

# REPORT ON BOILERS.

No. 946

Received at London Office

6 MAY 1927

1st Report 1st May 1927 When handed in at Local Office

Port of

Bremen

Survey held at

Bremen

Date, First Survey

9th July 1926

Last Survey

25th April

1927

on the *Single No. "BISCAYA"*

(Number of Visits)

7

Gross 6190

Tons

Net 3536

*Bremen*

By whom built

*Deutsche Schiff- u. Maschinenbau A.G. Werk A.G. Witten*

Yard No.

399

When built

1926/27

made at

*-H-*

By whom made

*-H-*

Engine No.

1787

When made

1926/27

made at

*-H-*

By whom made

*-H-*

Boiler No.

1184

When made

1926/27

*Bremen Oil-Transport G. M. B. H.*

Port belonging to

*Bremen*

## HEATING DONKEY BOILER.

*Bremen*

By whom made

*Deutsche Schiff- u. Maschinenbau A.G. Werk A.G. Witten*

Boiler No.

1184

When made

1926/27

Where fixed

*fore end of motor space*

Manufacturers of Steel

*Mannmannschmiedewerk, Abt. Schulz-Knaude, Herten*

Heating Surface of Boiler

*23.5 sq. meters*

Is forced draught fitted

*yes*

Coal or Oil fired

*oil*

Description of Boilers

*vertical multitubular*

Working pressure

*5 kg/cm<sup>2</sup>*

Hydraulic pressure to

*11 kg/cm<sup>2</sup>*

Date of test

*29th Nov. 1926*

No. of Certificate

Firegrate in each Boiler

No. and Description of safety valves to each boiler

*2 spring loaded*

Each set of valves per boiler

*2867 mm<sup>2</sup> per rule*

Pressure to which they are adjusted

*5 kg/cm<sup>2</sup>*

Are they fitted with easing gear

*yes*

Whether steam from main boilers can enter the donkey boiler

*no*

Smallest distance between boiler or uptake and bunkers

Is oil fuel carried in the double bottom under boiler

*no*

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

*yes*

Largest internal dia. of boiler

*1700 mm*

Height

*3770 mm*

Material

*S. M. steel*

Tensile strength

*34-41 kg/mm<sup>2</sup>*

Thickness

*12 mm*

Shell plates welded or flanged

*no*

Description of riveting: circ. seams

*single*

long. seams

*double*

Net holes in

*circ. seams 23 mm*

Pitch of rivets

*59 mm*

Percentage of strength of circ. seams

*plate 61%*

of Longitudinal joint

*plate 68.5%*

Pressure of shell by rules

*7.45 kg/cm<sup>2</sup>*

Thickness of butt straps

*outer 15 mm*

Whether complete hemisphere, dished partial spherical, or flat

*yes*

Material

*S. M. steel*

Strength

*34-41 kg/mm<sup>2</sup>*

Thickness

*15 mm*

Radius

*1530 x 200 mm*

Working pressure by rules

*7.16 kg/cm<sup>2</sup>*

Form of Furnace: Plain, spherical, or dished crown

*yes*

Material

*yes*

Tensile strength

*yes*

External diameter

*top 1700 mm*

Length as per rule

*yes*

Working pressure by rules

*yes*

Support stays circumferentially

*yes*

and vertically

*yes*

Are stays fitted with nuts or riveted over

*yes*

of stays over thread

*yes*

Radius of spherical or dished furnace crown

*yes*

Working pressure by rule

*yes*

of Ogee Ring

*yes*

Diameter as per rule

*yes*

Working pressure by rule

*yes*

Form of Chamber: Plain, spherical, or dished

*yes*

Tensile strength

*34-41 kg/mm<sup>2</sup>*

Thickness of top plate

*17 mm*

Working pressure by rule

*8.38 x 8.81 kg/cm<sup>2</sup>*

Thickness of back plate

*17 mm*

Diameter if circular

*1500 mm*

per rule

*yes*

Pitch of stays

*500 mm*

Are stays fitted with nuts or riveted over

*yes*

of stays over thread

*yes*

Working pressure of back plate by rules

*10 kg/cm<sup>2</sup>*

Material

*S. M. steel*

Tensile strength

*34-41 kg/mm<sup>2</sup>*

Thickness

*20 mm*

Mean pitch of stay tubes in nests

*305 mm*

Working shell, Dia. as per rule

*front 76 mm*

Pitch in outer vertical rows

*yes*

Dia. of tube holes FRONT

*stay 76 mm*

*plain 72 mm*

Alternate tube in outer vertical rows a stay tube

*no*

Working pressure by rules

*front 9.65 kg/cm<sup>2</sup>*

Combustion chamber tops: Material

*yes*

Tensile strength

*yes*

Thickness of girder at centre

*yes*

Length as per rule

*yes*

part

*yes*

No. and pitch of stays in each

*yes*

Working pressure by rule

*yes*



