

# REPORT ON BOILERS.

No. 16411.

Received at London Office 22 JULY 1926

Writing Report 16<sup>th</sup> June 1926 When handed in at Local Office 21 June 1926 Port of WEST HARTLEPOOL

Survey held at West Hartlepool Date, First Survey 29 Sept/25 Last Survey 15 June 1926

on the S.S. "CITY OF BATH" (Number of Visits 98.) Tons { Gross 5078.91 Net 3154.47

Built at West Hartlepool By whom built Wm Gray & Co. Ltd Yard No. 9 When built 1926

made at West Hartlepool By whom made Central Marine Engine No. 9 When made 1926

made at ditto By whom made Engine Works Boiler No. 978 When made 1926

Horse Power Owners Ellerman Lines Ltd (Hall Line Co) Port belonging to Liverpool

## TITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Constructors of Steel D. Colville & Sons Ltd (Letter for Record S)

Heating Surface of Boilers 5186 sq. ft. Is forced draught fitted yes Coal or Oil fired coal

Description of Boilers 2 single ended Working Pressure 26.5 lbs

by hydraulic pressure to 448 lb Date of test 24.2.26 No. of Certificate 3679 Can each boiler be worked separately yes

Firegrate in each Boiler 58.64 sq. ft. No. and Description of safety valves to each boiler 2 Cockburns High Lift

each set of valves per boiler { per Rule 7.73 as fitted 11.88 Pressure to which they are adjusted 270 lb Are they fitted with easing gear yes

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

distance between boilers or uptakes and bunkers or woodwork 16" Is oil fuel carried in the double bottom under boilers no

distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

internal dia. of boilers 15'-0" Length 12'-6" Shell plates: Material Steel Tensile strength 31-34

ss 15" Are the shell plates welded or flanged no Description of riveting: circ. seams { end D.R. Lap inter J.R. Lap

ums J.R. D.B.S. Diameter of rivet holes in { circ. seams 1 1/16" long. seams 1 1/16" Pitch of rivets { 4 1/4" end 5" inter 11 3/8"

age of strength of circ. end seams { plate 64.6 rivets 89 of end. Percentage of strength of circ. intermediate seam { plate 66.2 rivets 62.4

age of strength of longitudinal joint { plate 85.2 rivets 85.6 combined 87.5 Working pressure of shell by Rules 26.6

ss of butt straps { outer 1 1/4" inner 1 3/8" No. and Description of Furnaces in each Boiler 3 Deightons

Steel Tensile strength 26/30 Smallest outside diameter 45"

of plain part { top Thickness of plates { crown 1 3/16" bottom 1 1/16" Description of longitudinal joint welded

ions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 26.7

ates in steam space: Material Steel Tensile strength 26/30 Thickness 1 1/4" Pitch of stays 16" x 20"

re stays secured D nuts & washers Working pressure by Rules 26.5

lates: Material { front Steel Tensile strength { 26/30 Thickness { 1 1/16" back Steel

itch of stay tubes in nests 11 1/4" x 7 1/2" Pitch across wide water spaces 13 1/2" x 7 1/2" Working pressure { front 290 back 270

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

re 10" x 1 3/4" Length as per Rule 35 13/32 Distance apart 8 5/8" No. and pitch of stays

3 - 8 3/8" Working pressure by Rules 26.5 Combustion chamber plates: Material Steel

strength 26/30 Thickness: Sides 23/32 Back 23/32 Top 23/32 Bottom 16

f stays to ditto: Sides 9" x 7 1/2" Back 8" x 8 1/2" Top 8 3/8" x 8 3/8" Are stays fitted with nuts or riveted over nuts

g pressure by Rules 26.5 Front plate at bottom: Material Steel Tensile strength 26/30

Lower back plate: Material Steel Tensile strength 26/30 Thickness 1 5/16"

f stays at wide water space 13 1/2" x 8 1/2" Are stays fitted with nuts or riveted over nuts

g Pressure 28.4 Main stays: Material Steel Tensile strength 28/32

At body of stay, 3 3/8" No. of threads per inch 6 Area supported by each stay 20" x 16"

Over threads g pressure by Rules 26.8 Screw stays: Material Steel & iron Tensile strength 26/30 & 21 1/2

At turned off part, 1 3/4" No. of threads per inch 9 Area supported by each stay 8" x 8 1/2"

Over threads



a. 201

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Working pressure by Rules 268 Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, or Over threads } 2"  
No. of threads per inch 9 Area supported by each stay 8 1/2 x 10 3/4 Working pressure by Rules 270  
Tubes: Material Iron External diameter { Plain 2 1/2" Stay 2 1/2" Thickness { 8 W G 5/16 x 3/8" No. of threads per inch 9  
Pitch of tubes 3 3/4 x 3 3/4 Working pressure by Rules 290 Manhole compensation: Size of  
shell plate 16" x 20" Section of compensating ring 20 x 1 5/8 No. of rivets and diameter of rivet holes 28 1 1/8  
Outer row rivet pitch at ends 11 3/8" Depth of flange if manhole flanged ✓ Steam Dome: Material none  
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 \_\_\_\_\_  
stays \_\_\_\_\_ Inner radius of crown \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ Diameter of rivet hole \_\_\_\_\_  
How connected to shell \_\_\_\_\_ Size of doubling plate under dome \_\_\_\_\_  
of rivets in outer row in dome connection to shell \_\_\_\_\_

Type of Superheater none 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 used for \_\_\_\_\_  
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 \_\_\_\_\_  
Rules \_\_\_\_\_ Pressure to which the safety valves are adjusted \_\_\_\_\_ Hydraulic test \_\_\_\_\_  
tubes \_\_\_\_\_, castings \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Are drain cocks or \_\_\_\_\_  
to free the superheater from water where necessary \_\_\_\_\_

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with yes **FOR THE CENTRAL MARINE ENGINE**  
The foregoing is a correct description no **MANAGING DIRECTOR, C.**

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

See Report on Machinery

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.)

See accompanying machinery report.

Survey Fee ...

Travelling Expenses (if any) ±

See Report on Machinery

When applied for, ✓

192

When received, ✓

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R.D. Shilston

Engineer Surveyor to Lloyd's Register

Committee's Minute

FRI. 25 JUN 1926

Assigned

See Report attached



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