

REPORT ON BOILERS.

No. 16504

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Date of writing Report 27 June 1913 When handed in at Local Office 30/6/1913 Port of Greenock
 No. in Survey held at Greenock Date, First Survey 27th March 1912 Last Survey 25th June 1913
 Reg. Book. "NELLORE" (Number of Visits 69) Gross 6853
 on the TWIN SCREW STEAMER Tons Net 4250
 Master Built at Greenock By whom built Caird & Co. Ltd. When built 1913
 Engines made at Greenock By whom made Caird & Co. Ltd. When made 1913
 Boilers made at Greenock By whom made Caird & Co. Ltd. When made 1913
 Registered Horse Power Owners Peninsular & Oriental Steam Navigation Co. Port belonging to Greenock

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

(Letter for record S.) Total Heating Surface of Boilers 2298 sq. ft. Is forced draft fitted No. No. and Description of

Boilers 1 Cylindrical built single Working Pressure 215 lbs Tested by hydraulic pressure to 420 lbs Date of test 18/4/13

No. of Certificate 1108 Can each boiler be worked separately Yes Area of fire grate in each boiler 5.8 sq. ft. No. and Description of

safety valves to each boiler 2 Direct Spring Loaded Area of each valve 4.9 sq. in. Pressure to which they are adjusted 220 lbs

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 15 1/2 in. Mean dia. of boilers 14' 8" Length 11' 6"

Material of shell plates Steel Thickness 1 1/2 in. Range of tensile strength 20 tons per sq. in. Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap Double long. seams 2 Butt Straps Diameter of rivet holes in long. seams 1 9/16 in. Pitch of rivets 10 1/16 in.

Lap of plates or width of butt straps 22 3/4 in. Per centages of strength of longitudinal joint rivets 94.4 Working pressure of shell by

rules 268 lbs Size of manhole in shell 16" x 12" Size of compensating ring 28" x 1 1/2" No. and Description of Furnaces in each

boiler 3. Morrison's Material Steel Outside diameter 3' 9 3/4" Length of plain part 8 feet Thickness of plates crown 2 1/2 in. bottom 3 1/2 in.

Description of longitudinal joint Weld No. of strengthening rings None Working pressure of furnace by the rules 233 lbs Combustion chamber

plates: Material Steel Thickness: Sides 5/8 in. Back 5/8 in. Top 2 1/2 in. Bottom 3/8 in. Pitch of stays to ditto: Sides 7 1/2 x 7 1/2 Back 7 1/2 x 8

Top 8 x 8 1/4 If stays are fitted with nuts or riveted heads None Working pressure by rules 217 lbs Material of stays Steel Diameter at

smallest part 1 1/2 in. Area supported by each stay 62 sq. in. Working pressure by rules 243 lbs End plates in steam space: Material Steel Thickness 1 5/8 in.

Pitch of stays 17 x 15 1/4 How are stays secured None Working pressure by rules 225 lbs Material of stays Steel Diameter at smallest part 2 1/4 in.

Area supported by each stay 268 sq. in. Working pressure by rules 245 lbs Material of Front plates at bottom Steel Thickness 1 3/16 in. Material of

Lower back plate Steel Thickness 1 3/16 in. Greatest pitch of stays 12 in. Working pressure of plate by rules 218 lbs Diameter of tubes 3 in.

Pitch of tubes 4 1/4 x 4 1/4 Material of tube plates Steel Thickness: Front 1 5/16 in. Back 3/4 in. Mean pitch of stays 8 1/2 in. Pitch across wide

water spaces 14 in. Working pressures by rules 245 lbs 282 lbs: Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 10 1/2 x 1 1/2 in. Length as per rule 37 in. Distance apart 8 1/2 in. Number and pitch of Stays in each 3: 8 in.

Working pressure by rules 257 lbs Superheater or Steam chest: 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.

Dates of Survey } During progress of } work in shops - - }
while building } During erection on } board vessel - - - }
See accompanying report. Total No. of visits 69

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

This Boiler was built under special survey and the materials and workmanship are good.
For recommendations see accompanying sheet.

Survey Fee ... £ : } When applied for, 191
Travelling Expenses (if any) £ : } When received, 191

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

Committee's Minute GLASGOW 1-JUL. 1913

Assigned See minute on accompanying machinery reports

