

5b.

REPORT ON BOILERS.

No. 794

22 MAR 1953

Received at London Office

Date of writing Report 27th Feb. 1953 When handed in at Local Office 27th Feb. 1953 Port of KIEL

Survey held at KIEL Date, First Survey 9th Oct. 1952 Last Survey 10th Jan. 1953

Book. 5 s on the M.V. "HOEGH CLIPPER" (Number of Visits 13) Gross 9477 Tons Net

at Kiel By whom built Howaldtswerke Kiel Yard No. 960 When built 1953

Shells and diamines made at Kiel By whom made Howaldtswerke Kiel Engine No. 960 When made 1953

Boilers made at Kiel By whom made Howaldtswerke Kiel Boiler No. 197 When made 1953

Owners Leif Hoegh Port belonging to Oslo

VERTICAL BOILER.

Location Kiel By whom made Howaldtswerke Kiel A.G. Boiler No. 197 When made 1953 Where fixed at Kiel

Manufacturers of Steel Rheinische Röhrenwerke A.G., Mühlheim/Ruhr

Total Heating Surface of Boiler 55 m² = 592 sq.ft. Is forced draught fitted -- Coal or Oil fired exhaust gas

Description of Boilers One vertical fire tube (Swirlyflo) exhaust gas boiler Working Pressure 7 kg/cm²

Tested by hydraulic pressure to 14 kg/cm² Date of test 3.12.1952 No. of Certificate 412

No. of fire grate in each Boiler -- No. and description of safety valves to each boiler 2 ordinary spring loaded

No. of each set of valves per boiler { per Rule -- as fitted 3928 mm² Pressure to which they are adjusted 7 kg/cm² Are they fitted with easing gear yes

Whether steam from main boilers can enter the donkey boiler -- Smallest distance between boiler or uptake and bunkers --

Woodwork -- Is oil fuel carried in the double bottom under boiler -- Smallest distance between base of boiler and tank top plating --

Is the base of the boiler insulated -- Largest internal dia. of boiler 1956 mm Height 1500 mm

Shell plates: Material SM steel Tensile strength 49.3 kg/mm² Thickness 13 mm

Are the shell plates welded or flanged welded If fusion welded, state name of welding firm Howaldtswerke A.G., Kiel

Do all the requirements of the Rules for Class I vessels been complied with yes Description of riveting: circ. seams { end -- inter -- }

Longitudinal joint { plate -- rivets -- combined -- } Dia. of rivet holes in { circ. seams -- long. seams -- } Pitch of rivets { -- } Percentage of strength of circ. seams { plate -- rivets -- }

Shell Crown: Whether complete hemisphere, dished partial --

Material -- Tensile strength -- Thickness --

Description of Furnace: Plain, spherical, or dished crown -- Material --

Thickness -- External diameter { top -- bottom -- } Length as per Rule --

Are 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 --

Thickness of Ogee Ring -- Diameter as per Rule { D -- d -- }

Combustion Chamber: Material -- Tensile strength -- Thickness of top plate --

Is it dished -- Thickness of back plate -- Diameter if circular --

As per Rule -- Pitch of stays --

Are stays fitted with nuts or riveted over -- Diameter of stays over thread --

Plates: Material { top SM steel bottom SM steel } Tensile strength { 49-50 kg/mm² " " " } Thickness { 26 mm } Mean pitch of stay tubes in nests --

Surrounding shell, dia. as per Rule { front -- back -- } Pitch in outer vertical rows { -- } Dia. of tube holes { top 65 mm plain 65 mm } BACK { stay 63.5 mm plain 63.5 mm }

Do alternate tube in outer vertical rows a stay tube --

Material -- Tensile strength --

Length as per Rule --

No. and pitch of stays in each --

18.9.53

Crown Stays: Material SM steel Tensile strength --- Diameter { at body of stay, --- or over threads ---

No. of threads per inch --- Screw Stays: Material --- Tensile strength ---

Diameter { at turned off part, --- or over threads --- No. of threads per inch --- Are the stays drilled at the outer ends ---

Tubes: Material SM steel External diameter { plain 63.5 mm stay 63.5 mm Thickness { 8 LSG 10 mm

No. of threads per inch --- Pitch of tubes 85.7 x 85.7 mm

Manhole Compensation: Size of opening in shell plate 331x431 Section of compensating ring 90x26 mm No. of rivets and dia ---

of rivet holes welded Outer row rivet pitch at ends --- 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

KIELER HOWALDTSWERKE description,
Aktiengesellschaft
[Signature] Manufact

Dates of Survey while building { During progress of work in shops 9,16,28/10, 13,17,20,25/11, 2,3/12/52 the approved plan of boiler forwarded herewith yes (If not state date of approval.)
During erection on board vessel 6,23,31/12/52, 10/1/53 Total No. of visits 13

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.) This boiler has been constructed and installed on board in accordance with the approved plan and the Secretary's letters. The material used has been tested by the Society's Surveyors, the electric welding carried out by recognised welders using approved electrode X-ray films of seams and test results of welded specimens forwarded to Hamburg Office on 20th January, 1953. The boiler has been heat treated at Howaldtswerke on completion of welding. The workmanship is good and electric welding satisfactory.

The boiler when completed was tested by hydraulic pressure to 14 kg/cm² and found sound at that pressure.

The boiler has been examined under steam at sea and the safety valves adjusted to 7 kg/cm².

This boiler is eligible, in my opinion, to be classed with the notation * NDB 1,53.

For identification purposes, the boiler is marked:

No. 412
LLOYD'S TEST
14 kg/cm²
WP 7 kg/cm²
ES 3.12.52 ES

Survey Fee Construction 20 0 0
(F-welding)
Travelling Expenses (if any) £ : :
When applied for 19
When received 19

[Red stamp: No. 412 MAR 1953]

FRI. 20 MAR 1953

[Signature: S. Chamber]
Engineer Surveyor to Lloyd's Register of Shipping

Date FRI. 20 MAR 1953
Committee's Minute Su F.E. usky, opt.

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4-3.53

[Handwritten mark]