

REPORT ON BOILERS.

No. 425

16 SEP 1930

Received at London Office

Date of writing Report 16th Sep. 1930 When handed in at Local Office

19 Port of Sheffield

No. in Reg. Book Survey held at Sheffield

Date, First Survey 24th July

Last Survey 15th Sep. 1930

(Number of Visits 6) Gross Tons Net

on the

uilt at

By whom built Breunel Vulcan

Yard No. 694 When built

Engines made at

By whom made

Engine No. When made

Boilers made at

Sheffield

By whom made Messrs. Davy Bros. Ltd.

Boiler No. 3126/7 When made 1930

Order & Carriers

Clarkson Thimble Tube Boilers Co.

Contract Port belonging to No. 408 & 409

VERTICAL DONKEY BOILER.

Made at Sheffield By whom made Davy Bros. Boiler No. 3126/7 When made 1930 Where fixed

Manufacturers of Steel Park Gate Iron & Steel Co.

Manufacturers Heating Surface of Boiler

270 # each

Is forced draught fitted

Coal or Oil fired Exhaust-gas

No. and Description of Boilers

2 Clarkson Thimble Tube

Working pressure 100 lbs.

Tested by hydraulic pressure to 200 lbs.

Date of test 15-9-30

No. of Certificate 527 & 528

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

One 2" double spring

Area of each set of valves per boiler

per rule 3.51 sq. ft.
as fitted 6.28

Pressure to which they are adjusted

Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler

Smallest distance between boiler or uptake and bunkers

woodwork

Is oil fuel carried in the double bottom under boiler

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

Largest internal dia. of boiler 5'-0" Height 9'-3 3/8"

Shell plates: Material

O.H. Steel

Tensile strength 28-32

Thickness

7/16"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

top S.R. lap
end bottom D.R. lap
inter. S.R. lap

long. seams D.R. lap

Dia. of rivet holes in

circ. seams 13/16"
long. seams 13/16"

Pitch of rivets

1 7/8"
2-6 & 2-6

Percentage of strength of circ. seams

plate 56
rivets 51

of Longitudinal joint

plate 69
rivets 74
combined

Working pressure of shell by rules

133 lbs.

Thickness of butt straps

outer
inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat

dished

Material O.H. Steel

Tensile strength 26-30

Thickness

9/16"

Radius 4'-6"

Working pressure by rules 122 lbs.

Description of Furnace: Plain, spherical, or dished crown

dished crown

Material O.H. Steel

Tensile strength 26-30

Thickness

13/16"

External diameter

top 4'-1 5/8"
bottom 4'-6 1/4"

Length as per rule 4'-6 1/4"

Working pressure by rules 125 lbs.

Pitch of support stays circumferentially

and vertically

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Radius of spherical or dished furnace crown

3'-8" Working pressure by rule 117 lbs.

Thickness of Ogee Ring

Diameter as per rule

D
a

Working pressure by rule 117 lbs.

Combustion Chamber: Material

Tensile strength

Thickness of top plate

Radius if dished

Working pressure by rule

Thickness of back plate

Diameter if circular

Length as per rule

Pitch of stays

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Working pressure of back plate by rules

Tube Plates: Material

O.H. Steel

Tensile strength 26-30

Thickness

13/16"

Mean pitch of stay tubes in nests

comprising shell, Dia. as per rule

front
back

Pitch in outer vertical rows

3"

Dia. of tube holes

FRONT
stay
plain

BACK
stay
plain

each alternate tube in outer vertical rows a stay tube

Working pressure by rules

Orders 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

Working pressure by rule

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W 44-0016

Crown stays: Material ☒ Tensile strength ☒ Diameter ☒ at body of stay, or over threads. ☒
 No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒
Screw stays: Material ☒ Tensile strength ☒ Diameter ☒ at turned off part, or over threads. ☒ No. of threads per inch ☒
 Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒
Tubes: Material Steel External diameter 5.57" circular Thickness 9 8/16"
 No. of threads per inch ☒ Pitch of tubes 3" vertical Working pressure by rules ☒
Manhole Compensation: Size of opening in shell plate 10" x 9" Section of compensating ring 3" x 1 1/4" No. of rivets and diameter of rivet holes 16 - 15/16 Outer row rivet pitch at ends 2 3/4" Depth of flange if manhole flanged ☒
Uptake: External diameter ☒ Thickness of uptake plate ☒
Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

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

The foregoing is a correct description,
DAVY BROTHERS, LIMITED.

E. Astwood Manufacturer.

Dates of Survey ☒ During progress of work in shops - July 24, Aug. 6, 12, 27. Sep. 8, 15 Is the approved plan of boiler forwarded herewith ☒ (If not state date of approval.) 29 3/4
 while building ☒ During erection on board vessel - ☒ Total No. of visits 6

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These boilers have been constructed under special survey in accordance with the requirements of the Rules and the approved plans. The materials and workmanship are good.

The boilers are being despatched to Bremen.

Marked:-

Blr. 3126

Blr. 3127

No. 527

No. 528

LLOYDS TEST

LLOYDS TEST

200 lbs.

200 lbs.

W.P. 100 lbs.

W.P. 100 lbs.

L.Y. 15-9-30.

L.Y. 15-9-30.

Survey Fee ... £ 8 : 8 :

When applied for. 19

Travelling Expenses (if any) £ - :

When received, 29.11.1930

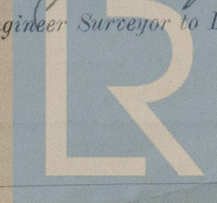
L. Young (for Self & R. W. Fawcett)
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

TUE. 25 NOV 1930

See Bmn. J.E. R. 1306



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