

REPORT ON BOILERS.

No. 22865

t. 5a.

Received at London Office

AUG 6 1938

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

Port of **HAMBURG**

Survey held at **HAMBURG**

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

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

(Number of Visits 7) Gross Tons 9456 Net Tons 5561

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

Engines made at **Angsburg** By whom made **Maschinenfabrik Angsburg-Hamburg** Engine No. 690170 When made 1938

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

Indicated Horse Power 1000 Owners **Inver Tankers, Ltd.** Port belonging to **Dublin.**

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

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

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

Manufacturers of Steel Tubes: **Mannesmannröhren Werke Akt. Renscheid** (Letter for Record 5)

Total 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

Tested by hydraulic pressure to 320 lbs Date of test 12.5.38 No. of Certificate 696 Can each boiler be worked separately -

No. of Firegrate in each Boiler - No. and Description of safety valves to each boiler one, spring loaded

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 -

Smallest distance between boilers or uptakes and bunkers or woodwork - Is oil fuel carried in the double bottom under boilers boiler in 'tweendeck

Smallest distance between shell of boiler and tank top plating - Is the bottom of the boiler insulated -

Smallest internal dia. of boilers 1440 mm Length 4270 mm Headers: Shell-plates Material **S-M-Steel** Tensile strength 50-60 kg/mm²

Thickness of shell plates welded or flanged - Description of riveting: circ. seams { end -

No. of coils: 25 Diameter of coil tubes outer 32 mm Thickness 3 mm inner 26 mm Pitch of rivets

Percentage of strength of circ. end seams { plate - rivets - Percentage of strength of circ. intermediate seam { plate - rivets -

Working pressure of tubes by Rules 16.25 kg/cm²

No. and Description of Furnaces in each Boiler -

Tensile strength Smallest outside diameter

Thickness of plates { crown - bottom - Description of longitudinal joint

Working pressure of furnace by Rules

Material Tensile strength Thickness Pitch of stays

Working pressure by Rules

Material Tensile strength Thickness

Pitch across wide water spaces Working pressure { front - back -

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

Thickness: Sides Back Top Bottom

Are stays fitted with nuts or riveted over

Working pressure by Rules Front plate at bottom: Material Tensile strength

Material Tensile strength Thickness

Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength

At body of stay, No. of threads per inch Area supported by each stay

Working pressure by Rules Screw stays: Material Tensile strength

At turned off part, No. of threads per inch Area supported by each stay



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 Stay 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 valves 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.

Progress of construction in shops - - } 1938 April 23rd, 28th, May 12th Are the approved plans of boiler and superheater forwarded herewith 20.5.38 (If not state date of approval.)

Erection on vessel - - } 1938 June 10th, July 4th, 13th, 25th Total No. of visits 7

Is this a 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, etc.)

Material and workmanship of this waste heat "La Mont" donkey boiler coil system are of good 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 *FRI 12 AUG 1938*

Assigned *See Ham. 22865*

