

Rpt. 5a.

REPORT ON BOILERS.

No. 7852.

WED. APR 9-1913

Received at London Office

Date of writing Report 8.4.13 1913 When handed in at Local Office 8.4.13 1913 Port of MIDDLESBROUGH ON TEES

No. in Survey held at Stockton-on-Tees

Date, First Survey 20th Dec 1912 Last Survey 2nd April 1913

Reg. Book.

on the

(Number of Visits 16)
(No 228)Gross
Tons
Net

Master

Built at

Beverley

By whom built

H. Scarr

When built

Engines made at

Luton

By whom made

Vauxhall & W. Hydraulic Eng. Co Ltd

When made

Boilers made at

Stockton

By whom made

Messrs Riley Bros Ltd (No 4504)

When made 1913

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer & Sons

(Letter for record (S))

Total Heating Surface of Boilers

711.5 sq ft

Is forced draft fitted

No. and Description of

Boilers

One single ended

Working Pressure

140

Tested by hydraulic pressure to

280

Date of test 2.4.13

No. of Certificate 5048

Can each boiler be worked separately

Area of fire grate in each boiler

26.4 sq ft

safety valves to each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

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

Inside

Mean dia. of boilers

9'-0"

Length 9'-1 1/2"

Material of shell plates

steel

Thickness

5/8"

Range of tensile strength

29-33

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

2 Riv lap

long. seams

2 B-2 Riv

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

5 1/2"

Lap of plates or width of butt straps

9" x 5/8"

Per centages of strength of longitudinal joint

rivets

89.1

Working pressure of shell by

rules

140

Size of manhole in shell

19" x 15"

Size of compensating ring

7" x 7/8"

No. and Description of

Furnaces in each

boiler

2 plain

Material

steel

Outside diameter

33

Length of plain part

top

78"

Thickness of plates

crown

5/8"

bottom

3/4"

Description of longitudinal joint

Weld

No. of strengthening rings

none

Working pressure of furnace by the rules

143

Combustion chamber

plates: Material

steel

Thickness: Sides

3/8"

Back

3/8"

Top

3/8"

Bottom

3/4"

Pitch of stays to ditto: Sides

9 1/2" x 7"

Back

8 5/8" x 8"

Top 9 1/2" x 7"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

158

Material of stays

steel

Diameter at

smallest part

1 1/2"

Area supported by each stay

69

Working pressure by rules

168

End plates in steam space: Material

steel

Thickness

7/8"

Pitch of stays

15 1/4" x 1 1/2"

How are stays secured

nuts

Working pressure by rules

140

Material of stays

steel

Diameter at smallest part

3 6/7"

Area supported by each stay

257.5

Working pressure by rules

148

Material of Front plates at bottom

Lower back plate

steel

Thickness

7/8"

Greatest pitch of stays

13 1/2" x 8"

Working pressure of plate by rules

215

Diameter of tubes

3"

Pitch of tubes

4 5/8" x 4"

Material of tube plates

steel

Thickness: Front

7/8"

Back

5/8"

Mean pitch of stays

9 1/2"

Pitch across wide

water spaces

13 1/2"

Working pressures by rules

150

Girders to Chamber tops: Material

steel

Depth and thickness of

girder at centre

6" x 1 1/4"

Length as per rule

22"

Distance apart

9 1/2"

Number and pitch of Stays in each

2 @ 7"

Working pressure by rules

153

Superheater or Steam chest: how connected to boiler

none

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

The foregoing is a correct description,

Manufacturer.

Dates of Survey During progress of work in shops - 1912, Dec. 20, 23, 30. 1913, Jan. 8, 14, 25. Feb. 12. Is the approved plan of boiler forwarded herewith yes

while building During erection on board vessel - 18, 27, March 5, 12, 14, 17, 20, 28, April 2. Total No. of visits 16.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under special survey, is of good material and workmanship and on completion was tested by hydraulic pressure with satisfactory results

MONTHLY A/c.

Survey Fee

...

£

2-7-0

When applied for,

191

Travelling Expenses (if any) £

When received,

191

SURVEY REQUEST

NO. 636

ATTACHED.

W. Morrison

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute

FRI. JUL 4-1913

Assigned

See minute on L.R. 75604

Lloyd's Register
Foundation

W1343-063