

REPORT ON BOILERS.

No. 2908
FRI. AUG. 13 1920

Received at London Office

Date of writing Report 29th June 1920 When handed in at Local Office Kobe Port of Kobe
 No. in Survey held at Kobe Date, First Survey 7th Nov 1919 Last Survey 18th June 1920
 Reg. Boob. STEEL SINGLE SCREW STEAMER "INDIA MARU" (Number of Visits 22) Gross 5872.89 Tons
 Net 4253.84
 Master K. Ogura Built at Kobe By whom built Kawasaki Dockyard Co. Ltd. When built 1920
 Engines made at Kobe By whom made Kawasaki Dockyard Co. Ltd. When made 1920
 Boilers made at do By whom made do When made 1920
 Registered Horse Power N.H.P. 440 Owners do Port belonging to Kobe

MULTITUBULAR BOILERS — MAIN, AUXILIARY OR DONKEY — Manufacturers of Steel Illinois Stl. Co. Carnegie Stl. Co. Am. Spiral Pipe Co. John Marshall

(Letter for record S.) Total Heating Surface of Boilers 11320 Is forced draft fitted yes No. and Description of

Boilers One S. & Auxy. Blr. Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 7-5-20

No. of Certificate LLOYDS TEST WT. 1000 LBS WP 300 LBS IN. 8-20 Can each boiler be worked separately yes Area of fire grate in each boiler 330 No. and Description of

safety valves to each boiler Two Direct Spring Area of each valve 5.930 Pressure to which they are adjusted 205 lbs.

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

Smallest 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

Descrip. of riveting: cir. seams Double riveted long. seams Double straps Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 6 29/32" + 3 29/64"

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

rules 200 lbs. Size of manhole in shell 12" x 16" Size of compensating ring (7 1/4" flange) 1" No. and Description of Furnaces in each

boiler Two Morrison Material Steel Outside diameter 40 1/4" Length of plain part top 9 1/16" Thickness of plates bottom 9 1/16"

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

plates: 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"

Top 7" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 213 lbs. Material of stays steel Area at

smallest part 1.790 Area supported by each stay 640 Working pressure by rules 223 lbs. End plates in steam space: Material Steel Thickness 7/8"

Pitch of stays 15 1/4" x 14 1/2" How are stays secured Double nuts Working pressure by rules 202 lbs. Material of stays steel Area at smallest part 5.270

Area 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

Lower 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"

Pitch 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

water spaces 13 3/4" doubled 5/8" Working pressures by rules 266 lbs. Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 8" x 3 1/4" (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

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

UPERHEATER. 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

Kawasaki Dockyard Co., Ltd.
 The foregoing is a correct description,
 Per J. O. Kane Secretary, Manufacturer.

Dates of Survey 1919. Nov 7, 29; Dec. 3, 27; Jan 1920, 9, 19; Feb 2, 9, 14, 24, 28; Apr. 5, 9, 15, 19, 27; May 7 Is the approved plan of boiler forwarded herewith yes.

while building During erection on board vessel --- May 26; June 5, 9, 10, 18 Total No. of visits 22.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This Boiler has been made & fitted under Special Survey. The Rules have been complied with and the materials & workmanship found good. The vessel is eligible, it is submitted, for the record of One S. & Auxy. Blr. 200 lbs.

Survey Fee ... Incl. in mch. fee. When applied for, 29th June 1920
 Travelling Expenses (if any) £ ... When received, 5th July 1920

Committee's Minute FRI. AUG. 13 1920
 Assigned See p.c. rpt. attached

A Watt
 Engineer Surveyor to Lloyd's Register of Shipping.

