

REPORT ON BOILERS.

No. 20699

Received at London Office FEB 22 1939

Date of writing Report 21. 12. 38 When handed in at Local Office 16th FEBRUARY 1939 Port of Greenock

No. in Survey held at Greenock Date, First Survey 25th JULY 1938 Last Survey 15th FEBRUARY 1939

Reg. Book. M/S 'San Eliseo' (Number of Visits) Tons { Gross 8041.54
Net 4985.91

Master _____ Built at P. Glasgow By whom built L. Glasgow L^d Yard No. 916 When built 1939
Engines made at Greenock By whom made John Macdonald & Co Engine No. 11123 When made 1934
Boilers made at ditto By whom made ditto Boiler No. 11123 When made 1939
Nominal Horse Power _____ Owners Eagle Oil Refining Co L^d Port belonging to London

MULTITUBULAR BOILERS ~~MAIN~~, AUXILIARY, ~~OR DONKEY~~

Manufacturers of Steel Salvill Steel Co of Scotland (Letter for Record S)

Total Heating Surface of Boilers 3800 sq ft Is forced draught fitted Yes Fuel or Oil fired oil

No. and Description of Boilers 2 Single ended Working Pressure 180

Tested by hydraulic pressure to 320 Date of test 24/11/38 No. of Certificate 2171 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 12.8 as fitted 14.12 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 2'-0" Is oil fuel carried in the double bottom under boilers No

Smallest distance between shell of boiler and tank top plating 17'-0" Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers 12'-6" Length 11'-0" Shell plates: Material S Tensile strength 29.33

Thickness 1 1/32" Are the shell plates welded or flanged Description of riveting: circ. seams { end OR inter. OR

long. seams T.R.D.B.S Diameter of rivet holes in { circ. seams 1 1/16" long. seams 1 1/32" Pitch of rivets { 3.000" 7"

Percentage of strength of circ. end seams { plate 64.6 rivets 45.3 Percentage of strength of circ. intermediate seam { plate 85.26 rivets 86

Percentage of strength of longitudinal joint { plate 85.26 rivets 86 combined 87.42 Working pressure of shell by Rules 183

Thickness of butt straps { outer 1 3/16" inner 1 5/16" No. and Description of Furnaces in each Boiler 2 Deighton's

Material S Tensile strength 26-30 Smallest outside diameter 3' 6 1/4"

Length of plain part { top ✓ bottom ✓ Thickness of plates { crown 1 7/32" bottom 1 7/32" Description of longitudinal joint weld

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 185

End plates in steam space: Material S Tensile strength 26-30 Thickness 1 1/8" Pitch of stays 19" x 16 1/2"

How are stays secured D.N.W Working pressure by Rules 186

Tube plates: Material { front S back S Tensile strength { 26-30 Thickness { 2 3/32" 1 5/16"

Mean pitch of stay tubes in nests 9 1/2" Pitch across wide water spaces 13 1/2" Working pressure { front 185 back 192

Girders to combustion chamber tops: Material S Tensile strength 29.33 Depth and thickness of girder at centre 8 1/2" x 3 1/4" (2)

Length as per Rule 2' - 4 5/8" Distance apart 8 1/2" No. and pitch of stays in each 3 at 4 3/4"

Working pressure by Rules 208 Combustion chamber plates: Material S

Tensile strength 26-30 Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 3 1/4"

Pitch of stays to ditto: Sides 4 3/4" x 8 1/4" Back 9" x 9" Top 4 3/4" x 8 1/2" Are stays fitted with nuts or riveted over Nuts

Working pressure by Rules 185 Front plate at bottom: Material S Tensile strength 26-30

Thickness 1 5/16" Lower back plate: Material S Tensile strength 26-30 Thickness 1 3/16"

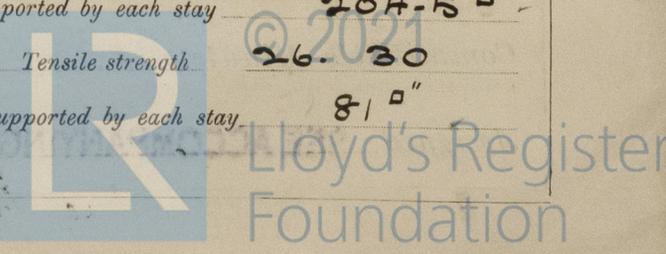
Pitch of stays at wide water space 14" Are stays fitted with nuts or riveted over Nuts

Working Pressure 193 Main stays: Material S Tensile strength 28-32

Diameter { At body of stay, 2 3/4" or 2 3/4" No. of threads per inch 6 Area supported by each stay 204" x 15 0"

Working pressure by Rules 208 Screw stays: Material S Tensile strength 26-30

Diameter { At turned off part, 1 5/8" or 1 5/8" No. of threads per inch 9 Area supported by each stay 81 0"



Working pressure by Rules 184 Are the stays drilled at the outer ends no Margin stays: Diameter 1 3/4"
 No. of threads per inch 9 Area supported by each stay 99 sq" Working pressure by Rules 183
 Tubes: Material S External diameter 2 1/2" Thickness 9WG 11/32" 5/16" No. of threads per inch 9
 Pitch of tubes 3 3/4" x 3 7/8" Working pressure by Rules 184 Manhole compensation: Size of opening in
 shell plate 16 1/2" x 20 1/2" Section of compensating ring 2-10 1/2" x 2-6 1/2" x 1 1/8" No. of rivets and diameter of rivet holes 26 at 1 1/4"
 Outer row rivet pitch at ends 8 3/16" 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 forgings 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 forgings and 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.
W. G. Kincaid Director/Manufacturer.

Dates of Survey During progress of work in shops - -
while building During erection on board vessel - - -
 SEE MACHINERY REPORT
 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 no If so, state Vessel's name and Report No. ✓

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 material & workmanship are of good quality. They have now been securely fitted on board.
This Report accompanies that of the Machinery

Survey Fee Charged on Maily Report
 Travelling Expenses (if any) : :
 When applied for, 19
 When received, 19

W. G. Kincaid
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 21 FEB 1939
 Assigned SEE ACCOMPANYING MACHINERY REPORT.

