

# REPORT ON BOILERS.

No. 4096

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Date of writing Report Feb 12<sup>th</sup> 1908 When handed in at Local Office Feb 12<sup>th</sup> 1908 Port of Genoa  
 No. in Survey held at Genoa Date, First Survey Nov 19<sup>th</sup> 1907 Last Survey Feb 11<sup>th</sup> 1908  
 Reg. Book. 3 Sup on the S.S. Principe di Piemonte (Number of Visits 8) Gross 5204 Tons Net 3313  
 Master N. Somericoni Built at Sunderland By whom built Sir Jas Laing + Sons Ltd When built 1904-6  
 Engines made at Sunderland By whom made G. Clark Ltd when made 1904  
 Boilers made at do By whom made do when made 1904  
 Registered Horse Power 804 869 Owners Lloyd Sabauda Soc Anon di Nav Port belonging to Naples

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Gesellschaft Deutscher Meiser

(Letter for record S) Total Heating Surface of Boilers 1805 <sup>sq ft</sup> Is forced draft fitted no No. and Description of Boilers One Horizontal Multitubular Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 19-11-07  
 No. of Certificate 49 Can each boiler be worked separately yes Area of fire grate in each boiler 55.2 <sup>sq ft</sup> No. and Description of safety valves to each boiler 2 Spring Area of each valve 8.95 <sup>sq in</sup> Pressure to which they are adjusted 180 <sup>psi</sup>  
 Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 22 <sup>in</sup> Mean dia. of boilers 15-9 <sup>in</sup> Length 9-5 <sup>in</sup>  
 Material of shell plates steel Thickness 1 1/4 <sup>in</sup> Range of tensile strength 36-40 <sup>tons</sup> Are the shell plates welded or flanged no  
 Descrip. of riveting: cir. seams double long. seams double melted Diameter of rivet holes in long. seams 1 1/4 <sup>in</sup> Pitch of rivets 4.8 x 9.6  
 Lap of plates or width of butt straps 22.8 <sup>in</sup> Per centages of strength of longitudinal joint rivets 46.00 Working pressure of shell by rules 192 Size of manhole in shell 15" x 11" Size of compensating ring 9.29" x 1 1/2" No. and Description of Furnaces in each boiler 3 Horizontal Material steel Outside diameter 43 <sup>in</sup> Length of plain part top Thickness of plates 10-25 <sup>in</sup> bottom 7.6  
 Description of longitudinal joint welded No. of strengthening rings - Working pressure of furnace by the rules 242 Combustion chamber plates: Material steel Thickness: Sides 5/8 <sup>in</sup> Back 5/8 <sup>in</sup> Top 5/8 <sup>in</sup> Bottom 3/2 <sup>in</sup> Pitch of stays to ditto: Sides 5.9 x 5.9 Back 6.6 x 5.9  
 Top 4.08 x 5.9 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 388 <sup>psi</sup> Material of stays steel Diameter at smallest part 1 1/2 x 1 1/4 <sup>in</sup> Area supported by each stay 57.00 <sup>sq in</sup> Working pressure by rules 244 <sup>psi</sup> End plates in steam space: Material steel Thickness 8 <sup>in</sup>  
 Pitch of stays 14.17 x 13.78 How are stays secured large nuts and washers outside Working pressure by rules 215 Material of stays steel Diameter at smallest part 3 1/2 <sup>in</sup>  
 Area supported by each stay 226.5 <sup>sq in</sup> Working pressure by rules 195 <sup>psi</sup> Material of Front plates at bottom steel Thickness 4 <sup>in</sup> Material of Lower back plate steel Thickness 4 <sup>in</sup> Greatest pitch of stays 12.49 x 5.9 Working pressure of plate by rules 430 Diameter of tubes 5 1/4 <sup>in</sup>  
 Pitch of tubes 4 7/16 <sup>in</sup> Material of tube plates steel Thickness: Front 4 <sup>in</sup> Back 3 1/2 <sup>in</sup> Mean pitch of stays 8 7/8 <sup>in</sup> Pitch across wide water spaces 13 3/8 <sup>in</sup> Working pressures by rules 312.5 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 4.08 x 1.49 Length as per rule 33.62 Distance apart 4.08 Number and pitch of Stays in each 3 - 5.9  
 Working pressure by rules 269 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately yes Diameter - Length - Thickness of shell plates - Material - Description of longitudinal joint - Diam. of rivet holes - Pitch of rivets - Working pressure of shell by rules - Diameter of flue - Material of flue plates - Thickness -  
 If stiffened with rings - Distance between rings - Working pressure by rules - End plates: Thickness - How stayed -  
 Working pressure of end plates - Area of safety valves to superheater - Are they fitted with easing gear -

see. Secretary's letters dated - Nov 12-14-07. E  
 " Genoa survey " " - Nov 9-11-20-07. I  
 The foregoing is a correct description,  
 Manufacturer.

Dates of Survey } During progress of work in shops - - } 1907. Nov 19<sup>th</sup> Dec 23<sup>rd</sup> } Is the approved plan of boiler forwarded herewith yes  
 while building } During erection on board vessel - - - } 1908. Jan 9. 23. 25. 29. Feb 5<sup>th</sup> 11<sup>th</sup> } Total No. of visits 8

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. This boiler was not constructed under special survey, but when completed, it was examined, the scantlings compared with the approved tracing, & the materials & workmanship found to be good & in accordance with the approved plan. It is therefore eligible in my opinion to be fitted to a clamed vessel.

Survey Fee ... £132.30 When applied for, 24-12-1907  
 Travelling Expenses (if any) £23.45 When received, not paid yet 1908

Assigned Maurice Pitson  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.