

REPORT ON BOILERS.

No. 11012.

FRI. DEC. 13. 1912

Received at London Office

Date of writing Report 10. 12. 1912. When handed in at Local Office 10. 12. 1912. Port of Aberdeen.

No. in Survey held at Aberdeen. Date, First Survey 24. 5. 12. Last Survey 5. 12. 1912.
 Reg. Book. 224. of the BOILER No. 12 fitted in S.S. Kathleen of Aberdeen. (Number of Visits 23.) Gross 364. Net 128.
 Master S.J. King Built at Belfast. By whom built Workman Clark & Co. When built 1884.
 Engines made at Glasgow. By whom made J. & J. Thomson when made 1884.
 Boiler made at Aberdeen. By whom made Hall Russell & Co. Ltd when made 1912.
 Registered Horse Power 40. Owners W.C. Sharp & Co. Ltd (Edmonie Dock, Inver), Port belonging to Aberdeen.

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Stewarts & Lloyds & S. Colville & Sons Ltd.

(Letter for record (7)) Total Heating Surface of Boilers 1330 # Is forced draft fitted No. No. and Description of Boilers One, cyl, mult, single ended Working Pressure 90 lbs. Tested by hydraulic pressure to 240. Date of test 31. 8. 12.
 No. of Certificate 420 Can each boiler be worked separately Yes Area of fire grate in each boiler 43.76 # No. and Description of safety valves to each boiler 2: direct spring Area of each valve 9.62 # Pressure to which they are adjusted 90 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 2' 0" Inside Mean dia. of boilers 12' 4" Length 10' 0"
 Material of shell plates S. Thickness 3/4" Range of tensile strength 28-32. Are the shell plates welded or flanged No. How. How.
 Descrip. of riveting: cir. seams d. 7/16" Long. seams dble straps Diameter of rivet holes in long. seams 1/10" Pitch of rivets 6 1/4" 3/8"
 Lap of plates or width of butt straps 1 1/4" x 1/4" Per centages of strength of longitudinal joint rivets 84.3 Working pressure of shell by rules 123.3. Size of manhole in shell 10" x 12" Size of compensating ring 28" dia x 1/4" No. and Description of Furnaces in each boiler 3: plain Material S. Outside diameter 36 1/4" Length of plain part top 89" Thickness of plates crown 5/8" bottom 3/8"
 Description of longitudinal joint welded. No. of strengthening rings Working pressure of furnace by the rules 129.9 Combustion chamber plates: Material S. Thickness: Sides 7/16" Back 7/16" Top 9/16" x 5/8" Bottom 9/16" Pitch of stays to ditto: Sides 9 1/2" x 8 1/2" Back 9" x 9"
 Top 9" x 9" If stays are fitted with nuts or riveted heads nuts. Working pressure by rules 135 Material of stays Iron. Diameter at smallest part 1/2" Area supported by each stay 81 # Working pressure by rules 144.4 End plates in steam space: Material S. Thickness 3/32"
 Pitch of stays 1 1/2" x 1 1/2" How are stays secured dble nuts + washers Working pressure by rules 124. Material of stays S. Diameter at smallest part 27/16"
 Area supported by each stay 306.25 # Working pressure by rules 124.6 Material of Front plates at bottom S. Thickness 3/32" Material of Lower back plate S. Thickness 3/4" Greatest pitch of stays 14 1/2" x 9" Working pressure of plate by rules 133. Diameter of tubes 3 1/2" ext.
 Pitch of tubes 4 3/4" x 4 3/4" Material of tube plates S. Thickness: Front 24/32" Back 11/16" Mean pitch of stays 11 3/8" Pitch across wide water spaces 14 1/2" Working pressures by rules B. 120.1 Girders to Chamber tops: Material S. Depth and thickness of girder at centre 6 3/8" x 1 3/8" Length as per rule 29 3/4" Distance apart 9" Number and pitch of Stays in each two: 9"
 Working pressure by rules 124.6 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

The foregoing is a correct description,
 HALL, RUSSELL & CO., LTD. Manufacturer.
 A. Hall

Dates of Survey During progress of work in shops - - - 1912 May 24, June 4, 5, 13, 25, 24, 29 - Is the approved plan of boiler forwarded herewith Yes.
 while building During erection on board vessel - - - July 29, 31 - Aug 1, 4, 9, 13, 15, 21, 26, 30, 31. Total No. of visits 18
 Nov. 26, 24, 28, 29 - Dec 5 (5)

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been constructed under special survey, and in accordance with the Secretary's Letter (E 22.2.12) the Rules, & approved plan. The materials & workmanship are good. On completion it was tested by hyd. press. to 240 lbs per sq inch, & found satisfactory, and for purposes of identification stamped as under. This boiler has now been fitted on board the above named vessel. See Abn. Rpt No. 11013.

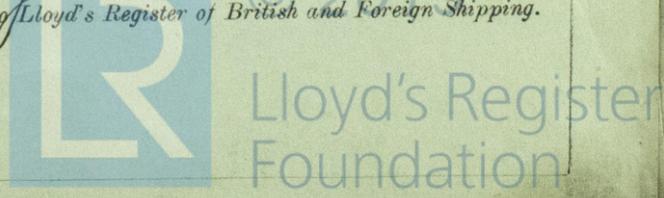
Survey Fee ... £ 4 : 8 : When applied for, 12. 12. 19 12.
 Travelling Expenses (if any) £ : : When received, 31/11/13
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.
 Ridley Powell

MARK ON BOILER
 No 720
 LLOYDSTEST.
 240 LBS.
 31. 8. 12. - R.F.

Committee's Minute FRI. DEC. 20. 1912
 Assigned sd Minute on Abn. Rpt 11013

If not, state whether, and when, one will be sent

If a Report also sent on the Hull of the Ship



ASN/32-0131