

# REPORT ON BOILERS.

No. 31983

Received at London Office

17 DEC 1936

16 DEC. 1936

Port of

Sunderland.

Sunderland

Date, First Survey

Last Survey 18 Dec 1936

Screw Steamer "GENERTON"

(Number of Visits) Gross 4797  
Tons Net 2800

Built at Sunderland By whom built Short Bros. Ltd. Yard No. 448. When built 1936

made at Sunderland By whom made G. Clark (1936) Ltd. Engine No. 1202 When made 1936

made at Sunderland By whom made G. Clark (1936) Ltd. Boiler No. 1202 1/2 When made 1936.

Horse Power 408. Owners The Earlton Steamship Co. Ltd. Port belonging to Newcastle.

Donkey Boilers. See Addn 31/12/36

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

The Steel Company of Scotland

(Letter for Record S.

Heating Surface of Boilers 1344 sq ft Is forced draught fitted no. Coal or Oil fired Coal.

Description of Boilers One Single Ended multitubular marine Working Pressure 220.

Tested by hydraulic pressure to 380 Date of test 16/11/36 No. of Certificate 4209. Can each boiler be worked separately

of Firegrate in each Boiler 34.5 sq ft No. and Description of safety valves to each boiler Two backburn High Lift.

of each set of valves per boiler 3.65 as fitted 3.52 Pressure to which they are adjusted Are they fitted with easing gear Yes.

se of donkey boilers, state whether steam from main boilers can enter the donkey boiler no.

test distance between boilers or uptakes and bunkers or woodwork (fitted above) Is oil fuel carried in the double bottom under boilers no.

test distance between shell of boiler and tank top plating in separate house. Is the bottom of the boiler insulated Yes.

est internal dia. of boilers 12'-3 19/32" Length 10'-6" Shell plates: Material Steel Tensile strength 29/33.

ness 1 13/64" Are the shell plates welded or flanged no. Description of riveting: circ. seams end D.R. Lap.

seams T.R.D.B.S. Diameter of rivet holes in circ. seams F. 1 3/16" B. 1 1/4" Pitch of rivets F. 3 1/16" B. 3 1/2"

entage of strength of circ. end seams plate F. 65.6 B. 64.0 rivets F. 42.4 B. 45.8 Percentage of strength of circ. intermediate seam plate

entage of strength of longitudinal joint plate 85.04 rivets 90.2 Working pressure of shell by Rules 221.

thickness of butt straps outer 15/16" inner 1 1/16" No. and Description of Furnaces in each Boiler Two corrugated (Leighton).

erial Steel Tensile strength 26/30. Smallest outside diameter 43 1/16"

length of plain part top 2 1/32" bottom 2 1/32" Description of longitudinal joint Weld.

ensions of stiffening rings on furnace or on bottom Working pressure of furnace by Rules 223.

plates in steam space: Material Steel Tensile strength 26/30 Thickness 1 3/4" 1 3/8" See Addn 31/12/36

are stays secured Double nuts. Working pressure by Rules 224.

e plates: Material front Steel Tensile strength 26/30. Thickness 2 1/32"

n pitch of stay tubes in nests 11 1/4" x 8 3/4" Pitch across wide water spaces 14 1/4" Working pressure front 34.

ders to combustion chamber tops: Material Steel Tensile strength 29/33. Depth and thickness of girder

entre 4 3/4" x 1 3/4" Length as per Rule 2'-6" Distance apart 9" No. and pitch of stays

ach 2 @ 9 1/2" Working pressure by Rules 225. Combustion chamber plates: Material Steel.

side strength 26/30. Thickness: Sides 4 1/2" Back 4 1/2" Top 4 1/2" Bottom 2 1/32"

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

orking pressure by Rules 221. Front plate at bottom: Material Steel Tensile strength 26/30.

ckness 1" Lower back plate: Material Steel Tensile strength 26/30 Thickness 1"

h of stays at wide water space 15" x 9 3/8" Are stays fitted with nuts or riveted over nuts.

orking Pressure 264. Main stays: Material Steel Tensile strength 28/32.

meter At body of stay, 2 1/8" 2 3/4" No. of threads per inch 6 Area supported by each stay

Over threads 3 1/4" 3 1/8" Screw stays: Material Steel Tensile strength 26/30.

orking pressure by Rules 245 229 At turned off part, 1 1/8" No. of threads per inch 9 Area supported by each stay

Over threads 1 1/8"

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Lloyd's Register Foundation



Working pressure by Rules 249. Are the stays drilled at the outer ends No. Margin stays: Diameter { At turned off part. Over threads 2" 2 1/4" ✓  
No. of threads per inch 9. Area supported by each stay 12" x 9 3/8", 12" x 12 3/16" Working pressure by Rules 220, 222 ✓  
Tubes: Material S.D. Steel External diameter { Plain 3 1/4" Thickness 5/16" 3/8" No. of threads per inch 9. ✓  
Pitch of tubes 4 1/2" x 4 3/8" Working pressure by Rules 286, 255, 230. ✓ Manhole compensation: Size of opening in  
shell plate 16" x 12" Section of compensating ring 8 1/2" x 1 1/6" No. of rivets and diameter of rivet holes 32 @ 1 1/4" ✓  
Outer row rivet pitch at ends 8 3/8" Depth of flange if manhole flanged ✓ Steam Dome: Material None. ✓  
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 none. 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 Yes.

The foregoing is a correct description,  
FOR GEORGE CLARK (1936) LTD.  
Manufacturer.

Dates of Survey { During progress of work in shops - - - Please see Incls. Rpt. Are the approved plans of boiler and superheater forwarded herewith Yes.  
while building { During erection on board vessel - - - (If not state date of approval.)  
Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)  
This boiler has been constructed under Special Survey in accordance with the approved plan & the rules of the Society.  
The materials & workmanship are good. On completion the boiler was tested by hydraulic pressure of 380 lbf/sq. in. & found tight & sound & securely fixed on board the vessel.  
For recommendation please see Incls. Rpt.

Survey Fee ... £ See Incls. Rpt. When applied for, 192  
Travelling Expenses (if any) £ Rpt. When received, 192  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 18 DEC 1936 THURS. 31 DEC 1936  
Assigned Lee minute on F.E. M.

