

REPORT ON BOILERS.

No. 24043.

Received at London Office. **23 MAR 1950**

Date of writing Report **13 MAR 1950** When handed in at Local Office **17 MAR 1950** Port of **GREENOCK**

No. in Survey held at **GREENOCK** Date, First Survey **23 RD MAY 1949** Last Survey **23 RD FEBRUARY 1950**

on the **SING S. OLINDA** (Number of Visits **1**) Tons { Gross **1432** Net **1432**

at **DUMPARTON** By whom built **DENNY BROS** Yard No. **1432** When built **1950**

ines made at **GREENOCK** By whom made **JOHN G. KINCAID & CO LD** Engine No. **799** When made **1950**

lers made at **do** By whom made **do** Boiler No. **799** When made **1950**

inal Horse Power **900** Owners **BRITISH INDIA STN. NAV. CO LD** Port belonging to **do**

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel **COLVILLE & CO** (Letter for Record **S**)

al Heating Surface of Boilers **10203 = 3660** Of Superheaters **4080**

l for Register Book **14283** Is forced draught fitted **Yes**

and Description of Boilers **Three cylindrical SE** Coal or Oil fired **Oil**

ed by hydraulic pressure to **380** Date of test **8-12-49** No. of Certificate **2567** Working Pressure **220 lb**

of Firegrate in each Boiler **12-49** No. and Description of safety valves to each boiler **Double spring 1 1/2 CS.**

of each set of valves per boiler **per Rule 9** Pressure to which they are adjusted **226** Are they fitted with easing gear **Yes**

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

Test distance between boilers or uptakes and bunkers or woodwork **2'-0"** Is oil fuel carried in the double bottom under boilers **No**

Test distance between shell of boiler and tank top plating **2'-1 1/2"** Is the bottom of the boiler insulated **Yes**

Test internal dia. of boilers **16'-3"** Length **12'-2 3/4"** Shell plates: Material **S** Tensile strength **26/30 tons**

ion welded, state name of welding firm **Yes** Have all the requirements of the Rules for Class I vessels **Yes**

omplied with **Yes** Thickness **1 1/8"** Are the shell plates welded or flanged **No** Description of riveting: circ. seams **DR**

seams **TROBS** Diameter of rivet holes in { circ. seams **1 1/8"** Pitch of rivets **10-5"**

ntage of strength of circ. end seams { plate **64.57** rivets **44.14** Percentage of strength of circ. intermediate seam { plate **85.19** rivets **86.9** combined **87.638**

ntage of strength of longitudinal joint { plate **85.19** rivets **86.9** combined **87.638**

ness of butt straps { outer **1 3/8"** inner **1 1/8"** No. and Description of Furnaces in each Boiler **Three Dighton corrugated**

al **S** Tensile strength **26/30 tons** Smallest outside diameter **3'-4 1/4"**

of plain part { top **Yes** bottom **Yes** Thickness of plates **5/8"** Description of longitudinal joint **Weld**

ions of stiffening rings on furnace or c.c. bottom **None**

ates in steam space: Material **S** Tensile strength **26/30 tons** Thickness **1 3/8"** Pitch of stays **18" x 2 1/2"**

re stays secured **DN**

lates: Material { front **S** back **S** Tensile strength **26/30 tons** Thickness **1 1/8"**

itch of stay tubes in nests **9-6"** Pitch across wide water spaces **14"**

s to combustion chamber tops: Material **S** Tensile strength **29/33 tons** Depth and thickness of girder **8 5/8"**

re **9 1/2" x 1 1/8" = 2 x 2 1/2"** Length as per Rule **2'-10 1/2"** Distance apart **8 5/8"** No. and pitch of stays **18" x 2 1/2"**

strength **26/30 tons** Combustion chamber plates: Material **S** Thickness: Sides **1 1/8"** Back **1 1/8"** Top **1 1/8"** Bottom **3/4"**

stays to ditto: Sides **8 5/8" x 8 5/8"** Back **8 5/8" x 8 5/8"** Top **8 5/8" x 8 5/8"** Bottom **8 5/8" x 8 5/8"** Are stays fitted with nuts or riveted over **Nuts on shell**

late at bottom: Material **S** Tensile strength **26/30 tons**

ss. **1 5/8"** Lower back plate: Material **S** Tensile strength **26/30 tons** Thickness **2 1/32"**

stays at wide water space **1'-1 1/2" x 8 5/8"** Are stays fitted with nuts or riveted over **Nuts**

ays: Material **S** Tensile strength **28/32 tons**

At body of stay **3 1/8"** No. of threads per inch **6**

Over threads **1 1/2"** Tensile strength **34/30 tons**

ays: Material **S** No. of threads per inch **9**

At turned off part **1 3/4"**

Over threads **1 3/4"**

Are the stays drilled at the outer ends. No ✓

Margin stays: Diameter { At turned off part... 1 7/8" x 2 1/5"
or
Over threads...

No. of threads per inch. 9 ✓

Tubes: Material Hot rolled steel External diameter { Plain 3" ✓
Stay 3" ✓ Thickness { 5/16" x 3/8" ✓ No. of threads per inch 9 ✓

Pitch of tubes. 4 1/4" x 4 1/5" Manhole compensation: Size of open shell plate. 16 1/2" x 20 1/2" Section of compensating ring 3 1/2" x 2 1/2" x 1 1/2" No. of rivets and diameter of rivet holes. 36 @ 1 9/16" ✓

Outer row rivet pitch at ends. 10 1/2" Depth of flange if manhole flanged M. Neil Lys. door 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. Thickness of crown. No. and diam stays.

How connected to shell. Inner radius of crown.

Size of doubling plate under dome. Diameter of rivet holes and of rivets in outer row in dome connection to shell.

Type of Superheater Superheater Co. L^{td} Manufacturers of { Tubes. See Manchester certificate
Steel forgings. N^o C 8024 & C 8025.
Steel castings.

Number of elements. 186 Material of tubes. SOS Internal diameter and thickness of tubes. 2 1/4" L

Material of headers. 6 Tensile strength. Thickness. Can the superheater be shut the boiler be worked separately. Yes See Main steam pipe plan. Is a safety valve fitted to every part of the superheater which can be shut off from the boiler. Yes

Area of each safety valve. 3.14 sq" Are the safety valves fitted with easing gear. Yes ✓

Pressure to which the safety valves are adjusted. 228 lbs / sq" ✓ Hydraulic test tubes. forgings and castings. and after assembly in place. 575 lbs Are drain valves fitted to free the superheater from water where necessary. Yes ✓

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

The foregoing is a correct description,
For JOHN G. KINCAID & CO., LTD.
J. Bowdler
Chief Draughtsman.

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

SEE MACHINERY REPORT

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 boilers have been constructed under special survey in accordance with Rules & approved plans. The materials & workmanship are sound & good. They have been effectually installed in the vessel & their safety valves adjusted for a working pressure of 220 lbs / sq"

For recommendation please see machinery report JGH F.E. N^o

Survey Fee ... £

Travelling Expenses (if any) £

When applied for, 19.....

When received, 19.....

See machinery report

Charles J. Hunter
Engineer Surveyor to Lloyd's Register of

Committee's Minute GLASGOW 22 MAR 1950

Assigned SEE ACCOMPANYING MACHINERY REPORT