

Rpt. 5a.

REPORT ON BOILERS.

No. 77162.

WFD. 24 OCT. 1923

Received at London Office

Date of writing Report 22nd Oct 1923 When handed in at Local Office 22nd Oct 1923 Port of NEWCASTLE-ON-TYNE

No. in Survey held at South Shields Date, First Survey Last Survey 192
Reg. Book. 40874 on the SS. "SARNIA" (Number of Visits ✓) Tons { Gross 710.
Net 320.

Master Built at So. Shields By whom built C. Penfoldson & Co. Yard No. 198 When built 1923.
Engines made at Dundee By whom made Bazgeren & Co. Engine No. 118 When made 1923.
Boilers made at Stockton-on-Tees By whom made Riley Bros. & Co. Boiler No. 5473 When made 1923.
Nominal Horse Power Owners B. Dony & Sons. Port belonging to Guernsey.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record)
Total Heating Surface of Boilers 1958 sq. ft. Is forced draught fitted No. Coal or Oil fired Coal.
No. and Description of Boilers 200. Single Ended Multitubular Working Pressure 180 lbs.
Tested by hydraulic pressure to Date of test No. of Certificate 6329. Can each boiler be worked separately Yes!
Area of Firegrate in each Boiler 34.4 sq. ft. No. and Description of safety valves to each boiler 2. Spring Loaded.
Area of each set of valves per boiler { per Rule 6.28. as fitted 3970" Pressure to which they are adjusted 185 lbs. Are they fitted with easing gear Yes!
In 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 3'-6" Is oil fuel carried in the double bottom under boilers No.
Smallest distance between shell of boiler and tank top plating ✓ Is the bottom of the boiler insulated No.
Largest internal dia. of boilers Length Shell plates: Material Tensile strength
Thickness Are the shell plates welded or flanged Description of riveting: circ. seams { end
inter.
long. seams Diameter of rivet holes in { circ. seams Pitch of rivets {
long. seams
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
Tube plates: Material { front back Tensile strength { Thickness {
Mean pitch of stay tubes in nests Pitch across wide water spaces Working pressure { front
back
Girders to combustion chamber tops: Material Tensile strength Depth and thickness of girder
at centre Length as per Rule Distance apart No. and pitch of stays
in 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, No. of threads per inch Area supported by each stay
or Over threads
Working pressure by Rules Screw stays: Material Tensile strength
Diameter { At turned off part, No. of threads per inch Area supported by each stay
or Over threads

004556-00 4563-0241

© 2020

Lloyd's Register
Foundation

Date of work
No. in
Reg. Book
Master
Engines
Boilers
Register
Nom. Ho
NGIN
Dia. of
Is the sc
the p
between
liners an
Dia. of T
collars
No. of
No. of
No. of
In Eng
No. of B
Are all
Are all
Are the
Are the
What p
Are all
Are the
Is the
BOIL
Total
Worki
Can ea
each bo
Smaller
Thickn
long. s
Per ce
Size of
Length
Work
Pitch
Mater
Mater
Area
Thick
Diam
Pitch
thick
Wor
Diam
Pitch
UPI
Date
Diam

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 _____ Stay _____ Thickness { _____ No. of threads per inch _____

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 _____ 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 _____

The foregoing is a correct description,

Manufacturer _____

Dates of Survey { During progress of work in shops - - } _____ Are the approved plans of boiler and superheater forwarded herewith _____ (If not state date of approval.) _____

while building { During erection on board vessel - - } _____ Total No. of visits _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have now been efficiently installed and fastened on the SS. "Sarmia". The safety valves have been adjusted under steam to the approved working pressure.*

For missing particulars see Middlesbrough Rpt Nos 11670 & 11671.

Survey Fee ... £ : : When applied for, 192

Travelling Expenses (if any) £ ✓ : : When received, 192

L. Piskett.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 26 OCT. 1923

Assigned _____