8033

REPORT ON BOILERS. No. 1794.

Received at London Office 4 AUG 1931

Writing Report 9th July 1931 When handed in at Local Office 9th July 1931 Port of NAGASAKI.

Survey held at NAGASAKI. Date, First Survey 25th Feb. 1831 Last Survey 30th June 1931.

(Number of Visits See Machy.rpt.)

on the Steel Screw Motor Ship "KAHOKU MARU". Tons Gross 3277.99 Net 1875.33

Nagasaki. By whom built Mitsubishi Zosen Kaisha,Ltd.. Yard No. 491 When built 1931

made at Nagasaki. By whom made Mitsubishi Zosen Kaisha,Ltd. Engine No. 491 When made 1931

made at Nagasaki. By whom made Mitsubishi Zosen Kaisha,Ltd. Boiler No. 491 When made 1931

Dairen Kisen Kabushiki Kaisha. Port belonging to Dairen.

ICAL DONKEY BOILER.

Nagasaki By whom made Mitsubishi Zosen Kaisha Boiler No. 491 When made 1931 Where fixed In Eng.Room.

urers of Steel Kawasaki Dkyd Co,Ltd., Fukiai Plate & Sheet Mills, Kobe.

ating Surface of Boiler 128.3 sq.feet. Is forced draught fitted No Coal or Oil fired Oil

Description of Boilers One vertical. Working pressure 100 lbs

hydraulic pressure to 200 lbs. Date of test 26th March 1931. No. of Certificate 143.

iregrate in each Boiler / No. and Description of safety valves to each boiler Two- direct spring loaded.

ch set of valves per boiler { per rule 3.53 sq.in. / as fitted 7.79 " } Pressure to which they are adjusted 100 lbs Are they fitted with easing gear Yes

ber steam from main boilers can enter the donkey boiler / Smallest distance between boiler or uptake and bunkers

rk / Is oil fuel carried in the double bottom under boiler No Smallest distance between base of boiler and tank top plating

5" Is the base of the boiler insulated No Largest internal dia. of boiler 1210 m/m Height 3000 m/m

es: Material Steel Tensile strength 28-35 tons/sq.in. Thickness 10 m/m and 13 m/m.

ll plates welded or flanged No Description of riveting: circ. seams { end S.R.L. / inter. " } long. seams D.R.L.

holes in { circ. seams 20 m/m / long. seams " } Pitch of rivets { 55.4 m/m / 64 m/m } Percentage of strength of circ. seams { plate 63.9 / rivets 46.6 } of Longitudinal joint { plate 68.8 / rivets 80.5 / combined }

essure of shell by rules 147.5 lbs per sq.in. Thickness of butt straps { outer / inner / }

: Whether complete hemisphere, dished partial spherical, or flat Dished partial spherical Material Steel

gth 26-30 tons/sq.in Thickness 15 m/m Radius 1200 m/m Working pressure by rules 147.9 lbs/sq.in.

of Furnace: Plain, spherical, or dished crown Spherical Material Steel Tensile strength 26-30 tons/sq.in.

13 m/m External diameter { top / bottom / } Length as per rule / Working pressure by rules 212.8 lbs/sq.in.

port stays circumferentially / and vertically / Are stays fitted with nuts or riveted over /

stays over thread / Radius of spherical crown 492 m/m Working pressure by rule /

Ogee Ring 16 m/m Diameter as per rule { D 1210 m/m / d 1010 m/m } Working pressure by rule 136.8 lbs/sq.in.

Chamber: Material / Tensile strength / Thickness of top plate /

ded / Working pressure by rule / Thickness of back plate / Diameter if circular /

rule / Pitch of stays / Are stays fitted with nuts or riveted over /

tays over thread / Working pressure of back plate by rules /

Material { front Steel / back " } Tensile strength { 26-30 tons / sq.in. } Thickness { 17 m/m / " } Mean pitch of stay tubes in nests 197 m/m

Shell, Dia. as per rule { front 1075.6 m/m / back 886.6 } Pitch in outer vertical rows { 160 m/m / " } Dia. of tube holes FRONT { stay 58 m/m / plain 52 m/m } BACK { stay 50.8 m/m / plain " }

ube tube in outer vertical rows a stay tube Yes Working pressure by rules { front 144 lbs/sq.in. / back 182 " }

mbustion chamber tops: Material / Tensile strength /

kness of girder at centre / Length as per rule /

/ No. and pitch of stays in each / Working pressure by rule /

Crown stays: *Material* / *Tensile strength* / *Diameter* { *at body of stay* /, *or over threads* /

No. of threads per inch / *Area supported by each stay* / *Working pressure by rules* /

Screw stays: *Material* / *Tensile strength* / *Diameter* { *at turned off part* /, *or over threads* / *No. of threads per inch* /

Area supported by each stay / *Working pressure by rules* / *Are the stays drilled at the outer ends* /

Tubes: *Material* Mild steel *External diameter* { *plain* 50.8 m/m, *stay* " *Thickness* { 10 L.S.G., 8m/m

No. of threads per inch 9 *Pitch of tubes* 78 x 80 m/m *Working pressure by rules* 215 lbs/sq.in.

Manhole Compensation: *Size of opening in shell plate* 305 x 405 m/m *Section of compensating ring* / *No. of rivets and diameter of rivet holes* / *Outer row rivet pitch at ends* / *Depth of flange if manhole flanged* 90 m/m

Uptake: *External diameter* 276 x 426 m/m *Thickness of uptake plate* 13 m/m

Cross Tubes: *No.* *External diameters* { / *Thickness of plates* /

Have all the requirements of Sections 14 *to* 23 *inclusive for boilers been complied with* Yes.

The foregoing is a correct description,
NAGASAKI WORKS, MITSUBISHI ZOSEN KAISHA, LTD.
J. Tsutsui *Manufacturer.*
GENERAL MANAGER.

Dates of Survey while building { *During progress of work in shops* - - { *During erection on board vessel* - - } See Machinery Report.

Is the approved plan of boiler forwarded herewith (If not state date of approval.)

Total No. of visits /

GENERAL REMARKS (*State quality of workmanship, opinions as to class, &c.*) The materials and workmanship are good. The boiler has been constructed under special survey in accordance with the Rules and Approved plan, satisfactorily fitted in the vessel and safety valves adjusted under steam as above.

Survey Fee ... ... £ : : } When applied for, ... 19.....
Travelling Expenses (if any) £ : : } When received, ... 19.....
See Macinery Report.

George E. Anderson & T. Kuwabara
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 7 AUG 1931
Assigned Lieut. E. Rpt.