

Lab

M.V. Storsten

13 JUL 1926

# REPORT ON BOILERS

No. 45445

attached 45810

-3 MAR 1926

Received at London Office

Surveying Report 23<sup>rd</sup> July 1926 When handed in at Local Office 24.2.1926 Port of Glasgow

Survey held at Glasgow

Date, First Survey 19.5.25 Last Survey 19.2.1926

on the Boiler No. 1850 M.V. Storsten

(Number of Visits 33) Tons { Gross 5240 Net 3088

Built at Glasgow By whom built Barclay Currie Yard No. 613 When built 1926

made at Glasgow

By whom made The N.B. Dinn E. & W. (1922) Engine No. When made

made at Glasgow

By whom made The Firth S.B. & E. Co. (1921) Boiler No. 1850 When made 1926

Horse Power 676

Owners Lonsberg & Son Ltd

Port belonging to Lonsberg

## TUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Constructors of Steel David Colville and Son Ltd

(Letter for Record S. ✓)

Painting Surface of Boilers 1200 ft. ✓

Is forced draught fitted No.

Coal or Oil fired oil

Description of Boilers One Cyl. Mult. Single End.

Working Pressure 120 lb

Hydraulic pressure to 230 lb Date of test 19.2.26 No. of Certificate 17051 Can each boiler be worked separately No

Firegrate in each Boiler oil fired No. and Description of safety valves to each boiler 2 Spring loaded

each set of valves per boiler { per Rule 6.6 as fitted 7.07 Pressure to which they are adjusted 120 lb Are they fitted with easing gear No

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

distance between boilers or uptakes and bunkers or woodwork well clear Is oil fuel carried in the double bottom under boilers

distance between shell of boiler and tank top plating This boiler is situated on tween deck level Is the bottom of the boiler insulated

internal dia. of boiler 10'-6" Length 11'-0" Shell plates: Material S. Tensile strength 28/32 T. ✓

Are the shell plates welded or flanged No Description of riveting: circ. seams { end L.D.R. inter. 3/8

ms DBS/D.R. Diameter of rivet holes in { circ. seams 15/16 long. seams 7/8 Pitch of rivets { 4 2/32

age of strength of circ. end seams { plate 70.1 rivets 55.5 Percentage of strength of circ. intermediate seam { plate 81.2 rivets 90.9

age of strength of longitudinal joint { plate 81.2 rivets 90.9 combined 92.6 Working pressure of shell by Rules 124 lb

of butt straps { outer 17/32 inner 2/32 No. and Description of Furnaces in each Boiler Two Plain

S. Tensile strength 26/30 T. Smallest outside diameter 39"

of plain part { top 57 Thickness of plates { crown 2/32 bottom 1/32 Description of longitudinal joint Weld

ons of stiffening rings on furnace or c.c. bottom None Working pressure of furnace by Rules 133 lb

ates in steam space: Material S. Tensile strength 26/30 T. Thickness 7/8 Pitch of stays 18 x 13

2 stays secured D.N. Working pressure by Rules 142 lb

ates: Material { front S. back S. Tensile strength { 26/30 T. Thickness { 23/32 23/32

itch of stay tubes in nests 1 1/4 x 8 3/4 Pitch across wide water spaces 14 1/4 Working pressure { front 125 lb back 183

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

6 1/4 x 40/32 = 1 1/4 Length as per Rule 27.7/8 Distance apart 9' No. and pitch of stays

20 9' Working pressure by Rules 124 lb Combustion chamber plates: Material S

strength 26/30 T. Thickness: Sides 9/16 Back 9/16 Top 9/16 Bottom 9/16

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

pressure by Rules 127 lb Front plate at bottom: Material S. Tensile strength 26/30 T. Thickness 1 1/16

23/32 Lower back plate: Material S. Tensile strength 26/30 T. Thickness 1 1/16

stays at water space 10 1/2 x 9' Are stays fitted with nuts or riveted over Nuts

Pressure 198 lb Main stays: Material S. Tensile strength 28/32 T.

At body of stay, or Over threads 2 1/4 No. of threads per inch 8 Area supported by each stay 2340

pressure by Rules 2 1/4 Screw stays: Material S. Tensile strength 26/30 T.

At turned off part, or Over threads 1 3/8 No. of threads per inch 9 Area supported by each stay 810



Working pressure by Rules 123 u Are the stays drilled at the outer ends no ✓ Margin stays: Diameter { At turned off part, 1 1/2 ✓  
No. of threads per inch 9 Area supported by each stay 990 Working pressure by Rules 126 u  
Tubes: Material I ✓ External diameter { Plain 3 1/4 ✓ Thickness { 10 wg. ✓ No. of threads per inch 9 ✓  
Pitch of tubes 4 1/2 x 4 3/8 ✓ Working pressure by Rules 160 u Manhole compensation: Size of  
shell plate 16 1/4 x 12 1/4 ✓ Section of compensating ring 15 x 2 1/32 ✓ No. of rivets and diameter of rivet holes 32 - 1 ✓  
Outer row rivet pitch at ends 7 1/2 ✓ 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 \_\_\_\_\_  
Internal diameter \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_ Thickness of crown \_\_\_\_\_ No. and \_\_\_\_\_  
stays \_\_\_\_\_ Inner radius of crown \_\_\_\_\_ Working pressure by Rules \_\_\_\_\_  
How connected to shell \_\_\_\_\_ Size of doubling plate under dome \_\_\_\_\_ Diameter of rivet holes \_\_\_\_\_  
of rivets in outer row in dome connection to shell \_\_\_\_\_

Type of Superheater \_\_\_\_\_ Manufacturers of { Tubes \_\_\_\_\_  
Number of elements \_\_\_\_\_ Material of tubes \_\_\_\_\_ Internal diameter and thickness of tubes \_\_\_\_\_  
Material of headers \_\_\_\_\_ Tensile strength \_\_\_\_\_ Thickness \_\_\_\_\_ Can the superheater be s \_\_\_\_\_  
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 press \_\_\_\_\_  
Rules \_\_\_\_\_ Pressure to which the safety valves are adjusted \_\_\_\_\_ Hydraulic test \_\_\_\_\_  
tubes \_\_\_\_\_, castings \_\_\_\_\_ and after assembly in place \_\_\_\_\_ Are drain cocks or v \_\_\_\_\_  
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,

FOR THE FORTH SHIPBUILDING & ENGINEERING CO. (1921) LTD.  
(LINDSAY BURNET'S BOILER WORKS) W. L. Lane

Dates of Survey { During progress of 1925 May 19-22-27 June 1 Oct 30 Are the approved plans of boiler and superheater forwarded herewith GRA  
work in shops - - - Nov 4-9-10-24-26 Dec 3-7 9-14-16-24-28-30 (If not state date of approval.)  
building { During erection on 1926 July 12-14-18-21-22-27-28-29-30 Aug 2-4-6-10 Total No. of visits 33  
board vessel - - - 12-16-17-19

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

This boiler has been examined under special survey in accordance with the Rules. The materials and workmanship employed in its manufacture are sound and good, it is fitted on board the vessel to Glasgow.

This boiler has now been satisfactorily installed on board the M.V. Storsten, and safety valves adjusted to Working Pressure.

H. L. Luthur

Survey Fee ... .. £ 8 : 0 : 0  
Travelling Expenses (if any) £ - : - : -

When applied for, 26/2/1926  
When received, 28/4/1926

W. Lane

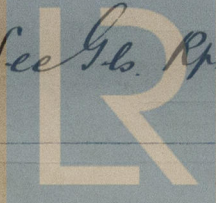
Engineer Surveyor to Lloyd's Register of

Committee's Minute GLASGOW 2-MAD 1926

Assigned TRANSMIT TO LONDON

GLASGOW 27 JUL 1926

See G.L. Rpt. No. 45810



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