

Rpt. 5a.

REPORT ON BOILERS.

No. 6435

Received at London Office SAT. 3 SEP 1910

Date of writing Report 10 When handed in at Local Office 14th Sept. 1910 Port of MIDDLESBROUGH-ON-TEES.
 No. in Survey held at Stockton-on-Tees Date, First Survey 1st July Last Survey 29th Aug. 1910
 Reg. Book. on the S.S. Watermouth (Number of Visits 9) Tons Gross Net
 Master Thomas Built at Thornaby-on-Tees By whom built Richardson Dock & Co When built 1910
 Engines made at _____ By whom made _____ when made _____
 Boilers made at Stockton By whom made J. Sudron & Co Lim. (No 2733) when made 1910
 Registered Horse Power _____ Owners Messrs Anning Bros Port belonging to Bardiff

MULTITUBULAR BOILERS — ~~MAIN, AUXILIARY OR DONKEY.~~ — Manufacturers of Steel J. Spencer & Sons

(Letter for record (S)) Total Heating Surface of Boilers 1141 sq ft Is forced draught fitted no No. and Description of

Boilers One Single Ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 29.8.10

No. of Certificate 4486 Can each boiler be worked separately — Area of fire grate in each boiler 35 1/2 sq ft No. and Description of

safety valves to each boiler 2 direct Spring Area of each valve 7.07 sq in Pressure to which they are adjusted 104 lbs

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler no

Smallest distance between boilers or uptakes and bunkers, or woodwork 2 ft dia. of boilers 11'-0" Length 10'-6"

Material of shell plates steel Thickness 21/32 Range of tensile strength 29-33 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams Single lap long. seams 3 Riv lap Diameter of rivet holes in long. seams 15/16" Pitch of rivets 3 1/2"

lay-up plates or width of butt straps 6 1/2" Per centages of strength of longitudinal joint rivets 76.6 Working pressure of shell by

rules 106 Size of manhole in shell 16" x 12" Size of compensating ring 5 1/2" x 27/32" No. and Description of Furnaces in each

boiler 2 plain Material steel Outside diameter 38 1/2" Length of plain part 80" Thickness of plates 1 1/2" crown 1 1/2" bottom 1 1/2" mean

Description of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 103 Combustion chamber

plates: Material steel Thickness: Sides 1/2" Back 1 1/2" Top 1/2" Bottom 1/4" Pitch of stays to ditto: Sides 9 1/2" x 7 1/2" Back 9" x 8 1/2"

Top 9 1/2" x 7 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 105 Material of stays steel Diameter at

smallest part 1 1/4" Area supported by each stay 71.25 Working pressure by rules 105 End plates in steam space: Material steel Thickness 3/4"

Pitch of stays 17 1/2" x 14 1/2" How are stays secured nuts & 6 x 1/2 loose washers Working pressure by rules 105 Material of stays steel Diameter at smallest part 1.84

Area supported by each stay 250 Working pressure by rules 179 Material of Front plates at bottom steel Thickness 3/4" Material of

Lower back plate steel Thickness 3/4" Greatest pitch of stays 17 1/2" x 8 1/2" Working pressure of plate by rules 100 Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates steel Thickness: Front 3/4" Back 1/2" Mean pitch of stays 10 1/2" Pitch across wide

water spaces 13 3/4" Working pressures by rules 107 Girders to Chamber tops: Material steel Depth and thickness of

girder at centre 6 1/2" x 1 1/2" Length as per rule 28 1/2" Distance apart 9 1/2" Number and pitch of Stays in each 2 @ 7 1/2"

Working pressure by rules 102 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,
THOMAS SUDRON & CO LIMITED. Manufacturer.

Dates of Survey 1910. July 5. 8. 12. 21. 25. Aug. 4. 8. 10. 29. Is the approved plan of boiler forwarded herewith yes
 while building During progress of work in shops - -
During erection on board vessel - - -
 Total No. of visits 9

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under Special Survey, is of good material and workmanship, and on completion was tested by hydraulic pressure with satisfactory results

Survey Fee ... £ 3 : 16 : - When received Monthly acc. 24. 11. 1910
 Travelling Expenses (if any) £ _____

Wm Morrison & Co
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

TUE. 10 JAN 1911

Committee's Minute
Assigned

