

REPORT ON BOILERS.

No. 22176

Received at London Office 29 JAN 1937

Date of writing Report 15th JAN. 37. When handed in at Local Office

19 Port of HAMBURG

No. in Survey held at HAMBURG Date, First Survey 4th SEPT. Last Survey 29th DEC. 1936

Reg. Book on the STEEL SC. "HOEGH SILVERLIGHT" (Number of Visits 9) Gross 5197 Tons Net 3186

Built at HAMBURG By whom built DEUTSCHE WERFT A.G. Yard No. 180. When built 1936.

Engines made at AUGSBURG By whom made M. A. N. Engine No. 691190 When made 1936

Boilers made at HAMBURG By whom made DEUTSCHE WERFT A.G. Boiler No. 639 When made 1936

Owners SKIBS A/S: NORUEGA, ASTREA, ARUBA, ABACO. Port belonging to OSLO.

VERTICAL DONKEY BOILER.

Made at Hamburg By whom made Deutsche Werft A.G. Boiler No. 639. When made 1936 Where fixed Eng. Room fore.

Manufacturers of Steel Gütchhoffnungshütte Akt. Halywerk Oberhausen.

Total Heating Surface of Boiler 1019 m. Is forced draught fitted no Coal or Oil fired oil

No. and Description of Boilers 1 Vertical Donkey Boiler for heating purposes only Working pressure 3 kg/cm²Tested by hydraulic pressure to 6 kg/cm² Date of test 25.9.36. No. of Certificate 687.

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 2 spring loaded

Area of each set of valves per boiler per rule 226919 mm² as fitted 251317 mm² Pressure to which they are adjusted 3 kg/cm² Are they fitted with easing gear yes

State whether steam from donkey boiler can enter the donkey boiler no, non-return valve fitted Smallest distance between boiler or uptake and bunkers

or woodwork 500 mm. Is oil fuel carried in the double bottom under boiler yes Smallest distance between base of boiler and tank top plating

800 mm. Is the base of the boiler insulated yes Largest internal dia. of boiler 1100 mm. Height 2275 mm.

Shell plates: Material S.M. Steel Tensile strength 40-50 kg/cm² Thickness 9 mm.

Are the shell plates welded or flanged flanged Description of riveting: circ. seams lap single long seams lap double

Dia. of rivet holes in circ. seams 20 mm Pitch of rivets 48.3 mm Percentage of strength of circ. seams plate 58.5% rivets 59.5% of Longitudinal joint plate 67% rivets 47% combined 81.4%

Working pressure of shell by rules 6.8 kg/cm² Thickness of butt straps outer inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished partial spherical Material S.M. Steel.

Tensile strength 41-47 kg/cm² Thickness 12 mm Radius 1100 mm Working pressure by rules 8.95 kg/cm²Description of Furnace: Plain, spherical, or dished crown dished half sphere Material S.M. Steel Tensile strength 41-47 kg/cm²Thickness 15 mm External diameter 976 mm Length as per rule 365 mm Working pressure by rules 7.75 kg/cm²

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread Radius of spherical or dished furnace crown Working pressure by rule

Thickness of Ogee Ring 12 mm Diameter as per rule D 1100 mm d 900 mm Working pressure by rule 11.05 kg/cm²Combustion Chamber: Material S.M. Steel Tensile strength 41-47 kg/cm² Thickness of top plate 15 mmRadius if dished 1100 mm Working pressure by rule 12.1 kg/cm² Thickness of back plate 12 mm Diameter if circular top 800 mm bottom 900 mm

Length as per rule 925 mm Pitch of stays Are stays fitted with nuts or riveted over

Diameter of stays over thread Working pressure of back plate by rules 10 kg/cm²Tube Plates: Material S.M. Steel Tensile strength 41-47 kg/cm² Thickness 18 mm Mean pitch of stay tubes in nests 178 x 356 mm

If comprising shell, Dia. as per rule front 900 mm Pitch in outer vertical rows 89 mm Dia. of tube holes FRONT stay 70 mm plain 70 mm BACK stay 60 mm plain 60 mm

Is each alternate tube in outer vertical rows a stay tube no Working pressure by rules front 11.3 kg/cm² back

Girders to combustion chamber tops: Material Tensile strength

Depth and thickness of girder at centre Length as per rule

Distance apart No. and pitch of stays in each Working pressure by rule

Crown stays: Material _____ Tensile strength _____ Diameter { 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 _____ Diameter { at turned off part, _____ or over threads _____ No. of threads per inch _____
Area supported by each stay _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____
Tubes: Material S. N. Steel ✓ External diameter { plain 63.5 mm stay 63.5 mm Thickness { 3 mm 8 mm
No. of threads per inch 9 mm Pitch of tubes 89 mm ✓ Working pressure by rules 9 kg/cm²
Manhole Compensation: Size of opening in shell plate 280 x 380 mm Section of compensating ring 560 x 660 x 9 mm No. of rivets and diameter
of rivet holes 28 - 20 mm Outer row rivet pitch at ends 120 mm ✓ Depth of flange if manhole flanged _____
Uptake: External diameter _____ Thickness of uptake plate _____
Cross Tubes: No. _____ External diameters { _____ Thickness of plates _____

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

The foregoing is a correct description,

Deutsche Werft
26 JAN 1937
Hamburg

Manufacturer.

Dates of Survey { During progress of work in shops - 4/9 - 17/9 - 18/9 - 25/9 - 1/10/36
while building { During erection on board vessel - 7/12 - 8/12 - 13/12 - 29/12/36

Is the approved plan of boiler forwarded herewith (If not state date of approval.) yes

Total No. of visits 9

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

material and workmanship of this Donkey Boiler are of good quality. The materials used in the construction are made at works recognized by the Committee, and tested by the Society's Surveyors in accordance with the requirements of the Rules. This Donkey Boiler having been made under Special Survey in conformity with the approved plan, the Secretary's Letter and otherwise in accordance with the requirements of the Rules is eligible in my opinion to be classed in the Society's Reg. No. Donkey Boiler pressure lbs. per sq. inch.

THICKNESS OF ADJ. WASHERS.

PORT: 8 mm STB: 8 mm

Survey Fee Share Lev. Report on Machinery:
Travelling Expenses (if any) _____

When applied for, _____ 19_____
When received, _____ 19_____

Committee's Minute

Assigned

See Ham. J.E. 22176

Friedrich Hill

Engineer Surveyor to Lloyd's Register of Shipping.

JUN 8 JUN 1937

FRI 3 SEP 1937

Lloyd's Register
Foundation