

REPORT ON BOILERS.

No. 38985.

Received at London Office

9 JUN 1928.

Date of writing Report June 7 1928 When handed in at Local Office June 7 1928 Port of HULL

No. in Survey held at Hull

Date, First Survey 15 March

Last Survey 1 June 1928

12778 on the Steam Trawler "ST ROMANUS"

(Number of Visits 12)

Gross 357
Tons Net 154

Built at Beverly

By whom built W. & A. Hammett

Yard No. 499

When built 1928

Engines made at Hull

By whom made Charles D. Holmes & Co. Ltd

Engine No. 1007

When made 1928

Boilers made at Hull

By whom made Charles D. Holmes & Co. Ltd

Boiler No. 1337

When made 1928

Nominal Horse Power 96

Owners Mr. Hammett & Co. Ltd

Port belonging to Hull

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel W. & A. Hammett & Co. Ltd

(Letter for Record S.)

Total Heating Surface of Boilers 1698 sq. ft.

Is forced draught fitted Yes

Coal or Oil fired Coal

No. and Description of Boilers One single ended

Working Pressure 200 lbs.

Tested by hydraulic pressure to 350 lbs. Date of test 14/5/28 No. of Certificate 3646 Can each boiler be worked separately Yes

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 valve per boiler 4.9 sq. in. Pressure to which they are adjusted 200 lbs. Are they fitted with easing gear Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 4"

Is oil fuel carried in the double bottom under boilers Yes

Smallest distance between shell of boiler and tank top plating 14'-0"

Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 14'-0" Length 10'-8" Shell plates: Material Steel Tensile strength 38/32 Tons

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

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

Percentage of strength of circ. end seams 57.2 Percentage of strength of circ. intermediate seam 57.2

Percentage of strength of longitudinal joint 90.8 Working pressure of shell by Rules 201 lbs.

Thickness of butt straps 1" No. and Description of Furnaces in each Boiler Three plain

Material Steel Tensile strength 38/30 Tons Smallest outside diameter 41"

Length of plain part 76" Thickness of plates 1 3/16" 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 38/30 Tons Thickness 1 3/16" Pitch of stays 18"

How are stays secured By nuts Working pressure by Rules 220 lbs.

End plates: Material Steel Tensile strength 38/30 Tons Thickness 7/8"

Lean pitch of stay tubes in nests 10.97 Pitch across wide water spaces 13 3/4" Working pressure 211

Orders to combustion chamber tops: Material Steel Tensile strength 38/32 Tons Depth and thickness of girder 230

Centre 9 3/4" x 1 3/4" Length as per Rule 36 3/16" Distance apart 9" No. and pitch of stays 3 @ 8 3/4"

Working pressure by Rules 210 lbs. Combustion chamber plates: Material Steel

Tensile strength 38/30 lbs. Thickness: Sides 3/4" Back 2 3/32" Top 3/4" 2 3/32" 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 Front plate at bottom: Material Steel Tensile strength 38/30 Tons

Thickness 1 9/16" Lower back plate: Material Steel Tensile strength 38/30 Tons Thickness 2 3/32"

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 38/32 Tons

Diameter 3 3/4" No. of threads per inch 8 Area supported by each stay 324 sq. in.

Working pressure by Rules 240 lbs. Screw stays: Material Steel Tensile strength 38/30 Tons

Diameter 1 7/8" 1 3/4" No. of threads per inch 10 Area supported by each stay 76.9

Working pressure by Rules 230 lb. Are the stays drilled at the outer ends ho Margin stays: Diameter { At turned off part, 1 7/8 or Over threads
No. of threads per inch 10 Area supported by each stay 97.75 sq. in. Working pressure by Rules 215 lb.
Tubes: Material Sm External diameter { Plain 3 1/2 Stay Thickness { 5/16 No. of threads per inch 9
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 34 x 27 x 1 3/32 No. of rivets and diameter of rivet holes 32 @ 1 1/4
Outer row rivet pitch at ends 8 3/8 Depth of flange if manhole flanged
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 Working pressure by Rules Thickness of crown No. and diameter of
stays Inner radius of crown Working pressure by Rules
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 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 23 inclusive for boilers been complied with

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

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 YES.
(If not state date of approval.)
Total No. of visits 1

See attached
Report on Machinery

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

Please return enclosed boiler plan for dealing with sister vessel.

Chapman engine report
Sent herewith

Survey Fee £ : When applied for, 192
Travelling Expenses (if any) £ : When received, 192

John H. Mackenzie
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute JUN 12 1926

Assigned see Minute on Hull Rpt
30985 attached