

REPORT ON BOILERS.

No. 16680

Received at London Office

-1 FEB 1926

Date of writing Report

23. 1. 1926

When handed in at Local Office

192

Port of

HAMBURG

No. in

Survey held at

HAMBURG

Date, First Survey

15. 12. 25

Last Survey

11. 1. 1926

Reg. Book.

Suppl.

39578

on the Twin Sc. Motor Vessel

JAVANESE PRINCE

(Number of Visits

5

Tons

Gross 4376

Net 3874

Master

Built at

HAMBURG

By whom built

Deutsche Werft A.G.

Yard No. 82

When built 1926

Engines made at

BERLIN

By whom made

Allgemeine-Electricitäts-Gesellschaft

Engine No. 181/153

When made 1926

Boilers made at

HAMBURG

By whom made

Deutsche Werft A.G.

Boiler No. 225

When made 1926

Nominal Horse Power

1313

Owners

RIO-CAPE-LINE Ltd.

Port belonging to

LONDON

MULTITUBULAR BOILERS ^{Heater} MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Guthrie & Co. Ltd. Oberhausen

(Letter for Record

5)

Total Heating Surface of Boilers

25 m²

Is forced draught fitted

m

Coal or Oil fired

exhaust gas fired

No. and Description of Boilers

One exhaust gas fired Donkey Boiler

Working Pressure 3 kg. 43 lbs

Tested by hydraulic pressure to

6 kg. 86 lbs

Date of test

17. 12. 25

No. of Certificate

406

Can each boiler be worked separately

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 spring loaded

Area of each set of valves per boiler

per Rule

3800 m²

as fitted

3926 m²

Pressure to which they are adjusted

43 lbs

Are they fitted with easing gear

yes

In case of donkey boilers, state whether steam from

boilers can enter the donkey boiler

no, non return valve fitted

Smallest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating placed in machinery way

Is the bottom of the boiler insulated

yes

Largest internal dia. of boilers

1200 mm

Length

2000 mm

Shell plates: Material

steel

Tensile strength 34-41 kg

Thickness

7 mm

Are the shell plates welded or flanged

flanged

Description of riveting: circ. seams

end

lp single

long. seams

lp single

Diameter of rivet holes in

circ. seams

20 mm

Pitch of rivets

47.7 mm

Percentage of strength of circ. end seams

plate

58 %

rivets

99 %

Percentage of strength of circ. intermediate seam

plate

rivets

Percentage of strength of longitudinal joint

plate

50.3 %

rivets

100 %

combined

Working pressure of shell by Rules

3.9 kg

Thickness of butt straps

outer

inner

No. and Description of Furnaces in each Boiler

Material

Tensile strength

Smallest outside diameter

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

End plates in steam space: Material

steel

Tensile strength

34-41 kg

Thickness

18 mm

Pitch of stays

How are stays secured

Working pressure by Rules

3.1 kg

Tube plates: Material

front

back

steel

Tensile strength

34-41 kg

Thickness

18 mm

Mean pitch of stay tubes in nests

200 x 300 mm

Pitch across wide water spaces

Working pressure

front

8 kg

back

8 kg

Girders 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 Rules

Combustion chamber plates: Material

Tensile strength

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

Working pressure by Rules

Front plate at bottom: Material

steel

Tensile strength

34-41 kg

Thickness

18 mm

Lower back plate: Material

steel

Tensile strength

34-41 kg

Thickness

18 mm

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

5 kg

Main 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

© 2019

Lloyd's Register
Foundation

W182-0184

Working pressure by Rules ☒ Are the stays drilled at the outer ends ☒ Margin stays: Diameter ☒ (At turned off part, or Over threads)

No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by Rules ☒

Tubes: Material *Stainless steel* External diameter ☒ Plain *76 mm* Thickness ☒ *3 mm* No. of threads per inch *11*

Pitch of tubes *100 mm* Working pressure by Rules *9 kg* Manhole compensation: Size of opening in shell plate *300 x 400 mm* Section of compensating ring *600 x 700 x 7* No. of rivets and diameter of rivet holes *28 - 20 mm*

Outer row rivet pitch at ends *130 mm* Depth of flange if manhole flanged ☒ Steam Dome: Material *Cast iron*

Tensile strength ☒ Thickness of shell *15 mm* Description of longitudinal joint ☒

Diameter of rivet holes ☒ Pitch of rivets ☒ Percentage of strength of joint ☒ (Plate Rivets)

Internal diameter *200 mm* Working pressure by Rules *90 kg* Thickness of crown *20 mm* No. and diameter of stays ☒

How connected to shell *riveted* Inner radius of crown *flat* Working pressure by Rules *11 kg*

Size of doubling plate under dome ☒ Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell *23 mm - 58 mm*

Type of Superheater ☒ Manufacturers of ☒ Tubes Steel castings

Number of elements ☒ Material of tubes ☒ Internal diameter and thickness of tubes ☒

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,

DEUTSCHE WERFT
AKTIENGESELLSCHAFT.

Manufacturer.

Dates of Survey ☒ During progress of work in shops *15/12.25, 17/12.25* Are the approved plans of boiler and superheater forwarded herewith *no 15/10.25* (If not state date of approval.)

while building ☒ During erection on board vessel *23/12.25, 8/1.26, 11/1.26* Total No. of visits *5*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This exhaust gas fired Donkey Boiler has been built under special survey in accordance with the approved plan, the Secretary's letter E 15.10.25 and otherwise in conformity with the requirements of the Rules, and the materials and the workmanship are of good quality. The materials used in the construction are made at works recognised by the Committee and tested in accordance with the Rules by the Society's Surveyors. When tested by hydraulic pressure to 86 lb per sq. inch, this Donkey Boiler was found to be tight and sound in every respect and showed no sign of weakness. Under steam it was found tight and its safety valves have been adjusted to 43 lb per sq. inch. It is eligible in our opinion for notification of*

** N.I.B. 1.26 "*

Mark on Boiler

No. 406
Lloyd's Test
86 lb
W.P. 43 "
A.Q. 17.12.25

Thickness of Vessels

port 8.7 mm
starb. 8.7 mm

Survey Fee ... £ 4 : 4 : -
Travelling Expenses (if any) £ - : - : -

When applied for, *25.1.1926*
When received, *9.3.1926*

Friedrich Hill
J. Carstensen
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 5 FEB 1926

FRI. 26 MAR 1926

Assigned

See other Rpt



© 2019

Lloyd's Register
Foundation