

REPORT ON BOILERS.

No. 54690

-4 JUL 1934

Received at London Office

Date of writing Report 22.6.34 When handed in at Local Office 23.6.34 Port of Glasgow

No. in Survey held at 6 bank, Gls. & Bowling Date, First Survey 13.2.34 Last Survey 21.6.34
P. Book. S.S. "Brown" (Number of Visits 28) Gross 347 Tons Net 121

Master Built at Bowling By whom built Scott & Sons Yard No. 325 When built 1934
Engines made at Glydebank By whom made Ritchison Blair & Co Engine No. 186 When made 1934
Boilers made at Glasgow By whom made D. Howan & Co Boiler No. 392 When made 1934
Nominal Horse Power 79 Owners Rickel S.S. Co. Ltd Port belonging to Henry

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY. See Gls Report No 54408

Manufacturers of Steel (Letter for Record)

Total Heating Surface of Boilers Is forced draught fitted Coal or Oil fired

Type and Description of Boilers 1. Multitubular. Working Pressure 205

Tested by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 1. double spring loaded.

Area of each set of valves per boiler {per Rule 8.44 as fitted 9.8"} Pressure to which they are adjusted 210 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 42" Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating Open floors 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 long. seams Pitch of rivets

Percentage of strength of circ. end seams {plate rivets Percentage of strength of circ. intermediate seam {plate rivets

Percentage of strength of longitudinal joints {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

Lean 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

At 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

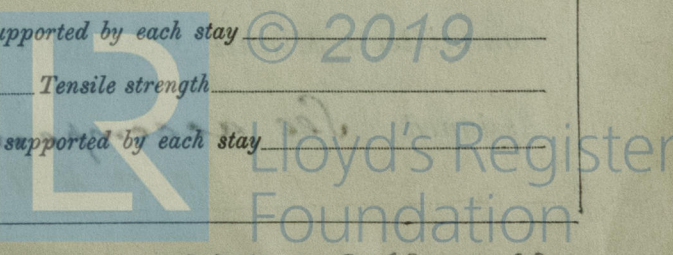
Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength

Diameter {At body of stay, or Over threads No. of threads per inch Area supported by each stay

Working pressure by Rules Screw stays: Material Tensile strength

Diameter {At turned off part, or Over threads No. of threads per inch Area supported by each stay



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 _____
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 _____
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 22 inclusive for boilers been complied with _____

The foregoing is a correct description, _____
Manufactured by _____

Dates of Survey { During progress of work in shops - - } Are 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 _____

Is this Boiler a duplicate of a previous case _____ If so, state Vessel's name and Report No. _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been securely fitted on board and the safety valves adjusted under steam.*

Survey Fee ... £ : : When applied for, 19 _____
Travelling Expenses (if any) £ : : When received, 19 _____

Jas. Cairns,
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *GLASGOW 3 JUL 1934* *CD*
Assigned *See accompanying machinery report.*