

REPORT ON BOILERS.

No. 10609

- 6 AUG 1941

Received at London Office

Reporting Report 21st July 1941 When handed in at Local Office 31st July 1941 Port of Manchester
 Survey held at Manchester Date, First Survey 20th February Last Survey 8th July 1941
 On the S.S. S.S. "MODLIN" ex "WILJA" (Number of Visits 21 (Total F&S) Gross Tons Net
 Built at Flensburg By whom built Flensburger Schiffbau Gesellschaft Yard No. When built 1906
 made at By whom made Engine No. When made
 made at Haver By whom made Ateliers de Reparations Maritimes Boiler No. When made 1926
 Horse Power 307 Owners Polish Government Beland Crighton & Co. Port belonging to

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

makers of Steel (Letter for Record)
 Heating Surface of Boilers 4200 sq ft Is forced draught fitted yes Coal or Oil fired coal
 Description of Boilers 2 single ended, cylindrical, multitubular boilers Working Pressure 200 lb²
 hydraulic pressure to 200 lb² Date of test 29-5-41, 3-6-41 No. of Certificate Can each boiler be worked separately yes
 Firegrate in each Boiler 67.5 sq ft No. and Description of safety valves to each boiler Double Valve 60" diam of high lift type
 each set of valves per boiler (per Rule 12.2 ordinary as fitted 8.8" high lift Pressure to which they are adjusted 200 lb² Are they fitted with easing gear yes
 of donkey boilers, state whether steam from main boilers can enter the donkey boiler Cross connection kept locked when main boilers are under steam.
 distance between boilers ~~compartments~~ and bunkers 15" Is oil fuel carried in the double bottom under boilers no
 distance between shell of boiler and tank top plating 18 1/2"
 Is the bottom of the boiler insulated no
 internal dia. of boilers 13' 7 1/2" Length 11' 8 1/2" Shell plates: Material Tensile strength
 1 5/16" Are the shell plates welded or flanged no Description of riveting: circ. seams {end D.R. lap inter. 3-75" 9-06"
 as double riveted double B.S. Diameter of rivet holes in {circ. seams 1 5/16" long. seams 1 7/16" Pitch of rivets {
 of strength of circ. end seams {plate 64.12 rivets 45.32 Percentage of strength of circ. intermediate seam {plate 85.52 rivets 87.62
 of strength of longitudinal joint {plate 85.52 rivets 87.62 combined 88.62 Working pressure of shell by Rules 213 lb²
 of butt straps {outer 1.06 inner 1.18 No. and Description of Furnaces in each Boiler 3 Morrison
 Tensile strength Smallest outside diameter 41"
 plain part {top Thickness of plates {crown 1 1/16" bottom 1 1/16" Description of longitudinal joint Fire weld
 of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 246 lb²
 in steam space: Material Tensile strength Thickness 1.18" Pitch of stays 15 1/2" x 17 1/2"
 stays secured nuts & loose washers inside & outside Working pressure by Rules 215 lb² above w.w. space
 es: Material {front Tensile strength Thickness 1 5/16" 1 7/16"
 of stay tubes in nests 8 1/2" x 8 1/2" Pitch across wide water spaces 14" Working pressure {front 229 lb² back 442 lb²
 combustion chamber tops: Material Tensile strength Depth and thickness of girder
 5 3/4" x 2 @ 7/8" Length as per Rule 2' 11" Distance apart 9 3/8" No. and pitch of stays
 3 @ 8" Working pressure by Rules 223 lb² Combustion chamber plates: Material
 length Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 3/4"
 stays to ditto: Sides 7 7/8" x 8 1/4" Back 8 3/8" x 9" Top 8" x 9 3/8" Are stays fitted with nuts or riveted over nuts
 pressure by Rules 261 lb² Front plate at bottom: Material Tensile strength Thickness 7/8"
 15/16" Lower back plate: Material Tensile strength Thickness 7/8"
 stays at wide water space 14 1/2" Are stays fitted with nuts or riveted over nuts
 pressure 215 lb² Main stays: Material Tensile strength
 body of stay, 3 3/16" No. of threads per inch 9 Area supported by each stay 17 1/2" x 15 1/2"
 or 3 7/16" Screw stays: Material Tensile strength
 pressure by Rules 309 lb² No. of threads per inch 9 Area supported by each stay 8" x 9 3/8"
 turned off part, 1 13/16"

W192-0083

Working pressure by Rules 262 lb. Are the stays drilled at the outer ends ☒ Margin stays: Diameter ^{At turned off part,} 1 7/8"
No. of threads per inch 9 Area supported by each stay 102.8" (max.) Working pressure by Rules 207 lb.
Tubes: Material ☒ External diameter ^{Plain} 3" Thickness ^{Stay} 5/16" & 1/4" No. of threads per inch 9
Pitch of tubes 4 1/4" Working pressure by Rules 250 lb. Manhole compensation: Size of opening 1 5/16"
shell plate 21" Section of compensating ring 17 1/2" x 1 7/16" No. of rivets and diameter of rivet holes 54
Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged 3" Steam Dome: Material 22
Tensile strength ☒ Thickness of shell ☒ Description of longitudinal joint ☒
Diameter of rivet holes ☒ Pitch of rivets ☒ Percentage of strength of joint ^{Plate} ☒
Internal diameter ☒ Working pressure by Rules ☒ Thickness of crown ☒ No. and diameter of rivets 54
stays ☒ Inner radius of crown ☒ Working pressure by Rules ☒
How connected to shell ☒ Size of doubling plate under dome ☒ Diameter of rivet holes 54
of rivets in outer row in dome connection to shell ☒

Type of Superheater ☒ Manufacturers of ☒
Number of elements ☒ Material of tubes ☒ Internal diameter and thickness of tubes ☒
Material of headers ☒ Tensile strength ☒ Thickness ☒ Can the superheater be shut off from the boiler ☒
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 ☒
Rules ☒ Pressure to which the safety valves are adjusted ☒ Hydraulic test pressure ☒
tubes ☒ castings ☒ and after assembly in place ☒ Are drain cocks or valves ☒
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 - - -
while building ☒ During erection on board vessel - - -
Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) ☒
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.) Plans of these boilers are not available.

Accordingly the boilers have now been measured and the scantlings are found to meet the requirements of the Rules for a working pressure of 200 lbs per sq in.

There are no test results available for the materials used in the construction of these boilers, but it is known that at the time the boilers were built and installed the vessel was classed with the Bureau Veritas.

The boilers have been examined internally and externally and are in good order and safe working condition. They have been hydraulically tested to 200 lbs per square inch with satisfactory results.

The boilers are eligible, in my opinion, to be classed in the Society's Register Book and to receive the notation BS-7, 41.

Survey Fee ... £ ... When applied for, 19
Travelling Expenses (if any) £ ... When received, 19

W. J. Ferguson
Engineer Surveyor to Lloyd's Register of Ships

Committee's Minute

TUE, 12 AUG 1941

Assigned

See Mch. Rpt. 10607



© 2019
Lloyd's Register
Foundation