

REPORT ON BOILERS.

No. 51295

Received at London Office 18 AUG 1941

Date of writing Report 19 When handed in at Local Office 18 AUG 1941 Port of HULL.

No. in Survey held at HULL. Date First Survey 3.2.41 Last Survey 25.7.1941

on the STEAM TRAWLER INCHCOLM. (Number of Visits 80) Gross 452 Tons Net 142

Built at BEVERLEY. By whom built Messrs. Cook, Welton & Gemmell Ltd. Yard No. 676 When built 1941-7

Engines made at HULL. By whom made Messrs. Chas. D. Holmes Ltd. Engine No. 1588. When made 1941-7

Boilers made at HULL. By whom made Messrs. Chas. D. Holmes Ltd. Boiler No. 1582. When made 1941-7

Nominal Horse Power 156. Owners THE ADMIRALTY. Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Messrs. the Steel Company of Scotland Ltd. (Letter for Record 5.)

Total Heating Surface of Boilers 2650 \square Is forced draught fitted Yes. Coal or Oil fired Coal

No. and Description of Boilers One C.B. Working Pressure 200 lb \square

Tested by hydraulic pressure to 350 lb \square Date of test 14-6-41 No. of Certificate 4014. Can each boiler be worked separately

Area of Firegrate in each Boiler 63 \square . No. and Description of safety valves to each boiler 2 - Spring loaded

Area of each set of valves per boiler { per Rule 15.4 \square as fitted 16.6 \square Pressure to which they are adjusted 200 lb \square 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 2'-0". Is oil fuel carried in the double bottom under boilers No.

Smallest distance between shell of boiler and tank top plating None Is the bottom of the boiler insulated No

Largest internal dia. of boilers 14'-9 $\frac{3}{8}$ " Length 11'-6" Shell plates: Material Steel Tensile strength 29/33 ton \square

Thickness 1 $\frac{5}{16}$ " Are the shell plates welded or flanged No. Description of riveting: circ. seams { end D.R. Lap. inter. None

Long. seams T.R. - D.B.S. Diameter of rivet holes in { circ. seams 1 $\frac{3}{8}$ " Pitch of rivets { 4" 9 $\frac{1}{2}$ "

Percentage of strength of circ. end seams { plate 65.6 % rivets 44.7 % Percentage of strength of circ. intermediate seam { plate 85.5 % rivets 88.5 % combined 88.8 %

Percentage of strength of longitudinal joint { rivets 88.5 % combined 88.8 %

Thickness of butt straps { outer 1 $\frac{1}{8}$ " inner 1 $\frac{1}{8}$ " No. and Description of Furnaces in each Boiler 3 - cf. Deighton Section

Material Steel Tensile strength 26/30 ton \square Smallest outside diameter 3'-6 $\frac{7}{16}$ "

Length of plain part { top 19 $\frac{1}{32}$ " bottom 19 $\frac{1}{32}$ " Thickness of plates { crown 19 $\frac{1}{32}$ " Description of longitudinal joint Weld

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

End plates in steam space: Material Steel Tensile strength 26/30 ton \square Thickness 1 $\frac{1}{32}$ " Pitch of stays 21" x 20" ton

How are stays secured Nuts under seat.

Tube plates: Material { front Steel Tensile strength 26/30 ton \square Thickness 7/8" 25/32" back Steel

Mean pitch of stay tubes in nests 9 $\frac{1}{16}$ " Pitch across wide water spaces 13 $\frac{7}{8}$ "

Girders to combustion chamber tops: Material Steel Tensile strength 28/32 ton \square Depth and thickness of girder

at centre 8 $\frac{1}{4}$ " x 1 $\frac{7}{8}$ " Length as per Rule 2'-7 $\frac{1}{32}$ " Distance apart 10 $\frac{3}{4}$ " No. and pitch of stays

in each 2 @ 9 $\frac{7}{8}$ "

Combustion chamber plates: Material Steel

Tensile strength 26/30 ton \square Thickness: Sides 25/32" Back 3/4" Top 25/32" Bottom 25/32"

Pitch of stays to ditto: Sides 10 $\frac{3}{4}$ " x 9 $\frac{7}{8}$ " Back 9 $\frac{1}{4}$ " x 9 $\frac{7}{8}$ " Top 10 $\frac{3}{4}$ " x 9 $\frac{7}{8}$ " Are stays fitted with nuts or riveted over Nuts.

Front plate at bottom: Material Steel Tensile strength 26/30 ton \square

Thickness 7/8" Lower back plate: Material Steel Tensile strength 26/30 ton \square Thickness 7/8"

Pitch of stays at wide water space 14 $\frac{1}{2}$ " x 9 $\frac{7}{8}$ " Are stays fitted with nuts or riveted over Nuts.

Main stays: Material Steel Tensile strength 28/32 ton \square

Diameter { At body of stay, or over threads 3 $\frac{3}{8}$ " No. of threads per inch 6"

Screw stays: Material Steel Tensile strength 26/30 ton \square

Diameter { At turned off part, or over threads 1 $\frac{7}{8}$ " No. of threads per inch 9"

Are the stays drilled at the outer ends No.

Margin stays: Diameter { At turned off part, 2"
or
Over threads 2"

No. of threads per inch 9

Tubes: Material Steel External diameter { Plain 2 3/4"
Stay 2 3/4" Thickness { 8 w.g.
1/4", 5/16", 3/8", 7/16" No. of threads per inch 9

Pitch of tubes 3 7/8" x 3 7/8" Section of compensating ring 1 5/16" x 20" No. of rivets and diameter of rivet holes 15 @ 1 5/32"
Manhole compensation: Size of opening

Outer row rivet pitch at ends 10 1/8" Depth of flange if manhole flanged 3 1/4" 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
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

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

Pressure to which the safety valves are adjusted Hydraulic test pressure

tubes forgings and castings and after assembly in place Are drain cocks

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.
Manufacture

Dates of Survey { During progress of work in shops - -
while building { During erection on board vessel - -
Are the approved plans of boiler and superheater forwarded herewith
(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. H.M.T. Bircea HUL Rm. 5067

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

This Boiler has been constructed under special survey in accordance with the approved Admiralty plans and the Rules

The Workmanship and materials are good and, when subjected to a hydraulic test of 350 lb./sq. in. it was found satisfactory in every respect.

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

Engineer/Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 19 AUG 1941

Assigned

See machy F.E. rpt.



© 2021

Lloyd's Register
Foundation