

REPORT ON BOILERS.

No. 61660

NOV. 1 1939

Received at London Office

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260
8-19

Date of writing Report 19 30 . 10 . 19 39 Port of Glasgow

No. in Survey held at Renfrew Date, First Survey ✓ Last Survey 19 : 10 : 19 39
Book. (Number of Visits ✓) Tons { Gross 620
Net ✓

on the T.W. Sc. TUG. "T. H. WATERMEYER"

Engines made at Renfrew By whom built A. J. Inglis & Co. Yard No. 1021 When built 1939

Engines made at Renfrew By whom made Lottin & Co. Ltd. Engine No. 1013 When made 1939

Boilers made at Glasgow By whom made Borlase Curle & Co. Ltd. Boiler No. 38/11 When made 1939

Nominal Horse Power 397 Owners Union Govt. of South Africa Port belonging to Cape Town

MULTITUBULAR BOILERS - MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel (Letter for Record 5 ✓)
Coal or Oil fired Coal

Total Heating Surface of Boilers 7508 sq. ft. Is forced draught fitted No

No. and Description of Boilers 4 - S.E. Multitubular Working Pressure 200 lb./sq. in.

Tested by hydraulic pressure to Date of test No. of Certificate Can each boiler be worked separately

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler 1-2" double opening I.H.L. ✓

Area of each set of valves per boiler { per Rule 5.450" ✓ Pressure to which they are adjusted 200 lb. Are they fitted with easing gear Yes
as fitted 6.280" I.H.L.

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler -

Smallest distance between boilers or uptakes and bunkers 4'-3" ✓ Is oil fuel carried in the double bottom under boilers -

Smallest distance between shell of boiler and tank top plating Open floors ✓ 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 Pitch of rivets {
long. seams

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 {

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 spec 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 Area supported by each stay

Diameter { At turned off part, or Over threads No. of threads per inch Area supported by each stay

Spec No. 61123



007553-007562-0326

Working pressure by Rules *Are the stays drilled at the outer ends* Margin stays: Diameter { At turned off part, or Over threads } Working pressure by Rules

No. of threads per inch Area supported by each stay

Tubes: Material External diameter { Plain Stay } Thickness { No. of threads per inch } Working pressure by Rules **Manhole compensation:** Size of opening

Pitch of tubes Working pressure by Rules

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 as Rules

Pressure to which the safety valves are adjusted Hydraulic test pressure 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

The foregoing is a correct description,

Dates of Survey { During progress of work in shops - - } *See Accompanying Machinery Report* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

{ During erection on board vessel - - - } Total No. of visits

Is this Boiler a duplicate of a previous case YES If so, state Vessel's name and Report No. "THEODOR WOKER" GLS.K

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The boiler has been satisfactorily installed, tested under working conditions at full load and all safety valves have been adjusted to the working pressure of 20 lb/sq"*

RB
30/10/39

Survey Fee £ : } When applied for, 19

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

HVC
W.B. Brown
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute **GLASGOW 31 OCT 1939**

Assigned *See Accompanying Machinery Report.*

