

REPORT ON BOILERS.

No. 22865

5a.

of writing Report 3rd Aug 1938 When handed in at Local Office

Received at London Office

AUG 8 1938

Port of **HAMBURG**

Survey held at **HAMBURG**

Date, First Survey 23rd April Last Survey 25th July 1938

on the **Steel Single Screw Motor Tanker INVERDARGLE**

(Number of Violets 7) Gross 9456 Tons Net 5561

Built at **HAMBURG**

By whom built **Deutsche Werft A.G.** Yard No. 302 When built 1938

By whom made **Maschinenfabrik Augsburg-Hamburg** Engine No. 690170 When made 1938

By whom made **Deutsche Werft A.G.** Boiler No. 738 When made 1938

inal Horse Power 1000

Owners **Inner Tankers, Ltd.**

Port belonging to **Dublin**

Waste Heat "La Mont"-Donkey Boiler Coil System.

~~TUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.~~

Leaders: **Bark & Co., Dortmund.**

Manufacturers of Steel Tubes: **Mannesmannröhren Werke Akt. Renscheid**

(Letter for Record 5)

Heating Surface of Boilers 149 sq. metres

Is forced draught fitted -

Coal or Oil fired **exhaust gas fired**

Description of Boilers One waste heat "La Mont"-donkey boiler coil system

Working Pressure 180 lbs/sq. inch

Test pressure by hydraulic pressure to 320 lbs Date of test 12.5.38 No. of Certificate 696

Can each boiler be worked separately -

of Firegrate in each Boiler -

No. and Description of safety valves to each boiler

one, spring loaded

of each set of valves per boiler

per Rule as fitted 35 lb, 962 mm²

Pressure to which they are adjusted 180 lbs

Are they fitted with easing gear yes

Use of donkey boilers, state whether steam from main boilers can enter the donkey boiler -

Least distance between boilers or uptakes and bunkers or woodwork -

Is oil fuel carried in the double bottom under boilers boiler in 'tweendeck

Least distance between shell of boiler and tank top plating -

Is the bottom of the boiler insulated -

Test internal dia. of boilers 1440 mm Length 4270 mm

Headers:

Shell plates

Material **S-M-Steel** Tensile strength 50-60 kg/mm²

Thickness of 90 Bore 70 mm

Are the shell plates welded or flanged -

Description of riveting: circ. seams

No. of coils: 25

Diameter of coil tubes

outer 32 mm inner 26 mm

Thickness 3 mm Pitch of rivets

Percentage of strength of circ. end seams

plate rivets

Percentage of strength of circ. intermediate seam

plate rivets

Percentage of strength of longitudinal joint

plate rivets combined

Working pressure of tubes by Rules 16.25 kg/cm²

Thickness of butt straps

outer inner

No. and Description of Furnaces in each Boiler -

Tensile strength

Smallest outside diameter

Thickness 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

plates in steam space: Material

Tensile strength

Thickness

Pitch of stays

are stays secured

Working pressure by Rules

plates: Material

front back

Tensile strength

Thickness

pitch of stay tubes in nests

Pitch across wide water spaces

Working pressure

front back

Boilers to combustion chamber tops: Material

Tensile strength

Depth and thickness of girder

Length as per Rule

Distance apart

No. and pitch of stays

Working pressure by Rules

Combustion chamber plates: Material

ile strength

Thickness: Sides

Back

Top

Bottom

of stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

Working pressure by Rules

Front plate at bottom: Material

Tensile strength

Thickness

Lower back plate: Material

Tensile strength

Thickness

of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

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

At turned off part, or Over threads

No. of threads per inch

Area supported by each stay

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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 External diameter Plain Thickness No. of threads per inch

Pitch of tubes Working pressure by Rules Manhole compensation: Size of opening in shell plate

Section of compensating ring No. of rivets and diameter of rivet holes

Outer row rivet pitch at ends Depth of flange if manhole flanged Steam Dome: Material

Tensile strength Thickness of shell Description of longitudinal joint

Diameter of rivet holes Pitch of rivets Percentage of strength of joint Plate Rivets

Internal diameter Working pressure by Rules Thickness of crown No. and diameter of stays

Inner radius of crown Working pressure by Rules

How connected to shell Size of doubling plate under dome Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell

Type of Superheater

Manufacturers of Tubes Steel forgings 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 forgings and castings and after assembly in place Are drain cocks or

es fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with yes

The foregoing is a correct description,

DEUTSCHE WERFT
AKTIENGESELLSCHAFT

Manufacturer.

ing progress of 1938 April 23rd, 28th, May 12th

erection on 1938 June 10th, July 4th, 13th, 28th

Are the approved plans of boiler and superheater forwarded herewith 20.5.38
(If not state date of approval.)

Total No. of visits 7

duplicate of a previous case yes

If so, state Vessel's name and Report No. INVERLIFFEY, Hamburg Report No. 22830

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

Material and workmanship of this waste heat "La Mont" donkey boiler coil system are of quality. The materials used in the construction are made at works recognised by the Committee and tested by the Society's Surveyors in accordance with the requirements of the Rules.

This donkey boiler coil system having been made under Special Survey in conformity with the approved plan, the Secretary's letter and otherwise in compliance with the requirements of the Rules is eligible in my opinion to be classed with notation in the Register Book =

One Donkey Boiler (WT) 180 lbs/sq. inch pressure.

Thickness of adjusting washer of safety valve 8 mm.

Survey Fee ... £ R No. 84 : - } When applied for, 29. July 1938

Travelling Expenses (if any) £ : : } When received, 19

H. Röhrs

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRL 12 AUG 1938

Assigned See Ham. 22865



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