

REPORT ON BOILERS.

No. 24205

Received at London Office.....

Date of writing Report 2ND SEPT. 1950. When handed in at Local Office 8TH SEPT. 1950. Port of GREENOCKNo. in Reg. Book. Survey held at GREENOCK Date, First Survey 17TH AUGUST 1949. Last Survey 25TH AUGUST 1950

on the S/S ORDIA (Number of Visits.....) Tons Gross..... Net.....

Built at DUMFARTON By whom built W. DENNY & BROS L^D Yard No. 1433 When built 1950Engines made at GREENOCK By whom made JOHN G. KINCAID & CO L^D Engine No. 800 When made 1950

Boilers made at do By whom made do Boiler No. 800 When made 1950

Nominal Horse Power 900 Owners BRITISH INDIA STEAM NAV. CO L^D Port belonging to

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel COLVILLE L^D (Letter for Record S)

Total Heating Surface of Boilers 10203 + 366s Of Superheaters 4080 ✓

Total for Register Book 14283 ✓ Is forced draught fitted 4 ✓ Coal or Oil fired Oil ✓

No. and Description of Boilers Three cylindrical SE ✓ Working Pressure 220 lb ✓

Tested by hydraulic pressure to 380 ✓ Date of test 16.3.50 24.3.50 11.4.50 No. of Certificate 3580 3582 2586 Can each boiler be worked separately Yes ✓

Area of Firegrate in each Boiler ✓ No. and Description of safety valves to each boiler Double spring 141 C.S. ✓

Area of each set of valves per boiler { per Rule 9" as fitted 9.82" ✓ Pressure to which they are adjusted 226 lb 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 and bunkers or woodwork 2'-0" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 2'-1 1/4" Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 16'-3" ✓ Length 12'-2 1/4" ✓ Shell plates: Material S Tensile strength 29/33 tons ✓

If fusion welded, state name of welding Firm ✓ Have all the requirements of the Rules for Class I vessels ✓

Have been complied with ✓ Thickness 1 1/8" Are the shell plates welded or flanged No ✓ Description of riveting: circ. seams { end 28" ✓ inter 4.41" ✓

Long. seams TRDAS ✓ Diameter of rivet holes in { circ. seams 1 1/4" ✓ long. seams 1 1/4" ✓ Pitch of rivets 10.5" ✓

Percentage 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

Percentage of strength of longitudinal joint { plate 87.6 rivets 87.6 220.9 lb

Thickness of butt straps { outer 1 3/4" ✓ inner 1 1/4" ✓ No. and Description of Furnaces in each Boiler Three Doughton corrugated

Material SMS Tensile strength 24/30 tons ✓ Smallest outside diameter 3'-4 1/4" ✓

Length of plain part { top ✓ bottom ✓ Thickness of plates 5/8" ✓ Description of longitudinal joint Weld. ✓

Dimensions of stiffening rings on furnace or c.c. bottom None ✓

End plates in steam space: Material SMS Tensile strength 24/30 tons ✓ Thickness 1 1/8" ✓ Pitch of stays 18" x 2 1/2" ✓

How are stays secured DN ✓

Tube plates: Material { front SMS back SMS Tensile strength 24/30 tons ✓ Thickness 1 1/8" ✓ 29/32 ✓

Lean pitch of stay tubes in nests 9.6" Pitch across wide water spaces 14" ✓

Girders to combustion chamber tops: Material SMS Tensile strength 29/33 tons ✓ Depth and thickness of girder

Centre 9 1/2" x 1 1/4" = 2 x 1 1/4" ✓ Length as per Rule 2'-10 1/2" ✓ Distance apart 5 3/8" ✓ No. and pitch of stays

Each Three 2 8 3/8" ✓ Combustion chamber plates: Material SMS

Tensile strength 24/30 tons ✓ Thickness: Sides 1/4" ✓ Back 1/4" ✓ Top 1/4" ✓ Bottom 3/4" ✓

Pitch of stays to ditto: Sides 8 3/8" x 8 3/8" ✓ Back 8 3/8" x 8 3/8" ✓ Top 8 3/8" x 8 3/8" ✓ Are stays fitted with nuts or riveted over Nuts except on shell

Front plate at bottom: Material SMS Tensile strength 24/30 tons ✓

Thickness 1 5/8" ✓ Lower back plate: Material SMS Tensile strength 24/30 tons ✓ Thickness 27" ✓ 32 ✓

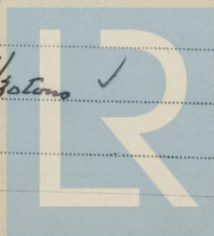
Pitch of stays at wide water space 13 1/4" x 8 3/8" Are stays fitted with nuts or riveted over Nuts ✓

Main stays: Material SMS Tensile strength 28/32 tons ✓

Diameter { At body of stay 3/8" ✓ or Over threads No. of threads per inch 6

Screw stays: Material S Tensile strength 24/30 tons ✓

Diameter { At turned off part 1 1/4" ✓ or Over threads No. of threads per inch 9



© 2020

Lloyd's Register Foundation

Are the stays drilled at the outer ends No ✓ Margin stays: Diameter { At turned off part 1 1/8" x 2 1/8" or Over threads. 1 1/8" x 2 1/8" ✓
No. of threads per inch 9 ✓
Tubes: Material Hot rolled steel External diameter { Plain 3" ✓ Thickness { 8 wt. ✓ No. of threads per inch 9 ✓
Stay 3" ✓ 5/16" x 3/8" ✓
Pitch of tubes 4 1/4" x 4 1/8" ✓ Manhole compensation: Size of opening in
shell plate 16 1/2" x 20 1/2" ✓ Section of compensating ring 3 1/2" x 2 9/2" x 1 9/16" 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 McNeil type 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 diameter of
stays _____ Inner radius of crown _____
How connected to shell _____ Size of doubling plate under dome _____ Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell _____

Type of Superheater Superheater 6 1/2"

Manufacturers of

Tubes See Manchester Cords
Steel forgings C 8365, C 8366
Steel castings _____

Number of elements 186 Material of tubes SOS Internal diameter and thickness of tubes 5 1/2" x 1/4"
Material of headers 6 Tensile strength _____ Thickness _____ Can the superheater be shut off and
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. in. ✓ Are the safety valves fitted with easing gear Yes ✓
Pressure to which the safety valves are adjusted 225 lbs. / sq. in. ✓ Hydraulic test pressure
tubes _____ forgings and castings _____ and after assembly in place 575 lbs. Are drain cocks or
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 Yes ✓

For JOHN G. KINCAID & CO. LTD.
The foregoing is a correct description,

J. Bonney Chief Draughtsman.

Manufactured

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 Yes ✓
(If not state date of approval.)

Total No. of visits _____

SEE MACHINERY REPORT

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. OLINDA GRK FE N° 22073.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These boilers have been constructed under special survey in accordance with the Rules and approved plans. The materials & workmanship are sound & good. They have been efficiently installed in the vessel & their safety valves adjusted under steam for a working pressure of 225 lbs / sq. in.

For recommendations please see Machinery rpt GRK N° 24205.

Survey Fee £

Travelling Expenses (if any) £

When applied for, 19.....

When received 19.....

See Machinery
Yt

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

Committee's Minute

GLASGOW

13 SEP 1950

Assigned

...ING MACHINERY REPORT



© 2020

Lloyd's Register
Foundation