 18 1920 *Alexander Watt* Engineer Surveyor to Lloyd's Register of Shipping.

signed see fee rpt attached

