

REPORT ON BOILERS.

Slid. No. 32769
Mach No. 16722

Received at London Office 21 OCT 1939

Date of Writing Report 16/10/39 When handed in at Local Office 17/10/39 Port of MIDDLEBURY

No. in Survey held at Stockton-on-Tees Date, First Survey 27th July 1939 Last Survey 13th October 1939

on the M/V "RODSLEY" (Number of Visits 7) Tons { Gross 5000 Net 3014

Master Built at Sunderland By whom built W. & A. Franks & Co. Ltd. Yard No. 654 When built 1939

Engines made at Sunderland By whom made W. & A. Franks & Co. Ltd. Engine No. 654 When made 1939

Boilers made at Stockton By whom made Stockton C. E. Riley Boilers Co. Boiler No. 6379 When made 1939

Nominal Horse Power 388. Owners Thos. & Co. Shipping Co. Port belonging to Newcastle.

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appleby-Frodingham Steel Co. Ltd. (Letter for Record S)

Total Heating Surface of Boilers 1660 sq. ft. Is forced draught fitted No. Coal or Oil fired oil

No. and Description of Boilers 1-Single Ended Working Pressure 120 lbs

Tested by hydraulic pressure to 230 lbs Date of test 13/10/39 No. of Certificate 6978 Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 2 Direct Spring

Area of each set of valves per boiler { per Rule 15.35 sq. in. as fitted 19.2 sq. in. Pressure to which they are adjusted 120 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 Is oil fuel carried in the double bottom under boilers No.

Smallest distance between shell of boiler and tank top plating 2'-10" Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 11'-10 5/8" Length 11'-6" Shell plates: Material Steel Tensile strength 29-33

Thickness 1 1/16" Are the shell plates welded or flanged No Description of riveting: circ. seams { end D.R. inter

Long. seams T.R.D.B.S Diameter of rivet holes in { circ. seams 1 1/16" long. seams 1 3/16" Pitch of rivets { 3 3/8" 5 3/8"

Percentage of strength of circ. end seams { plate 68.51 rivets 45.45 Percentage of strength of circ. intermediate seam { plate rivets

Percentage of strength of longitudinal joint { plate 84.88 rivets 83.38 combined Working pressure of shell by Rules 123 lbs

Pressure of butt straps { outer 9 1/16" inner 1 1/16" No. and Description of Furnaces in each Boiler 2-Corrugated-Deighton

Material Steel Tensile strength 26-30 Smallest outside diameter 3'-8 1/16"

Thickness of plates { crown 13/32 bottom 13/32 Description of longitudinal joint Nodd

Positions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 132 lbs

End plates in steam space: Material Steel Tensile strength 26-30 Thickness 27/32 Pitch of stays 17" x 16"

How are stays secured D. nuts & washers Working pressure by Rules 142 lbs

Tube plates: Material { front Steel back Tensile strength { 26-30 Thickness { 13/16"

Mean pitch of stay tubes in nests 9 7/8" Pitch across wide water spaces 14" Working pressure { front 139 lbs back 244 "

Girders to combustion chamber tops: Material Steel Tensile strength 28-32 Depth and thickness of girder

at centre 7" 20 5/8" Length as per Rule 29 7/16" Distance apart 9" No. and pitch of stays

in each 2 @ 9" Working pressure by Rules 134 lbs Combustion chamber plates: Material Steel

Tensile strength 26-30 Thickness: Sides 19/32 Back 9/16" Top 19/32 Bottom 7/8"

Pitch of stays to ditto: Sides 10" x 9" Back 8 3/4" x 9 1/2" Top 9" x 9" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 125 lbs Front plate at bottom: Material Steel Tensile strength 26-30

Thickness 27/32 Lower back plate: Material Steel Tensile strength 26-30 Thickness 27/32

Pitch of stays at wide water space 13 1/2" x 9 1/2" Are stays fitted with nuts or riveted over Nuts

Working Pressure 202 lbs Main stays: Material Steel Tensile strength 28-32

Diameter { At body of stay, 2" No. of threads per inch 6 Area supported by each stay 246.5 sq. in.

Over threads Working pressure by Rules 120 lbs Screw stays: Material Steel Tensile strength 26-30

Diameter { At turned off part, 1 1/2" 1 3/8" No. of threads per inch 9 Area supported by each stay 400 sq. in. 819"

Over threads (Sides) (Top)

Working pressure by Rules 125 lbs Are the stays drilled at the outer ends No Margin stays: Diameter { At turned off part, or Over threads 1 5/8"
No. of threads per inch 9 Area supported by each stay 102.50" Working pressure by Rules 148 lbs
Tubes: Material L. W. Iron External diameter { Plain 2 3/4" Thickness 5/16" No. of threads per inch 9
Pitch of tubes 3 3/4" x 3 3/4" Working pressure by Rules P 245 lbs 5262 lbs Manhole compensation: Size of opening in shell plate 20" x 16" Section of compensating ring 4" x 1" No. of rivets and diameter of rivet holes 44 - 1 5/16"
Outer row rivet pitch at ends 6 1/2" 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 and pitch of rivets in outer row in dome connection to shell _____

Type of Superheater _____ 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 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 _____, 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.

For and on behalf of
STOCKTON CHEMICAL ENGINEERS & RILEY BOILERS LTD.
The foregoing is a correct description,
G. H. Riley Manufactures.
DIRECTOR.

Dates of Survey { During progress of work in shops - - July 27, Aug 15, Sept 1, 13, 19, Oct 3, 13. Are the approved plans of boiler and superheater forwarded herewith 24-5-39
while building { During erection on board vessel - - -
Total No. of visits _____

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

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

This boiler has been constructed under Special Survey in accordance with the approved plan. The materials & workmanship are good, & on completion the boiler was tested by hydraulic pressure to 230 lbs / sq. inch & found tight and satisfactory.

This boiler is being forwarded to Sunderland for installation on board.

This boiler has been securely fixed on board the vessel, & examined under steam & safety valves adjusted in accordance with rule requirements

For recommendation please see sketch p. 2
W. H. R. R. R.

Survey Fee ... £ 11 : 2 : - When applied for, 19-10-1939
Travelling Expenses (if any) £ 08 : 00 : - When received, 22/12/1939 R.R.R.

R. J. Castle
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 12 JAN 1940

Assigned.

See Sld. H.E. 32769



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Lloyd's Register Foundation

Rpt. 13.

Date of writing

No. in Reg. Bo

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