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REPORT ON BOILERS.

No. 86308

Received at London Office 10 OCT 1930

Writing Report 19 When handed in at Local Office 8/10/1930 Port of Newcastle-on-Tyne

Survey held at Wallsend. Date, First Survey 21st Nov/29. Last Survey 2 Oct 1930

6 on the S.S. "City of Hankow" (Number of Visits ——) Tons { Gross 7369 Net 4765

Built at W. Hartlepool By whom built W. Gray & Co Ld Yard No. ✓ When built 1915-6

made at Hartlepool By whom made Central Mar Engg Wks. Engine No. ✓ When made do

made at do By whom made do. Boiler No. ✓ When made do

l Horse Power 211 Owners Montgomery & Workman (1920) Ld Port belonging to Liverpool.

TITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Superheaters only.

facturers of Steel (Letter for Record)

Heating Surface of Boilers Is forced draught fitted Coal or Oil fired

d Description of Boilers **Working Pressure**

by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately

f Firegrate in each Boiler No. and Description of safety valves to each boiler

f each set of valves per boiler { per Rule / as fitted Pressure to which they are adjusted Are they fitted with easing gear

of donkey boilers, state whether steam from main boilers can enter the donkey boiler

st distance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers

st distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

internal dia. of boilers Length **Shell plates:** Material Tensile strength

Are the shell plates welded or flanged Description of riveting: circ. seams { end / inter.

Diameter of rivet holes in { circ. seams / long. seams Pitch of rivets { / /

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

age of strength of longitudinal joint { plate / rivets / combined Working pressure of shell by Rules

ss of butt straps { outer / inner **No. and Description of Furnaces in each Boiler**

l Tensile strength Smallest outside diameter

of plain part { top / bottom Thickness of plates { crown / bottom Description of longitudinal joint

ions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules

ates in steam space: Material Tensile strength Thickness Pitch of stays

re stays secured Working pressure by Rules

lates: Material { front / back Tensile strength { / Thickness { /

tch of stay tubes in nests Pitch across wide water spaces Working pressure { front / back

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

re Length as per Rule Distance apart No. and pitch of stays

Working pressure by Rules **Combustion chamber plates:** Material

strength Thickness: Sides Back Top Bottom

t stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

g pressure by Rules **Front plate at bottom:** Material Tensile strength

ess **Lower back plate:** Material Tensile strength Thickness

f stays at wide water space Are stays fitted with nuts or riveted over

g Pressure **Main stays:** Material Tensile strength

er { At body of stay, / or / Over threads No. of threads per inch Area supported by each stay

g pressure by Rules **Screw stays:** Material Tensile strength

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

of Shipping.

Working pressure by Rules ____ *Are the stays drilled at the outer ends* ____ *Margin stays: Diameter* { *At turned off part* / *Over threads* } ____

No. of threads per inch ____ *Area supported by each stay* ____ *Working pressure by Rules* ____

Tubes: *Material* ____ *External diameter* { *Plain* / *Stay* } ____ *Thickness* { ____ } ____ *No. of threads per inch* ____

Pitch of tubes ____ *Working pressure by Rules* ____ **Manhole compensation:** *Size of*

shell plate ____ *Section of compensating ring* ____ *No. of rivets and diameter of rivet holes* ____

Outer row rivet pitch at ends ____ *Depth of flange if manhole flanged* ____ **Steam Dome:** *Material* ____

Tensile strength ____ *Thickness of shell* ____ *Description of longitudinal joint* ____

Diameter of rivet holes ____ *Pitch of rivets* ____ *Percentage of strength of joint* { *Plate* / *Rivets* } ____

Internal diameter ____ *Working pressure by Rules* ____ *Thickness of crown* ____ *No. and d*

stays ____ *Inner radius of crown* ____ *Working pressure by Rules* ____

How connected to shell ____ *Size of doubling plate under dome* ____ *Diameter of rivet holes*

of rivets in outer row in dome connection to shell ____

Type of Superheater North Eastern Superheater *Manufacturers of* { *Tubes* Weldless Steel Tube Co / *Steel ~~castings~~ forgings* Sheffield Steel Co }

Number of elements Main Br 210 Aux Br 56 *Material of tubes* Solid drawn steel *Internal diameter and thickness of tubes* 1¼" ins x 2.5 m/m

Material of headers forged steel *Tensile strength* 26 to 30 tons *Thickness* Main 1⅝" Aux 1⅛" *Can the superheater be s*

the boiler be worked separately yes *Is a safety valve fitted to every part of the superheater which can be shut off from the boiler* ye

Area of each safety valve 3.1416 High lift. *Are the safety valves fitted with easing gear* yes *Working press*

Rules 225 lbs. *Pressure to which the safety valves are adjusted* 230 lbs *Hydraulic test*

tubes 1500 lbs. *, castings* 625 lbs *and after assembly in place* 500 lbs. *Are drain cocks or va*

to free the superheater from water where necessary yes.

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

The foregoing is a correct description,

Ma

Dates of Survey while building { *During progress of work in shops* - - / *During erection on board vessel* - - - } ____

Are the approved plans of boiler and superheater forwarded herewith ____
(If not state date of approval.)

Total No. of visits ____

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.*)

These superheaters have been built under special survey, materi
workmanship good. Hydraulic tests satisfactory, satisfactor
installed examined under steam & safety valve adjusted.

Survey Fee ... ... £ : : | When applied for, 19

Travelling Expenses (if any) £ : ✓ : | When received, 19

William Butler.

Engineer Surveyor to Lloyd's Register of S

Committee's Minute TUE. 21 OCT 1930 FRI. 20 MAR 1931

Assigned TUE. 8 DEC 1931 FRI. 11 DEC 1931

AUG 1931

TUE. 15 NOV 1932