

REPORT ON BOILERS.

No. 72352

Received at London Office

10 DEC 1947

Date of writing Report 4-10-47 When handed in at Local Office 29-11-47 Port of GLASGOW

No. in
Reg. Book.

Survey held at Paisley

Date, First Survey

9.10.47

Last Survey

17-11-1947

on the TWIN SC BUCKET DREDGER "ABERTAW" (Number of Visits) 30

Gross 653
Net 213 Tons

Master

Built at Paisley

By whom built

Messrs Fleming & Ferguson

Yard No.

441 When built 1947

Engines made at

Paisley

By whom made

Messrs Fleming & Ferguson Ltd

Engine No.

441 When made 1947

Boilers made at

Paisley

By whom made

Messrs A. F. Craig & Co Ltd

Boiler No.

903 When made 1947

Nominal Horse Power

Owners

GREAT WESTERN RAILWAY Port belonging to LONDON

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Colvilles Ltd. 3618

(Letter for Record S)

Total Heating Surface of Boilers

1809 sq ft (EACH) ✓

Is forced draught fitted

No ✓

Coal or Oil fired

COAL ✓

No. and Description of Boilers

2 - SINGLE ENDED ✓

Working Pressure 185 lbs ✓

Tested by hydraulic pressure to

327.5 lbs

Date of test

13-3-47

No. of Certificate

22381-902
22382-903

each boiler be worked separately

YES ✓

Area of Firegrate in each Boiler

54.5 sq ft ✓

No. and Description of safety valves to each boiler

1 - 2" DOUBLE SPRING I.H.L. ✓

Area of each set of valves per boiler

per Rule 5.65 sq ft

as fitted 6.28 sq ft

Pressure to which they are adjusted

185 lbs ✓

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

uptakes and bunkers

4'-6" ✓

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

OPEN FLOORS ✓

Is the bottom of the boiler insulated

YES

Largest internal dia. of boilers

13'-6" ✓

Length

11'-0" ✓

Shell plates: Material

Steel

Tensile strength

29-33 tons ✓

Thickness

17/64" ✓

Are the shell plates welded or flanged

No ✓

Description of riveting: circ. seams

end DR

long. seams

T.R.D.B.S. ✓

Diameter of rivet holes in

circ. seams 13/16"

long. seams 15/32"

Pitch of rivets

3.37"

8.37"

Percentage of strength of circ. end seams

plate 65.0 ✓
rivets 47.1 ✓

Percentage of strength of circ. intermediate seam

plate ✓
rivets ✓

Percentage of strength of longitudinal joint

plate 85.87 ✓
rivets 86.20 ✓
combined 89.0 ✓

Working pressure of shell by Rules -

Thickness of butt straps

outer 27/32" ✓
inner 31/32" ✓

No. and Description of Furnaces in each Boiler

2 - Corrugated ✓

Material

Steel

Tensile strength

26-30 tons ✓

Smallest outside diameter

3'-2 1/4" ✓

Length of plain part

top ✓
bottom ✓

Thickness of plates

crown 1/2" ✓
bottom 1/2" ✓

Description of longitudinal joint

Weld ✓

Dimensions of stiffening rings on furnace or c.c. bottom

-

Working pressure of furnace by Rules -

End plates in steam space: Material

Steel ✓

Tensile strength

26-30 tons ✓

Thickness

13/32" ✓

Pitch of stays 1'-6 1/2" x 1'-4" ✓

How are stays secured

Nuts ✓

Working pressure by Rules -

Tube plates: Material

front Steel ✓
back Steel ✓

Tensile strength

26-30 tons ✓

Thickness

29/32" ✓
13/16" ✓

Mean pitch of stay tubes in nests

9 3/4" ✓

Pitch across wide water spaces

1'-1 1/2" ✓

Working pressure

front ✓
back ✓

Girders to combustion chamber tops: Material

Steel

Tensile strength

28-32 tons ✓

Depth and thickness of girder

at centre

9" 2 @ 39/64" ✓

Length as per Rule

2'-7 3/8" ✓

Distance apart

8 1/2" ✓

No. and pitch of stays

in each

3 @ 7 7/8" ✓

Working pressure by Rules -

Combustion chamber plates: Material

Steel ✓

Tensile strength

26-30 tons ✓

Thickness: Sides

5/8" ✓

Back

4 1/64" ✓

Top

5/8" ✓

Bottom

13/16" ✓

Pitch of stays to ditto: Sides

9" x 7 7/8" ✓

Back

9" x 8 1/2" ✓

Top

7 7/8" x 8 1/2" ✓

Are stays fitted with nuts or riveted over

Nuts ✓

Working pressure by Rules -

Front plate at bottom: Material

Steel ✓

Tensile strength

26-30 tons ✓

Thickness

29/32" ✓

Lower back plate: Material

Steel ✓

Tensile strength

26-30 tons ✓

Thickness

13/16" ✓

Pitch of stays at wide water space

1'-1 1/2" x 9" ✓

Are stays fitted with nuts or riveted over

Nuts ✓

Working Pressure -

Main stays: Material

Steel ✓

Tensile strength

28-32 tons ✓

Diameter

At body of stay, 2 3/4" ✓
or Over threads

No. of threads per inch

6 ✓

Area supported by each stay

Working pressure by Rules -

Screw stays: Material

Steel ✓

Tensile strength

26-30 tons ✓

Diameter

At turned off part, 1 5/8" ✓
or Over threads

No. of threads per inch

9 ✓

Area supported by each stay

018196-008200-0261

Lloyd's Register
Foundation

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

Dates of Survey while building	During progress of work in shops - (-)	1946 Dec 9 Nov 7-10 Dec 10 1947 Jan 1950 Feb 4-17, 28 Mar 13-27 Apr 1951 June Aug 19	Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)	2-5-4
	During erection on board vessel - (-)	Apr 15-1950 Dec 8-14 Nov 2-4 67, 1957		
Total No. of visits			30	

Is this Boiler a duplicate of a previous case No If so, state Vessel's name and Report No. 5

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under Special Survey, in accordance with the Rule Requirements, & approved plans. The materials and workmanship are good. The boilers securely fitted on board, safety valves adjusted under steam to 185 lbs / sq" & accumulation test found satisfactory.

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



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