

REPORT ON BOILERS.

No. 40993

Received at London Office

JUL 1930

Date of writing Report 14 July 1930 When handed in at Local Office 14 July 1930 Port of **HULL**

No. in Reg. Book. 10710 Survey held at Hull Date, First Survey 10 March Last Survey 24 June 1930

on the Steam Trawler - CAPE KANIN (Number of Visits 19) Gross 347.44 Tons Net 143.82

Master Built at Selby By whom built Cochrane & Sons 4 Yard No. 1083 When built 1930

Engines made at Hull By whom made Cochrane & Sons 4 Engine No. 1398 When made 1930

Boilers made at Hull By whom made do Boiler No. 1398 When made 1930

Nominal Horse Power 96 Owners Hudson S. Fishing Co Ltd Port belonging to Hull

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Hilkschitz & Bergman & Eisenhütten Gs. (Letter for Record ✓)

Total Heating Surface of Boilers 1698 Sq. feet. Is forced draught fitted ✓ Coal or Oil fired Coal

No. and Description of Boilers One single ended return tube Working Pressure 200 lbs

Tested by hydraulic pressure to 350 lbs. Date of test 2.6.30 No. of Certificate 3779 Can each boiler be worked separately ✓

Area of Firegrate in each Boiler 49.2 sq. ft. No. and Description of safety valves to each boiler 2 Spring loaded

Area of each set of valves per boiler (per Rule 9.8 sq. ft. as fitted 9.8 sq. ft. Pressure to which they are adjusted 200 lbs. Are they fitted with easing gear ✓

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 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'-2" Length 10'-8" Shell plates: Material Steel Tensile strength 28/32 Tons

Thickness 1 3/32" Are the shell plates welded or flanged: Description of riveting: circ. seams end 3/4" Inter. 3/4"

Long. seams T.R. 5 B.S. Diameter of rivet holes in (circ. seams 1 3/32" Pitch of rivets 8 3/4"

Percentage of strength of circ. end seams (plate 65.8 rivets 51.2 ✓ Percentage of strength of circ. intermediate seam (plate 85.03 rivets 90.6 ✓

Percentage of strength of longitudinal joint (plate 90.6 rivets 88.8 ✓ Working pressure of shell by Rules 201 lbs.

Thickness of butt straps (outer 1 1/8" inner 1 1/8" No. and Description of Furnaces in each Boiler Three plain

Material Steel Tensile strength 26/30 Tons Smallest outside diameter 41"

Length of plain part (top 76" bottom 69" Thickness of plates (crown 13/16" bottom 13/16" Description of longitudinal joint welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 219 lbs.

End plates in steam space: Material Steel Tensile strength 26/30 Tons Thickness 13/16" Pitch of stays 18"

How are stays secured Double nuts & washers. Working pressure by Rules 220 lbs.

End plates: Material (front Steel Tensile strength 26/30 Tons Thickness 13/16" back 15/16"

Can pitch of stay tubes in nests 10.94" Pitch across wide water spaces 13 3/4" Working pressure (front 211 lbs. back 230)

Orders to combustion chamber tops: Material Steel Tensile strength 28/32 Tons Depth and thickness of girder

Centre 10 1/2" x 13 1/4" Length as per Rule 36 3/16" Distance apart 9' 11" No. and pitch of stays

each 3 @ 8 3/4" Working pressure by Rules 210 lbs. Combustion chamber plates: Material Steel

Tensile strength 26/30 Tons Thickness: Sides 3/4" Back 23/32" Top 3/4" + 23/32" Bottom 3/4"

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

Working pressure by Rules 230 lbs. Front plate at bottom: Material Steel Tensile strength 26/30 Tons Thickness 13/16"

Lower back plate: Material Steel Tensile strength 26/30 Tons Thickness 13/32"

Pitch of stays at wide water space 14' x 8 3/4" Are stays fitted with nuts or riveted over nuts

Working Pressure 228 lbs. Main stays: Material Steel Tensile strength 28/32 Tons

meter (At body of stay, or Over threads 3 1/4" No. of threads per inch 8 Area supported by each stay 324 sq. in.

Working pressure by Rules 248 lbs. Screw stays: Material Steel Tensile strength 26/30 Tons

meter (At turned off part, or Over threads 1 7/8" + 1 1/4" No. of threads per inch 10 Area supported by each stay 78.9 sq. in.

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Working pressure by Rules 230 Lb Are the stays drilled at the outer ends Yes Margin stays: Diameter { At turned off part, 17/8"
or Over threads 17/8"
No. of threads per inch 10 Area supported by each stay 97.75 sq. in. Working pressure by Rules 218 Lb.
Tubes: Material Low External diameter { Plain 3 1/2" Thickness { 3/8" No. of threads per inch 9
Stay 3 1/2"
Pitch of tubes 4 7/8" Working pressure by Rules 215 Lb. Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 54" x 1 3/2" No. of rivets and diameter of rivet holes 16 @ 1 3/2"
Outer row rivet pitch at ends 10.3" Depth of flange if manhole flanged Yes Steam Dome: Material Steel
Tensile strength 36 3/4 Tons Thickness of shell 3/4" Description of longitudinal joint J. R. Lap.
Diameter of rivet holes 1 3/2" Pitch of rivets 2 1/4" Percentage of strength of joint { Plate 54.0
Rivets 43.8
Internal diameter 33" Working pressure by Rules 226 Lb. Thickness of crown 7/8" No. and diameter of
stays 2 @ 2 1/4" Inner radius of crown Yes Working pressure by Rules
How connected to shell Riveted Size of doubling plate under dome 54" x 1 3/2" Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell 1 3/2" @ 10.3"

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 Pressure to which the safety valves are adjusted Hydraulic test pressure:
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

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

Manufacturer.

Dates of Survey { During progress of
work in shops - -
while building { During erection on
board vessel - -

See attached

Are the approved plans of boiler and superheater forwarded herewith
(If not state date of approval.)

Total No. of visits

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

This boiler has been built under special survey & in accordance with the approved plan, & the materials & workmanship are sound & good. It has been satisfactorily fitted on board, examined under steam, and its safety valves adjusted under steam.

Charged on engine report

Survey Fee £

When applied for,

192

Travelling Expenses (if any) £

When received,

192

John Whackley

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 11 JUL 1930

Assigned

See report attached



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Lloyd's Register
Foundation