

REPORT ON BOILERS.

No. 19100.

Received at London Office

Date of writing Report

1929

When handed in at Local Office

3rd October 1929

Port of

Greenock

No. in Survey held at

Reg. Book.

Greenock

Date, First Survey

16th October 1928

Last Survey

1st October 1929

1929

on the

TS/MS "Arthur's Count"

(Number of Visits)

Tons

Gross 8882.30.

Net 5259.31.

Master

Built at

P^r Elangou

By whom built

R Duncan & Co

Yard No.

When built

1929

Engines made at

Greenock

By whom made

John & Macdonald & Co

Engine No.

When made

1929

Boilers made at

ditto

By whom made

ditto

Boiler No.

When made

1929

Nominal Horse Power

✓

Owners

United Motors Co Ltd

Port belonging to

Liverpool

MULTITUBULAR BOILERS — ~~STEAM~~, AUXILIARY, ~~STEAM~~ ENGINE.

Manufacturers of Steel

Usines Metallurgiques du Hamant, Societe Anonyme
Bargo Fleet Hou Co Ltd of Scotland

(Letter for Record)

S

Total Heating Surface of Boilers

1823 ft²

Is forced draught fitted

yes

Fuel or Oil fired

oil

No. and Description of Boilers

one single ended

Working Pressure

180 lb

Tested by hydraulic pressure to

320 lb

Date of test

26.9.29

No. of Certificate

1879

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

oil fuel

No. and Description of safety valves to each boiler

Double spring

Area of each set of valves per boiler

per Rule

14.02.9"

as fitted

14.13.9"

Pressure to which they are adjusted

185 lb

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

15.0"

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

14.11.2"

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

13.4.7.8"

Length

11.0"

Shell plates: Material

S

Tensile strength

28-32

Thickness

1.18"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

end

DR

long. seams

TR + DBS

Diameter of rivet holes in

circ. seams

1.14"

long. seams

1.3.16"

Pitch of rivets

3.8.5.5"

8.3.18"

Percentage of strength of circ. end seams

plate

64.5

rivets

46.5

Percentage of strength of circ. intermediate seam

plate

86.82

rivets

90.5

Percentage of strength of longitudinal joint

plate

86.82

rivets

90.5

Working pressure of shell by Rules

184

Thickness of butt straps

outer

1.18"

No. and Description of Furnaces in each Boiler

3 Delightous

Material

S

Tensile strength

26-30

Smallest outside diameter

3.0.15.16"

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

weld

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules

182

End plates in steam space: Material

S

Tensile strength

26-30

Thickness

1.3.32"

Pitch of stays

18.2" x 18.2"

How are stays secured

D N + washers

Working pressure by Rules

182

Tube plates: Material

front

back

S

Tensile strength

26-30

Thickness

2.3.32"

Mean pitch of stay tubes in nests

10.8

Pitch across wide water spaces

14"

Working pressure

front

192

back

188

Girders to combustion chamber tops: Material

S

Tensile strength

28-32

Depth and thickness of girder

at centre

9.1.2.7.8(2)

Length as per Rule

27.62

Distance apart

8.1.2"

No. and pitch of stays

in each

3 at 9"

Working pressure by Rules

204

Combustion chamber plates: Material

S

Tensile strength

26-30

Thickness: Sides

2.1.32"

Back

2.1.32"

Top

2.1.32"

Bottom

2.1.32"

Pitch of stays to ditto: Sides

9.9.1.4"

Back

8.1.2.9"

Top

8.1.2.9"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

183

Front plate at bottom: Material

S

Tensile strength

26-30

Thickness

1"

Lower back plate: Material

S

Tensile strength

26-30

Thickness

2.5.32"

Pitch of stays at wide water space

1.3.3.4"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

183

Main stays: Material

S

Tensile strength

28-32

Diameter

At body of stay,

or

Over threads

No. of threads per inch

6

Area supported by each stay

342.5"

Working pressure by Rules

196

Screw stays: Material

S

Tensile strength

26-30

Diameter

At turned off part,

or

Over threads

No. of threads per inch

9

Area supported by each stay

76.5"

002215-002221-0036

Lloyd's Register
Foundation

PILLARS
" "
" "
" "
" "
Centre
Stiffen
Plating
STRINGER
Upper
Stringer
" "
" "
Thick
in w
Thick
in w
Thick
If She
Second
String
STR
FLAT PLAT
" "
BOTTOM P
of Strak
BILGE PLA
Strakes
SIDE PLA
Strakes
UPPER DI
strake
UPPER DI
strake
STRAKE B
strake
STRAKE B
strake
POOP SIDE
BRIDGE S
FORECASTLE
Total No
MIDSH
" "
" "
" "
COLLIS
AFTER
STEE

Working pressure by Rules 198 Are the stays drilled at the outer ends 80 Margin stays: Diameter { At turned off part, 13/4" Over threads }
No. of threads per inch 9 Area supported by each stay 100.62 A" Working pressure by Rules 181
Tubes: Material Iron External diameter { Plain } 3" Thickness { 9 WG 11/4 + 5/16 } No. of threads per inch 9
Pitch of tubes 45/16 + 43/16 Working pressure by Rules 192 Manhole compensation: Size of opening in
shell plate 20 1/2 + 16 1/2 Section of compensating ring 2-11 + 2-7 + 13/16 No. of rivets and diameter of rivet holes 26 at 15/16
Outer row rivet pitch at ends 8 3/4 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 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

FOR JOHN G. KINCAID & COY. LIMITED

The foregoing is a correct description,

W. Gordon-Mitchell
DIRECTOR

Manufacturer

Dates { During progress of work in shops - - } Are the approved plans of boiler forwarded herewith Yes
while building { During erection on board vessel - - } (If not state date of approval.)
SEE MACHINERY REPORT. Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Boiler has been built under Special Survey in accordance with the approved plan and the workmanship & material are of good quality, it is now securely fitted on board. This Rept. accompanies that of the Machinery (Duplicate K 34. 1/3 "Auld ducks" look Rept. 19014)

Survey Fee charged on Machinery Rept. : When applied for, 192
When received, 192

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

Committee's Minute GLASGOW 8 OCT 1929
Assigned See accompanying machinery report.