

REPORT ON BOILERS.

No. 17199
21 NOV 1930

Received at London Office

Date of writing Report 17. 11. 1930 When handed in at Local Office 20. 11. 1930 Port of Grimsby

No. in Reg. Book Survey held at Lincoln Date, First Survey 3. 10. 30 Last Survey 10-11-1930

on the (Number of Visits 9) Gross Tons Net

Built at Kobe By whom built Kawasaki Dockyard Co. Ltd. Yrd No. 563 When built

Engines made at By whom made Engine No. When made

Boilers made at Lincoln By whom made Habcock & Wilson, Ltd. Boiler No. 73/4619 When made 1930

Owners Port belonging to

VERTICAL DONKEY BOILER.

Made at Lincoln By whom made Habcock & Wilson, Ltd. Boiler No. 73/4619 When made 1930 Where fixed

Manufacturers of Steel Parkgate 7 & Co. Ltd. Cooper & Turner, Ltd.

Total Heating Surface of Boiler 550 sq. ft. Is forced draught fitted Coal or Oil fired Steam Gas

No. and Description of Boilers One Clark Patent Waste Heat. Plate Working pressure 100 lb.

Tested by hydraulic pressure to 200 lb. sq. in. Date of test 6th November, 1930 No. of Certificate 312

Area of Firegrate in each Boiler None No. and Description of safety valves to each boiler Double spring, each 2 1/2" dia.

Area of each set of valves per boiler { per rule 7.17 sq. in. as fitted 9.81 sq. in. Pressure to which they are adjusted not adjusted 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 or woodwork

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

Is the base of the boiler insulated Largest internal dia. of boiler 6'-6" Height 11'-10 1/2"

Shell plates: Material S. K. steel Tensile strength 28/32 T. Thickness 1/2"

Are the shell plates welded or flanged no Description of riveting: circ. seams { end S.K. Lap inter. D.K. Lap long. seams D.K. D.H.S.

Dia. of rivet holes in { circ. seams 7/8" long. seams 7/8" Pitch of rivets { 2" x 2 5/8" Percentage of strength of circ. seams { plate 56.25 x 66.7 rivets 50 x 75 of Longitudinal joint { plate 72.6 x 75 rivets 115 x 114 combined

Working pressure of shell by rules 133 lb. sq. in. Thickness of butt straps { outer 7/16" inner 7/16"

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat flat Material S. K. steel

Tensile strength 26/30 T. Thickness 3/4" Radius - Working pressure by rules 290 lb. sq. in.

Description of Furnace: Plain, spherical, or dished crown dished Material S. K. steel Tensile strength 26/30 T.

Thickness 1 1/8" External diameter { top 5'-8 1/4" bottom 5'-8 1/4" Length as per rule 7'-9 3/8" Working pressure by rules 111 lb.

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread - Radius of spherical or dished furnace crown 5'-0" Working pressure by rule 149 lb.

Thickness of Ogee Ring 1 1/8" Diameter as per rule { D 6'-6" a 5'-8 1/4" Working pressure by rule 225 lb.

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 back Tensile strength { Thickness { Mean pitch of stay tubes in nests

If comprising shell, Dia. as per rule { front back Pitch in outer vertical rows { Dia. of tube holes FRONT { stay plain BACK { stay plain

Is each alternate tube in outer vertical rows a stay tube Working pressure by rules { front back

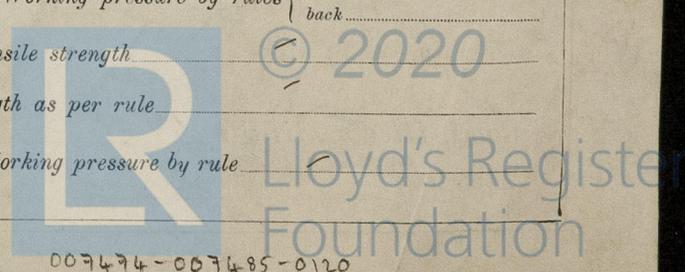
Girders to combustion chamber tops: Material Tensile strength

Depth and thickness of girder at centre Length as per rule

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

If not, state whether, and when, one will be sent

In a Report also sent on the Hull of the Ship



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 *S.D. steel* External diameter { plain *4" 6" 2 3/4"* stay Thickness *5-BWG*
 No. of threads per inch V-Pitch of tubes *8 3/4" staggered* Working pressure by rules
Manhole Compensation: Size of opening in shell plate *15 1/2" x 11 1/2"* Section of compensating ring *4 3/4" x 7/8"* No. of rivets and diameter of rivet holes *44 - 7/8" holes* Outer row rivet pitch at ends *2.9"* Depth of flange if manhole flanged
Uptake: External diameter *3'-6"* Thickness of uptake plate *5/8"*
Cross Tubes: No. External diameters Thickness of plates

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *yes*

The foregoing is a correct description,

Annual Survey Request

[Signature]
 OFFICE, LINCOLN BRANCH
 Manufacturer.

Dates of Survey During progress of work in shops - *1930 Oct 5, 7, 14, 16, 21, 23, 30 Nov 6, 10* Is the approved plan of boiler forwarded herewith *yes*
 while building During erection on board vessel - - - - - (If not state date of approval.)
 Total No. of visits *9*

Is this Boiler a duplicate of a previous case If so, state Vessel's name and Report No.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey and in accordance with the Rules and approved plans as per Secty's letter of 18/9/30. The materials and workmanship are good.*

Survey Fee ... £ *4:4* When applied for, *10/11* 19*30*
 Travelling Expenses (if any) £ *1:12* When received, *12/31* 19*30*

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute *TUE. 18 AUG 1930*
 Assigned *See F.E. Rep.*

