

REPORT ON BOILERS.

No. 16385.

21 DEC 1948

Received at London Office

Date of writing Report 6th Dec. 1948. When handed in at Local Office 17th Dec. 1948. Port of Gothenburg

No. in Book 599 Survey held at Gothenburg Date, First Survey 30th August Last Survey 29th November 1948.

on the Motor Tanker "ATLANTIC QUEEN" (Number of Visits 28) Tons Gross 14567
Net 8631

Built at Gothenburg By whom built A-B. Götaverken Yard No. 628 When built 1948

Engines made at Gothenburg By whom made A-B. Götaverken Engine No. 2074 When made 1948

Boilers made at Stockton By whom made Stockton C.E. & R.B. Co., Ltd. Boiler No. 7046/7 When made 1948

Original Horse Power --- Owners Rederi A-B. Monacus Port belonging to Kungälv

MULTITUBULAR BOILERS ~~XXXXXXXXXXXXXXXXXXXX~~ DONKEY.

Manufacturers of Steel Appleby Frodingham Steel Co., Ltd. (Letter for Record 8)

Total Heating Surface of Boilers 2 x 2720 square feet Is forced draught fitted Yes Coal or Oil fired Oil

No. and Description of Boilers 2 Scotch Donkey Boilers Working Pressure 150 lbs/in²

Tested by hydraulic pressure to 275 Date of test 19/3 & 13/4 1948 No. of Certificate 7235 & 7238 Can each boiler be worked separately Yes

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

Area of each set of valves per boiler per Rule 13125 mm² as fitted 15706 mm² Pressure to which they are adjusted 150 lb/in² 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 boilers fitted

Smallest distance between boilers or uptakes and bunkers or woodwork Abt 1 M. from AP Bhd. 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 EB Is the bottom of the boiler insulated ---

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 ---

Long. 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 --- combined --- Working pressure of shell by Rules ---

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 ---

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

How are stays secured --- Working pressure by Rules ---

Stay plates: Material --- front --- back --- Tensile strength --- Thickness ---

Span pitch of stay tubes in nests --- Pitch across wide water spaces --- Working pressure --- front --- back ---

Stays to combustion chamber tops: Material --- Tensile strength --- Depth and thickness of girder ---

Centre --- Length as per Rule --- Distance apart --- No. and pitch of stays ---

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 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 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 tubes..... forgings and castings..... and after assembly in place..... Are drain 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,
AKTIEBOLAGET GÖTAVERKEN
Manuf.

Dates of Survey while building { During progress of work in shops - - - }
 { During erection on board vessel - - - } 30th August - 29th November, 1948

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
 Total No. of visits..... 28

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 donkey boilers have been securely fitted in the vessel under my inspection and to my satisfaction and the safety valves adjusted under steam to 150 lbs. per square inch. Please also see Middlesbrough reports Nos. 18489 and 18490.

An exhaust gas economiser of A-B. Götaverken's tubular type has been fitted in the vessel. The economiser has been built under special survey and of tested material, tested hydraulically to 19.25 kgs. per square centimeter on the 22nd October, 1948, and marked:

LLOYD'S TEST 19.25 kgs.
 WP 10.5 kgs.
 OS 22.10.48

The safety valves have been adjusted under steam to 150 lbs. per square inch.

Survey Fee £ -- : -- : -- } When applied for..... 19.....

Travelling Expenses (if any) £ -- : -- : -- } When received..... 19.....

Eng. Surveyor
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute.....
 Assigned *For minute see J.E. Rife*

FRI, 28 JAN 1949