

REPORT ON BOILERS.

No. 120674.

Date of writing Report

1-1-44

When handed in at Local Office

Received at London Office

MAR 1944

Port of

Liverpool

No. in Survey held at

g. Book

Date, First Survey

11/2/43

Last Survey

30/12/43

on the Admiralty Trawler Boat No 2259
S.S. URMSTON GRANGE

(Number of Visits 18)

Gross
Tons
Net

Master

Built at

By whom built

Yard No.

When built

Engines made at

By whom made

Engine No.

When made

Boilers made at

Birkenhead

By whom made

Lammell and Rod

Boiler No.

2259

When made

1943

Nominal Horse Power

176.6

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Colvilles Ltd.

(Letter for Record

(5) ✓

Total Heating Surface of Boilers

2650 ft² ✓

Is forced draught fitted

Yes

Coal or Oil fired

oil ✓

No. and Description of Boilers

1 S.E. ✓

Working Pressure

200 lb ✓

Tested by hydraulic pressure to

350 lb ✓

Date of test

12/11/43

No. of Certificate

2625

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

Oil fired

No. and Description of safety valves to each boiler

8.6

ONE DOUBLE SPRING I. H. L. VALVE

Area of each set of valves per boiler

per Rule

as fitted 10.321

Pressure to which they are adjusted

200 lb ✓

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

None adjacent

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

Approx. 2'-2 1/2"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

14'-9 3/8"

Length

11'-4 3/2"

Shell plates: Material

Steel

Tensile strength

29/33 Ton

Thickness

1 5/16"

Are the shell plates welded or flanged

No. ✓

Description of riveting: circ. seams

end

inter.

4.01"

long. seams

T.R. - D.B.S. ✓

Diameter of rivet holes in

circ. seams

1 3/8"

Pitch of rivets

9.5"

Percentage of strength of circ. end seams

plate

rivets

65

Percentage of strength of circ. intermediate seam

plate

rivets

85.5

Percentage of strength of longitudinal joint

plate

rivets

88.54

Working pressure of shell by Rules

202 lb.

Thickness of butt straps

outer

inner

1 1/8"

No. and Description of Furnaces in each Boiler

3. Brighton Section

Material

Steel

Tensile strength

26/30 Ton

Smallest outside diameter

3'-4 1/8"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

19/32"

Description of longitudinal joint

weld

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

Working pressure of furnace by Rules

208 lb

End plates in steam space: Material

Steel

Tensile strength

26-30 Ton

Thickness

1 1/32"

Pitch of stays

20 3/8" x 20"

How are stays secured

D.N. ✓

Working pressure by Rules

204 lb

Tube plates: Material

front

back

Steel

Tensile strength

26-30 Ton

Thickness

7/8"

25/32"

Mean pitch of stay tubes in nests

9 1/32"

Pitch across wide water spaces

13 5/8"

Working pressure

front

back

240 lb max

Girders to combustion chamber tops: Material

Steel

Tensile strength

28/32 Ton

Depth and thickness of girder

at centre

8 1/4" x 15 1/16" dble

Length as per Rule

31.47"

Distance apart

10 3/4" max.

No. and pitch of stays

in each

2 @ 17/8" x 9"

Working pressure by Rules

203 lb

Combustion chamber plates: Material

Steel

Tensile strength

26-30 Ton

Thickness: Sides

25/32"

Back

25/32"

Top

25/32"

Bottom

25/32"

Pitch of stays to ditto: Sides

9 7/8" x 10 3/4"

Back

9 1/2" x 11" max

Top

10 3/4" x 9 7/8"

Are stays fitted with nuts or riveted over

nuts.

Working pressure by Rules

200 lb

Front plate at bottom: Material

Steel

Tensile strength

26/30 Ton

Thickness

7/8"

Lower back plate: Material

Steel

Tensile strength

26/30 Ton

Thickness

7/8"

Pitch of stays at wide water space

14 1/2"

Are stays fitted with nuts or riveted over

nuts.

Working Pressure

200 lb

Main stays: Material

Steel

Tensile strength

28-32 Ton

Diameter

At body of stay,

or

Over threads

3 1/4"

No. of threads per inch

6

Area supported by each stay

20 3/8" x 20"

Working pressure by Rules

Screw stays: Material

Steel

Tensile strength

26-30 Ton

Diameter

At turned off part,

or

Over threads

1 7/8" - 2"

No. of threads per inch

9

Area supported by each stay

11" x 9 1/2" max

002485-002489-0042

Lloyd's Register
Foundation

| | | | | |
|---|--|--|-------------------------------------|---|
| Type of Superheater | | Manufacturers of | | Tubes { Steel forgings 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 | |
| forgings and castings | | and after assembly in place | | Are drain cocks or |
| fitted to free the superheater from water where necessary | | | | |

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

The foregoing is a correct description,
W H Mendenhall Manufacturer

| | | | | |
|--------------------------|--------------------------------------|---|--|--------|
| is very le ling | During progress of work in shops - - | Feb 11, Mar 5, 16, 23, May 25, June 17, July 1, 8, 29, Aug 26, Sept 10, 29, Oct 16, 27, Nov 12, 16, 18, Dec 30. | Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) | 23/1/4 |
| | During erection on board vessel - - | Total No. of visits | 18. | |

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 built under Special Survey, to approved plans in accordance with the Society's Rules. Materials and workmanship are good.

This boiler now satisfactorily fitted on board the
S.S. URMSTON GRANGE. Examined under steam,
safety valves adjusted to 200 lbs/sq inch, & an accumulation
test carried out.

215. 29/1/47

[Faint handwritten notes at the bottom of the page, likely bleed-through from the reverse side.]

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|------------------------------|------------|-----------|-------------------|----|
| Survey Fee | ... NB ... | £ 14/13/0 | When applied for, | 10 |
| Travelling Expenses (if any) | £ | : | When received, | 19 |

Committee's Minute **LIVERPOOL 29 FEB 1944**

Assigned Transmit to London.