

REPORT ON BOILERS.

No. 22238

Received at London Office 17 MAR '37

Date of writing Report 11th March 1937 When handed in at Local Office 10 Port of Hamburg

No. in Survey held at Hamburg Date, First Survey 8th January Last Survey 18th February 1937

Reg. Book (Number of Visits 10) Gross Tons Net

on the *GN*

Built at Wesermünde By whom built Deschimag "Lebeck" Wesermünde Yard No. 572 When built 1937

Engines made at By whom made Engine No. When made

Boilers made at Hamburg By whom made Messrs. Deutsche Werft A.G. Boiler No. 696 When made 1937

Owners Port belonging to

VERTICAL DONKEY BOILER.

Made at Hamburg By whom made Messrs. Deutsche Werft A.G. Boiler No. 696 When made 1937 Where fixed

Manufacturers of Steel Messrs. Eisenhoffnungs- u. Kt. W. W. Oberhausen.

Total Heating Surface of Boiler 23 m² Is forced draught fitted yes Coal or Oil fired Oil

No. and Description of Boilers one Vertical Donkey Boiler Working pressure 7 kgs/sq cm

Tested by hydraulic pressure to 14 kgs/sq cm Date of test 18-2-37 No. of Certificate 657

Area of Firegrate in each Boiler no No. and Description of safety valves to each boiler 1; two spring loaded

Area of each set of valves per boiler { per rule 1240 mm² as fitted 3150 mm² Pressure to which they are adjusted Are they fitted with easing gear

State whether steam from main boilers can enter the donkey boiler no Smallest distance between boiler or uptake and bunkers

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 Largest internal dia. of boiler 1400 mm Height 3325 mm

Shell plates: Material S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness 10 mm

Are the shell plates welded or flanged flanged Description of riveting: circ. seams { end. single row inter. long. seams Two rows.

Dia. of rivet holes in { circ. seams 20 mm Pitch of rivets { 48 mm Percentage of strength of circ. seams { plate 58.3% rivets 57.4% of Longitudinal joint { plate 69.4% rivets 84.2% combined 81%

Working pressure of shell by rules 7.95 kgs/sq cm Thickness of butt straps { outer inner

Shell Crown: ~~Whether complete hemisphere~~, dished partial spherical, or flat yes Material S.M. Steel.

Tensile strength 41-47 kgs/sq mm Thickness 12 mm Radius 1120 mm Working pressure by rules 8.35 kgs/sq cm

Description of Furnace: ~~Plain~~, spherical, or ~~dished crown~~ yes Material S.M. Steel Tensile strength 41-47 kgs/sq mm

Thickness 15 mm External diameter { top 1050 mm Length as per rule 1150 mm Working pressure by rules 7.85 kgs/sq cm

Thickness 15 mm { bottom 1150 mm

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 Working pressure by rule

Thickness of Ogee Ring 15 mm Diameter as per rule { D 1400 mm Working pressure by rule 7.85 kgs/sq cm

Combustion Chamber: Material S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness of top plate 15 mm

Diameter if dished 1120 mm Working pressure by rule 11 kgs/sq cm Thickness of back plate 15 mm Diameter if circular 1150 mm

Length as per rule 1150 mm Pitch of stays 180/180 mm Are stays fitted with nuts or riveted over filled with nuts

Diameter of stays over thread 26.17 mm Working pressure of back plate by rules 10.4 kgs/sq cm

Tube Plates: Material { front S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness 18 mm Mean pitch of stay tubes in nests 178/267 mm

back S.M. Steel Tensile strength 41-47 kgs/sq mm Thickness 18 mm

Comprising shell, Dia. as per rule { front Pitch in outer vertical rows 89 mm Dia. of tube holes FRONT { stay 70 mm BACK { stay 635 mm

back Pitch in outer vertical rows 89 mm { plain 635 mm

Each alternate tube in outer vertical rows a stay tube Working pressure by rules { front 9.56 kgs/sq cm back 9.56 kgs/sq cm

Stays to combustion chamber tops: Material Tensile strength

Position and thickness of girder at centre Length as per rule

Distance apart No. and pitch of stays in each Working pressure by rule

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

DEUTSCHE WERFT

AKTIENGESELLSCHAFT

Manufactur

Is the approved plan of boiler forwarded herewith 2. 10. 36
(If not state date of approval.)

Total No. of visits 10

ARKS (State quality of workmanship, opinions as to class, &c.) Material and workmanship of this vertical donkey boiler are of good quality. The materials used in it's construction are made at Work recognised by the Committee and tested by the Society's Survey in accordance with the requirements of the Rules. This donkey boiler havind been made under Special Survey in conformity with the approved plan, the Secretary's Letter and otherwise in compliance with the requirements of the Rules is eligible in my opinion to be classed in the Society's Record Book with the notation:- +D.B. pressure 7 kgs/sq.cm. This donkey boiler has been shipped to Flensburg where it will be fitted on board of the vessel No 572 now under construction:-

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 6 AUG 1937

Assigned

See Bonn 1935



Lloyd's Register
Foundation