

REPORT ON BOILERS.

No. 9987

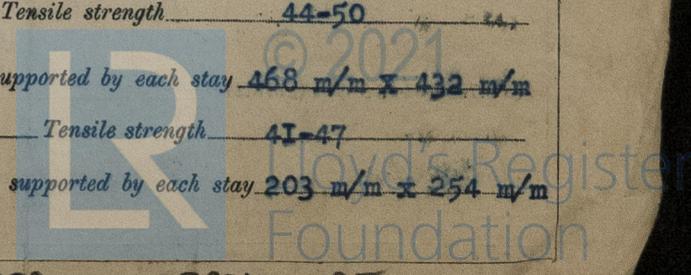
Received at London Office 20 AUG 1927

pt. 5a.

Date of writing Report 27/7/27 1927 When handed in at Local Office 27/7/27 1927 Port of GENOVA
 No. in Book. Survey held at RIVA TRIGOSO Date, First Survey 21/2/27 Last Survey 23/7/27 1927
 on the 5/8" CONTE GRANDE (Number of Visits 12) Tons {Gross - Net -}
 Built at Trieste By whom built Stat. Ice Trieste Yard No. 764 When built -
 By whom made - Engine No. - When made -
 Made at Riva Trigoso By whom made Cantiere del Tirreno Boiler No. 725 When made 1927
 Owners "Lloyd Sabauda" Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY

Manufacturers of Steel Messrs August Thyssen-Hutte Gewerschaft-Mutheim-Ruhr (Letter for Record
 Heating Surface of Boilers 584 sq. m/m. Is forced draught fitted Coal or Oil fired Oil
 Description of Boilers 2 Single Ended Multitubular Scotch Type Working Pressure 15.46 kg./cm²
 Tested by hydraulic pressure to 26.7 kg. cm² Date of test 19-7-27 No. of Certificate 195
23-7-27 196 Can each boiler be worked separately
 No. and Description of safety valves to each boiler -
 Pressure to which they are adjusted - Are they fitted with easing gear -
 Use of donkey boilers, state whether steam from main boilers can enter the donkey boiler -
 Is oil fuel carried in the double bottom under boilers -
 Is the bottom of the boiler insulated -
 Shell plates: Material Steel Tensile strength 44.50 kg./m/m²
 Description of riveting: circ. seams {end D.R.Z.Z. inter. Nil}
 Diameter of rivet holes in {circ. seams 40 m/m long. seams 40 m/m} Pitch of rivets {100 m/m 273 m/m}
 Percentage of strength of circ. end seams {plate 60% rivets 49.5%} Percentage of strength of circ. intermediate seam {plate - rivets -}
 Percentage of strength of longitudinal joint {plate 85.3% rivets 84.96% combined 87.74%} Working pressure of shell by Rules 15.46 kg. cm²
 No. and Description of Furnaces in each Boiler 4 Morrison
 Material Steel Tensile strength 4I-47 Smallest outside diameter 1057 m/m
 Thickness of plates {top 16 m/m bottom 16 m/m} Description of longitudinal joint Welded
 Working pressure of furnace by Rules 15.56 kg.
 Material Steel Tensile strength 4I-47 Thickness 3I m/m Pitch of stays 468 m/m x 432 m/m
 Working pressure by Rules 15.56 kg/cm²
 Material {front Steel back Steel} Tensile strength {4I.47 4I.47} Thickness {23 m/m 23 m/m}
 Working pressure {front 15.9 kg. cm² back 15.7 kg. cm²}
 Material Steel Tensile strength 44-50 kg. cm² Depth and thickness of girder
 Working pressure by Rules 21.7 kg. cm² Combustion chamber plates: Material Steel
 Thickness: Sides 17.5 m/m Back 18.5 m/m Top 17.5 m/m Bottom 22 m/m
 Working pressure by Rules 16 kg. cm² Front plate at bottom: Material Steel Tensile strength 4I-47
 Lower back plate: Material Steel Tensile strength 4I-47 Thickness 24 m/m
 Working pressure 19.5 kg. cm² Main stays: Material Steel Tensile strength 44-50
 At body of stay, 85 m/m No. of threads per inch 6 per inch Area supported by each stay 468 m/m x 432 m/m
 Over threads 85 m/m
 Working pressure by Rules 19.7 kg. cm² Screw stays: Material Steel Tensile strength 4I-47
 At turned off part, 44 m/m No. of threads per inch 9 per inch Area supported by each stay 203 m/m x 254 m/m



Working pressure by Rules 15.56 kg/cm² Are the stays drilled at the outer ends No Margin stays: Diameter 57 m/m & 50.8
 No. of threads per inch 9 Area supported by each stay 36743 sq. m/m. Working pressure by Rules 29.4 kg. cm²
 Tubes; Material Steel External diameter { Plain 76 m/m Stay 76 m/m Thickness { 4 m/m 9.5 m/m & 8 m/m No. of threads per inch 9 per in.
 Pitch of tubes 108 m/m x 105 m/m Working pressure by Rules 17.5 kg. cm² Manhole compensation: Size of opening 94 x 99
 shell plate 300 m/m x 400 m/m Section of compensating ring Flanged plate No. of rivets and diameter of rivet holes 40 - 40 m/m
 Outer row rivet pitch at ends 273 m/m Depth of flange if manhole flanged 102 m/m 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 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 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 _____
 to free the superheater from water where necessary _____

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

CANTIERI DEL TIRRENO - GENOVA
Stabilimento Meccanico
 DI
RIVA TRIGOSO
 Il Direttore Tecnico
F. Tommaso Chiappini Manuf.

Dates of Survey { During progress of work in shops - - - { 21/2/27, 3/3/27, 11/3/27, 8/4/27
 while building { During erection on board vessel - - - { 25/4/27, 2/5/27, 9/5/27, 23/5/27, 27/6/27, 9/7/27, 19/7/27, 23/7/27
 Are the approved plans of boiler and superheater forwarded herewith. (If not state date of approval.) _____
 Total No. of visits 12 Sent with Genoa Register No 9958.

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

These Boilers have been constructed tested materials under special survey and in accordance with approved plans, Secretary's letter Rule Requirements. The workmanship and materials are good and when tested hydraulically to 26 kg. cm² were found tight and satisfactory.

These boilers are intended for the S/S "CONTE GRANDE" now building at Trieste and be eligible in my opinion, to be classed in the Register Book when they have been satisfactorily tested on board, all safety valves and mountings fitted, safety valves adjusted under steam and later tests satisfactorily carried out.

Copy of this report has been sent to Trieste.

The Boilers have been stamped for identification as follows:-

No 195
 LLOYD'S TEST
 T.P. 26.70 kg. cm²
 W.P. 15.46 kg. cm²
 G.C.V. 19-7-27

No 196
 LLOYD'S TEST
 T.P. 26.70 kg. cm²
 W.P. 15.46 kg. cm²
 G.C.V. 23-7-27

Survey Fee ... £ 1060.- :
 Travelling Expenses (if any) £ 1030.- :

When applied for, 17/8/27 S.C.V.
 When received, 29.11.1927

G. Blankvaux

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

TUES. 3 APR 1928

Assigned

La Tri. I. E. n. n. 7869



Lloyd's Register Foundation