

REPORT ON BOILERS.

No. 1306.
12 NOV 1930

Received at London Office

Date of writing Report 30th Oct 1930 When handed in at Local Office

Port of Krump

No. in Reg. Book

Survey held at

Vegrad

Date, First Survey 3rd Oct.

Last Survey 29th Oct. 1930

90836 on the STEEL T.W.S.C. "HEINRICH v. RIEDEMANN"

(Number of Visits)

5
Gross 12175
Net 6974

Built at Vegrad

By whom built Krumer Vulkan

Yard No. 694 When built 1930

Engines made at Vegrad

By whom made Krumer Vulkan

Engine No. 265/70 When made 1930

Boilers made at Sheffield

By whom made Mass. Davy Croc. Ltd.

Boiler No. 3126/7 When made 1930

Owners National - America Petroleum Import & M. Co.

Port belonging to Tanzig

VERTICAL DONKEY BOILER.

Made at Sheffield By whom made Davy Croc.

Boiler No. 3126 When made 1930 Where fixed Top part of engine space.

Manufacturers of Steel Park Gate Iron & Steel Co.

Total Heating Surface of Boiler 270 sq. ft.

Is forced draught fitted

Coal or Oil fired Lignite-gas

No. and Description of Boilers 2 Clarkson Trickle Tube

Working pressure 100 lbs.

Tested by hydraulic pressure to 200 lbs.

Date of test 15th Sep. 1930

No. of Certificate 527-528

Area of Firegrate in each Boiler No. and Description of safety valves to each boiler One 2" donkey spring

Area of each set of valves per boiler per rule 3.51 sq. in. as fitted 6.28 sq. in. Pressure to which they are adjusted 100 lbs. Are they fitted with easing gear Yes

State whether steam from main boilers can enter the donkey boiler Smallest distance between boiler or uptake and bunkers or woodwork

Is oil fuel carried in the double bottom under boiler Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated lagged Largest internal dia. of boiler 5'0" Height 9'3 3/8"

Shell plates: Material O.H. Steel Tensile strength 28-32 T./sq. in. Thickness 7/16"

Are the shell plates welded or flanged No Description of riveting: circ. seams top & bottom 9.9. lap long. seams 9.9. lap

Dia. of rivet holes in circ. seams 13/16" long. seams 13/16" Pitch of rivets 17/8" Percentage of strength of circ. seams plate 56 of Longitudinal joint rivets 74 combined

Working pressure of shell by rules 133 lbs. Thickness of butt straps outer inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat dished Material O.H. Steel

Tensile strength 26-30 T./sq. in. Thickness 9/16" Radius 4'-6" Working pressure by rules 122 lbs.

Description of Furnace: Plain, spherical, or dished crown dished crown Material O.H. Steel Tensile strength 26-30 T./sq. in.

Thickness 13/16" External diameter top 4'-15 1/8" bottom 4'-6 1/4" Length as per rule 4'-6 1/4" Working pressure by rules 127 lbs.

Pitch of support stays circumferentially and vertically Are stays fitted with nuts or riveted over

Diameter of stays over thread Radius of spherical or dished furnace crown 3'-9" Working pressure by rule 117 lbs.

Thickness of Ogee Ring Diameter as per rule Working pressure by rule

Combustion Chamber: Material Tensile strength Thickness of top plate

Radius if dished Working pressure by rule Thickness of back plate Diameter if circular

Length as per rule Pitch of stays Are stays fitted with nuts or riveted over

Diameter of stays over thread Working pressure of back plate by rules

Tube Plates: Material front O.H. Steel Tensile strength 26-30 T. Thickness 13/16" Mean pitch of stay tubes in nests

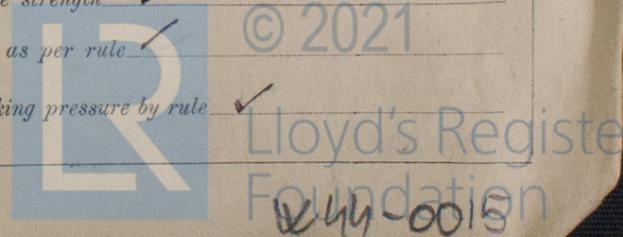
If comprising shell, Dia. as per rule front back Pitch in outer vertical rows 3" Dia. of tube holes FRONT stay 2 3/4" plain BACK stay plain

Is each alternate tube in outer vertical rows a stay tube Working pressure by rules 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 rule



Crown 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
Tubes: Material Steel External diameter { 3 3/4" tapered Thickness { 9 B.W.G.
to 2"
 No. of threads per inch Pitch of tubes 5.57" circular Working pressure by rules
3" vertical
Manhole Compensation: Size of opening in shell plate 10" x 9" Section of compensating ring 3" x 1 1/4" No. of rivets and diameter
 of rivet holes 16 - 15/16" Outer row rivet pitch at ends 2 3/4" Depth of flange if manhole flanged
Uptake: External diameter Thickness of uptake plate
Cross Tubes: No. External diameters { Thickness of plates

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yea

The foregoing is a correct description,

Wm. Gray Brothers, Limited Manufacturer

Dates of Survey { During progress of work in shops - - }
 while building { During erection on board vessel - - } 1930. Oct. 3, 11, 15, 23, 29

Is the approved plan of boiler forwarded herewith Yes (If not state date of approval.)
 Total No. of visits 5

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

These vertical waste heat boilers have been constructed under Special Survey in accordance with the requirements of the Rules and the approved plans. They have been satisfactorily fitted on board examined under steam and found tight. Their safety valves have been adjusted to 100 lbs. per sq. inch.

Thickness of adjusting washers: - Starboard Boiler. Port Boiler.
 Starboard .225" port .24" Starboard .23" port .23"

It is recommended that these boilers be eligible to be classed in the Register Book with the notation of 100 lbs.

Survey Fee ... £ 2 : 0 : } When applied for, 4/11/30
 Travelling Expenses (if any) £ 1 : 0 : } When received, 13.11.1930

Wm. Gray
Wm. Gray

Committee's Minute
Assigned

TUE. 25 NOV 1930

See other Bmn. J.C.
Rpt. 1306

