

# REPORT ON BOILERS.

No. 2324

Received at London Office

FEB 4 1938

Date of writing Report 11th Dec 1937 When handed in at Local Office 11th Dec. 1937 Port of NAGASAKI.

No. in Survey held at NAGASAKI. Date, First Survey 30th March 37 Last Survey 30th Nov. 1937

Reg. Book. 37122 on the Single Screw Motor Vessel "ASAHA MARU" (Number of Visits) See Machy. Rpt. Gross 7398.36 Net 4327.87

Master / Built at Nagasaki By whom built Mitsubishi J.K.K. Yard No. 687 When built 1937

Engines made at Nagasaki By whom made Mitsubishi Jukogyo K.K. Engine No. 687 When made 1937

Boilers made at Nagasaki By whom made Mitsubishi Jukogyo K.K. Boiler No. 687 When made 1937

Nominal Horse Power 2248. Owners Nippon Yusen Kabushiki Kaisha Port belonging to Tokyo.

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Nippon Seitetsu K.K. Yawata Seitetsu-sho and Mitsubishi Jukogyo K.K. Nagasaki Seiko-sho. (Letter for Record S)

Total Heating Surface of Boilers 258.82 sq.M. Is forced draught fitted No Coal or Oil fired Oil & Exhaust gas.

No. and Description of Boilers One Cylindrical Multitubular. DRY UPTAKE Working Pressure 7 Kg/cm<sup>2</sup>

Tested by hydraulic pressure to 14 Kg/cm<sup>2</sup> Date of test 17-7-37 No. of Certificate 1825 Can each boiler be worked separately /

Area of Firegrate in each Boiler / No. and Description of safety valves to each boiler 4 Spring Loaded.

Area of each set of valves per boiler {per Rule 1531 m<sup>2</sup> as fitted 25446.8 m<sup>2</sup> Pressure to which they are adjusted 7 Kg. 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 & hold bulkhead and bulkhead work 420 m/m Is oil fuel carried in the double bottom under boilers /

Smallest distance between shell of boiler and tank top plating Located in E.R. at 2nd deck level. Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 3700 m/m Length 2650 m/m Shell plates: Material Steel Tensile strength 44-45 Kg.

Thickness 19 m/m Are the shell plates welded or flanged No Description of riveting: circ. seams {end Double inter. /

long. seams D.R. & D.R.S. Diameter of rivet holes in {circ. seams 26.5 m/m long. seams 26.5 m/m Pitch of rivets {100.7 104.4

Percentage of strength of circ. end seams {plate 76.2 rivets 47 Percentage of strength of circ. intermediate seam {plate / rivets /

Percentage of strength of longitudinal joint {plate 74.6 rivets 85.6 combined -- Working pressure of shell by Rules 8.08 sq/cm.

Thickness of butt straps {outer 12 m/m inner 15 m/m No. and Description of Furnaces in each Boiler One CORRUGATED.

Material Steel Tensile strength 41-48 Kg/sq m/m Smallest outside diameter 1050 m/m

Length of plain part {top / bottom / Thickness of plates {crown 10 m/m bottom / Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom / Working pressure of furnace by Rules 9.94 Kg

End plates in steam space: Material Steel Tensile strength 41-48 Kg Thickness 22 m/m Pitch of stays 400 m/m

How are stays secured Double nuts and riveted strip. Working pressure by Rules 16.1 Kg end 9.8 Kg.

Tube plates: Material {front Steel back / Tensile strength {41-48 Kg " / Thickness {22 m/m " /

Mean pitch of stay tubes in nests 228x222 m/m Pitch across wide water spaces 340 m/m Working pressure {front 10.8 back /

Girders to combustion chamber tops: Material / Tensile strength / Depth and thickness of girder /

at centre / Length as per Rule / Distance apart / No. and pitch of stays /

in each / Working pressure by Rules / Combustion chamber plates: Material /

Tensile strength / Thickness: Sides / Back / Top / Bottom /

Pitch of stays to ditto: Sides / Back / Top / Are stays fitted with nuts or riveted over /

Working pressure by Rules / Front plate at bottom: Material Steel Tensile strength 41-48 Kg.

Thickness 22 m/m Lower back plate: Material Steel Tensile strength 41-48/Kg Thickness 22 m/m

Pitch of stays at wide water space / Are stays fitted with nuts or riveted over /

Working Pressure / Main stays: Material Steel Tensile strength 44-55 Kg.

Diameter {At body of stay, 2 @ 65m/m and 4 @ 57m/m. No. of threads per inch 6 Area supported by each stay 270000 m<sup>2</sup>

{Over threads 72m/m and 4 @ 64m/m Working pressure by Rules 8.05 Kg. Screw stays: Material / Tensile strength /

Diameter {At turned off part, / No. of threads per inch / Area supported by each stay /

{Over threads /



