

REPORT ON BOILERS.

No. 45495

Received at London Office 18 MAY 1935

Date of writing Report

19

When handed in at Local Office

17 MAY 1935

Port of

HULL

No. in Reg. Book

Hull

Date, First Survey

11th Feb. 1935

Last Survey

15th May 1935

on the Steel S. K. "Scalby Wyke"

(Number of Visits)

Gross 440.23
Net 170.30

Master Built at Selby By whom built Cochrane & Sons Ltd. Yard No. 1138 When built 1935.5

Engines made at Hull By whom made Charles D. Holmes & Co. Ltd. Engine No. 1477 When made 1935

Boilers made at Hull By whom made Charles D. Holmes & Co. Ltd. Boiler No. 1477 When made 1935

Nominal Horse Power 114. Owners West Sock Steam Fishing Co. Ltd. Port belonging to Hull

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel The Steel Company of Scotland Ltd. (Letter for Record "S" ✓)

Total Heating Surface of Boilers 2030 sq feet Is forced draught fitted no. Coal or Oil fired coal

No. and Description of Boilers One single Ended Return Tube. Working Pressure 210 #0

Tested by hydraulic pressure to 365 #0 Date of test 16.4.35 No. of Certificate 3915 Can each boiler be worked separately ✓

Area of Firegrate in each Boiler 57.5 sq ft No. and Description of safety valves to each boiler 2 Spring loaded. ✓

Area of each set of valves per boiler (per Rule 11.28 sq in. as fitted 14.13 " " Pressure to which they are adjusted 210 #0 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 10 1/2" Is oil fuel carried in the double bottom under boilers ✓

Smallest distance between shell of boiler and tank top plating ✓ Is the bottom of the boiler insulated ✓

Largest internal dia. of boilers 177" Length 10'8" Shell plates: Material Steel Tensile strength 30-34 tons ✓

Thickness 1 1/32" Are the shell plates welded or flanged ✓ Description of riveting: circ. seams (end 8K inter. 3 3/4" ✓

long. seams T.R. S.S. ✓ Diameter of rivet holes in (circ. seams } 1 3/8" Pitch of rivets { 9 1/4" ✓

Percentage of strength of circ. end seams (plate 63.40. rivets 52.10 Percentage of strength of circ. intermediate seam (plate ✓ rivets ✓

Percentage of strength of longitudinal joint (plate 85.13 rivets 86.00 Working pressure of shell by Rules 215 #0 ✓

combined 87.30

Thickness of butt straps (outer 1 1/32" inner 1 5/32" No. and Description of Furnaces in each Boiler Three plain. ✓

Material Steel Tensile strength 26-30 tons ✓ Smallest outside diameter 43.5" ✓

Length of plain part (top 72" Thickness of plates (crown } 5 3/64" Description of longitudinal joint Welded. ✓

(bottom } 5 3/64" Working pressure of furnace by Rules 210 #0 ✓

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

End plates in steam space: Material Steel Tensile strength 26-30 tons ✓ Thickness 1 3/16" Pitch of stays 19 1/2" x 17 1/2" ✓

How are stays secured Double nuts + washers ✓ Working pressure by Rules 210 #0 ✓

Tube plates: Material (front } Steel Tensile strength } 26-30 tons ✓ Thickness { 15/16" ✓

(back } Thickness { 7/8" ✓

lean pitch of stay tubes in nests 11" Pitch across wide water spaces 14" Working pressure (front 215 #0 back 229 #0 ✓

Girders to combustion chamber tops: Material Steel Tensile strength 29-33 tons ✓ Depth and thickness of girder

centre 10" @ 1 3/4" ✓ Length as per Rule 35.219" ✓ Distance apart 9 3/4" ✓ No. and pitch of stays

each 3 @ 8 1/4" Working pressure by Rules 217 #0 ✓ Combustion chamber plates: Material Steel

Tensile strength 26-30 tons ✓ Thickness: Sides 24/32" Back 23/32" Top 23/32" Bottom 24/32" ✓

Pitch of stays to ditto: Sides 10" x 8 1/4" Back 9 1/2" x 8 1/4" Top 9 3/4" x 8 1/4" Are stays fitted with nuts or riveted over nuts ✓

Working pressure by Rules 212 #0 ✓ Front plate at bottom: Material Steel Tensile strength 26-30 tons ✓

Thickness 15/16" Lower back plate: Material Steel Tensile strength 26-30 tons ✓ Thickness 28/32" ✓

Pitch of stays at wide water space 14" x 8 1/4" Are stays fitted with nuts or riveted over nuts ✓

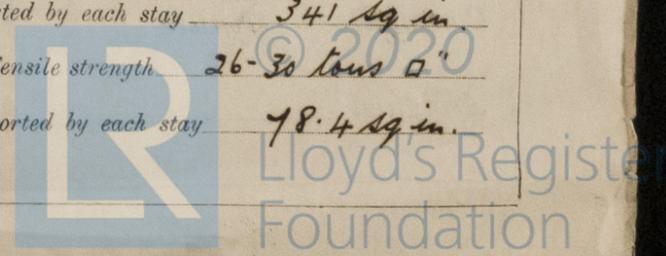
Working Pressure 214 #0 Main stays: Material Steel Tensile strength 28 tons ✓ (min)

Diameter (At body of stay, } 3 1/4" ✓ No. of threads per inch 8 ✓ Area supported by each stay 341 sq in. ✓

(Over threads } Working pressure by Rules 249 #0 ✓ Screw stays: Material Steel Tensile strength 26-30 tons ✓

Diameter (At turned off part, } 1 3/4" ✓ No. of threads per inch 10 ✓ Area supported by each stay 78.4 sq in. ✓

(Over threads }



Working pressure by Rules **232 #0** Are the stays drilled at the outer ends **No** Margin stays: Diameter ^{At turned off part.} _{or} ^{Over threads} **1 7/8", 2" + 2 1/8"**
 No. of threads per inch **10** Area supported by each stay **97 sq inches** Working pressure by Rules **220 #0**
 Tubes: Material **Iron** External diameter ^{Plain} _{Stay} **3 1/2"** Thickness **8 WG.** ^{5/16" + 3/8"} No. of threads per inch **9**
 Pitch of tubes **4 3/4" x 4 3/4"** Working pressure by Rules **215 #0** Manhole compensation: Size of opening in shell plate **16 x 12"** Section of compensating ring **5 7/2" dia x 1 1/2"** No. of rivets and diameter of rivet holes **118 @ 1 3/8"**
 Outer row rivet pitch at ends **4' 5 1/4" f.c.** ^(16 rivets) Depth of flange if manhole flanged **24/32"** Steam Dome: Material **Steel**
 Tensile strength **26-30 tons** Thickness of shell **24/32"** Description of longitudinal joint **S.R. lap.**
 Diameter of rivet holes **1 1/32"** Pitch of rivets **2 1/4"** Percentage of strength of joint ^{Plate} _{Rivets} **54 . 00** **43 . 80**
 Internal diameter **33"** Working pressure by Rules **230 #0** Thickness of crown **28/32"** No. and diameter of stays **2 @ 2 1/4"** Inner radius of crown **Working pressure by Rules**
 How connected to shell **Riveted** Size of doubling plate under dome **4' 9 1/2" dia x 1 1/2"** Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell **1 3/8" 4' 5 1/4" f.c. (16 rivets)**

Type of Superheater _____ Manufacturers of ^{Tubes} _{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 _____ Hydraulic test pressure _____
 Pressure to which the safety valves are adjusted _____
 tubes _____ 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. ^{Manufacturers}

Dates of Survey ^{During progress of work in shops - -} _{while building} ^{During erection on board vessel - - -} **See mch Rpt.** Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) **No.**
 Total No. of visits **✓**

Is this Boiler a duplicate of a previous case **Yes.** If so, state Vessel's name and Report No. **"Yascama" 45688.**

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) **This boiler has been built under special survey and in accordance with the approved plan the materials and workmanship being sound and good. It has been satisfactorily fitted on board, tried under steam and its safety valves adjusted as stated.**

The approved boiler plan was forwarded previously with report No 45688 on boiler No 1476.

Charged on engine report herewith.

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

C. Knoffatt.
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **FRI. 24 MAY 1935**

Assigned **See Minute on F.E. Rpt.**

