

REPORT ON BOILERS.

No. 89465

Received at London Office

25 NOV 1932

Writing Report

19

When handed in at Local Office

23/11/1932

Port of

NEWCASTLE-ON-TYNE

Survey held at

Wallsend-on-Tyne

Date, First Survey

28 Oct

Last Survey

19 Nov

1932

on the

P.D. Blythmoor

(Number of Visits

8)

Tons

Gross

6588

Net

4038

Built at

Sunderland

By whom built

W.D. & H.O. Wills Ltd

Yard No.

When built

1908

Made at

Sunderland

By whom made

W.D. & H.O. Wills Ltd

Engine No.

When made

Made at

do

By whom made

do

Boiler No.

When made

Nominal Horse Power

544

Owners

Moore Line Ltd.

Port belonging to

London

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Fitting of Superheaters in the Port & Std Blys.

(Letter for Record

Heating Surface of Boilers

Is forced draught fitted

Coal or Oil fired

and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

No. of Firegrate in each Boiler

No. and Description of safety valves to each boiler

No. of each set of valves per boiler

{per Rule

Pressure to which they are adjusted

Are they fitted with easing gear

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

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

Length

Shell plates: Material

Tensile strength

Thickness

Are the shell plates welded or flanged

Description of riveting: circ. seams

Long. seams

Diameter of rivet holes in

{circ. seams

{long. seams

Pitch of rivets

Percentage of strength of circ. end seams

{plate

{rivets

Percentage of strength of circ. intermediate seam

{plate

{rivets

Percentage of strength of longitudinal joint

{plate

{rivets

{combined

Working pressure of shell by Rules

Thickness of butt straps

{outer

{inner

No. and Description of Furnaces in each Boiler

Material

Tensile strength

Smallest outside diameter

Length of plain part

{top

{bottom

Thickness of plates

{crown

{bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

End plates in steam space: Material

Tensile strength

Thickness

Pitch of stays

How are stays secured

Working pressure by Rules

End plates: Material

{front

{back

Tensile strength

Thickness

Can pitch of stay tubes in nests

Pitch across wide water spaces

Working pressure

{front

{back

Orders to combustion chamber tops: Material

Tensile strength

Depth and thickness of girder

centre

Length as per Rule

Distance apart

No. and pitch of stays

each

Working pressure by Rules

Combustion chamber plates: Material

Tensile strength

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

Working pressure by Rules

Front plate at bottom: Material

Tensile strength

Thickness

Lower back plate: Material

Tensile strength

Thickness

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Diameter

{At body of stay,

{Over threads

No. of threads per inch

Area supported by each stay

Working pressure by Rules

Screw stays: Material

Tensile strength

Diameter

{At turned off part,

{Over threads

No. of threads per inch

Area supported by each stay

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REPORT ON BOILERS

Working pressure by Rules Are the stays drilled at the outer ends Margin stays: Diameter { At turned off part, or Over threads

No. of threads per inch Area supported by each stay Working pressure by Rules

Tubes: Material External diameter { Plain Thickness No. of threads per inch { Stay

Pitch of tubes Working pressure by Rules Manhole compensation: Size of opening in

shell plate Section of compensating ring No. of rivets and diameter of rivet holes

Outer row rivet pitch at ends Depth of flange if manhole flanged Steam Dome: Material

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 North Eastern Smoke Tube Manufacturers of Stewart & Lloyd Ltd

Number of elements 144 Material of tubes Solid drawn steel Internal diameter and thickness of tubes 15 7/8" x 2 1/2" thick

Material of headers wrought steel Tensile strength 26 to 30 tons Thickness 1 1/2" Can the superheater be shut off and yes

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 yes

Area of each safety valve 3.1416 Are the safety valves fitted with easing gear yes Working pressure as per 180 lbs.

Rules 180 lbs. Pressure to which the safety valves are adjusted 185 lbs. Hydraulic test pressure: 540 lbs.

tubes 1500 lbs. forgings & castings 540 lbs. and after assembly in place 450 lbs. Are drain cocks or valves fitted yes

to free the superheater from water where necessary yes

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

The foregoing is a correct description, yes

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 (If not state date of approval.)

Total No. of visits

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

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

Superheaters fitted to the Port & Starboard main boilers (Centre boiler not so fitted).

Materials & workmanship good. Hydraulic tests satisfactory.

Examined under steam & safety valves adjusted.

Survey Fee ... £ 10 :- :- When applied for, 19

Travelling Expenses (if any) £ : : When received, 12/12/1932

William Butler

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 2 DEC 1932

Assigned



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