

# REPORT ON BOILERS.

No. 18915.

Received at London Office 9-APR 1952

Date of writing Report 21st March 1952. When handed in at Local Office 4th April 1952. Port of Gothenburg

No. in Survey held at Gothenburg Date, First Survey 2nd January, 1952 Last Survey 13th March, 1952

242 on the Single Screw Motor Tanker "A STRID ONSTAD" (Number of Visits.....) Gross 14685 Tons Net 8673

Master --- Built at Gothenburg By whom built Aktiebolaget Götaverken Yard No. 660 When built 1952.

Engines made at Gothenburg By whom made Aktiebolaget Götaverken Engine No. 2239 When made 1952

Boilers made at Stockton By whom made Stockton Chemical Eng. & Riley Boilers Ltd. Boiler No. 7183/4 When made 1951

Nominal Horse Power --- Owners Rederi Aktiebolaget Monacus Port belonging to Kungsbacka

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Appleby Frodingham Steel Co. Ltd. (Letter for Record S)

Total Heating Surface of Boilers 2 x 2720 sq. feet Is forced draught fitted Yes ✓ Coal or Oil fired oil ✓

No. and Description of Boilers 2 single ended multitubular marine Working Pressure 150 lbs/in<sup>2</sup>.

Tested by hydraulic pressure to 275 lbs Date of test 27.4.52 No. of Certificate 7344/5 Can each boiler be worked separately Yes

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 1 double spring loaded ✓

Area of each set of valves per boiler { per Rule 13350 mm<sup>2</sup> as fitted 15708 mm<sup>2</sup> Pressure to which they are adjusted 150 lbs ✓ Are they fitted with easing gear Yes ✓

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No main boiler fitted

Smallest distance between boilers or uptakes and bunkers or woodwork About 1 met. from after peak bulkhead Is oil fuel carried in the double bottom under boilers No.

Smallest distance between shell of boiler and tank top plating Boilers on a platform aft in engine room. Is the bottom of the boiler insulated Yes

Largest internal dia. of boilers Length Shell plates: Material Tensile strength

Thickness Are the shell plates welded or flanged Description of riveting: circ. seams { end inter. } mg. seams Diameter of rivet holes in { circ. seams long. seams } Pitch of rivets { } Percentage of strength of circ. end seams { plate rivets } Percentage of strength of circ. intermediate seam { plate rivets } Percentage of strength of longitudinal joint { plate rivets } Working pressure of shell by Rules combined

Thickness of butt straps { outer inner } No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter

Length of plain part { top bottom } Thickness of plates { crown bottom } Description of longitudinal joint

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

End plates in steam space: Material Tensile strength Thickness Pitch of stays

How are stays secured Working pressure by Rules

Tube plates: Material { front back } Tensile strength Thickness

Lean pitch of stay tubes in nests Pitch across wide water spaces Working pressure { front 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

At each Working pressure by Rules Combustion chamber plates: Material

Tensile strength Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top Are stays fitted with nuts or riveted over

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

Thickness Lower back plate: Material Tensile strength Thickness

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

Working pressure Main 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. 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 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 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 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 Rules. Pressure to which the safety valves are adjusted. Hydraulic test press tubes. forgings and castings. and after assembly in place. Are drain cock 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, **ACCEPTED** Manufacture

Dates of Survey while building } During progress of work in shops - - - Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) } During erection on board vessel - - - 2.1.1952 - 13.3.1952 Total No. of visits 20

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

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

These donkey Boilers have been securely fitted in the vessel under our inspection and to our satisfaction and to safety valves adjusted under steam to 150 lbs per sq. inch. See also Middlesbrough Reports Nos. 19370 and 19373.

An exhaust gas economiser of AB. Götaverken's multitubular type has also been fitted in the vessel. The economiser has been built under Special Survey and of tested material and in accordance with the approved plan, tested hydraulically to 19.25 kg/cm<sup>2</sup> on the 31st January, 1952, and marked for identification purposes:

No. 2687	
LLOYD'S TEST	19.25 Kgs.
W P	10.5 Kgs.
C.S. 31.1.1952.	

The safety valves have been adjusted under steam to 150 lbs/sq.inch.

Survey Fee ... £ ... When applied for, ... 19 ... Travelling Expenses (if any) £ ... When received, ... 19 ...

Engineer Surveyor to Lloyd's Register of Shipping

FRI. 2 MAY 1952

Committee's Minute.

Assigned. See F.E. mch. upl.