

REPORT ON BOILERS.

No. 52002.

Date of writing Report

25-2-43. 5.

19

When handed in at Local Office

13 MAY 1943

Received at London Office

14 MAY 1943

Port of HULL.

No. in Survey held at

Reg. Book.

HULL.

Date, First Survey

30. 10. 42.

Last Survey

29. 4. 1943.

(Number of Visits 63.)

Gross 580

Net 182

COLDSTREAMER

Built at BEVERLEY.

By whom built

Cook Weir & Gemmell

Vard No. 706

When built 1943

Engines made at HULL

By whom made

Chas. D. Holmes & Co

Engine No. 1639

When made

Boilers made at HULL

By whom made

Chas. D. Holmes & Co

Boiler No. 1639

When made

Nominal Horse Power 165.

Owners

Admiralty

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Appley Frodingham Steel Co. Ltd and Chiswick.

(Letter for Record 5.)

Total Heating Surface of Boilers

2551 sq. ft.

Is forced draught fitted Yes.

Coal or Oil fired Coal

No. and Description of Boilers

One S.B.

Working Pressure 225.

Tested by hydraulic pressure to 388 lb/sq. in.

Date of test 10/2/43.

No. of Certificate 4179.

Can each boiler be worked separately —

Area of Firegrate in each Boiler

64 sq. ft.

No. and Description of safety valves to each boiler

2 Spring loaded

Area of each set of valves per boiler

per Rule 17.526 (Superheat).

Pressure to which they are adjusted

225 lb/sq. in.

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 12"

Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating —

Is the bottom of the boiler insulated No

Largest internal dia. of boilers 15'-9 1/16".

Length 11'-0".

Shell plates: Material Steel

Tensile strength 31-35 tons/sq. in.

Thickness 1 1/32".

Are the shell plates welded or flanged No

Description of riveting: circ. seams

end D.R. Cap.

Pitch of rivets

3 7/8"

Diameter of rivet holes in

circ. seams 1 1/32"

long. seams 1 1/2"

Percentage of strength of circ. end seams

plate 62.1%.

rivets 44.0%.

Percentage of strength of circ. intermediate seam

plate —

rivets —

Percentage of strength of longitudinal joint

plate 84.3%.

rivets 86.9%.

Thickness of butt straps

outer 1 5/32".

inner 1 9/32".

Material Steel

No. and Description of Furnaces in each Boiler

3 C.F. Deighton Section.

Tensile strength

26-30 tons/sq. in.

Smallest outside diameter 3'-10".

Thickness of plates

crown 23/32"

bottom 3/32"

Description of longitudinal joint Welded

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

Material Steel

Tensile strength

26-30 tons/sq. in.

Thickness 1 1/2"

Pitch of stays 19 1/4" x 19 1/8".

How are stays secured

Nuts swages inside and out. Outside washers large

Front plate: Material Steel

Back plate: Material Steel

Tensile strength

26-30 tons/sq. in.

Thickness 3 1/32"

29/32".

Pitch of stay tubes in nests 10-675.

Pitch across wide water spaces 14 1/4" x 9 1/2"

Risers to combustion chamber tops: Material Steel

Tensile strength

29-33 tons/sq. in.

Depth and thickness of girder

Centre 9" x 7/8" Double

Length as per Rule 32 1/4".

Distance apart 9 1/4".

No. and pitch of stays

Each 3 @ 7 1/2".

Combustion chamber plates: Material Steel.

Tensile strength

26-30 tons/sq. in.

Thickness: Sides 23/32".

Back 23/32".

Top 1 1/16".

Bottom 15/16".

Pitch of stays to ditto: Sides 9 7/8" x 8".

Back 9 1/2" x 8 1/4".

Top 9 1/4" x 7 1/2".

Are stays fitted with nuts or riveted over Nuts.

Front plate at bottom: Material Steel

Tensile strength

26-30 tons/sq. in.

Thickness 3 1/32".

Lower back plate: Material Steel

Tensile strength 26-30 tons/sq. in.

Thickness 29/32"

Pitch of stays at wide water space 14 1/2" x 9 1/2".

Are stays fitted with nuts or riveted over Nuts.

Main stays: Material Steel

Tensile strength

28-32 tons/sq. in.

Pitch of stays 3 3/8".

No. of threads per inch 8.

New stays: Material Steel

Tensile strength

26-30 tons/sq. in.

Pitch of stays 1 3/4".

No. of threads per inch 10.

© 2020

Lloyd's Register Foundation

004799-004809-0204

Are the stays drilled at the outer ends No. Margin stays: Diameter 1 1/8", 2" & 2 1/8"
No. of threads per inch 10.
Tubes: Material L.W. Iron. External diameter 3 1/2" Thickness 7/16, 3/8, 1/2" No. of threads per inch 9.
Pitch of tubes 4 3/4" x 4 3/4" Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 3'-8 1/2" x 1 1/32" No. of rivets and diameter of rivet holes 62 @ 1 1/2" Dia.
Outer row rivet pitch at ends 10-74" Depth of flange if manhole flanged 3 1/2" Steam Dome: Material Dome not fitted
Tensile strength Thickness of shell Description of longitudinal joint but compensating plate made to suit.
Diameter of rivet holes Pitch of rivets Percentage of strength of joint
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 None (Safety Valve fitted to allow of change over to superheat). Manufacturers of
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
Pressure to which the safety valves are adjusted Hydraulic test pressure:
tubes forgings and 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

The foregoing is a correct description
FOR CHARLES D. HOLMES & CO., LTD.
Manufacturer

Dates of Survey During progress of work in shops - - Are the approved plans of boiler and superheater forwarded herewith
while building During erection on board vessel - - (If not state date of approval.)
Total No. of visits

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. SAPPER. Hull Rpt. No 51966

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

The Boiler has been constructed under Special Survey in accordance with the approved plans and the Rules.

The Workmanship and Materials are good and, when subjected to a hydraulic test of 388 lbs. 10" it was found satisfactory in every respect.

The boiler examined under steam, safety valves adjusted to 225 lbs. accumulation test held and boiler subsequently examined after all trials.

[Handwritten notes and signatures in the remarks section]

Survey Fee £ : : When applied for, 19
Travelling Expenses (if any) £ : : When received, 19

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

Committee's Minute FRI. 21 MAY 1943
Assigned See fe machy rhl