

REPORT ON BOILERS.

No. 24864

Received at London Office

7 AUG 1948

Date of writing Report 18 JUNE 1948 When handed in at Local Office 5. 8. 1948 Port of ANTWERP

No. in Survey held at ANTWERP

Date, First Survey 3rd MARCH.

Last Survey 12 JULY.

1948

217 on the S/S "JACQUES MARIE" (EX. HARAND)

(Number of Visits)

Gross 1064

Tons Net 612

Built at HAMBURG By whom built SCHEPPSW (V.J. & SCH) AG. Yard No. — When built 1921

Engines made at HANNOVER By whom made HANNOVERSCHE MASCH AG. Engine No. — When made 1921

Boilers made at HAMBURG By whom made SCHEPPSW (V.J. & SCH) AG. Boiler No. 671+2 When made 1921

Nominal Horse Power 141 Owners REEDERIJ ANTOINE VLOEBERGH'S Port belonging to ANTWERP.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel — (Letter for Record —)

Total Heating Surface of Boilers 204,70 sq. m. Is forced draught fitted no Coal or Oil fired COAL

No. and Description of Boilers TWO MULTITUBULAR 2 FURNACED. Working Pressure 13 Kg.

Tested by hydraulic pressure to 19 Kg. Date of test — No. of Certificate — Can each boiler be worked separately YES.

Area of Firegrate in each Boiler 3,76 M² No. and Description of safety valves to each boiler TWO SPRING LOADED. 70 kg per unit. 20/9/48Area of each set of valves per boiler {per Rule 6280 2nd as fitted 962.5 1/2 Pressure to which they are adjusted 13 Kg. Are they fitted with easing gear YES

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 12 inches Is oil fuel carried in the double bottom under boilers no

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

Largest internal dia. of boilers 3700 mm Length 3050 mm Shell plates: Material SM. Tensile strength 44-52 Kg/cm²

Thickness 25 mm Are the shell plates welded or flanged FLANGED. Description of riveting: circ. seams {end DOUBLE RIVETED LAP

g. seams TRDBS. BUTT STRAP. Diameter of rivet holes in {circ. seams 29 mm long. seams 29 mm Pitch of rivets {96 mm 102.5 mm

Percentage of strength of circ. end seams {plate 70.8% rivets 45% Percentage of strength of circ. intermediate seam {plate — rivets —

Percentage of strength of longitudinal joint {plate 85% rivets 106% combined 82% Working pressure of shell by Rules 13.8 Kg.

Thickness of butt straps {outer 20 mm inner 20 mm No. and Description of Furnaces in each Boiler TWO CORRUGATED

Material SM. Tensile strength 34-41 Kg/cm² Smallest outside diameter 1105 mm

Length of plain part {top 240 mm bottom 240 mm Thickness of plates {crown 15 mm bottom 15 mm Description of longitudinal joint —

Dimensions of stiffening rings on furnace or c.c. bottom — Working pressure of furnace by Rules 13.8 Kg.

End plates in steam space: Material SM. Tensile strength 34/41 kg/cm² Thickness 22 mm Pitch of stays 410 mm x 370 mm

How are stays secured NUTS in front + middle washers. Working pressure by Rules 14.5 Kg.

End plates: Material {front SM. back SM. Tensile strength {34/41 kg/cm² Thickness {22 mm Back 16 mm 26 mm front

Can pitch of stay tubes in nests 208 mm Pitch across wide water spaces 360 mm x 104 mm Working pressure {front 21 Kg. back 17.8 Kg.

Orders to combustion chamber tops: Material SM. Tensile strength — 34/41 kg/cm² Depth and thickness of girder

Centre 160 mm - 18 mm Length as per Rule 675 mm Distance apart 195 mm No. and pitch of stays

Each 2 - 200 mm Working pressure by Rules 12.24 Kg. Combustion chamber plates: Material SM.

Tensile strength — 34/41 kg/cm² Thickness: Sides 16 mm Back 16 mm Top 16 mm Bottom 22 mm

Pitch of stays to ditto: Sides 200 mm x 200 mm Back 195 mm x 195 mm Top 200 mm x 195 mm Are stays fitted with nuts or riveted over NUTS.

Working pressure by Rules 14 Kg. Front plate at bottom: Material SM. Tensile strength — 34/41 kg/cm²

Thickness 26 mm Lower back plate: Material SM. Tensile strength — Thickness 24 mm

Pitch of stays at wide water space 350 mm Are stays fitted with nuts or riveted over NUTS.

Working Pressure 21 Kg. Main stays: Material SM. Tensile strength — 34/41 kg/cm²

Diameter {At body of stay, 70 mm or Over threads 70 mm No. of threads per inch 10 Area supported by each stay 370 x 410

Working pressure by Rules 15 Kg. Screw stays: Material SM. Tensile strength — 34/41 kg/cm²

Diameter {At turned off part, 44 mm or Over threads 44 mm No. of threads per inch 10 Area supported by each stay 195 mm

Working pressure by Rules 21 Kg. Are the stays drilled at the outer ends no ✓ Margin stays: Diameter { At turned off part, 41.5 or Over threads }
 No. of threads per inch 10 ✓ Area supported by each stay 273 x 195 Working pressure by Rules 13.2 Kg.
 Tubes: Material SM. External diameter { Plain 83 1/2 Stay 83 1/2 } Thickness { 4 1/2 8 1/2 x 10 } No. of threads per inch —
 Pitch of tubes 104 1/2 x 104 1/2 ✓ Working pressure by Rules 16 Kg. Manhole compensation: Size of opening 195 x 100
 shell plate 410 1/2 x 510 1/2 Section of compensating ring 20 1/2 x 250 1/2 No. of rivets and diameter of rivet holes 54 - 29 1/2
 Outer row rivet pitch at ends 2 1/2 Depth of flange if manhole flanged 64 1/2 ✓ 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 rivets —
 stays — Inner radius of crown — Working pressure by Rules —
 How connected to shell — Size of doubling plate under dome — Diameter of rivet holes and of rivets in outer row in dome connection to shell —

Type of Superheater W. SCHMIDT PATENT. Manufacturers of { Tubes — Steel castings — }
 Number of elements 16 Material of tubes SM. Internal diameter and thickness of tubes 16 1/2 2 1/2 1/2
 Material of headers C.S. Tensile strength — Thickness 15 1/2 Can the superheater be shut off from the boiler YES. ✓
 the boiler be worked separately YES. ✓ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler YES. ✓
 Area of each safety valve 1195 1/2 (3920) Are the safety valves fitted with easing gear YES. ✓ Working pressure by Rules 13 Kg.
 Pressure to which the safety valves are adjusted — Hydraulic test pressure —
 tubes 1000 12/2 castings 1000 12/2 and after assembly in place — Are drain cocks or valves to free the superheater from water where necessary YES. ✓
 Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with YES. ✓
 The foregoing is a correct description, Manufactured by —

Dates of Survey { During progress of work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
 while building { During erection on board vessel - - } Total No. of visits —

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

The boiler, superheater, mountings etc. have now been examined throughout and found to be placed in good order.

Survey Fee ... £ see Rpt. 2 } When applied for, 192
 Travelling Expenses (if any) £ — } When received, 192

Committee's Minute FRI. 24 SEP 1948

Assigned Su F.E. mchly. rpt 1,

M. J. H. M. S.
 Engineer Surveyor to Lloyd's Register of Shipping