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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 23 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.

Constructors 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

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

each set of valves per boiler { per Rule 11.6 13/32 as fitted 19.24 Pressure to which they are adjusted 185 Are they fitted with easing gear yes

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

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

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 ✓

Are the shell plates welded or flanged no Description of riveting: circ. seams { end D.R. Lap. inter. I.R. Lap. ✓

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

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

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

ess of butt straps { outer 1 3/16 inner 1 3/16 No. and Description of Furnaces in each Boiler 4 Morisons ✓

al Steel Tensile strength 26/28 Smallest outside diameter 41 1/16 ✓

of plain part { top Thickness of plates { crown 19" bottom 32" Description of longitudinal joint welded ✓

sions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 207

ates in steam space: Material Steel Tensile strength 26/30 Thickness 1 5/32 front 17 1/4 x 19 1/2 3 Pitch of stays 16 7/8 x 19 5/8 B. ✓

re stays secured D. Nuts & Washers Working pressure by Rules 181

plates: Material { front Steel Tensile strength { 26/30 Thickness { 3/4 ✓

itch 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 ✓

s to combustion chamber tops: Material Steel Tensile strength 26/30 Depth and thickness of girder

re 8 3/8 x 1 3/4 Length as per Rule 31 1/2 Distance apart 9 7/8 No. and pitch of stays

Three 7 7/8 Working pressure by Rules 184 Combustion chamber plates: Material Steel ✓

strength 26/30 Thickness: Sides 21/32 Back 19/32 Top 21/32 Bottom 21/32 ✓

f stays to ditto: Sides 7 7/8 x 9 7/8 Back 7 3/4 x 8 1/2 Top 7 7/8 x 9 7/8 Are stays fitted with nuts or riveted over nuts ✓

g pressure by Rules 184 Front plate at bottom: Material Steel Tensile strength 26/30

ess 7/8 Lower back plate: Material Steel Tensile strength 26/30 Thickness 3/4 ✓

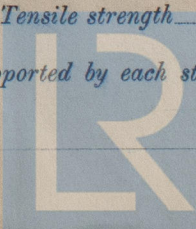
f stays at wide water space 13 3/8 x 8 1/2 Are stays fitted with nuts or riveted over nuts ✓

g Pressure 181 Main stays: Material Steel Tensile strength 28/32 ✓

er { At body of stay, or Over threads } 2 7/8 No. of threads per inch 6 Area supported by each stay 17 1/4 x 19 1/2 ✓

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

er { At turned off part, or Over threads } 1 1/2 No. of threads per inch 9 Area supported by each stay 7 3/4 x 8 1/2 ✓



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 Foundation

Working pressure by Rules 190 Are the stays drilled at the outer ends no Margin stays: Diameter At turned off part, 3"
Over threads 1 3/4"
 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" Thickness 7 1/16" 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"
 shell plate 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 rivets _____
 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 Man

Dates of Survey During progress of work in shops - - See Report on Machinery attached Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
while building During erection on board vessel - - - 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

Committee's Minute FRI DEC 28 1923

Assigned FRI JAN 11 1924