

REPORT ON BOILERS.

No. 86253

27 SEP 1930

Received at London Office

NEWCASTLE-ON-TYNE

Date of writing Report *25/9/30* When handed in at Local Office *25/9/30* Port of *NEWCASTLE-ON-TYNE*

No. in Reg. Book *81065* Survey held at *Scotwood.* Date, First Survey *27 Dec 129* Last Survey *22 Sept 1930*

on the *M.V. "PEIK"* (Number of Visits *—*) Gross Tons *6099* Net Tons *3592*

Master *Walker.* Built at *Walker.* By whom built *Sir W.G. Armstrong Whitworth & Co Ltd* Yard No. *1057.* When built *1930*

Engines made at *Scotwood* By whom made *Thos Sir W.G. Armstrong Whitworth & Co Ltd* Engine No. *90.* When made *1930*

Boilers made at *Scotwood* By whom made *Thos Sir W.G. Armstrong Whitworth & Co Ltd.* Boiler No. *90.* When made *1930.*

Nominal Horse Power *583.* Owners *J. W. Salvesen* Port belonging to *OSLO.*

MANOEUVRING AIR RECEIVERS.

~~MANOEUVRING BOILERS MAIN AUXILIARY OR DONKEY~~

Manufacturers of Steel *Thos. Gutehoffnungshutte Oberhausen.* (Letter for Record)

CAPACITY OF AIR RECEIVERS *400 cuft.* Is forced draught fitted Coal or Oil fired

No. and Description of Boilers *Two Riveted Air Receivers* Working Pressure *425 lb/sq in*

Tested by hydraulic pressure to *625 lb/sq in* Date of test *3.7.30* No. of Certificate *44034404* Can each boiler be worked separately

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

Area of each set of valves per boiler *per Rule as fitted 88 sq in* Pressure to which they are adjusted *425 lb/sq in* 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 *RECEIVERS* *4'-6"* Length *11'-6"* Shell plates: Material *Steel* Tensile strength *29-33 tons*

Thickness *1/8"* Are the shell plates welded or flanged *no.* Description of riveting: circ. seams *end D.R. lap.* *inter. 3/4"*

Long. seams *T.R. Double Butt Straps* Diameter of rivet holes in *circ. seams 1 1/8"* *long. seams 1"* Pitch of rivets *3 3/4"* *6 3/4"*

Percentage of strength of circ. end seams *plate 65.3%* *rivets 55.7%* Percentage of strength of circ. intermediate seam *plate 85.6%* *rivets 97.0%*

Percentage of strength of longitudinal joint *plate 85.6%* *rivets 97.0%* Working pressure of shell by Rules *434.7 lb/sq in*

Thickness of butt straps *outer 1 1/4"* *inner 1 3/16"* No. and Description of Furnaces in each Boiler

Material *Steel* Tensile strength Smallest outside diameter

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

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

Stays in steam space: Material *Steel* Tensile strength *26-30 tons* Thickness *F 1/4" B. 1 3/8"* RADIUS *3'-7 1/2"* Pitch of stays *3'-7 1/2"*

How are stays secured Working pressure by Rules *430.3 lb/sq in*

Stays in steam space: Material *Steel* Tensile strength Thickness

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

Material 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

At body of stay, No. of threads per inch Area supported by each stay *or* *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 *or* *Over threads*

Working pressure by Rules *22538* 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 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 } No. and diameter

Internal diameter Working pressure by Rules Thickness of crown Working pressure by Rules

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 } Internal diameter and thickness of tubes

Number of elements Material of tubes Can the superheater be shut off at

Material of headers Tensile strength Thickness Working pressure as total

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 Hydraulic test pressure

Rules Pressure to which the safety valves are adjusted and after assembly in place Are drain cocks or valves fitted by hydraulic test

tubes castings to free the superheater from water where necessary

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with

FOR THE FOREGOING IS A CORRECT DESCRIPTION,
 W. G. ARMISTEAD WHITWORTH & COMPANY (ENGINEERS) LIMITED.
W. G. Armistead
 Manufacturer

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

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

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.)
The Receivers have been busy under Special Survey and in accordance with the Society's Rules approved plan. The materials & workmanship are sound & good. The safety valves were adjusted to the approved working pressure.

For Fees See Lucky Report

Survey Fee £ When applied for, 19

Travelling Expenses (if any) £ When received, 19

L. Peck
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE. 30 SEP 1930

Assigned See other Sur. 36 Rpt. 86253

