

REPORT ON BOILERS.

No. 78211

Received at London Office

26 AUG 1924

Date of writing Report

192

When handed in at Local Office

23/8/24

1924

Port of

NEWCASTLE-ON-TYNE

No. in Reg. Book

78240

Survey held at

Newcastle-on-Tyne

Date, First Survey

4th March

Last Survey

21st August 1924

(Number of Visits)

Gross

Tons

Net

on the

Steel Co.

CYRILLE DANNEELS

Built at

Goole

By whom built

Goole S. B. Co

Yard No.

257

When built

1924

at

Mallowd-on-Tyne

By whom made

North Eastern Marine & C. Co. Ltd

Engine No.

2566

When made

1924

at

do

By whom made

do

Boiler No.

2566

When made

1924

orse Power

204

Owners

Port belonging to

Goole

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Suppliers of Steel John Spencer & Sons Ltd. Steel Company of Scotland Ltd. (Letter for Record S.)

Weight of Steel 3540 Is forced draught fitted no Coal or Oil fired coal

Working Surface of Boilers 3540 Description of Boilers 2 Single ended multitanbulular 2SB. Working Pressure 180 lbs

Hydraulic pressure to 320 Date of test 19.6.24 No. of Certificate 9834 Can each boiler be worked separately yes

Regulate in each Boiler 48 No. and Description of safety valves to each boiler 2 Spring loaded

Each set of valves per boiler per Rule 11.35 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

Donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Distance between boilers 24" Is oil fuel carried in the double bottom under boilers no

Distance between shell of boiler and tank top plating 20" Is the bottom of the boiler insulated no

Internal dia. of boilers 13-6 3/4 Length 10-6 Shell plates: Material steel Tensile strength 28-32

Are the shell plates welded or flanged no Description of riveting: circ. seams double

Diameter of rivet holes in circ. seams 1 3/16 Pitch of rivets 3 1/8

Percentage of strength of circ. intermediate seam plate 66.0

Working pressure of shell by Rules 182 lbs

Percentage of strength of longitudinal joint plate 85.83

No. and Description of Furnaces in each Boiler 3 brightons

Tensile strength 26-30 tons Smallest outside diameter 35"

Thickness of plates 1 5/16 Description of longitudinal joint welded

Working pressure of furnace by Rules 191 lbs

Material steel Tensile strength 26-30 Thickness 1 1/4 Pitch of stays 24" x 17 3/4

Working pressure by Rules 182 lbs

Material steel Tensile strength 26-30 Thickness 1 1/16

Pitch across wide water spaces 14 1/2" x 9" Working pressure 182 lbs

Material steel Tensile strength 28-32 tons Depth and thickness of girder

Length as per Rule 30" Distance apart 10 1/2" No. and pitch of stays

Working pressure by Rules 185 lbs Combustion chamber plates: Material steel

Thickness: Sides 1 1/16 Back 1 1/16 Top 1 1/16 Bottom 1 3/16

Are stays fitted with nuts or riveted over nuts

Material steel Tensile strength 26-30 tons

Material steel Tensile strength 26-30 tons Thickness 1 1/16

Are stays fitted with nuts or riveted over nuts

Material steel Tensile strength 28-32 tons

Material steel Tensile strength 26-30 tons

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Material steel Tensile strength 26-30 tons

W 472-0129

REPORT ON BOILERS

Working pressure by Rules 184 Are the stays drilled at the outer ends No Margin stays: Diameter $\left\{ \begin{array}{l} \text{At turned off part} \\ \text{or} \\ \text{Over threads} \end{array} \right. \frac{1\frac{1}{8}}{1\frac{1}{8}}$

No. of threads per inch 9 Area supported by each stay 11" x 10\frac{5}{8}" Working pressure by Rules 182.5 lbs

Tubes: Material Crown External diameter $\left\{ \begin{array}{l} \text{Plain} \\ \text{Stay} \end{array} \right. \frac{3\frac{1}{4}}{3\frac{1}{4}}$ Thickness $\left\{ \begin{array}{l} \text{8.5WG} \\ \frac{5}{16} \times \frac{1}{4} \end{array} \right. \text{No. of threads per inch } \frac{9}{9}$

Pitch of tubes 4\frac{3}{4}" + 4\frac{1}{2}" Working pressure by Rules 190 lbs Manhole compensation: Size of opening in shell plate 16" x 12" Section of compensating ring Flanged No. of rivets and diameter of rivet holes 36 Rivets - 1\frac{7}{16}"

Outer row rivet pitch at ends 9\frac{1}{2}" Depth of flange if manhole flanged 4" 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 $\left\{ \begin{array}{l} \text{Plate} \\ \text{Rivets} \end{array} \right. \frac{-}{-}$

Internal diameter - Working pressure by Rules - Thickness of crown - No. and diameter of stays -

How connected to shell - Inner radius of crown - Working pressure by Rules -

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 None Manufacturers of $\left\{ \begin{array}{l} \text{Tubes} \\ \text{Steel castings} \end{array} \right. \frac{-}{-}$

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 No.

FOR THE NORTH EASTERN MARINE ENGINEERING CO. LTD.
The foregoing is a correct description.
Stephenson Manufacturer.
Commercial Manager

Dates of Survey $\left\{ \begin{array}{l} \text{During progress of work in shops} \\ \text{while building} \end{array} \right. \left\{ \begin{array}{l} \text{---} \\ \text{---} \end{array} \right.$ See Machinery Report

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.)

These boilers were constructed under special survey. The materials & workmanship are sound and good. They were subjected to a hydraulic test with satisfactory results and have been efficiently installed on the steamer "Gyille Darnede". The safety valves were adjusted under steam.

Survey Fee £	:	When applied for,	192
Travelling Expenses (if any) £	:	When received,	192

See Machinery Report

Rlee Amess
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 21 OCT 1924

Assigned

