

Rpt. 5a.

REPORT ON BOILERS.

No. 41353

Received at London Office 11 NOV 1930

Date of writing Report 10/11/30 When handed in at Local Office 10 Nov. 1930 Port of HULL

No. in Reg. Book 61705 Survey held at HULL Date, First Survey 23 July Last Survey 4 Nov. 1930

on the STEAM TRAWLER "RYLSTON." (Number of Visits 19) Tons {Gross 380.11 Net 153.62

Master Built at Beverley By whom built Cook, Welton & Gemmell Ltd No. 556 When built 1930

Engines made at Hull By whom made Charles D. Holmes & Co Ltd Engine No. 1408 When made 1930

Boilers made at Hull By whom made Charles D. Holmes & Co Ltd Boiler No. 1408 When made 1930

Nominal Horse Power 104 Owners Henriksen & Co Ltd Port belonging to Hull

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Witkowitz Bergbau und Eisenhütten G/S (Letter for Record)

Total Heating Surface of Boilers 1866 sq ft Is forced draught fitted No Coal or Oil fired Coal

No. and Description of Boilers One single ended return tube 1 SB. Working Pressure 210 #/sq in

Tested by hydraulic pressure to 365 # Date of test 3-10-30 No. of Certificate 3807 Can each boiler be worked separately

Area of Firegrate in each Boiler 50.47 sq ft No. and Description of safety valves to each boiler 2 Spring loaded

Area of each set of valves per boiler {per Rule 10.37 sq ft as fitted 11.89 sq ft Pressure to which they are adjusted 210 # 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 6 1/4" 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 14' 3" Length 10' 8" Shell plates: Material Steel Tensile strength 29/33 tons

Thickness 1 3/16" Are the shell plates welded or flanged flanged Description of riveting: circ. seams {end 3 3/4" inter. 9 1/4" g. seams 1R 8HS Diameter of rivet holes in {circ. seams 1 1/32" long. seams Pitch of rivets {plate rivets

Percentage of strength of circ. end seams {plate 64.00 rivets 48.2 Percentage of strength of circ. intermediate seam {plate 85.6 rivets 85.5 combined 88.00 Working pressure of shell by Rules 213 #/sq in

Percentage of strength of longitudinal joint {plate 85.5 rivets 88.00

Thickness of butt straps {outer 1 1/32" inner 1 1/32" No. and Description of Furnaces in each Boiler 3 Plain 3 pf. 3' 6"

Material Steel Tensile strength 26/30 tons Smallest outside diameter 3' 6"

Length of plain part {top 6' 7 1/2" bottom 5' 10" Thickness of plates {crown 1 3/16" bottom 1 1/16" Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 219 #/sq in

plates in steam space: Material Steel Tensile strength 26/30 tons Thickness 1 3/16" Pitch of stays 19x18 + 20x17

Are stays secured Double nuts & washers Working pressure by Rules 220 #/sq in

plates: Material {front Steel Tensile strength 26/30 tons Thickness {15/16" 7/8" back " Working pressure {front 260 # back 243 #

Pitch of stay tubes in nests 10.62" Pitch across wide water spaces 12" x 9 1/2" Depth and thickness of girder 14" x 8 3/8"

Boilers to combustion chamber tops: Material Steel Tensile strength 29/33 tons Distance apart 9 1/2" No. and pitch of stays 3 @ 8 3/4"

Centre 10" x 1 3/4" Length as per Rule 36 1/4" Working pressure by Rules 227 #/sq in Combustion chamber plates: Material Steel

Strength 26/30 tons Thickness: Sides 3/4" Back 1/16" Top 23/32" Bottom 3/4"

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

Working pressure by Rules 234 #/sq in 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 7/8"

of stays at wide water space (19" dia + 11 5/8" x 8 3/4" + 14" x 8 3/4" + 9 1/2" x 8 3/8") Are stays fitted with nuts or riveted over nuts

Register of Shipping Pressure 232 #/sq in Main stays: Material Steel Tensile strength 28 tons

At body of stay, or Over threads 3 1/8" No. of threads per inch 8 Area supported by each stay 342 sq inches

Working pressure by Rules 215 #/sq in Screw stays: Material Steel Tensile strength 26 tons

At turned off part, or Over threads 1 3/4" No. of threads per inch 10 Area supported by each stay 76.5 sq inches

Working pressure by Rules 237#0 Are the stays drilled at the outer ends no Margin stays: Diameter 1 7/8"
No. of threads per inch 10 Area supported by each stay 99.5 sq in Working pressure by Rules 214#0
Tubes: Material Iron External diameter 3 1/2" Thickness 5/16" 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 see below No. of rivets and diameter of rivet holes 122 @ 1 1/2"
Outer row rivet pitch at ends 10" Depth of flange if manhole flanged 3/4" Description of longitudinal joint SR lap
Tensile strength 26/30 tons Thickness of shell 3/4" Percentage of strength of joint 54.3
Diameter of rivet holes 1 1/32" Pitch of rivets 2 1/4" Thickness of crown 1/8" No. and diameter
Internal diameter 2'9" Working pressure by Rules 230#0 Working pressure by Rules
stays 2 @ 2 1/4" Inner radius of crown 1 21/64" x 4'9 1/2" dia Diameter of rivet holes and pitch
How connected to shell Riveted Size of doubling plate under dome 16 Rivets @ 4'5 1/4" pitch circle (app. pitch 10")
of rivets in outer row in dome connection to shell 1 1/32"

Type of Superheater

Number of elements 1 Material of tubes Steel Internal diameter and thickness of tubes 1 1/2" x 1/8" Can the superheater be shut off no
Material of headers Steel Tensile strength 50,000 Thickness 1/8" Working pressure as 214#0
the boiler be worked separately no Is a safety valve fitted to every part of the superheater which can be shut off from the boiler no
Area of each safety valve 10 sq in Are the safety valves fitted with easing gear no Hydraulic test pressure 214#0
Rules no Pressure to which the safety valves are adjusted 100 lb Are drain cocks or valves fitted no
tubes no and after assembly in place no
to free the superheater from water where necessary no
Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with no

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

Dates of Survey See attached report Are the approved plans of boiler and superheater forwarded herewith no
while building on board (If not state date of approval.)
Total No. of visits 1

Is this Boiler a duplicate of a previous case no If so, state Vessel's name and Report No. This boiler has been built

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

changed on engine report sent herewith

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

B. Moffatt
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

Assigned

See Mr J.E. Rpt