

REPORT ON BOILERS.

No. 44130.

26 AUG 1936

Date of writing Report

19

When handed in at Local Office

25 AUG 1936

Port of

HULL

No. in Reg. Book

68602

Survey held at

Hull

Date, First Survey

29th April, 1936

Last Survey

12th August 1936

Steel Sc K. "Ocean Monarch"

(Number of Visits)

Tons

Gross 440.47

Net 168.17

Master

Built at

Selly

By whom built

Bochane & Sons Ltd.

Yard No.

1165

When built 1936, 8

Engines made at

Hull

By whom made

Charles D. Holmes & Co. Ltd.

Engine No.

1496

When made 1936

Boilers made at

Hull

By whom made

Charles D. Holmes & Co. Ltd.

Boiler No.

1496

When made 1936

Nominal Horse Power

114

Owners

Ocean Steam Fishing Co. Ltd.

Port belonging to

Hull

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel { Appleby, Frodingham Steel Co. Ltd. Steel Company of Scotland (Letter for Record "S")

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

No. and Description of Boilers One single ended return tube Working Pressure 210 #

Tested by hydraulic pressure to 365 # Date of test 25/6/36. No. of Certificate 3944 Can each boiler be worked separately

Area of Firegrate in each Boiler 57.54 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. inch as fitted 14.13 " 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 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 J.R. S.S. Diameter of rivet holes in { circ. seams 1 3/8 " long. seams 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 85.13 rivets 86.00 Working pressure of shell by Rules 215 # combined 87.30

Percentage of strength of longitudinal joint { plate 85.13 rivets 86.00 combined 87.30 Working pressure of shell by Rules 215 #

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 " bottom Thickness of plates { crown 53/64 " Description of longitudinal joint Welded. bottom 1/64 " Working pressure of furnace by Rules 210 #

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 and washers Working pressure by Rules 210 #

Tube plates: Material { front Steel Tensile strength { 26-30 tons Thickness { 15/16 " back 7/8 "

Mean pitch of stay tubes in nests 11 " Pitch across wide water spaces 14 " Working pressure { front 215 # back 229 #

Girders to combustion chamber tops: Material Steel Tensile strength 29-33 tons Depth and thickness of girder at centre 10 @ 1 3/4 " Length as per Rule 35.219 # Distance apart 9 3/4 " No. and pitch of stays in each 3 @ 8 1/4 " Working pressure by Rules 217 # 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 222 # 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 "

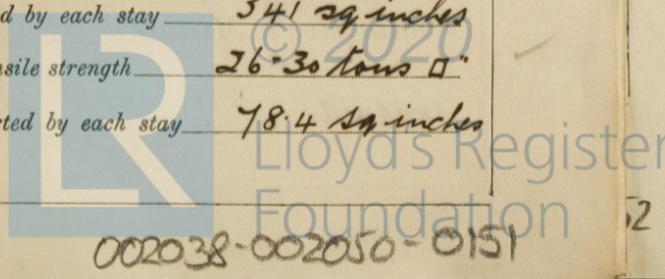
Pitch of stays at wide water space 14 " x 8 1/4 " Are stays fitted with nuts or riveted over nuts

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

Diameter { At body of stay, or Over threads } 3 1/4 " No. of threads per inch 8 Area supported by each stay 341 sq. inches

Working pressure by Rules 249 # Screw stays: Material Steel Tensile strength 26-30 tons

Diameter { At turned off part, or Over threads } 1 3/4 " No. of threads per inch 10 Area supported by each stay 78.4 sq. inches



002038-002050-0151

1190

Working pressure by Rules 232 #0 Are the stays drilled at the outer ends no Margin stays: Diameter ^{At turned off part,} 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} 3 1/2" Thickness ^{8 wgs.} 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 1/2" dia X 1 1/32" No. of rivets and diameter of rivet holes 118 @ 1 3/8"
 Outer row rivet pitch at ends 4' 5 1/4" f.c. Depth of flange if manhole flanged nailed Steam Dome: Material Steel
 Tensile strength 26-30 tons Thickness of shell 24/32" Description of longitudinal joint A.R. lap
 Diameter of rivet holes 20/11 1/32" Pitch of rivets 2 1/4" Percentage of strength of joint ^{Plate} 54.00 ^{Rivets} 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 1/32" 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 _____
 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 Yes

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

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

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. Scally Nyke 45795

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.

Charged on engine report herewith

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

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

Committee's Minute FRI, 28 AUG 1936
 Assigned See Sol J.C. 47130