

REPORT ON BOILERS.

No. 109291

2 - APR 1952

Received at London Office.

Date of writing Report 31.3.52 When handed in at Local Office 31.3.52 Port of NEWCASTLE-ON-TYNE

No. in Reg. Book. Survey held at WALLSEND & SUNDERLAND Date, First Survey 13.3.50 Last Survey 28.3.1952

40546 on the S.S. "SANDALWOOD" (Number of Visits... 111...) Gross 10061.23 Net 5925.05

BUILT AT SUPPLEMENT. SUNDERLAND. By whom built JOSEPH. L. THOMPSON & SONS L^{td} Yard No 672 When built 1952.Engines made at WALLSEND-ON-TYNE By whom made NORTH EASTERN MARINE ENG CO (1938) L^{td} Engine No 3206 When made 1952.Boilers made at WALLSEND-ON-TYNE By whom made NORTH EASTERN MARINE ENG CO (1938) L^{td} Boiler No 3206 When made 1952.Nominal Horse Power 4348 / 12 = 363. Owners JOHN. I. JACOBS & CO. L^{td} Port belonging to LONDON.MULTITUBULAR BOILERS ~~MAIN~~, ~~AUXILIARY~~, OR DONKEY.Manufacturers of Steel COLVILLES L^{td} (Letter for Record 'S')

Total Heating Surface of Boilers 2 x 2174 = 4348 sq ft Of Superheaters

Total for Register Book Is forced draught fitted YES Coal or Oil fired OIL FIRED.

No. and Description of Boilers 2 SINGLE ENDED Working Pressure 160 lbs/p

Tested by hydraulic pressure to 290 lbs/p Date of test 12.5.51 No. of Certificate 1446 / 1447 Can each boiler be worked separately YES

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 2-2 1/4" ENCLOSED IMPROVED HIGH LIFT.

Area of each set of valves per boiler per Rule 7.725 sq in as fitted 7.952 sq in Pressure to which they are adjusted 160 lbs/p Are they fitted with easing gear YES.

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler NO MAIN BOILERS.

Smallest distance between boilers or uptakes and bunkers or woodwork PASSAGE WAY 1'-2" Is oil fuel carried in the double bottom under boilers.

Smallest distance between shell of boiler and tank top plating BOILER FLAT 3'-6" Is the bottom of the boiler insulated YES

Largest internal dia. of boilers 13'-4 1/16" Length 11'-9" OVERALL Shell plates: Material STEEL Tensile strength 29/33 Tons/p

If fusion welded, state name of welding firm. Have all the requirements of the Rules for Class I vessels been complied with.

Thickness 31/32 Are the shell plates welded or flanged No Description of riveting: circ. seams end DR. OVERLAP

long. seams TR DOUBLE BUTT STRAP Diameter of rivet holes in circ. seams 1 3/32 long. seams 1 3/32 Pitch of rivets 3/4" / 7/4"

Percentage of strength of circ. end seams plate 66.3 rivets 47.3 Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 85.8 rivets 88.4 combined 89.2 WORKING PRESSURE OF SHELL BY RULES 163.4 lbs/p

Thickness of butt straps outer 3/4" inner 7/8 No. and Description of Furnaces in each Boiler THREE CORRUGATED DEIGHTON TYPE.

Material MILD STEEL Tensile strength 26/30 Tons/p Smallest outside diameter 3'-0 5/8"

Length of plain part top bottom Thickness of plates 7/16 Description of longitudinal joint WELD.

Dimensions of stiffening rings on furnace or c.c. bottom NONE WORKING PRESSURE OF FURNACE BY RULES 170.3 lbs/p

End plates in steam space: Material MILD STEEL Tensile strength 26/30 Tons/p Thickness 1 3/16" Pitch of stays 18 1/2" x 21 1/2"

How are stays secured NOTTED IN & OUT.

Tube plates: Material front MILD STEEL Tensile strength 26/30 Tons/p Thickness 27/32" 11/16"

Mean pitch of stay tubes in nests 9.38" Pitch across wide water spaces 14"

Girders to combustion chamber tops: Material MILD STEEL Tensile strength 29/33 Tons/p Depth and thickness of girder

at centre 6 1/2" x 3/4" Length as per Rule 2'-10" Distance apart 6" No. and pitch of stays

in each EW WHOLE LENGTH Combustion chamber plates: Material MILD STEEL

Tensile strength 26/30 Tons/p Thickness: Sides 11/16" Back 11/16" Top 11/16" Bottom 11/16"

Pitch of stays to ditto: Sides 11 3/8" x 8 1/4" Back 11 1/4" x 8 3/8" Top GIRDERS EW Are stays fitted with nuts or riveted over BOTH ENDS.

Front plate at bottom: Material MILD STEEL Tensile strength 26/30 Tons/p

Thickness 27/32 Lower back plate: Material MILD STEEL Tensile strength 26/30 Tons/p Thickness 13/16"

Pitch of stays at wide water space 14" Are stays fitted with nuts or riveted over WELDED BOTH ENDS

Main stays: Material MILD STEEL Tensile strength 28/32 Tons/p

Diameter At body of stay 2 3/4" No. of threads per inch 6

Screw stays: Material MILD STEEL Tensile strength 26/30 Tons/p

Diameter At turned off part 1 1/2" 1 5/8" No. of threads per inch 15/8" - 9 1 1/2" WELDED.

Diameter Over threads 1 1/2" 1 5/8"

Are the stays drilled at the outer ends. No Margin stays: Diameter 1 1/8" At turned off part, 1 3/4" or 1 3/4" Over threads. 7 Wg. 2-19 Wg.
No. of threads per inch. 9
Tubes: Material SEAMLESS STEEL External diameter 2 1/2" Thickness 3/16" No. of threads per inch. 9
Pitch of tubes 3 3/4" x 3 3/4" Manhole compensation: Size of opening in 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: NONE
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. NONE 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. ✓
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. YES.

The foregoing is a correct description,
THE NORTH EASTERN MARINE ENGINEERING CO. (1938) LTD.
Harry Huxley Manufacturer.

Dates of Survey while building { During progress of work in shops - - - Are the approved plans of boiler and superheater forwarded herewith. DIRECTOR. YES.
{ During erection on board vessel - - - (If not state date of approval.)
PLEASE SEE RPT LB Total No. of visits III

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

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These two donkey boilers have been constructed under special survey in accordance with the approved plan & the Society's Rules.
The materials & workmanship are good.
The boilers have been satisfactorily installed on board examined under steam & the safety valves adjusted to the approved pressure.

NOTE! OLD SCALE FEES CHARGED FOR BOOKS.

Survey Fee 363 M.D. £ 61 : 6 : 0. When applied for. 1 APR 1952
Travelling Expenses (if any) £ : : When received. 19

J. A. C. Mole
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute. TUES. 6 MAY 1952

Assigned. See F.E. Mole's report



© 2021

Lloyd's Register
Foundation