

# REPORT ON BOILERS

No. 6064

Received at London Office **WHL 29 DEC 1909**

Date of writing Report

When handed in at Local Office

28<sup>th</sup> Dec 1909 Port of *Middlesbrough*

No. in Survey held at

*Stockton-on-Tees*

Date, First Survey *25<sup>th</sup> Oct.*

Last Survey *20<sup>th</sup> Dec.*

1909

Reg. Book.

on the

*S.S. "Spilsby"*

Gross Tons *451*

Net Tons

Master

Built at *Stockton*

By whom built *J. Spencer & Sons*

When built *1910*

Engines made at

*Stockton*

By whom made

*Wm. Dixon & Co.*

(Boiler No. *2593*)

when made

*1910*

Boilers made at

*Stockton*

By whom made

*Wm. Dixon & Co.*

when made

*1910*

Registered Horse Power

Owners *Messrs J. Spencer & Co.*

Port belonging to *Stockton*

MULTITUBULAR BOILERS ~~MAIN AUXILIARY OR DONKEY.~~ Manufacturers of Steel *J. Spencer & Sons Ltd.*

Letter for record (S) Total Heating Surface of Boilers *948 sq ft* Is forced draft fitted  No. and Description of

Boilers *One Single Ended* Working Pressure *100* Tested by hydraulic pressure to *200* Date of test *20.12.09*

No. of Certificate *4346* Can each boiler be worked separately  Area of fire grate in each boiler *30 1/2 sq ft* No. and Description of

Safety valves to each boiler *2 direct spring* Area of each valve *7.07* Pressure to which they are adjusted *105 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  Mean dia. of boilers *10'-6"* Length *10'-0"*

Material of shell plates *Steel* Thickness *5/8* Range of tensile strength *29 1/2 - 32* Are the shell plates welded or flanged *no*

Description of riveting: cir. seams *Lap Single Butt* Long. seams *3 Riv Lap* Diameter of rivet holes in long. seams *15/16* Pitch of rivets *3 5/8*

Gap of plates or width of butt straps *6 1/2"* Percentages of strength of longitudinal joint rivets *77.7* Working pressure of shell by plate *74.1*

Number of tubes *103* Size of manhole in shell *16" x 12"* Size of compensating ring *5 1/2 x 13/16* No. and Description of Furnaces in each

Boiler *2 plain* Material *steel* Outside diameter *38"* Length of plain part *81 1/2* Thickness of plates *5/8* crown *5/8* bottom *104* bottom *656 mm*

Description of longitudinal joint *welded* No. of strengthening rings *none* Working pressure of furnace by the rules *135 lbs* Combustion chamber

Plates: Material *steel* Thickness: Sides *17/32* Back *1/2* Top *17/32* Bottom *1/8* Pitch of stays to ditto: Sides *9 1/2* Back *8 1/2 x 9*

Top *8 1/2* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *100 lbs* Material of stays *steel* Diameter at

Smallest part *1 1/4* Area supported by each stay *76.5* Working pressure by rules *101 lbs* End plates in steam space: Material *steel* Thickness *1 3/8*

Pitch of stays *18 1/2 x 18 1/2* How are stays secured *nuts & 22" x 1 3/4" doubling* Working pressure by rules *180* Material of stays *steel* Diameter at smallest part *2.34*

Area supported by each stay *356 sq"* Working pressure by rules *125* Material of Front plates at bottom *steel* Thickness *3/8* Material of

Over back plate *steel* Thickness *1 3/8* Greatest pitch of stays *13" x 9"* Working pressure of plate by rules *182* Diameter of tubes *3 1/4*

Pitch of tubes *4 1/2 x 4 1/2* Material of tube plates *steel* Thickness: Front *1 3/8* Back *2 1/32* Mean pitch of stays *11 13/32* Pitch across wide

Water spaces *13 3/4* Working pressures by rules *117* Girders to Chamber tops: Material *steel* Depth and thickness of

Order at centre *6" x 1 1/4"* Length as per rule *24 1/4"* Distance apart *8 1/2* Number and pitch of Stays in each *one @ 9 1/2*

Working pressure by rules *106 lbs* 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

Plates  Pitch of rivets  Working pressure of shell by rules  Diameter of flue  Material of flue plates  Thickness

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.

*T. J. Morrison*

Dates of Survey: During progress of work in shops - *1909 Oct. 25, 27, 29, Nov. 24, 9, 17, 19, 20, Dec. 13, 19, 20* Is the approved plan of boiler forwarded herewith *yes*

while building: During erection on board vessel - - - Total No. of visits *14*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler was partly built before being submitted for survey. The work then in hand was specially examined and the completion of the boiler carried out under special survey in accordance with the approved plan and secretary's letter E-29.10.09. The materials & workmanship are sound & good; and the results of the tests of the steel, which are satisfactory, are forwarded herewith. A hydraulic test was satisfactory and the boiler is to be fitted on board at this port.*

Survey Fee ... £ *3 + 3-0* When applied for, *Monthly 9/0*

Travelling Expenses (if any) £ *✓* When received, *22.2.19*

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

FRI. 6 MAY 1910

Committee's Minute

Assigned

*See No. 7 Entry No. 6239*



© 2020  
Lloyd's Register  
W539-0205

*Page 451*

LIBRARY OF THE BOTTLE CO.