

8194

pt. 5.

# REPORT ON BOILERS.

No. 8194

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No. in Survey held at RIVA TRIGOSO & GENOA Date, First Survey 19. 9. 21 Last Survey 6. 2. 1922

eg. Book. (Number of Visits 4)

Safety on the donkey boiler of the s.s. "RAPALLO" Tons { Gross 6467 Net 3944

ster Built at Riva Trigoso By whom built Societa' Esercizio Bacini When built 1922

ines made at Riva Trigoso By whom made Societa' Esercizio Bacini When made 1922

ilers made at do. By whom made do. When made 1921

gistered Horse Power Owners do. Port belonging to Genoa.

## WATER-TUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Consorzio Costuttori Navali Italiane

atter for record S. ✓ Total Heating Surface of Boilers 90 m<sup>2</sup> Is forced draft fitted no No. and Description of Boilers 1- S.E. Marine ✓ Working Pressure 100 lbs. 4 kg/cm<sup>2</sup> Tested by hydraulic pressure to 14 kg/cm<sup>2</sup> Date of test 16. 7. 21. G R M.

of Certificate none Can each boiler be worked separately ✓ Area of fire grate in each boiler 3.2 m<sup>2</sup> No. and Description of Safety valves to each boiler Pair spring loaded ✓ Area of each valve 3630 cm<sup>2</sup> Pressure to which they are adjusted 4.3 kg/cm<sup>2</sup> they fitted with easing gear Yes ✓ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no ✓

allest distance between oil boilers or uptakes and bunkers or woodwork 2 meters Mean dia. of boilers 3120 Length 2850

aterial of shell plates S. ✓ Thickness 16 Range of tensile strength 44.5/50 Are the shell plates welded or flanged no ✓

scrip. of riveting: cir. seams D.R. long. seams D.R. D.B.S. Diameter of rivet holes in long. seams 25 Pitch of rivets 105

of plates or width of butt straps 252 Per centages of strength of longitudinal joint rivets 89 plate 46.2 Working pressure of shell by rules 8.1 Size of manhole in shell nil ✓ Size of compensating ring ✓ No. and Description of Furnaces in each boiler 2 plain ✓ Material S. Outside diameter 932 Length of plain part top 1950 bottom 2120 Thickness of plates crown 16 bottom 16

escription of longitudinal joint D.R. Lap. No. of strengthening rings nil Working pressure of furnace by the rules 8.4 Combustion chamber: Material S. Thickness: Sides 13 Back 13 Top 13 Bottom 16 Pitch of stays to ditto: Sides 180x14 Back 180x180 area 188x80 If stays are fitted with nuts or riveted heads R Heads Working pressure by rules 8.2 Material of stays S Diameter at smallest part 1.22 Area supported by each stay 3240 cm<sup>2</sup> Working pressure by rules 14.1 End plates in steam space: Material S Thickness 19 How are stays secured DN & RW Working pressure by rules 10.8 Material of stays S Diameter at smallest part 345x340 area 2346 cm<sup>2</sup> Area supported by each stay 13840 cm<sup>2</sup> Working pressure by rules 13.1 Material of Front plates at bottom S Thickness 19 Material of back plate S Thickness 19 Greatest pitch of stays 340x180 Working pressure of plate by rules 13.8 Diameter of tubes 76

h of tubes 104x104 Material of tube plates S. Thickness: Front 19 Back 18 Mean pitch of stays 208x208 Pitch across wide spaces 340 Working pressures by rules 4.8 Girders to Chamber tops: Material S. Depth and thickness of girder at centre 180x18 (double) Length as per rule 580 Distance apart 188 Number and pitch of Stays in each 2-180 Working pressure by rules 20 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked separately ✓ Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivets ✓ Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓ 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 ✓

**VERTICAL DONKEY BOILER**— No. \_\_\_\_\_ Description \_\_\_\_\_ Manufacturers of steel \_\_\_\_\_

le at \_\_\_\_\_ By whom made \_\_\_\_\_ When made \_\_\_\_\_ Where fixed \_\_\_\_\_ Working pressure \_\_\_\_\_

ed by hydraulic pressure to \_\_\_\_\_ Date of test \_\_\_\_\_ No. of Certificate \_\_\_\_\_ Fire grate area \_\_\_\_\_ Description of safety valves \_\_\_\_\_

of safety valves \_\_\_\_\_ Area of each \_\_\_\_\_ Pressure to which they are adjusted \_\_\_\_\_ If fitted with easing gear \_\_\_\_\_ If steam from main boilers can \_\_\_\_\_

the donkey boiler \_\_\_\_\_ Dia. of donkey boiler \_\_\_\_\_ Length \_\_\_\_\_ Material of shell plates \_\_\_\_\_ Thickness \_\_\_\_\_ Range of tensile \_\_\_\_\_

ngth \_\_\_\_\_ Descrip. of riveting long. seams \_\_\_\_\_ Dia. of rivet holes \_\_\_\_\_ Whether punched or drilled \_\_\_\_\_ Pitch of rivets \_\_\_\_\_

of plating \_\_\_\_\_ Per centage of strength of joint Rivets \_\_\_\_\_ Plates \_\_\_\_\_ Working pressure of shell by rules \_\_\_\_\_ Thickness of shell crown plates \_\_\_\_\_

lius of do. \_\_\_\_\_ No. of Stays to do. \_\_\_\_\_ Dia. of stays \_\_\_\_\_ Diameter of furnace Top \_\_\_\_\_ Bottom \_\_\_\_\_ Length of furnace \_\_\_\_\_

ckness of furnace plates \_\_\_\_\_ Description of joint \_\_\_\_\_ Working pressure of furnace by rules \_\_\_\_\_ Thickness of furnace crown \_\_\_\_\_

es \_\_\_\_\_ Radius of do. \_\_\_\_\_ Stayed by \_\_\_\_\_ Diameter of uptake \_\_\_\_\_ Thickness of uptake plates \_\_\_\_\_

ckness of water tubes \_\_\_\_\_

The foregoing is a correct description,  
Fug. Ferdinando Rossi Manufacturer.

During progress of work in shops --  
 During erection on board vessel ---  
 Total No. of visits

See Machinery Report.

Is the approved plan of main boiler forwarded herewith  
 " " " donkey " "



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

The materials used in the construction of this boiler were tested by the R.N.I.  
 The boiler and its mountings were examined and the scantlings checked  
 and found in order. The boiler and mountings are of good workmanship  
 and were found in good order.  
 The safety valves have been adjusted under steam and the boiler is secured  
 satisfactorily.

M. R. A.

Certificate (if required) to be sent to  
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £	See :	When applied for,
Special .. .. .	Trachy :	.....19.....
Donkey Boiler Fee .. .. .	Report :	When received,
Travelling Expenses (if any) £	:	.....19.....

M. R. A.  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute  
 Assigned

TUE. FEB. 28 1922