

REPORT ON BOILERS.

No. 20394

Received at London Office

JUN 30 1937.

Date of writing Report 28.4.37 When handed in at Local Office 26-6-10-37 Port of Lerwick

No. in Survey held at Lerwick Date, First Survey 19th February 1934 Last Survey 21-6-1937
No. of Book. 115 " Sau Sifruano (Number of Visits) Gross 8007966
Tons Net 48004767

Master J. J. [unclear] Built at Glasgow By whom built Rylands Wood & Co. Ltd Yard No. 415 When built 1937
Engines made at Lerwick By whom made John & Richard [unclear] Engine No. 1798 When made 1937
Boilers made at ditto By whom made ditto Boiler No. 1798 When made 1937
Nominal Horse Power [unclear] Owners Eagle Oil Refining Co. Ltd Port belonging to London

MULTITUBULAR BOILERS - [unclear], AUXILIARY, [unclear].

Manufacturers of Steel Bolville Steel Co of Scotland & Glasgow Iron Co. (Letter for Record S)

Total Heating Surface of Boilers 3380 Is forced draught fitted Yes Coal or Oil fired Oil

No. and Description of Boilers 2 Single Ended Dry Back Working Pressure 180

Tested by hydraulic pressure to 320 Date of test 23.4.37 No. of Certificate 2182 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler Oil Fuel No. and Description of safety valves to each boiler 2 Double Spring

Area of each set of valves per boiler { per Rule 10.8 as fitted 11.8 Pressure to which they are adjusted 185 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 17 Is oil fuel carried in the double bottom under boilers Yes

Smallest distance between shell of boiler and tank top plating 24 Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 12-1" Length 10-3" Shell plates: Material S Tensile strength 29-33

Thickness 1" Are the shell plates welded or flanged Yes Description of riveting: circ. seams { end DR inter. [unclear]

Long. seams T R O D B S Diameter of rivet holes in { circ. seams 1 1/16" long. seams 1 1/32" Pitch of rivets { 3-054

Percentage of strength of circ. end seams { plate 65.2 rivets 45.6 Percentage of strength of circ. intermediate seam { plate 85.25 rivets 88.6

Percentage of strength of longitudinal joint { plate 88.6 rivets 88.2 Working pressure of shell by Rules 186

Thickness of butt straps { outer 3/4" inner 7/8" No. and Description of Furnaces in each Boiler 2 Morrison's

Material S Tensile strength 26-30 Smallest outside diameter 3-4"

Length of plain part { top [unclear] bottom [unclear] Thickness of plates { crown 1 1/2" bottom [unclear] Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 180

End plates in steam space: Material S Tensile strength 26-30 Thickness 3/8" Pitch of stays 22

How are stays secured DN & Washers Working pressure by Rules 219

Tube plates: Material { front S back S Tensile strength { 26-30 Thickness { 15/16"

Lean pitch of stay tubes in nests 9-375 Pitch across wide water spaces 14 1/2" Working pressure { front 193 back 193

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 S Tensile strength 26-30

Thickness 15/16" Lower back plate: Material S Tensile strength 26-30 Thickness 15/16"

Pitch of stays at wide water space 1-2 1/2" Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material S Tensile strength 28-32

Diameter { At body of stay, 3 3/8" No. of threads per inch 6 Area supported by each stay 484"

Working pressure by Rules 186 Screw stays: Material Tensile strength

Diameter { At turned off part, 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 S External diameter Plain 2 1/2" Thickness 9 WG No. of threads per inch 9

Pitch of tubes 3 3/4" x 3 3/4" Working pressure by Rules 184 Manhole compensation: Size of opening

shell plate 16 1/2" x 20 1/2" Section of compensating ring 2-10 1/2" x 2.65" x 1/16" No. of rivets and diameter of rivet holes 38 at 1 1/4"

Outer row rivet pitch at ends 8" Depth of flange if manhole flanged 3 1/2" 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 from the boiler or 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,
For JOHN G. KINCAID & CO. LIMITED.
Robert Green Director.

Dates of Survey During progress of work in shops - - - Are the approved plans of boiler and superheater forwarded herewith yes
 while building During erection on board vessel - - - (If not state date of approval.)
See Machinery Report Total No. of visits _____

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. "Saubal" No. Repl. No. 20318

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Boilers have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality & they have now been securely fitted on board. This Report accompanies that of the Machinery

Survey Fee £ 100 When applied for, _____ 19____
Traveling Expenses (if any) £ 100 When received, _____ 19____

W. Gordon-Maclean
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 29 JUN 1937

Assigned SEE ACCOMPANYING MACHINERY REPORT.

