

REPORT ON BOILERS.

No. 57699

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Date of writing Report 19 When handed in at Local Office 2- DEC 1909 Port of NEWCASTLE ON TYNE.

No. in Survey held at *South Shields* Date, First Survey *27th July 1909* Last Survey *30th November 1909*
 Reg. Book. *44* *upon the Steel Screw Tug Abeille No. 10* (Number of Visits) Gross *193* Tons Net *25*
 Master *J. P. Remoldson & Sons* Built at *South Shields* By whom built *J. P. Remoldson & Sons* When built *1909*
 Engines made at *South Shields* By whom made *J. P. Remoldson & Sons* when made *1909*
 Boilers made at " " By whom made *J. T. Altringham & Co. (No. 1629)* when made *1909*
 Registered Horse Power Owners *Soc. de Remorq. Les Abeilles* Port belonging to *Floure*

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

(Letter for record *S*) Total Heating Surface of Boilers *1794* Is forced draft fitted *no* No. and Description of

Boilers *one multitubular (single end)* Working Pressure *180 lbs* Tested by hydraulic pressure to *360 lbs* Date of test *22/9/09*

No. of Certificate *7898* Can each boiler be worked separately Area of fire grate in each boiler *57.6* No. and Description of

safety valves to each boiler *2 direct spring* Area of each valve *5.94* Pressure to which they are adjusted *185 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 *2'-0"* Mean dia. of boilers *13'-10 1/2"* Length *10'-6"*

Material of shell plates *steel* Thickness *1 3/16"* Range of tensile strength *28 3/4 - 32* Are the shell plates welded or flanged *flanged*

Descrip. of riveting: cir. seams *double* long. seams *double with extra* Diameter of rivet holes in long. seams *1 1/4"* Pitch of rivets *7 3/8"*

Lap of plates or width of butt straps *17 1/2"* Per centages of strength of longitudinal joint rivets *83* Working pressure of shell by plate *83*

rules *190 lbs* Size of manhole in shell *12" x 16"* Size of compensating ring *7 1/2" x 1 1/16"* No. and Description of Furnaces in each

boiler *3 Saighton's* Material *steel* Outside diameter *42 3/4"* Length of plain part top *6'-6"* Thickness of plates crown *1 1/32"* bottom *6'-6"* bottom *1 1/32"*

Description of longitudinal joint *welded* No. of strengthening rings Working pressure of furnace by the rules *191 lbs* Combustion chamber

plates: Material *steel* Thickness: Sides *2 3/32"* Back *2 3/32"* Top *2 3/32"* Bottom *2 5/32"* Pitch of stays to ditto: Sides *9 1/2"* Back *9 1/2"*

Top *10 1/8" x 9 1/2"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *185 lbs* Material of stays *steel* Diameter at

smallest part *1 1/32"* Area supported by each stay *96.18* Working pressure by rules *185 lbs* End plates in steam space: Material *steel* Thickness *1 1/8"*

Pitch of stays *8 7 1/4"* How are stays secured *nuts* Working pressure by rules *187 lbs* Material of stays *steel* Diameter at smallest part *2 25/32"*

Area supported by each stay *319.5* Working pressure by rules *198 lbs* Material of Front plates at bottom *steel* Thickness *1* Material of

Lower back plate *steel* Thickness *1 5/16"* Greatest pitch of stays *14 1/2" x 8 1/2"* Working pressure of plate by rules *215 lbs* Diameter of tubes *3 1/2"*

Pitch of tubes *4 3/4"* Material of tube plates *steel* Thickness: Front *1"* Back *7/8"* Mean pitch of stays *11 1/8"* Pitch across wide

water spaces *14 1/2"* Working pressures by rules *192 lbs* Girders to Chamber tops: Material *steel* Depth and thickness of

girder at centre *6" x 1 1/32"* Length as per rule *31"* Distance apart *9 1/2"* Number and pitch of Stays in each *two 10 1/8"*

Working pressure by rules *180 lbs* Superheater or Steam chest: how connected to boiler 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. T. Altringham Manufacturer.

Dates of Survey *1909* During progress of work in shops - *Jul. 27, Aug. 6, 19, 25, 31, Sep. 6, 14, 22* Is the approved plan of boiler forwarded herewith *Yes*
 while building *See Machinery report* During erection on board vessel - - - Total No. of visits *8+*

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

This boiler has been constructed under special survey the materials used are good, and the workmanship satisfactory.

Survey Fee £ When applied for, 19
 Travelling Expenses (if any) £ When received, 19
See Machinery report

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

THU. 3 DEC 1909

Committee's Minute
 Assigned *See Minute on hve. Rpt 57699*



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