

REPORT ON BOILERS.

No. 29966.

RECEIVED

Received at London Office

9 - JUL 1947

Date of writing Report 27-6-47 When handed in at Local Office

Port of Rotterdam

No. in Survey held at Flushing

Date, First Survey 17-1-44

Last Survey 22-5-1947

(Number of Visits 26) Tons { Gross Net

Master Built at By whom built Amst. Dok Maatsch. Yard No. 03 When built

Engines made at By whom made Engine No. When made

Boilers made at Flushing By whom made Kon. Hg. de Schelde Boiler No. 1113-14 When made 1947

Nominal Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Gutehoffnungshutte Oberhausen & G. Oberhausen (Letter for Record S)

Total Heating Surface of Boilers 405 M² each boiler Is forced draught fitted ✓ Coal or Oil fired ✓

No. and Description of Boilers Two Multitubular Marine boilers ✓ Working Pressure 15 kg/cm² ✓

Tested by hydraulic pressure to 26 kg/cm² Date of test 23-5-47 No. of Certificate 1065-1066 Can each boiler be worked separately ✓

Area of Firegrate in each Boiler ✓ No. and Description of safety valves to each boiler ✓

Area of each set of valves per boiler { per Rule ✓ as fitted ✓ Pressure to which they are adjusted ✓ Are they fitted with easing gear ✓

In case 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 ✓

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

Largest internal dia. of boilers 4132 mm Length 3300 mm Shell plates: Material S.H. steel Tensile strength 44-53 kg/cm² ✓

Thickness 34 mm Are the shell plates welded or flanged ✓ Description of riveting: circ. seams { end double riveted ✓ inter. ✓

long. seams Triple riveted DBS Diameter of rivet holes in { circ. seams 30 mm ✓ long. seams 30 mm ✓ Pitch of rivets { 110 mm ✓ (22) mm ✓ 264 ✓

Percentage of strength of circ. end seams { plate As approved ✓ rivets " " Percentage of strength of circ. intermediate seam { plate ✓ rivets ✓

Percentage of strength of longitudinal joint { plate As approved ✓ rivets " " Working pressure of shell by Rules As approved

Thickness of butt straps { outer 31 mm ✓ inner 31 mm ✓ No. and Description of Furnaces in each Boiler 2 corrugated Morrison's furnaces

Material S.H. steel Tensile strength 30-46 kg/cm² ✓ Smallest outside diameter 1200 mm ✓

Length of plain part { top ✓ bottom ✓ Thickness of plates { crown 19 mm ✓ bottom 19 mm ✓ Description of longitudinal joint Welded ✓

Dimensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules As approved

End plates in steam space: Material S.H. steel Tensile strength 44-53 kg/cm² ✓ Thickness 29 mm ✓ Pitch of stays 420 mm ✓

How are stays secured nuts with washers on the inside and the outside Working pressure by Rules As approved ✓

Tube plates: Material { front S.H. steel Tensile strength 41-50 kg/cm² ✓ back S.H. steel Tensile strength 41-50 kg/cm² ✓ Thickness { 25 mm ✓ 22 mm ✓

Mean pitch of stay tubes in nests 216 mm Pitch across wide water spaces 360 mm Working pressure { front As approved ✓ back " " ✓

Girders to combustion chamber tops: Material S.H. steel Tensile strength 41-50 kg/cm² ✓ Depth and thickness of girder at centre 277 x 15 mm ✓ Length as per Rule 840 930 mm ✓ Distance apart 210 mm ✓ No. and pitch of stays in each 3 @ 100 mm Working pressure by Rules As approved

Combustion chamber plates: Material S.H. steel Tensile strength 41-50 kg/cm² ✓ Thickness: Sides 16 mm ✓ Back 17 mm ✓ Top 16 mm ✓ Bottom 25 mm ✓

Pitch of stays to ditto: Sides 100 x 220 mm Back 224 x 100 mm Top 210 x 100 mm Are stays fitted with nuts or riveted over with nuts ✓

Working pressure by Rules As approved Front plate at bottom: Material S.H. steel Tensile strength 44-53 kg/cm² ✓

Thickness 25 mm Lower back plate: Material S.H. steel Tensile strength 41-50 kg/cm² ✓ Thickness 25 mm ✓

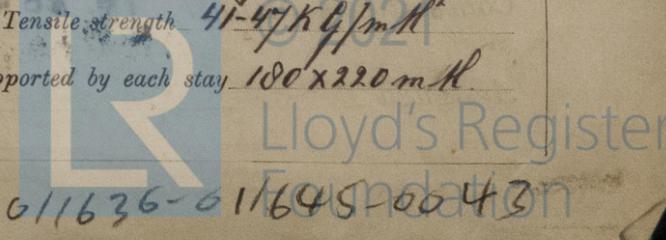
Pitch of stays at wide water space 372 mm Are stays fitted with nuts or riveted over with nuts ✓

Working Pressure As approved Main stays: Material S.H. steel Tensile strength 44-50 kg/cm² ✓

Diameter { At body of stay, 69 mm ✓ or Over threads No. of threads per inch 6 ✓ Area supported by each stay 420 x 420 mm ✓

Working pressure by Rules As approved Screw stays: Material S.H. steel Tensile strength 41-47 kg/cm² ✓

Diameter { At turned off part, 37 mm ✓ or Over threads No. of threads per inch 9 ✓ Area supported by each stay 100 x 220 mm ✓



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Working pressure by Rules *As approved* Are the stays drilled at the outer ends *no* Margin stays: Diameter { At turned off part. *55 mH.* or Over threads

No. of threads per inch *9* Area supported by each stay *200 x 294 mH* Working pressure by Rules *As approved*

Tubes: Material *S.H. steel* External diameter { Plain *83 mH* Stay *83 mH* Thickness { *4 mH* *5+7 mH* No. of threads per inch *9*

Pitch of tubes *100 x 100 mH* Working pressure by Rules *As approved* Manhole compensation: Size of opening in shell plate *400 x 500 mH* Section of compensating ring *990 x 890 mH* No. of rivets and diameter of rivet holes *40 @ 30 mH*

Outer row rivet pitch at ends *165 mH* Depth of flange if manhole flanged *110 mH* 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 *✓*

How connected to shell *✓* Inner radius of crown *✓* Working pressure by Rules *✓*

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 *✓*

The foregoing is a correct description,
 P. PROC. *V. J. De Schelde* Manufacturer.

Dates of Survey { During progress of work in shops - - } *1944: 1/11, 11/5, 26/5, 6/7, 30/8, 1945: 23/7, 2-3/10, 21/9, 20/11, 1946: 23/7, 19/5, 26/5, 3/9, 17/9, 2/5, 6/5, 15/5, 31/5, 1947: 7/5, 4/7, 30/7, 13/12, 23/12* Are the approved plans of boiler and superheater forwarded herewith *22 Nov. 46* (If not state date of approval.)

while building { During erection on board vessel - - } *1947: 7/5 - 14/5 - 22/5* Total No. of visits *26*

Is this Boiler a duplicate of a previous case *no* If so, state Vessel's name and Report No. *✓*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have been made in accordance with the approved plans, Society's Rules and Secretary's letter. Material as per G.L. certificates controlled and found in order. Workmanship found good. Boilers tested as required and found sound and tight.*

Copy of this report has been sent to Amsterdam.

Survey Fee £ *700.00* When applied for, 19
 Travelling Expenses (if any) £ *250.50* When received, 19

V. J. De Schelde
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute **FM. 28 MAY 1948**

Assigned *See F.E. mch. rpt.*

