

# REPORT ON BOILERS.

No. 15876

Received at London Office

Date of writing Report

When handed in at Local Office

15/9/1910 Port of Greenock

No. in Survey held at Greenock

Date, First Survey

3rd November 1909 Last Survey 10th Sept. 1910

(Number of Visits 25)

Gross Tons

Net Tons

on the LLOYD AUSTRIACOS N°126 VESSEL.

Built at Trieste By whom built Lloyd Austriaco When built 1910  
 Engines made at Trieste By whom made Lloyd Austriaco when made 1910  
 Partly made at Greenock By whom made David & Co. Ltd. when made 1910  
 Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel D. Colville & Sons

Letter for record \$(r) Total Heating Surface of Boilers 24000 sq. ft. Is forced draft fitted Yes No. and Description of

Boilers Eight Cylindrical Multi-Engine End Working Pressure 215 lbs Tested by hydraulic pressure to Date of test

No. of Certificate Can each boiler be worked separately Area of fire grate in each boiler 70 sq. ft. No. and Description of

Safety valves to each boiler Area of each valve Pressure to which they are adjusted

Are they fitted with easing gear 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 Inside Mean dia. of boilers 16'6" Length 11'7 1/2"

Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 30 to 34 tons Are the shell plates welded or flanged No

Description of riveting: cir. seams Lap Double Riv. long. seams Double Butt Shape Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 9" 4 1/2"

Gap of plates or width of butt straps 2 1/2" Per centages of strength of longitudinal joint rivets 89 Working pressure of shell by plate 85

Boiler 4 Deightons Material Steel Outside diameter 44 1/2" Length of plain part top 8'2 3/8" Thickness of plates crown 5" bottom 8"

Description of longitudinal joint Weld No. of strengthening rings None Working pressure of furnace by the rules 227 lbs Combustion chamber

Plates: Material Steel Thickness: Sides 5/8" Back 2 1/2" Top 5/8" Bottom 1 1/2" Pitch of stays to ditto: Sides 8" x 7 1/2" Back 8 1/2" x 8"

Top 8 1/2" x 7" If stays are fitted with nuts or riveted heads Auto Working pressure by rules 213 lbs Material of stays Iron Diameter at

Smallest part 1 1/2" Area supported by each stay 65" Working pressure by rules 215 lbs End plates in steam space: Material Steel Thickness 1 1/2"

Pitch of stays 24" x 18" How are stays secured Double Nuts Working pressure by rules 272 lbs Material of stays Steel Diameter at smallest part 3 1/2"

Area supported by each stay 445" Working pressure by rules 231 lbs Material of Front plates at bottom Steel Thickness 3/2" Material of

Lower back plate Steel Thickness 3/2" Greatest pitch of stays 13 1/4" Working pressure of plate by rules 269 lbs Diameter of tubes 2 1/2"

Pitch of tubes 5 3/4" x 3 3/4" Material of tube plates Steel Thickness: Front 1 1/2" 3/2" Back 3/4" Mean pitch of stays 7 1/2" Pitch across wide

Water spaces 13 1/2" Working pressures by rules Front 212 lbs Back 358 lbs Girders to Chamber tops: Material Steel Depth and thickness of

Girder at centre 10" x 1 1/2" Length as per rule 32 1/2" Distance apart 8 7/8" Number and pitch of Stays in each 3:7"

Working pressure by rules 252 lbs 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 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

The foregoing is a correct description, FOR CAIRD AND COMPANY, LIMITED, Manufacturer.

Request. B.10. attached.

Dates of Survey while building: During progress of work in shops 1909. Nov. 3. 14. 23. 21. Dec. 7. 23. 1910. Jan. 14. Apr. 29. Is the approved plan of boiler forwarded herewith Yes.  
 During erection on board vessel May. 11. 18. 19. 24. 24. June 7. 15. 17. July 4. 25. 29. Aug. 9. 18. Total No. of visits 25.  
 Sept. 2. 3. 8. 10.

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

The main Boilers referred to in this report were partly constructed by Messrs David & Co. Ltd. of Greenock. The combustion chambers only have been rivetted. All the remaining parts have been flanged, fitted together, drilled, and made ready for fitting. They have been especially surveyed during construction and the workmanship is good.

Survey Fee ... £ 25: - : : When applied for. 19. Included in Machinery fee  
 Travelling Expenses (if any) £ : : : When received. 19.

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

GLASGOW 20 SEP. 1910

FRI. JAN. 26. 1912

Committee's Minute Assigned Transmit to London.

