

Rpt. 5a.

REPORT ON BOILERS.

No. 49537

Received at London Office 28 AUG 1929

Date of writing Report

When handed in at Local Office

2/18/29 Port of

Glasgow

No. of Survey held at

Glasgow

Date, First Survey 18 June

Last Survey 31 July 1929

on the

"AIR RECEIVER" M.V. "ANGLO SWEDE"

(Number of Visits 5) Gross 8033 Tons Net 4498

Built at Newcastle By whom built Sir W. G. Armstrong Whitworth & Co. Ltd. No. 1048 When built 1930
 Engines made at Stockholm By whom made Aktief. Atlas Diesel Engine No. 50122 When made 1930
 Boilers made at Glasgow By whom made Nilson Boilermakers Ltd. No. 5106 When made 1929
 Indicated Horse Power 848 Owners Rederiaktief Lancker Port belonging to Stockholm

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Conssett Iron Co. and James Dunlop & Co. (Letter for Record)
 Capacity of Receiver about 700 ft³ Is forced draught fitted
 Heating Surface of Boilers RECEIVER One riveted air receiver. Coal or Oil fired
 and Description of Boilers One riveted air receiver. Working Pressure 215 lbs.
 Tested by hydraulic pressure to 430 lbs. Date of test 31/7/29 No. of Certificate 18382 Can each boiler be worked separately
 Area of Firegrate in each Boiler No. and Description of safety valves to each boiler
 No. of each set of valves per boiler (per Rule / as fitted) Pressure to which they are adjusted Are they fitted with easing gear
 In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers
 Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated
 Largest internal dia. of RECEIVER 6'9" Length 17'0" Shell plates: Material Steel Tensile strength 28/32 tons
 Thickness 3/4" Are the shell plates welded or flanged No Description of riveting: circ. seams double
 Seams treble Diameter of rivet holes in 1 1/16" Pitch of rivets 5 3/4"
 Percentage of strength of circ. end seams (plate / rivets) 66.0 / 63.0 Percentage of strength of circ. intermediate seam (plate / rivets) 66.0 / 63.0
 Percentage of strength of longitudinal joint (plate / rivets) 83.7 / 150 / 123.0 Working pressure of shell by Rules 231 lbs.
 Thickness of butt straps (inter. / inner) 3/4" / 3/4" No. and Description of Furnaces in each Boiler

Material Tensile strength Smallest outside diameter
 Thickness of plates (top / bottom) Description of longitudinal joint
 Extensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules
 Plates in stays: Material Steel Tensile strength 26/30 tons Thickness F 1 3/8", B 1 1/4" Pitch of stays radius
 Are stays secured Working pressure by Rules over 215 lbs.
 Front plates: Material (front / back) Tensile strength Thickness
 Pitch of stay tubes in nests Pitch across wide water spaces Working pressure (front / back)

Plates to combustion chamber tops: Material Tensile strength Depth and thickness of girder
 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
 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
 of stays at wide water space Are stays fitted with nuts or riveted over

Working Pressure Main stays: Material Tensile strength
 At body of stay, No. of threads per inch Area supported by each stay
 Over threads Working pressure by Rules Screw stays: Material Tensile strength
 At turned off part, No. of threads per inch Area supported by each stay
 Over threads



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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 *16" x 12" end 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* *4"* 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*

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 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 from the boiler*

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 as per Rules

Rules *Pressure to which the safety valves are adjusted* Hydraulic test pressure

tubes *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, _____

Manufactured by _____

Dates of Survey *During progress of work in shops - - -* *1929. June 18. 25. July 3. 9. 31.* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building *During erection on board vessel - - -* Total No. of visits *5.*

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

This Air Receiver has been built under Special Survey and to the approved plan. The materials and workmanship are good.

It has been dispatched to A. B. Atlas Diesel, Sickle Stockholm. Reference 7287.

This air receiver has been securely fastened on board this vessel and its Safety valve adjusted to the approved working pressure.

A. Baskett.

The attached Plate invoices include the plates used in Air Receiver No. 5 the report on which will be forwarded to Lon. Shonthy.

Survey Fee £ 4 : 4 : 0 | When applied for. *21/8/1929*

Travelling Expenses (if any) £ : : | When received. *7.9.1929*

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

Committee's Minute **GLASGOW 27 AUG 1929**

Assigned **TRANSMIT TO LONDON**

FRI. 14 MAR 1930

See Invoice No. 2020

85442

Lloyd's Register Foundation