

REPORT ON BOILERS.

No. 1656

Received at London Office 29 SEP 1928

Date of writing Report 23rd Aug. 1928 When handed in at Local Office 23rd Aug. 1928 Port of NAGASAKI.

No. in Survey held at Annan, Scotland and Nagasaki. Date, First Survey 11th Oct. 1927 Last Survey 4th August, 1928.
Reg. Book

on the Steel Screw Motor Vessel "S HUNTEN MARU". (Number of Visits 8.) Gross 5,623.35 Tons Net 3,508.

Built at Nagasaki. By whom built Mitsubishi Zosen Kaisha, Ltd., Yard No. 448. When built 1928.

Engines made at Nagasaki. By whom made Mitsubishi Zosen Kaisha, Ltd., Engine No. 448. When made 1928.

Boilers made at Annan, Scotland. By whom made Cochran & Co. (Annan) Ltd., Boiler No. 10661. When made 1927.

Owners Yamamoto Shoji Kaisha, Ltd., Port belonging to Fuchu.

VERTICAL DONKEY BOILER.

Made at Annan. By whom made Cochran & Co (Annan) Ltd. Boiler No. 10661. When made 1927 Where fixed In Engine Rm.

Manufacturers of Steel D. Colville & Sons, Ltd.,

Total Heating Surface of Boiler Is forced draught fitted No. Coal or Oil fired Oil.

No. and Description of Boilers One, Vertical. Working pressure 100 lbs.

Tested by hydraulic pressure to 200 lbs. Date of test 11-11-27. No. of Certificate 17676.

Area of Firegrate ~~12.5~~ 9.2 sq. ft. No. and Description of safety valves to each boiler Two, - Direct spring loaded.

Area of each set of valves per boiler { per rule 3.53 sq. in. Pressure to which they are adjusted 102 lbs per sq. in. Are they fitted with easing gear Yes

State whether steam from main boilers can enter the donkey boiler ☒ Smallest distance between boiler or uptake and bunkers

Is oil fuel carried in the double bottom under boiler Yes Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated / ~~Yes~~ Donkey Length 4'-6" 11'-9"

Shell plates: Material Steel. Tensile strength 28/32 tons. Thickness 3/8", 7/16", 3/8".

Are the shell plates welded or flanged Description of riveting: circ. seams { end long seams D.R. Lap.

Whether punched or drilled----- Drilled. Lap of plating--3 1/4". { plate 66.8
Dia. of rivet holes in { circ. seams 23/32" Pitch of rivets 2.156", 2.383", { rivets of ~~xxxxxx~~ joint rivets 75.1
{ long seams 2.364"

Working pressure of shell by rules 119.2 lbs Thickness of butt straps { outer inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Material

Shell crown plate 1/2" Radius of Do. 2'-3" Working pressure by rules

Description of Furnace: Plain, spherical, or dished crown Material Tensile strength

of furnace 1" Hemisphere of furnace 2'-8 1/2" Working pressure by rules 183.2 lbs.

Thickness of side plates 1" ~~xxxxxx~~ diameter { top 45" Length ~~xxxxxx~~ of furnace 2'-8 1/2" Working pressure by rules 183.2 lbs.

furnace crown 1/2" Radius of Do. 22 1/2" Are stays fitted with nuts or riveted over

Description of joint: Seamless & Ogee. of Ogee ring 104 lbs

Thickness of Ogee Ring 5/8" Diameter as per rule { D Working pressure by rule 104 lbs

Combustion Chamber: Material Tensile strength Thickness of top plate

Radius if dished Working pressure by rule Thickness of back plate Diameter if circular

Length as per rule Pitch of stays Are stays fitted with nuts or riveted over

Diameter of stays over thread Working pressure of back plate by rules

Tube Plates: Material { front Tensile strength { Thickness 19/32" Mean pitch of stay tubes in nests 9 1/2"

of comprising shell, Dia. as per rule { front Pitch in outer vertical rows { 8" Dia. of tube holes FRONT { stay 2 11/16" BACK { stay 2 1/2"

Working pressure by rules { front 107.4 lbs back 119.8 lbs

Orders 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 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 Wrot Iron. External diameter { plain 2 1/2" stay 2 1/2" Thickness { 11 L.S. 11/32"

No. of threads per inch 9 Pitch of tubes 4" x 3 1/2" Working pressure by rules 125 lbs

Manhole Compensation: Size of opening in shell plate 16" x 12" Section of compensating ring 12" x 7/8" No. of rivets at CA

of rivet holes 32 @ 23/32" Outer row rivet pitch at ends 4 5/8" Depth of flange if manhole flanged _____

Uptake: External diameter 10 1/2" x 17" Thickness of uptake plate 1/2"

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
(Sign) Cochran & Co, (Annan) Ltd., Ma

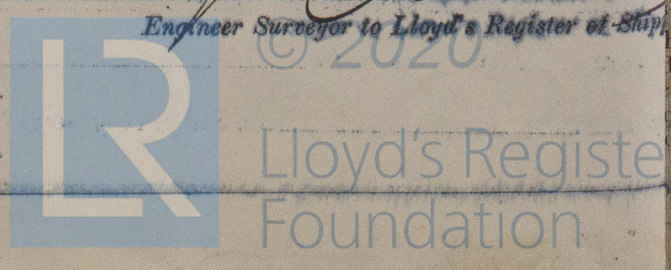
Dates of Survey { During progress of work in shops - - Oct 11, 14, 21 Nov. 4, 11. (At Annan) Is the approved plan of boiler forwarded herewith No. 5
while building { During erection on board vessel - - May 31, July 31, Aug. 4 (At Nagasaki) (If not state date of approval.) report No
Total No. of visits 8.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under
in accordance with the Rules and approved plan.
Materials and workmanship good.
The above boiler (constructed by Messrs. Cochran & Co (Annan) Ltd.,) has been satisfactory for
the vessel and safety valves adjusted under steam to 102 lbs, per sq.in.

Survey Fee £ See Machinery When applied for, 10
Travelling Expenses (if any) £ Report. When received, 10

George Anderson
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE. 2 OCT 1928
Assigned See Report attached



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