

REPORT ON BOILERS.

Sl. No. 34589

Roll No. 18128.

27 AUG 1946

5 DEC 1946

AUG 1946

Received at London Office

Date of writing Report 22/8/ 19 46 When handed in at Local Office 26/8/ 19 46 Port of MIDDLESBROUGH.

No. in Reg. Book. Surrey held at Stockton-on-Tees. Date, First Survey 14th Nov. 1945. Last Survey 20th Aug. 19 46.

on the "BRITISH ENTERPRISE" (Number of Visits 26.) Tons { Gross 6095 Net 3329

Built at Sunderland By whom built Wm. Doxford & Sons Ltd. Yard No. 438 When built 1946.

Engines made at Sunderland. By whom made Wm. Doxford & Sons Ltd. Engine No. 738 When made 1946.

Boilers made at Stockton-on-Tees. By whom made Stockton C.E. & Riley Boilers Ltd. Boiler No. 6934 When made 1946.

Nominal Horse Power Owners British Tanker Co Ltd. Port belonging to London.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

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

Total Heating Surface of Boilers 2020 sq. feet. Is forced draught fitted Yes Coal or Oil fired Oil & light gas

No. and Description of Boilers 1 S.E. Multitubular. Working Pressure 150 lbs./sq. in.

Tested by hydraulic pressure to 275 lbs Date of test 20/8/46. No. of Certificate 7186 Can each boiler be worked separately Yes.

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 3" double high lift. Yes.

Area of each set of valves per boiler { per Rule 14.12 as fitted 15.4 Pressure to which they are adjusted 150 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 boiler? No

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated? Yes.

Largest internal dia. of boilers 12'-10 3/16" Length 11'-6" Shell plates: Material Steel Tensile strength 29-33

Thickness 29/32" Are the shell plates welded or flanged Description of riveting: circ. seams { end DR. Lap inter. -

long. seams TR. DBS. Diameter of rivet holes in { circ. seams 1 1/16" long. seams 1 1/16" Pitch of rivets { 3.187 7 1/16"

Percentage of strength of circ. end seams { plate 66.6% rivets 48.7 Percentage of strength of circ. intermediate seam { plate - rivets -

Percentage of strength of longitudinal joint { plate 84.9 rivets 103 combined

Thickness of butt straps { outer 23/32" inner 27/32" No. and Description of Furnaces in each Boiler 2 Deighton Corrugated.

Material Steel Tensile strength 26-30 Smallest outside diameter 3'-10"

Length of plain part { top 2 bottom - Thickness of plates { crown 1/2" bottom 1/2" Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom End plates in steam space: Material Steel Tensile strength 26-30 Thickness 1" Pitch of stays 18" x 17"

How are stays secured double nuts and washers screwed into both plates.

Tube plates: Material { front steel back steel Tensile strength { 26-30 Thickness { 7/8" 3/4"

Mean pitch of stay tubes in nests 9 3/8" Pitch across wide water spaces 13 1/2"

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

at centre 7" - 2 @ 5 1/2" Length as per Rule 2'-5 1/2" Distance apart 9" No. and pitch of stays

in each 2 @ 9" Combustion chamber plates: Material Steel

Tensile strength 26-30 Thickness: Sides 21/32" Back 19/32" Top 21/32" Bottom 21/32"

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

Front plate at bottom: Material steel Tensile strength 26-30 Thickness 7/8" Lower back plate: Material Steel Tensile strength 26-30 Thickness 5/8"

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

Main stays: Material Steel Tensile strength 28-32

Diameter { At body of stay or Over threads 2 3/8" No. of threads per inch 6

Screw stays: Material Steel Tensile strength 26-30

Diameter { At turned off part or Over threads 1 1/2" No. of threads per inch 9

Are the stays drilled at the outer ends No. 3 Margin stays: Diameter At turned off part, 1 3/4" or Over threads

No. of threads per inch 9

Tubes: Material Seamless Steel External diameter Plain 2 1/4" Stay 2 1/2" Thickness 10SW.F. 5/16" No. of threads per inch 9

Pitch of tubes 3 3/4" x 3 3/4" Manhole compensation: Size of opening in shell plate 21" x 17" Section of compensating ring 8 3/4" x 1 1/2" No. of rivets and diameter of rivet holes 52 - 1 1/16"

Outer row rivet pitch at ends 7 1/16" Depth of flange if manhole flanged None 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 _____ 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

Manufacturers of Tubes Steel forgings Steel castings

Internal diameter and thickness of tubes _____

Number of elements _____ Material of tubes _____ Tensile strength _____ Thickness _____ Can the superheater be shut off and the boiler be worked separately _____

Area of each safety valve _____ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler _____

Pressure to which the safety valves are adjusted _____ Are the safety valves fitted with easing gear _____

tubes _____ forgings and castings _____ and after assembly in place _____ Hydraulic test pressure: _____

valves fitted to free the superheater from water where necessary _____ Are drain cocks or _____

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

The foregoing is a correct description, *[Signature]* Manufacturer.

Dates of Survey During progress of work in shops - - 1945. Nov. 14, 23, 29, Dec. 14, 20, 28, 1946. Jan. 11, 16, Feb. 7, 14, 28, Mar. 7, 29, Apr. 26, May, 10, 20, 30, June 4, 13, July 2, 8, 15, 23, Aug. 7, 15, 20. Are the approved plans of boiler and superheater forwarded herewith 9/2/46. (If not state date of approval.)

During erection on board vessel - - - 26. 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 and in accordance with the Rule Requirements and approved plan.

The materials and workmanship are good and on completion the boiler was hydraulically tested to 275 lbs. per sq. inch and found satisfactory.

This boiler is being forwarded to Sunderland for Wm. Doxford's Contract No. 738.

This boiler has been securely fixed on board the vessel & safety valves adjusted under steam on shore

In recommendations please see Macky's rpt.

[Signature]

Survey Fee £ 20 : 5 : - When applied for, 26/8/ 19 46.

Travelling Expenses (if any) £ : : When received, 19

[Signature]
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 20 DEC 1946

Assigned *Sue F.E. Macky, rpt.*



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Lloyd's Register Foundation

Rpt. 13.

Date of writing

No. in Reg. Book

Built at

Owners

Electrical In

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