

REPORT ON BOILERS.

No. 23050
FEB 16 1939

Received at London Office

Rpt. 5a.
 Date of writing Report 12th Febr. 1939. When handed in at Local Office 19 Port of HAMBURG
 No. in Survey held at HAMBURG Date, First Survey 22nd Sept. 1938 Last Survey 31st January 1939.
 on the Turin Ye. GERMANIA (Number of Visits 5)
 Gross Tons 9977
 Net Tons 5800
 Built at HAMBURG By whom built Deutsche Werk A.G. Yard No. 216 When built 1939.
 Engines made at Augsburg By whom made Maschinenfabrik Augsburg - Nürnberg Engine No. 681430/40 When made 1939
 Boilers made at HAMBURG By whom made Deutsche Werk A.G. Boiler No. 817, 818 When made 1939.
 Nominal Horse Power 1170 Owners The Texas Co (Norway) A/S Port belonging to Oslo.

Waste-Heat La-Mont-Donkey Boiler Coil System.
~~MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.~~

Manufacturers of Steel Headers: Gutehoffnungshütte A.G. Werk Sterkrade (Letter for Record S.)
 Total Heating Surface of Boilers each boiler 100 sq. metres Is forced draught fitted - Coal or Oil fired exhaust-gas heated
 No. and Description of Boilers Two Waste Heat "La Mont"-Donkey Boiler Coil Systems Working Pressure 12 kg/cm²
 Tested by hydraulic pressure to 307 lbs Date of test 29.10.38 No. of Certificate 7/2, 7/3 Can each boiler be worked separately only in connection with a sep. d. boiler
 Area of Firegrate in each Boiler - No. and Description of safety valves to each boiler one - spring-loaded
 Area of each set of valves per boiler { 35 mm φ as fitted } Pressure to which they are adjusted 12 kg/cm² Are they fitted with easing gear yes
 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 yes
 Largest internal dia. of boilers 1280 mm Length 3300 mm HEADERS Shell-plates: Material S-M-Steel Tensile strength 41-47 kg/mm²
 Thickness of shell 10 mm Are the shell plates welded on flanged yes Description of riveting: circ. seams { end }
 { inter. }
 No. of coils { 4 double coils Diameter of coil tubes 32 / 26 mm Thickness of shell 3 mm
 { 3 triple coils Diameter of rivet holes in { circ. seams }
 { 2 quadruple coils { long. seams } Pitch of rivets }
 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 16.25 kg/cm²
 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 Rule - 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 -
 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 _____ 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 in 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 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 and 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 _____
 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 yes.
 The foregoing is a correct description, _____
 Manufacturer: _____

Dates of Survey { During progress of work in shops - - } 1938. Sept. 22 Oct. 8, 29
 { During erection on board vessel - - - } 1939. Jan. 11, 31
 Are the approved plans of boiler and superheater forwarded herewith 3.9.36
 (If not state date of approval.)
 Total No. of visits 5

Is this Boiler a duplicate of a previous case yes If so, state Vessel's name and Report No. NUEVA GRANADA Hambg Rep. No. 22304

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) _____
 Material and workmanship of these Waste-Heat - La Mont - Donkey Boiler Coil Systems are of good quality.
 The materials used in their constructions are made at Works recognized by the Committee and tested by the Society's Surveyors in accordance with the requirements of the Rules.
 These Donkey Boiler Coil Systems having 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 are eligible in my opinion to be classed with notation in the Register Books:
Two Donkey Boilers (WT) 171 lbs/sq. inch pressure.

Thickness of safety valves' adjusting washers: Port boiler 6 mm, Starbd boiler 5 mm.

Survey Fee £ R.M. 168: - } When applied for, 10.2. 1939.
 Travelling Expenses (if any) £ : - : - } When received, See Incty rpt.

H. Röhrs
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute _____ FRI. 24 FEB 1939
 Assigned _____ Sec FE in acty rpt

