

REPORT ON MACHINERY.

MUN. AUG 26 1901

Port of Newcastle

Received at London Office MON. 2 JUL 1900

No. in Survey held at Wallsend

Date, first Survey April 25 1900 Last Survey June 6 1900.

Boat.

(Austrian Lloyd's 5000 62)

Tons { Gross Net

on the

Built at

By whom built

When built

Engines made at

By whom made

when made

Boilers made at Wallsend

By whom made Wallsend Shipway & Co

when made 1900.

Registered Horse Power

Owners

Port belonging to

Net Horse Power as per Section 28

Is Refrigerating Machinery fitted

Is Electric Light fitted

Engines, &c.—Description of Engines

No. of Cylinders

No. of Cranks

No. of Cylinders

Length of Stroke

Revs. per minute

Dia. of Screw shaft

as per rule
as fitted

Lgth. of stern bush

No. of Tunnel shaft

as per rule
as fitted

Dia. of Crank shaft journals

as per rule
as fitted

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

Boilers

Dia. of screw

Pitch of screw

No. of blades

State whether moveable

Total surface

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room

In Holds, &c.

No. of bilge injections

sizes

Connected to condenser, or to circulating pump

Is a separate donkey suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship

Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Are the discharge pipes above or below the deep water line

Are they each fitted with a discharge valve always accessible on the plating of the vessel

Are the blow off cocks fitted with a spigot and brass covering plate

Are the pipes carried through the bunkers

How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges

Are the stern tube, propeller, screw shaft, and all connections examined in dry dock

Is the screw shaft tunnel watertight

Is the door fitted with a watertight door

worked from

Boilers, &c.—

(Letter for record S)

Total Heating Surface of Boilers

7690 ft²

Is forced draft fitted

Description of Boilers

3 Single ended, mult.

Working Pressure

200 lb

Tested by hydraulic pressure to

Test of

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of safety valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Least distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

15-6

Length

12-0

Material of shell plates

Steel

Range of tensile strength

29-32

Are they welded or flanged

No

Descrip. of riveting: cir. seams

TR lap

long. seams

DBS, TR

Diameter of rivet holes in long. seams

1 1/2

Pitch of rivets

9 1/2

Length of plates or width of butt straps

22 1/4

Intensities of strength of longitudinal joint

rivets 94-0

plate 94-2

Working pressure of shell by rules

218 lb

Size of manhole in shell

16 x 12

Compensating ring

8 x 1 1/2

No. and Description of Furnaces in each boiler

3 Brightons

Material

Steel

Outside diameter

45 3/4

No. of plain part

top 1

bottom 1

Thickness of plates

crown 5

bottom 8

Description of longitudinal joint

welded

No. of strengthening rings

two

Working pressure of furnace by the rules

205 lb

Combustion chamber plates: Material

Steel

Thickness: Sides

5/8

Back

5/8

Top

5/8

Bottom

11/16

No. of stays to ditto: Sides

8 x 8

Back

8 x 8

Top

8 x 7 5/8

If stays are fitted with nuts or riveted heads

Working pressure by rules

221 lb

Material of stays

Steel

Diameter at smallest part

1 9/16

Area supported by each stay

64

Working pressure by rules

293 lb

End plates in steam space:

Material of stays

Steel

Thickness

1 1/2

Pitch of stays

16 x 15 1/2

How are stays secured

DN+W

Working pressure by rules

200 lb

Material of stays

Steel

Material at smallest part

2 3/4

Area supported by each stay

248

Working pressure by rules

205 lb

Material of Front plates at bottom

Steel

Material of Lower back plate

Steel

Thickness

1 5/8

Greatest pitch of stays

13 1/2

Working pressure of plate by rules

281 lb

Material of tube plates

Steel

Thickness: Front

3/2

Back

3/4

Mean pitch of stays

7 3/4

Material of tubes

2 1/2

Pitch of tubes

3 3/4 x 3 3/4

Material of tube plates

Steel

Thickness: Front

3/2

Back

3/4

Mean pitch of stays

7 3/4

Material across wide water spaces

13 1/2

Working pressures by rules

200 lb

Girders to Chamber tops: Material

Steel

Depth and

Distance apart

8

Number and pitch of Stays in each

3-7 5/8

Working pressure by rules

209 lb

Superheater or Steam chest; how connected to boiler

None

Can the superheater be shut off and the boiler worked

Yes

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

Are they fitted 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

Yes

Material of flue plates

Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Yes

Material of flue plates

Thickness

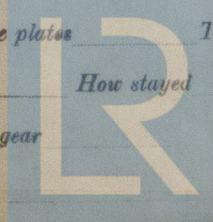
How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Ws62-0105



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DONKEY BOILER— No. 1 Description Single ended Mulk, 2 Deighton's furnaces.
Made at Wallsend By whom made Wallsend Shipway & Co When made 1900- Where fixed
Working pressure 180 ⁴/₁₆ 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 11-6 Length 10-2 ¹/₂ Material of shell plates S2-ee2 Thickness ³³/₃₂ Range of tensile strength 28-32 Descrip. of riveting long. seams DBS, T T Dia. of rivet holes 1 ¹/₈ Whether punched or drilled drilled Pitch of rivets 7
Butt straps 1 ¹/₂ Per centage of strength of joint Rivets 102 Thickness of shell ~~end~~ plates 1 Radius of do. Pitch No. of Stays to do. 16x16
Dia. of stays, 2 ¹/₃₂ Diameter of furnace Top 40 ³/₈ Bottom 27 ¹/₂ Length of furnace 6-0 Thickness of furnace plates ⁹/₈ Description of joint welded Thickness of ~~comb. chamber~~ plates ⁹/₁₆ & ¹¹/₁₆ Stayed by Steel Stays 4 ¹/₂ dia pitch 7x7 ¹/₂ Working pressure of shell by rules 187 ⁴/₁₆
Working pressure of furnace by rules 204 ⁴/₁₆ Diameter of ~~water~~ tubes 3 Thickness of ~~water~~ plates F ²⁹/₃₂, B ³/₄ Thickness of ~~water~~ tubes ⁵/₁₆

SPARE GEAR. State the articles supplied:—

FOR THE WALLSEND SLIPWAY & ENGINEERING CO., LIMITED.

The foregoing is a correct description, June 26/00

Manufacturer.

MANAGING DIRECTOR.

Dates { During progress of work in shops - 1900 After May 29 June 6-78
of Survey { During erection on board vessel -
while building { Total No. of visits 5

Is the approved plan of main boiler forwarded herewith yes

" " " donkey " " " yes

General Remarks (State quality of workmanship, opinions as to class, &c.)

These three main boilers and one donkey boiler have been so far constructed under special survey, the workmanship is sound and good. The combustion chambers have been riveted up, but the other parts of the boilers have only been fitted together & bolted up. The boilers have now been taken apart & shipped to Trieste where the boilers will be completed.

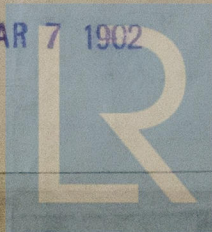
The amount of Entry Fee... £ . . . When applied for, 30 JUN 1900
Special . . . £ 15 4
Donkey Boiler Fee . . . £ . . . When received, 1 August 1900
Travelling Expenses (if any) £ . . .

Committee's Minute

TUES. AUG 27 1901

FRI. MAR 7 1902

Assigned



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