

Rpt. 5.

REPORT ON BOILERS.

No. 12983.

Port of WEST HARTLEPOOL.

Received at London Office

WED. 18 JUL 1906

No. in
Reg. Book.

Survey held at

West Hartlepool

Date, first Survey

3rd April

Last Survey

9th June 1906

(Number of Visits 29)

on the

Steam Trawler "Helenia"

Tons } Gross
Net

Master

Built at

Selly

By whom built

Cochran & Sons

When built 1906

Engines made at

By whom made

when made

Boilers made at

West Hartlepool

By whom made

Central Marine & Works

when made 1906

Registered Horse Power

76

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel John Spencer & Son

(Letter for record

S)

Total Heating Surface of Boilers

1314 sq ft

Is forced draft fitted

No. and Description of

Boilers

One Cylindrical

Working Pressure

180 lb

Tested by hydraulic pressure to

Date of test

No. of Certificate

5060

Can each boiler be worked separately

✓

Area of fire grate in each boiler

No. and Description of

safety valves to each boiler

2 Spring loaded.

Area of each valve

3.980 sq in

Pressure to which they are adjusted

185 lbs.

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

alt 8"

Mean dia. of boilers

12.6"

Length

10.0"

Material of shell plates

Steel

Thickness

1 1/2"

Range of tensile strength

27-30

Are the shell plates welded or flanged

both

Descrip. of riveting: cir. seams

✓

long. seams

all lap

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

7 1/2"

Lap of plates or width of butt straps

16 1/2"

Per centages of strength of longitudinal joint

rivets

86%

Working pressure of shell by

rules

180 lb

Size of manhole in shell

16" x 12"

Size of compensating ring

32" x 28" x 1 1/2"

No. and Description of Furnaces in each

boiler

Two Main

Material

Steel

Outside diameter

44.5"

Length of plain part

top

70"

Thickness of plates

crown

10 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

180 lb

Combustion chamber

plates: Material

Steel

Thickness: Sides

2 1/2"

Back

2 1/2"

Top

2 1/2"

Bottom

12 1/2"

Pitch of stays to ditto: Sides

Top 9 1/2" If stays are fitted with nuts or riveted heads

none

Working pressure by rules

180 lb

Material of stays

Steel

Diameter at

smallest part

1 5/8"

Area supported by each stay

9.8 sq in

Working pressure by rules

239 lb

End plates in steam space: Material

Steel

Thickness

1 1/8"

Pitch of stays

17 1/2"

How are stays secured

all nut

Working pressure by rules

180 lb

Material of stays

Steel

Diameter at smallest part

2 29/32"

Area supported by each stay

17.4 sq in

Working pressure by rules

214 lb

Material of Front plates at bottom

Steel

Thickness

1"

Material of

Lower back plate

Steel

Thickness

1 5/8"

Greatest pitch of stays

14"

Working pressure of plate by rules

180 lb

Diameter of tubes

Pitch of tubes

4 1/2"

Material of tube plates

Steel

Thickness: Front

1"

Back

12 1/2"

Mean pitch of stays

9"

Pitch across wide

water spaces

14 1/4"

Working pressures by rules

180 lb

Girders to Chamber tops: Material

Steel

Depth and thickness of

girder at centre

9" x 1 1/2"

Length as per rule

315 lb

Distance apart

8 1/4"

Number and pitch of Stays in each

14

Pitch

9 1/4"

Working pressure by rules 207 lb Superheater or Steam chest: how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

VERTICAL DONKEY BOILER—

No.

Description

Manufacturers of steel

Made at

By whom made

When made

Where fixed

Working pressure

tested by hydraulic pressure to

No. of Certificate

Fire grate area

Description of safety valves

No. of safety valves

Area of each

Pressure to which they are adjusted

If fitted with easing gear

If steam from main boilers can

enter the donkey boiler

Dia. of donkey boiler

Length

Material of shell plates

Thickness

Range of tensile

strength

Descrip. of riveting long. seams

Dia. of rivet holes

Whether punched or drilled

Pitch of rivets

Lap of plating

Per centage of strength of joint

Rivets

Working pressure of shell by rules

Thickness of shell crown plates

Radius of do.

No. of Stays to do.

Dia. of stays

Diameter of furnace Top

Bottom

Length of furnace

Thickness of furnace plates

Description of joint

Working pressure of furnace by rules

Thickness of furnace crown

plates

Stayed by

Diameter of uptake

Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description,

J. Borraiman

Manufacturer.

Dates

During progress of

work in shops - - -

of Survey

During erection on

board vessel - - -

while

building

Total No. of visits

29

Is the approved plan of main boiler forwarded herewith

"

"

"

donkey

"

"

"

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W877-0134

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

*This case is similar in all respects to Central No R 135.
R 136 + R 137 West Hartlepool Reports Nos 12833, 12837 + 12838 respectively*

*This main boiler has been constructed under special
survey in accordance with the approved Photo Print tested by
hydraulic pressure and found tight and sound.*

*It has now been forwarded to Grimsby where it will be
placed on board the Steam Trawler "Halcia" building by
Messrs. Cockburn & Sons of Selby.*

*The boiler securely fastened on board the vessel at Grimsby and
the safety valves adjusted* *R. Ritchie*

Certificate (if required) to be sent to

(The Surveyors are required to fill in on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	:	When applied for,
Special	£	3	11	14. 6. 1906
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any) £	£	:	:	11/7/06 18/7/06

E. W. James Jones
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. 20 JUL 1906

Assigned



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