

REPORT ON BOILERS.

Hpl. No. 13336.
No. 5116

Received at London Office MON. 2 SEP 1907

Date of writing Report

19

When handed in at Local Office

5. 7 1907

Port of

MIDDLESBROUGH-ON-TEES.

No. in Survey held at

Darlington

Reg. Book.

Date, First Survey

May 24

Last Survey

19

28

on the

Donkey Boiler (No 107) for the S/S "COMPETITOR"

Number of Visits

Tons

Gross 3525.83

Net 2215.88

Master

W. W. Millburn

Built at

Hartlepool

By whom built

Furness Withy & Co. Ltd

When built

1907

Engines made at

Hartlepool

By whom made

Richardsons Wessforth & Co. Ltd

when made

1907

Boilers made at

Darlington

By whom made

Blake Boiler Wagon Eng Co Ltd

when made

1907

Registered Horse Power

Owners

Exhale ss Co. Ltd (B. Smales Donkey)

Port belonging to

Whitby

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

(Letter for record S.) Total Heating Surface of Boilers 569 ft² Is forced draft fitted No. and Description of

Boilers One Cyl. Mult. single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 4/7/07

No. of Certificate 3960 Can each boiler be worked separately Area of fire grate in each boiler 27 ft² No. and Description ofsafety valves to each boiler Two, spring loaded Area of each valve 5.939 ft² Pressure to which they are adjusted 100 lb per sq. in.

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 D.B. on Main deck Mean dia. of boilers 9'-6" Length 9'-0"

Material of shell plates Steel Thickness 7/8" Range of tensile strength 28/32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams S.R.L. long. seams D.R.D.B.S. Diameter of rivet holes in long. seams 13/16" Pitch of rivets 4 3/8" 1 row 2 7/8" 1 row

Gap of plates or width of butt straps 9" x 9/16" Per centages of strength of longitudinal joint rivets 94.4 plate 81.4 Working pressure of shell by

rules 110 Size of manhole in shell 12" x 16" Size of compensating ring 7" x 5/8" No. and Description of Furnaces in each

boiler 2 plain Material Steel Outside diameter 3'-0" Length of plain part top 5'-6" bottom 7'-7 1/2" Thickness of plates crown 5" bottom 8"

Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 127 Combustion chamber

plates: Material Steel Thickness: Sides 5/8" Back 3/4" Top 5/8" Bottom 3/2" Pitch of stays to ditto: Sides 10" x 10 1/2" Back 9" x 10"

Top 9" x 11" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 101 Material of stays Steel Area

smallest part 1.5" Area supported by each stay 90" Working pressure by rules 133 End plates in steam space: Material Steel Thickness 29/32

Pitch of stays 8" x 19 1/2" How are stays secured D nuts Working pressure by rules 105 Material of stays Steel Area

Area supported by each stay 315" Working pressure by rules 136 Material of Front plates at bottom Steel Thickness 29/32 Material of

Lower back plate Steel Thickness 29/32 Greatest pitch of stays 12 3/4" x 9" Working pressure of plate by rules 232 Diameter of tubes 3"

Pitch of tubes 4" x 4 1/2" Material of tube plates Steel Thickness: Front 29/32 Back 5/8" Mean pitch of stays 9 5/8" Pitch across wide

water spaces 12 3/4" Working pressures by rules 150 Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 6" x 1 3/4" Length as per rule 2'-1" Distance apart 11" Number and pitch of Stays in each Two 9"

Working pressure by rules 152 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,

FOR BLAKE BOILER, WAGON &

ENGINEERING CO. LIMITED, Manufacturer

J. Spencer & Son Ltd

MANAGING DIRECTOR

Total No. of visits

Is the approved plan of boiler forwarded herewith

During progress of work in shops - -

while building - -

During erection on board vessel - -

1907 May 24 June 6. 20. 26. 27 July 2. 4

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. This boiler has been constructed

under special survey, the material and workmanship are good and

efficient, and when tested with hydraulic pressure was found tight and

satisfactory. This boiler has now been efficiently fitted on board.

Survey Fee £ : : When applied for, 19.

Travelling Expenses (if any) £ : : When received, 19.

Committee's Minute

Assigned

TUES. 3 SEP 1907

20 minute on Hpl. Rpt

No 13336

R.D. Philston & Son Ltd

Engineer Surveyors to Lloyd's Register of British and Foreign Shipping.

J. Spencer & Son Ltd

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Foundation