

REPORT ON BOILERS.

No. 70069

Received at London Office. 9th NOV 1945

Date of writing Report 15-10-45 When handed in at Local Office 22-10-45 Port of GLASGOW

No. in Reg. Book. 34386 Survey held at GLASGOW Date, First Survey 31. 9. 43 Last Survey 2. 10. 1945

on the MOTOR VESSEL "IAPTI" (Number of Visits 112) Tons { Gross 6650 Net 4352 } 18

Master P. M. Built at GLASGOW By whom built CHAS. CONNELLY & CO. LD. Yard No. 1945 When built 1945

Engines made at GLASGOW By whom made BARCLAY CURLE & CO. LD. Engine No. EW 143 When made 1945

Boilers made at Do By whom made Do Boiler No. EW 143 When made 1945

Nominal Horse Power 449 Owners JAMES NOURSE LD. Port belonging to LONDON

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Bolton & Co. Ltd. (Letter for Record S ✓)

Total Heating Surface of Boilers 12534 566 oil fired Is forced draught fitted yes ✓ Coal or Oil fired oil ✓

No. and Description of Boilers One oil fired exhaust gas Working Pressure 120 lbs ✓

Tested by hydraulic pressure to 230 lbs Date of test 25-10-45 No. of Certificate 21811 Can each boiler be worked separately no

Area of Firegrate in each Boiler no No. and Description of safety valves to each boiler One - 2 1/4" S. H. R. double ✓

Area of each set of valves per boiler { per Rule 6.864" 4.22 as fitted 7.944" } Pressure to which they are adjusted 120 lbs Are they fitted with easing gear yes ✓

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Smallest distance between boilers or uptakes and bunkers or woodwork Well clear Is oil fuel carried in the double bottom under boilers yes ✓

Smallest distance between shell of boiler and tank top plating middle platform Is the bottom of the boiler insulated yes ✓

Largest internal dia. of boilers 9' 9" Length 10' 6" Shell plates: Material S ✓ Tensile strength 29/33 tons ✓

Thickness 9/16" Are the shell plates welded or flanged no ✓ Description of riveting: circ. seams { end 2.841" inter 2.841" } long. seams D. B. S. I. R. R. Diameter of rivet holes in { circ. seams 3/4" long. seams 3/4" } Pitch of rivets 5" ✓

Percentage of strength of circ. end seams { plate 43.5 rivets 43.6 } Percentage of strength of circ. intermediate seam { plate 85 rivets 116 } Working pressure of shell by Rules 23.2 ✓

Percentage of strength of longitudinal joint { plate 85 rivets 116 } combined 93.2 ✓

Thickness of butt straps { outer 7/16" inner 9/16" } No. and Description of Furnaces in each Boiler One Deighton ✓

Material S ✓ Tensile strength 26/30 tons ✓ Smallest outside diameter 34 1/4" ✓

Length of plain part { top 3/8" bottom 3/8" } Thickness of plates { crown 3/8" bottom 3/8" } Description of longitudinal joint Welded ✓

Dimensions of stiffening rings on furnace or c.c. bottom no Working pressure of furnace by Rules 25/32" ✓

End plates in steam space: Material S ✓ Tensile strength 26/30 tons ✓ Thickness 25/32" ✓ Pitch of stays 14" x 16" ✓

How are stays secured Double nuts Working pressure by Rules 25/32" ✓

Tube plates: Material { front S back S } Tensile strength 26/30 tons ✓ Thickness { 25/32" } 1/16" ✓

Mean pitch of stay tubes in nests 9 3/8" Pitch across wide water spaces 13 1/4" Working pressure { front 25/32" back 25/32" } ✓

Girders to combustion chamber tops: Material S ✓ Tensile strength 28/32 tons ✓ Depth and thickness of girder at centre 20 8 x 1 1/2" ✓ Length as per Rule 29 23/32" ✓ Distance apart 10 1/2" ✓ No. and pitch of stays in each 20 9 1/2" ✓ Working pressure by Rules 25/32" ✓ Combustion chamber plates: Material S ✓

Tensile strength 26/30 tons ✓ Thickness: Sides 19/32" ✓ Back 19/32" ✓ Top 19/32" ✓ Bottom 19/32" ✓

Pitch of stays to ditto: Sides 9 1/2" x 10 1/2" ✓ Back 9 1/2" x 10 1/2" ✓ Top 9 1/2" x 10 1/2" ✓ Are stays fitted with nuts or riveted over Nuts ✓

Working pressure by Rules 25/32" ✓ Front plate at bottom: Material S ✓ Tensile strength 26/30 tons ✓

Thickness 25/32" ✓ Lower back plate: Material S ✓ Tensile strength 26/30 tons ✓ Thickness 25/32" ✓

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

Working pressure 25/32" ✓ Main stays: Material S ✓ Tensile strength 28/32 tons ✓

Diameter { At body of stay 1 7/8" or over threads 1 1/2" } No. of threads per inch 6 ✓ Area supported by each stay 6 ✓

Working pressure by Rules 25/32" ✓ Screw stays: Material S ✓ Tensile strength 26/30 tons ✓

Diameter { At turned off part 1 1/2" or over threads 1 1/2" } No. of threads per inch 9 ✓ Area supported by each stay 9 ✓

Working pressure by Rules..... Are the stays drilled at the outer ends No ✓ Margin stays: Diameter { At turned off part, or Over threads... 1 3/8 ✓

No. of threads per inch 9 ✓ Area supported by each stay 2 1/2" x 1 3/4" ✓ Working pressure by Rules 11 w 9 ✓

Tubes: Material S ✓ External diameter { Plain 2 1/2" ✓ Stay 2 1/2" ✓ Thickness { 3/16" ✓ 3/8" ✓ No. of threads per inch 9 ✓

Pitch of tubes 3 3/4" x 3 3/4" ✓ Working pressure by Rules..... Manhole compensation: Size of opening in shell plate 20" x 16" ✓ Section of compensating ring 19" x 9/16" ✓ No. of rivets and diameter of rivet holes 14 @ 1 1/16" ✓

Outer row rivet pitch at ends 7 1/2" ✓ Depth of flange if manhole flanged 3 1/4" ✓ 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 diameter of stays.....

Inner radius of crown..... Working pressure by Rules.....

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..... Manufacturers of { Tubes..... Steel forgings..... Steel castings.....

Number of elements..... Material of tubes..... Internal diameter and thickness of tubes.....

Material of headers..... Tensile strength..... Thickness..... Can the superheater be shut off and the boiler be worked separately.....

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler.....

Area of each safety valve..... Are the safety valves fitted with easing gear..... Working pressure as per Rules.....

Pressure to which the safety valves are adjusted..... Hydraulic test pressure: tubes..... forgings and castings..... and after assembly in place..... Are drain cocks or valves fitted to free the superheater from water where necessary.....

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

A. Macaulay

The foregoing is a correct description,

Manufacturer.

Dates of Survey { During progress of work in shops - - - See attached Are the approved plans of boiler and superheater forwarded herewith Yes (If not state date of approval.)

while building { During erection on board vessel - - - Machinery report Total No. of visits.....

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. H/VMECNA GLS. RPT. N° 68172

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey in accordance with the Rules and approved plans. The materials and workmanship are good. The boiler has been satisfactorily installed in the vessel, and the safety valves have been adjusted under steam to 120 lb./sq. inch

Survey Fee £ See mach. report When applied for.....19.....

Travelling Expenses (if any) £ See mach. report When received.....19.....

N. Russell

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute.....

GLASGOW 6 NOV 1945

Assigned..... SEE ACCOMPANYING MACHINERY REPORT



© 2021

Lloyd's Register Foundation