

# REPORT ON BOILERS.

No. 29883

Received at London Office 8 NOV 1928

Report made Nov: 1928 When handed in at Local Office 1<sup>st</sup> Nov: 1928 Port of Sunderland

Survey held at Sunderland Date, First Survey ✓ Last Survey 2<sup>nd</sup> Nov 1928

the S. S. "FARNDALE" (Number of Visits ✓) Gross Tons 4222 Net Tons 2533

Built at Sunderland By whom built Sir J. Priestman & Co Yard No. 280 When built 1928

at Sunderland By whom made North Eastern Marine Eng. Co. Ltd. Engine No. 2672 When made 1928

at Sunderland By whom made North Eastern Marine Eng. Co. Ltd. Boiler No. 2672 When made 1928

orse Power 380 Owners Morrison S. S. Co. Ltd. (J. Morrison & Son, Mgrs) Port belonging to Newcastle

## TUBULAR BOILERS - MAIN, ~~AUXILIARY~~, OR DONKEY.

Plates The Vithovics Mine, Steel & Iron Works, Vithovics, Czechoslovakia (Letter for Record (S))  
Stays: The Oldingham Steel & Iron Co. Ltd.  
 Date of Test 1-10-28 Is forced draught fitted No Coal or Oil fired Coal

Description of Boilers Three - Single ended Marine type Working Pressure 180 lbs sq

hydraulic pressure to 320 lbs sq Date of test 1-10-28 No. of Certificate 4009 Can each boiler be worked separately Yes

regate in each Boiler 52 sq No. and Description of safety valves to each boiler Two Direct Spring loaded

each set of valves per boiler per Rule 13.35 sq Pressure to which they are adjusted 185 lbs sq Are they fitted with easing gear Yes

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

distance between ~~boilers~~ uptakes and bunkers 21" Is oil fuel carried in the double bottom under boilers ✓

distance between shell of boiler and tank top plating 3' 0" Is the bottom of the boiler insulated No

internal dia. of boilers 14' 3 3/4" Length 11' 0" (FULL) Shell plates: Material Steel Tensile strength 29 to 33 tons sq

Are the shell plates welded or flanged No Description of riveting: circ. seams D.R. Lap

T.R.D.B.S. Diameter of rivet holes in 1 3/16" Pitch of rivets 3 1/2"

Percentage of strength of circ. end seams 66 Percentage of strength of circ. intermediate seam 43.7

Percentage of strength of longitudinal joint 85.9 Working pressure of shell by Rules 181 lbs sq

No. and Description of Furnaces in each Boiler Three - Corrugated - Dighton type

Tensile strength 26 to 30 tons sq Smallest outside diameter 3' 3 3/4"

Thickness of plates 1 1/2" Description of longitudinal joint Welded

Working pressure of furnace by Rules 181 lbs sq

Thickness 1 1/4" Pitch of stays 21" x 19"

Working pressure by Rules 182 lbs sq

Thickness 3/4"

Working pressure 183 lbs sq (W.W. space)

Working pressure 182 lbs sq

Depth and thickness of girder

No. and pitch of stays

Working pressure by Rules 184 lbs sq

Thickness: Sides 23/32" Back 23/32" Top 23/32" Bottom 23/32"

Are stays fitted with nuts or riveted over Fitted with Nuts

Tensile strength 26 to 30 tons sq

Thickness 7/8"

Are stays fitted with nuts or riveted over Fitted with Nuts

Tensile strength 28 to 32 tons sq

Area supported by each stay 399 sq

Tensile strength 26 to 30 tons sq

Sides & Back 99.75 sq

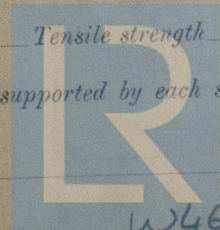
Area supported by each stay Top 95 sq

No. of threads per inch 9

Area supported by each stay

Area supported by each stay

Area supported by each stay



Lloyd's Register  
Foundation



*Sides & Backs 181 lbs 0"*  
 Working pressure by Rules *191 lbs 0"* Are the stays drilled at the outer ends *No* Margin stays: Diameter *At turned off part, 1 7/8"*  
 No. of threads per inch *9* Area supported by each stay *117.60"* Working pressure by Rules *181 lbs 0"*  
 Tubes: Material *SEAMLESS STEEL* External diameter *Plain 3 1/4"* Thickness *8. W. 4 1/4" & 5 1/16"* No. of threads per inch *9*  
 Pitch of tubes *4 5/8" x 4 1/2"* Working pressure by Rules *Plain 230 lbs 0" Stay 192 & 193 lbs 0"* Manhole compensation: Size of opening in  
 END plate *16" x 12"* Section of compensating ring *✓* No. of rivets and diameter of rivet holes *✓*  
 Outer row rivet pitch at ends *✓* Depth of flange if manhole flanged *3 7/8"* 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** 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 *Yes*

The foregoing is a correct description,  
 THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

*John Neill* Manufacturer.  
 Manager.

Dates of Survey *During progress of work in shops - -* Please see Machinery Rpt. the approved plans of boiler and superheater forwarded herewith  
 while building *During erection on board vessel - -* (If not state date of approval.)  
 Total No. of visits

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

*The Materials and Workmanship are good.*  
*The Boilers have been built under Special Survey, and satisfactorily fitted in the vessel.*  
*For notation please see Machinery Report.*

Survey Fee ... £ *Please see Machinery Report.* When applied for, 192  
 Travelling Expenses (if any) £ When received, 192

*A. T. Griffiths.*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 13 NOV 1928

Assigned *see Minute on*  
*Sta Rpt No. 29883 attached*

