

# REPORT ON BOILERS.

No. 61264

Received at London Office WED. NOV. -1. 1911

Date of writing Report 22nd Sept 11 When handed in at Local Office 22nd Sept 11 Port of Newcastle on Tyne  
 No. in Survey held at S Shields Date, First Survey 26th June 1911 Last Survey 22nd Sept 1911  
 Reg. Book. S. S. Overton (Number of Visits) Gross 426 Net 185  
 Master S. Shields Built at S. Shields. By whom built for J. Eltringham & Co When built 1911  
 Engines made at S Shields By whom made Baird Bros when made 1911.  
 Boilers made at S Shields By whom made J. Eltringham & Co (No. 1712) when made 1911.  
 Registered Horse Power Owners Overton S. S. Co. Ltd Port belonging to Liverpool

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Son Ltd

(Letter for record S) Total Heating Surface of Boilers 1405 sq ft Is forced draft (fitted) No No. and Description of Boilers Ore, Single Ended Working Pressure 130 lb tested by hydraulic pressure to 260 lb Date of test 18/8/11.  
 No. of Certificate 8180 Can each boiler be worked separately ✓ Area of fire grate in each boiler 46.2 sq ft No. and Description of safety valves to each boiler 2, Spring loaded Area of each valve 12.56 sq ft Pressure to which they are adjusted 133 lbs.  
 Are they fitted with easing gear Yes 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 4'-6" Inside dia. of boilers 12'-9" Length 10'-3"  
 Material of shell plates Steel Thickness 25/32" Range of tensile strength 29/33 tons are the shell plates welded or flanged No  
 Descrip. of riveting: cir. seams 2 R Lap long. seams 4 R Butt Diameter of rivet holes in long. seams 7/8" Pitch of rivets 5 3/8"  
 Lap of plates or width of butt straps 13 1/2" Per centages of strength of longitudinal joint rivets 85.0 Working pressure of shell by rules 131 lb Size of manhole in shell 16" x 12" Size of compensating ring 30 x 24 x 25/32" No. and Description of Furnaces in each boiler 3, 40000 BHP Material Steel Outside diameter 39 1/2" Length of plain part top ✓ Thickness of plates crown 13/32" bottom ✓ bottom 13/32"  
 Description of longitudinal joint Welded No. of strengthening rings ✓ Working pressure of furnace by the rules 143 Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 19/32" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 11" x 9" Back 9 1/8" x 9 1/2"  
 Top 11" x 9" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 132 Material of stays Steel Diameter at smallest part 1 1/8" Area supported by each stay 99 sq in Working pressure by rules 136 End plates in steam space: Material Steel Thickness 15/16"  
 Pitch of stays 8 1/2" x 17" How are stays secured Nuts Working pressure by rules 131 Material of stays Steel Diameter at smallest part 4.210"  
 Area supported by each stay 314 sq in Working pressure by rules 139 Material of Front plates at bottom Steel Thickness 27/32" Material of Lower back plate Steel Thickness 25/32" Greatest pitch of stays 14" x 9 5/8" Working pressure of plate by rules 146 Diameter of tubes 3 1/2"  
 Pitch of tubes 4 3/4" Material of tube plates Steel Thickness: Front 15/16" Back 13/16" Mean pitch of stays 13 1/6" Pitch across wide water spaces 14" Working pressures by rules 130 lb Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7 7/8" x 1 1/2" Length as per rule 31" Distance apart 11" Number and pitch of Stays in each No, 9"  
 Working pressure by rules 137 lb 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, J. Eltringham & Co Manufacturer.

Dates of Survey During progress of work in shops - - - Jan. 26, 28, 30, Feb. 6, 19, 27, 31, Aug. 2, 11, 14, 18, Sept. 5, 7, 22 Is the approved plan of boiler forwarded herewith Yes - Invis  
 while building During erection on board vessel - - - See machy report Total No. of visits 14

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c) This boiler has been built under special survey. The materials & workmanship are of good quality, and on completion was tested by hydraulic pressure to 260 pounds per sq in & found tight & sound at that pressure. Now efficiently  
This boiler was put on board at South Shields. Secured on board.

Survey Fee Charged to Engineer When applied for 19  
 Travelling Expense (if any) £            When received 19  
George Murdoch  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. NOV. 3 - 1911