

REPORT ON BOILERS.

No. 19561

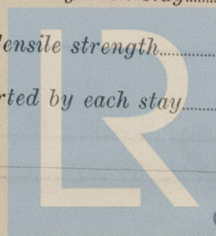
Received at London Office.

30 JUL 1954

Date of writing Report **29-7-1954** When handed in at Local Office **29-7-1954** Port of **West Hartlepool**
 No. in Survey held at **West Hartlepool** Date, First Survey **20th March, 1953**, Last Survey **21st July, 1954**
 523 on the **S.S. "STANPOOL"** (Number of Visits... **109**)
 Tons { Gross **4351**
 Net **4241**
 Built at **W. Hartlepool** By whom built **Wm Gray & Co. Ltd** Yard No. **1266** When built **1954**
 Engines made at **W. Hartlepool** By whom made **Ben. Mar. & Wks (Wm Gray & Co. Ltd)** Engine No. **1266** When made **1954**
 Boilers made at **W. Hartlepool** By whom made **Ben. Mar. & Wks (Wm Gray & Co. Ltd)** Boiler No. **1266** When made **1954**
 Nominal Horse Power **-** Owners **Stanhope S.S. Co. Ltd.** Port belonging to **London**

Manufacture of MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel **bolwilles Ltd and South Durham S.S. Co.** (Letter for Record...)
 Total Heating Surface of Boilers **4851 sq ft + 3180 sq ft SpW?** Is forced draught fitted **Yes** ✓ Coal or Oil fired **Oil** ✓
 Date **23/10/53** and Description of Boilers **Three Single Ended Multitubular** ✓ Working Pressure **250 lbs/sq in** ✓
 Tested by hydraulic pressure to **425 lbs/sq in** Date of test **22.3.54** No. of Certificate **4213/4/5** Can each boiler be worked separately **Yes** ✓
 Area of Firegrate in each Boiler **-** No. and Description of safety valves to each boiler **Two 2 1/4" Improved High Lift** ✓
 Area of each set of valves per boiler **per Rule 6.142"** ✓ Pressure to which they are adjusted **250 lbs/sq in** ✓ 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 **3'-9"** Is oil fuel carried in the double bottom under boilers **Yes** ✓
 Smallest distance between shell of boiler and tank top plating **2'-6"** Is the bottom of the boiler insulated **Yes** ✓
 Smallest internal dia. of boilers **14'-9"** ✓ Length **11'-9"** ✓ Shell plates: Material **S.M. Steel** ✓ Tensile strength **31-35 T.P.S.** ✓
 Thickness **1 33/64"** ✓ Are the shell plates welded or flanged **No** ✓ Description of riveting: circ. seams **end A.R. Lap** ✓
 Diameter of rivet holes in { circ. seams **1 1/2"** ✓
 { long. seams **1 19/32"** ✓ Pitch of rivets { **10 23/32"** ✓
 Percentage of strength of circ. end seams { plate **62.5** ✓
 { rivets **43.3** ✓ Percentage of strength of circ. intermediate seam { plate **-** ✓
 { rivets **-** ✓ Working pressure of shell by Rules **252 lbs/sq in** ✓
 Percentage of strength of longitudinal joint { plate **85.2** ✓
 { rivets **85.4** ✓
 { combined **87.3** ✓
 Thickness of butt straps { outer **1 5/32"** ✓
 { inner **1 9/32"** ✓ No. and Description of Furnaces in each Boiler **Three Deighton Section** ✓
 Material **S.M. Steel** ✓ Tensile strength **26-30 Tons/sq in** ✓ Smallest outside diameter **3'-4 1/2"** ✓
 Thickness of plates { crown **3/4"** ✓
 { bottom **3/4"** ✓ Description of longitudinal joint **Welded** ✓
 Dimensions of stiffening rings on furnace or c.c. bottom **-** Working pressure of furnace by Rules **-** ✓
 Plates in steam space: Material **S.M. Steel** ✓ Tensile strength **26-30 Tons/sq in** ✓ Thickness **1 13/32"** ✓ Pitch of stays **19" x 19 3/8"** ✓
 Are stays secured **Double nuts** ✓
 Plates: Material { front **S.M. Steel** ✓
 { back **S.M. Steel** ✓ Tensile strength { **26-30 Tons/sq in** ✓
 Thickness { **29/32"** ✓
 Pitch of stay tubes in nests **10 1/2" Long 10 7/16" bore** ✓ Pitch across wide water spaces **14"** ✓ Working pressure { front **-** ✓
 { back **-** ✓
 Stays to combustion chamber tops: Material **S.M. Steel** ✓ Tensile strength **28-32 Tons/sq in** ✓ Depth and thickness of girder
 at **11 3/8" x 1 1/4"** ✓ Length as per Rule **2'-10 3/8"** ✓ Distance apart **4 3/4"** ✓ No. and pitch of stays
Welded ✓ Working pressure by Rules **-** ✓
 Combustion chamber plates: Material **S.M. Steel** ✓
 Tensile strength **26-30 Tons/sq in** ✓ Thickness: Sides **23/32"** ✓ Back **23/32"** ✓ Top **23/32"** ✓ Bottom **29/32"** ✓
 of stays to ditto: Sides **9 1/8" x 4 3/4"** ✓ Back **W. 8 1/2" x 8 3/8"** ✓ Top **-** ✓ Are stays fitted with nuts or riveted over **Welded** ✓
 Working pressure by Rules **-** ✓ Front plate at bottom: Material **S.M. Steel** ✓ Tensile strength **26-30 Tons/sq in** ✓
 Lower back plate: Material **S.M. Steel** ✓ Tensile strength **26-30 Tons/sq in** ✓ Thickness **15/16"** ✓
 of stays at wide water space **14 3/8" x 8 1/2"** ✓ Are stays fitted with nuts or riveted over **Welded** ✓
 Working pressure **-** ✓ Main stays: Material **S.M. Steel** ✓ Tensile strength **28-32 Tons/sq in** ✓
 At body of stay **3 1/2"** ✓ No. of threads per inch **6** ✓ Area supported by each stay **-** ✓
 Over threads **15/8"** ✓ Screw stays: Material **S.M. Steel** ✓ Tensile strength **26-30 Tons/sq in** ✓
 At turned off part **1 3/4" x 9 T.P.I. of Steel** ✓ No. of threads per inch **-** ✓ Area supported by each stay **-** ✓
 Over threads **1 3/4" x 9 T.P.I. of Steel** ✓



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Working pressure by Rules..... Are the stays drilled at the outer ends No. ✓ Margin stays: Diameter { At turned off part, 1 1/8" & 2 1/8"
Over threads.....
No. of threads per inch..... Area supported by each stay..... Working pressure by Rules.....
Tubes: Material Plain:- E.R.W. ✓ External diameter { Plain..... 3" ✓ Thickness { 3/16" & 3/8" ✓ No. of threads per inch..... 9 ✓
Pitch of tubes..... 4 1/4" x 4 1/8" ✓ Working pressure by Rules..... Manhole compensation: Size of opening.....
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..... 4 1/8" ✓ 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.....
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 Smoke tube type ✓ Manufacturers of { Tubes..... Manchester Superheater Co. Ltd.
Steel forgings..... (See Man. Rpts Nos. C. 2810 & C. 2585)
Steel castings.....
Number of elements..... 53 per B.L. Material of tubes..... Internal diameter and thickness of tubes.....
Material of headers..... Forged Steel Tensile strength..... Thickness..... Can the superheater be shut off where a bearing is required.....
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..... Yes 1-1/2" wheel dia.....
Area of each safety valve..... 1.464 sq" Are the safety valves fitted with easing gear..... Yes. ✓ Working pressure as set.....
Rules..... Pressure to which the safety valves are adjusted..... 255 lbs/sq" ✓ Hydraulic test pressure.....
tubes..... forgings and castings..... and after assembly in place..... 500 lbs/sq" ✓ Are drain cocks fitted.....
valves fitted to free the superheater from water where necessary..... Yes. ✓
Have all the requirements of Sections 11 to 22 inclusive for boilers been complied with..... Yes. ✓

The foregoing is a correct description,
For THE CENTRAL MARINE ENGINE WORKS
(Ed. Gray & Co. Ltd.) Manufacturer

Dates of Survey { During progress of work in shops - - - } Are the approved plans of boiler and superheater forwarded herewith.....
while building { During erection on board vessel - - - } (If not state date of approval.)
Total No. of visits.....
GENERAL MANAGER

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.).....

The boilers referred to herein have been constructed and installed under Special Survey in accordance with the Rules of the Society, Approved plan, & Secretary's letters. The material and workmanship are good. On completion, the boilers were examined under steam, safety valves adjusted and accumulation test carried out as required by the Rules, with satisfactory results.

Survey Fee £ : : } When applied for.....19.....
Travelling Expenses (if any) £ : : } When received.....19.....

Engineer Surveyor to Lloyd's Register of Shipping

TUESDAY 24 AUG 1954

Committee's Minute.....

Assigned..... See Rpt. 4.



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