

REPORT ON BOILERS.

No. 1826.

Received at London Office

OCT. 30 1939

Date of writing Report 19th Oct, 1939. When handed in at Local Office 24th Oct, 1939. Port of Helsingborg & Mahroö.

No. in Survey held at Landskrona Date, First Survey 31st July Last Survey 11th Oct, 1939.

Reg. Book 9655 on the Single Screw Motor Tanker "JANUS" (Number of Visits 6) (Gross 9965 Tons Net 5931)

Master Built at Landskrona By whom built Öresundsvarvet A.B. Ward No. 54 When built 1939.

Engines made at Helsingborg By whom made A. B. Götaverken Engine No. 1339 When made 1939.

Boilers made at Helsingborg By whom made Helsingborg C. & P. Ryberg Boilers Ltd. Boiler No. 6338/9 When made 1939.

Nominal Horse Power 653 Owners Rederi A. B. Nordstjernan Port belonging to Helsingborg.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record) Is forced draught fitted *Yes* Coal or Oil fired *Oil*

Total Heating Surface of Boilers Working Pressure 150 lbs./sq. in.

No. and Description of Boilers Tested by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately *Yes*

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

Area of each set of valves per boiler *per Rule 10.6 sq. in. as fitted 13.7 sq. in.* Pressure to which they are adjusted *154 lbs.* Are they fitted with easing gear *Yes*

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *Boilers fitted on a platform at after end of engine room.*

Smallest distance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers *Yes*

Smallest distance between shell of boiler and tank top plating 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.*

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

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

Mean 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

in 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 in 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 pitch 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 and 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 casing gear Working pressure as per Rules
 Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes forgings and castings and after assembly in place
 Are drain cocks or 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 _____
 The foregoing is a correct description, _____
 Manufacturer, _____

Dates of Survey { During progress of work in shops - - - while building { During erection on board vessel - - - 21/7.14/8.5/9.8/9.20/9.11/10.1939. Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
 Total No. of visits 6.

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 built under special survey and tested by the Surveyors to this Society as per Middlesbrough Reports Nos. 16598 & 16599 and have been installed under our supervision and to our satisfaction.

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

A. Barring.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 3 NOV 1939
 Assigned See Memo. J.E. 1826

