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REPORT ON BOILERS.

No. 16135

Received at London Office FRI. NOV. 23 1923

Writing Report 17th Nov 1923 When handed in at Local Office 22 Nov 1923 Port of WEST HARTLEPOOL

Survey held at Hartlepool Date, First Survey 6th April Last Survey 16 Nov 1923

On the S S "THROCKLEY" (Number of Visits 69) Tons {Gross 2925 Net 1465

Built at Middlesbrough By whom built Furness S B Co Ltd Yard No. 49 When built 1923

made at Hartlepool By whom made Richardson Westgarth & Co Ltd Engine No. 2642 When made 1923

made at ditto By whom made ditto Boiler No. 2642 When made 1923

Horse Power 335 Owners Furness Withy & Co Ltd Port belonging to Newcastle.

TITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel J Spencer & Sons (Letter for Record S)

Heating Surface of Boilers 5679 sq. ft. Is forced draught fitted no Coal or Oil fired coal

Description of Boilers 2 single ended Working Pressure 180 lb

Tested by hydraulic pressure to 320 Date of test 31.7.23 No. of Certificate 3627 Can each boiler be worked separately yes

Firegrate in each Boiler 70.875 No. and Description of safety valves to each boiler 2 direct spring

Pressure of each set of valves per boiler {per Rule 11.6 as fitted 19.24} Pressure to which they are adjusted 185 Are they fitted with easing gear yes

For donkey boilers, state whether steam from main boilers can enter the donkey boiler

Minimum distance between boilers or uptakes and bunkers or woodwork no side bunkers Is oil fuel carried in the double bottom under boilers no

Minimum distance between shell of boiler and tank top plating Is the bottom of the boiler insulated yes

Internal dia. of boilers 17'-0" Length 11'-0" Shell plates: Material Steel Tensile strength 28/32

Thickness of shell plates 1 13/32" Are the shell plates welded or flanged no Description of riveting: circ. seams {end 2 R Lap inter. 1 R Lap

Material J.R. & B.S. Diameter of rivet holes in {circ. seams End 1 5/16 Middle 1 13/32 long. seams 1 13/32} Pitch of rivets {End 3 5/8 Middle 4 5/8 1 row 9 5/8 2 rows 4 13/16

Percentage of strength of circ. end seams {plate 61 rivets 48.5} Percentage of strength of circ. intermediate seam {plate 69.5 rivets 61

Percentage of strength of longitudinal joint {plate 85.4 rivets 89 combined 87.3} Working pressure of shell by Rules 183.5

Thickness of butt straps {outer 1 3/16 inner 1 3/16} No. and Description of Furnaces in each Boiler 4 Morrison's

Material Steel Tensile strength 26/28 Smallest outside diameter 41 1/16"

Thickness of plain part {top 19 bottom 32} Description of longitudinal joint welded

Working pressure of furnace by Rules 207

Material Steel Tensile strength 26/30 Thickness 1 1/32 front 1 1/8 back Pitch of stays 17 1/4 x 19 1/2 16 7/8 x 19 5/8

Working pressure by Rules 181

Material Steel Tensile strength 26/30 Thickness 3/4"

Pitch of stay tubes in nests 10 13/32" Pitch across wide water spaces 14 1/4 x 8 7/8 Working pressure {front 186 back 186

Material Steel Tensile strength 26/30 Depth and thickness of girder

Material Steel Tensile strength 26/30 Thickness: Sides 21/32 Back 19/32 Top 21/32 Bottom 21/32

Working pressure by Rules 184

Material Steel Tensile strength 26/30 Thickness 3/4"

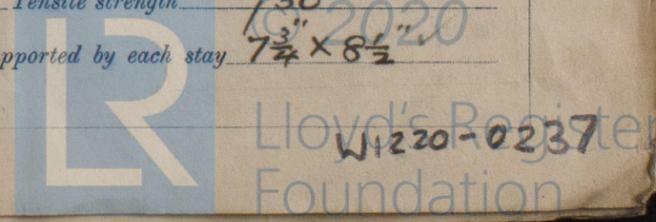
Material Steel Tensile strength 26/30 Thickness 3/4"

Material Steel Tensile strength 28/32

No. of threads per inch 6 Area supported by each stay 17 1/4 x 19 1/2"

Working pressure by Rules 181 Screw stays: Material Steel Tensile strength 26/30

No. of threads per inch 9 Area supported by each stay 7 3/4 x 8 1/2"



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Working pressure by Rules 190 Are the stays drilled at the outer ends no Margin stays: Diameter ^{At turned off part} 3" ^{or} 1 3/4" ^{Over threads} ✓

No. of threads per inch 9 Area supported by each stay 10 9/16" x 8 1/2" Working pressure by Rules 202

Tubes: Material Iron External diameter ^{Plain} 3 1/4" ^{Stay} 3 1/4" Thickness ^{7 V V 6} 5/16" 3/8" 7/16" No. of threads per inch 9

Pitch of tubes 4 7/16" x 4 7/16" Working pressure by Rules 240 Manhole compensation: Size of opening 13" x 16 1/2" Section of compensating ring 14 3/16" x 1 13/32" No. of rivets and diameter of rivet holes 28 1 13/32"

Outer row rivet pitch at ends 9 5/8" Depth of flange if manhole flanged ✓ Steam Dome: Material 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 _____ 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 _____

of rivets in outer row in dome connection to shell _____

Type of Superheater none Manufacturers of ^{Tubes} _____ ^{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 from the boiler _____

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 _____

Rules _____ Pressure to which the safety valves are adjusted _____ Hydraulic test _____

tubes _____ castings _____ and after assembly in place _____ Are drain cocks or cocks _____

to free the superheater from water where necessary _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with _____

The foregoing is a correct description,
For RICHARDSONS, WESTGARTH & Co. LIMITED,
L. D. Wright
DIRECTOR & JOINT GENERAL MANAGER.

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

See Report on Machinery attached.

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____

Total No. of visits _____

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

See report on machinery attached

Survey Fee ... £ See attached Report on Machy. When applied for, ✓ 192

Travelling Expenses (if any) £ When received, ✓ 192

R. D. Shilston.
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI DEC. 28 1923

Assigned FRI. JAN. 11 1924

