

for vessel building by Messrs Smiths Dock Co Ltd Newcastle

REPORT ON BOILERS.

No. 2534

pt. 5a.

Received at London Office

Date of writing Report 3/12/19 When handed in at Local Office 4 - DEC 1919 Port of Newcastle on Tyne

No. in Survey held at Newcastle Date, First Survey 2nd Oct 1919 Last Survey 1st December 1919

Reg. Book. on the Horizontal ^{Shell} Boilers No 5249. (originally constructed under inspection of Works Vertical Bureau)

Number of Visits 5 Tons Gross Net

Engines made at Newcastle By whom made Messrs Hawthorne Leslie & Co Ltd When made 1919

Boilers made at Newcastle By whom made Messrs Hawthorne Leslie & Co Ltd When made 1919

Registered Horse Power Owners Port belonging to

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

Letter for record Total Heating Surface of Boilers 5104 sq ft Is forced draft fitted No No. and Description of

Boilers 2 6 ft x 10 ft single Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 1/12/19

No. of Certificate 9834 Can each boiler be worked separately Area of fire grate in each boiler 40 sq ft No. and Description of

Safety valves to each boiler Area of each valve Pressure to which they are adjusted

Are they fitted with easing gear 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 16'-3" Length 11'-2 1/2"

Material of shell plates steel Thickness 1 1/2 Range of tensile strength 29/32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams OR Lap. long. seams OR Double strap Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 9/8: 4 1/2

Width of plates or width of butt straps 1'-8 1/2 Per centages of strength of longitudinal joint rivets 89.5% plate 89.5% Working pressure of shell by

Rules 154 lbs Size of manhole in shell 16" x 12" Size of compensating ring 16" No. and Description of Furnaces in each

Boiler 1 Doughton Material steel Outside diameter 44 1/4 Length of plain part 76 1/2 Thickness of plates crown 1 1/2 bottom 1 1/2

Description of longitudinal joint welded No. of strengthening rings None Working pressure of furnace by the rules 180 lbs Combustion chamber

Plates: Material steel Thickness: Sides 5/8 Back 5/8 Top 5/8 Bottom 1 Pitch of stays to ditto: Sides 8 x 8 Back 7 1/4 x 5 1/4

Top 8 x 8 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 203 lbs Material of stays steel Area at

Smallest part 1-73 Area supported by each stay 60 Area supported by each stay 434.5 Working pressure by rules 197 lbs

Pitch of stays 19 1/4 How are stays secured On in Working pressure by rules 197 lbs Material of stays steel Area at smallest part 495

Area supported by each stay 434.5 Working pressure by rules 197 lbs Material of Front plates at bottom steel Thickness 1 Material of

Lower back plate steel Thickness 1 1/2 Greatest pitch of stays 5' x 8 3/4 Working pressure of plate by rules 202 lbs Diameter of tubes 3 1/4

Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 1 Back 1 1/2 Mean pitch of stays 9 Pitch across wide

Water spaces 14 1/2 Working pressures by rules 193 lbs Girders to Chamber tops: Material steel Depth and thickness of

Girder at centre 11 1/4 Length as per rule 2'-11 1/2 (Distance apart 8" Number and pitch of Stays in each 23: 8"

Working pressure by rules 180 lbs Steam dome: description of joint to shell None % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted



Dates of Survey During progress of work in shops - - - Oct 2, 6, 9, Nov 27, Dec 5

while building During erection on board vessel - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, etc.) These boilers have been

examined, the scantlings checked and found in accordance with the approved plan and were tested by hydraulic pressure

to 360 lbs and were found good & sound in every respect.

Survey Fee £ 12 : 7 : 0 When applied for, 5.12.19

Travelling Expenses (if any) £ : : When received, 191

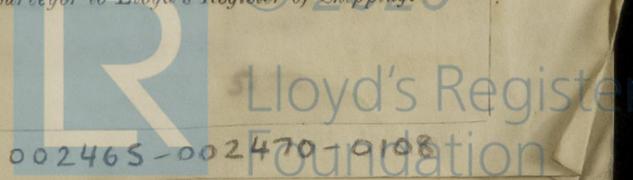
TUE. SEP. 7 1920

J. McInellan Engineer, Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

See Mdb 10782



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