

REPORT ON BOILERS.

No. 16454

Received at London Office

-6 OCT. 1926

Date of writing Report

1st Oct. 1926

When handed in at Local Office

4th Oct. 1926

Port of

WEST HARTLEPOOL

No. in
Reg. Book.

Survey held at

Hartlepool.

Date, First Survey

16th April

Last Survey

2nd Oct.

1926

on the

S.S. "TALANG AKAR"

(Number of Visits)

Subsiding

Tons

Gross

Net

Master

Built at

Middlesbro.

By whom built

Furness S.B.C. & Co.

Yard No.

107

When built

1926

Engines made at

Hartlepool

By whom made

Richardsons Westgarth & Co.

Engine No.

2658

When made

1926

Boilers made at

ditto

By whom made

ditto

Boiler No.

2658

When made

1926

Nominal Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

D. Colville & Sons Ltd

(Letter for Record

S)

Total Heating Surface of Boilers

3649 sq. ft.

Is forced draught fitted

yes

Coal or Oil fired

oil

No. and Description of Boilers

Two single ended

Working Pressure

180 lb

Tested by hydraulic pressure to

320 lb

Date of test

22.7.26

No. of Certificate

3687

Can each boiler be worked separately

yes

Area of Firegrate in each Boiler

oil burning

No. and Description of safety valves to each boiler

2 direct spring

Area of each set of valves per boiler

per Rule

14.04

as fitted

16.58

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

no side bunkers

Is oil fuel carried in the double bottom under boilers

no

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Largest internal dia. of boilers

13'-0"

Length

11'-6"

Shell plates: Material

Steel

Tensile strength

28.5/32.5

Thickness

1 1/16"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end

D. Riv lap

Long. seams

D.R. D.B.S.

Diameter of rivet holes in

circ. seams

1 1/16"

long. seams

1 1/16"

Pitch of rivets

3 1/8"

7 1/4"

Percentage of strength of circ. end seams

plate

66.0

rivets

56.3 of end.

Percentage of strength of circ. intermediate seam

plate

85.35

rivets

87

Percentage of strength of longitudinal joint

plate

85.35

rivets

87

Working pressure of shell by Rules

181

Thickness of butt straps

outer

1 3/16"

inner

1 5/16"

No. and Description of Furnaces in each Boiler

2 Deightons

Material

Steel

Tensile strength

26/30

Smallest outside diameter

47 1/16"

Length of plain part

top

bottom

Thickness of plates

crown

1 1/8"

bottom

Description of longitudinal joint

welded

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

Working pressure of furnace by Rules

182

End plates in steam space: Material

Steel

Tensile strength

26/30

Thickness

1 1/16"

Pitch of stays

16 1/4" x 16 3/4"

How are stays secured

Double nuts

Working pressure by Rules

191

Tube plates: Material

front

steel

back

steel

Tensile strength

26/30

Thickness

3/8"

3/4"

Mean pitch of stay tubes in nests

9 3/8"

Pitch across wide water spaces

13 1/2" x 7 1/2"

Working pressure

front

192

back

226

Girders to combustion chamber tops: Material

Steel

Tensile strength

28 1/2/32 1/2

Depth and thickness of girder

at centre

7 1/2" x 1 3/4"

Length as per Rule

31 1/4"

Distance apart

8 1/4"

No. and pitch of stays

in each

3

7 1/4"

Working pressure by Rules

189

Combustion chamber plates: Material

Steel

Tensile strength

26/30

Thickness: Sides

23/32

Back

19/32

Top

9/16"

Bottom

23/32

Pitch of stays to ditto: Sides

8" x 10"

Back

8" x 8 3/8"

Top

8 1/4" x 7 1/4"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

780

Front plate at bottom: Material

Steel

Tensile strength

26/30

Thickness

3/8"

Lower back plate: Material

steel

Tensile strength

26/32

Thickness

13/16"

Pitch of stays at wide water space

13" x 8 3/8"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

224

Main stays: Material

Steel

Tensile strength

28/32

Diameter

At body of stay,

2 5/8"

No. of threads per inch

6

Area supported by each stay

16 1/4" x 16 3/4"

Working pressure by Rules

182

Screw stays: Material

Steel

Tensile strength

26/30

Diameter

At turned off part,

1 1/2"

No. of threads per inch

9

Area supported by each stay

8" x 8 3/8"

Working pressure by Rules 184 Are the stays drilled at the outer ends no ✓ Margin stays: Diameter { At turned off part, 1 5/8 ✓
 No. of threads per inch 9 ✓ Area supported by each stay 8 3/8 x 10 1/6 Working pressure by Rules 180
 Tubes: Material Iron ✓ External diameter { Plain 2 1/2 ✓ Thickness 9 W.G. No. of threads per inch 9 ✓
 Pitch of tubes 3 3/4 x 3 3/4 ✓ Working pressure by Rules 200 Manhole compensation: Size of opening in
 shell plate 13 x 16 1/2 ✓ Section of compensating ring 10 7/8 x 1 1/6 No. of rivets and diameter of rivet holes 34 1 1/6
 Outer row rivet pitch at ends 7 1/4 ✓ 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 _____
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ Rivets _____
 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 _____
 Number of elements _____ Material of tubes _____ Steel castings _____
 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 23 inclusive for boilers been complied with yes ✓

The foregoing is a correct description,
 For EDWARDS, WESTGAERTH & Co. LIMITED
E. D. Wright Manufacturer.

Dates of Survey { During progress of work in shops - - } See report on Machinery Are the approved plans of boiler and superheater forwarded herewith _____
 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.)

See accompanying machinery report. ✓

Survey Fee ... See Machinery report When applied for, 192
 Travelling Expenses (if any) £ report When received, 192

R. D. Shilston
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRL 8 OCT 1926

Assigned See Minute on Npl. 7. E. Rpt 16434