

REPORT ON BOILERS.

No. 22433

Received at London Office

113 JUL 1944

Date of writing Report 30th JUNE 1944. When handed in at Local Office 30th JUNE 1944. Port of Greenock

No. in Survey held at Greenock Date, First Survey 15th JULY 1943. Last Survey 30th JUNE 1944
 eg. Book. (Number of Visits) Gross 7201
 Tons Net 4946

on the EMPIRE TALISMAN.

built at Port Glasgow By whom built Lithgous Ltd
 Engines made at Glasgow By whom made Harland & Wolff Ltd
 Boilers made at Glasgow By whom made Fairfield S.B. & E. Co Ltd
 Auxiliary at Greenock. By whom made Rankin & Blackburne Ltd
 Nominal Horse Power Owners Ministry of War Transport
 Yard No. 997. When built 1944
 Engine No. 8370 When made 1944
 505667 A71
 Boiler No. 495 When made 1944
 Port belonging to Greenock.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record)
 Total Heating Surface of Boilers Is forced draught fitted Coal or Oil fired
 No. and Description of Boilers Working Pressure

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
 Area of each set of valves per boiler {per Rule as fitted Pressure to which they are adjusted 220 lbs Are they fitted with easing gear

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 2'-6" Is oil fuel carried in the double bottom under boilers No.
 Smallest distance between shell of boiler and tank top plating 2'-3" Is the bottom of the boiler insulated Yes

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 joint {plate rivets combined

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

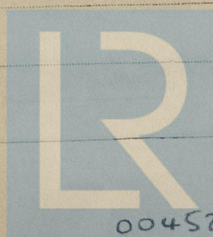
End plates in steam space: Material Tensile strength Thickness Pitch of stays
 How are stays secured
 Tube plates: Material {front back Tensile strength Thickness
 Mean pitch of stay tubes in nests Pitch across wide water spaces

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 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

Front plate at bottom: Material Tensile strength Thickness
 Thickness Lower back plate: Material Tensile strength Thickness
 Pitch of stays at wide water space Are stays fitted with nuts or riveted over

Main stays: Material Tensile strength
 Diameter {At body of stay or Over threads No. of threads per inch
 Screw stays: Material Tensile strength
 Diameter {At turned off part or Over threads No. of threads per inch



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Are the stays drilled at the outer ends _____

Margin stays: Diameter { At turned off part, _____
or
Over threads _____

No. of threads per inch _____

Tubes: Material _____ External diameter { Plain _____
Stay _____ Thickness { _____ No. of threads per inch _____

Pitch of tubes _____

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 _____ Thickness of crown _____ No. and diameter of Engines made _____

stays _____ Inner radius of crown _____ Boilers made _____

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 Smoke tube Manufacturers of { Tubes The Weldless Steel Tube Co.
Steel forgings Steel Peck & Tozer
Steel castings _____

Number of elements 120 Material of tubes S. D. Steel Internal diameter and thickness of tubes 22/17 mm.

Material of headers M. S. Tensile strength 28/32 tons Thickness 3/4" Can the superheater be shut off and _____

the boiler be worked separately Yes Is a safety valve fitted to every part of the superheater which can be shut off from the boiler Yes

Area of each safety valve 3 1/4 sq" Are the safety valves fitted with easing gear Yes

Pressure to which the safety valves are adjusted 220 lbs Hydraulic test pressure: _____

tubes 1000 lbs forgings and castings 660 lbs and after assembly in place 550 lbs Are drain cocks or _____

valves fitted to free the superheater from water where necessary Yes

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with Yes

The foregoing is a correct description,
Rankin & Blackmore Ltd. Manufacturer.
J. H. Smith Managing Director.

SEE MACHINERY REPORT

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

while building { During erection on board vessel - - - } _____

Are the approved plans of boiler and superheater forwarded herewith (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.) These superheat leaders and elements have been fitted to the 2 main boilers on Glasgow Report No 66375. They have been tested after fitting in place to 550 lbs. Hydraulic

Survey Fee ... £ : : When applied for, 19

Travelling Expenses (if any) £ : : When received, 19

M. Caldwell
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 11 JUL 1944

Assigned _____