

SAT. FEB. 24 1923

Rpt. 5a.

REPORT ON BOILERS.

No. 76347

Received at London Office

SAT. 20 JAN. 1923

Date of writing Report

19

When handed in at Local Office

18/1/23 Port of

NEWCASTLE ON TYNE

No. in Survey held at

Date, First Survey 11 Sept. 1922 Last Survey 15 Jan. 1923

Reg. Book.

on the Main boiler for Messrs Palmers & Co. for No. 1007 Smith's Dock S.S. No. 23 Tons } Gross
Net

Master vessel Built at Middlesbrough By whom built Smith's Dock. When built

Engines made at By whom made When made

Boilers made at Hebburn By whom made Palmers & Co. & Co. Ltd. When made

Registered Horse Power Owners Port belonging to

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

(Letter for record 5) Total Heating Surface of Boilers 1830 sq ft Is forced draft fitted No. and Description of

Boilers One boiler Smith's Working Pressure 180 lbs Tested by hydraulic pressure to 320 lbs Date of test 15/1/23

No. of Certificate 9714 Can each boiler be worked separately Area of fire grate in each boiler 55.5 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 Mean dia. of boilers 14-0 Length 10-9

Material of shell plates Steel Thickness 1 1/2 Range of tensile strength 28 to 32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D.R.L. long. seams T.R.D.B.S. Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 8 1/2

Lap of plates or width of butt straps 1-6 1/8 Per centages of strength of longitudinal joint rivets 86% plate 86% Working pressure of shell by

rules 182.4 Size of manhole in shell 16 x 12 Size of compensating ring 2-4 x 2-8 x 1 1/2 No. and Description of Furnaces in each

boiler 3 plain Material Steel Outside diameter 3-5 1/4 Length of plain part top 6-3 1/8 Thickness of plates crown 3 3/4 bottom 6-0 bottom 3 3/4

Description of longitudinal joint Welded. No. of strengthening rings Working pressure of furnace by the rules 182 Combustion chamber

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

Top 8 1/2 x 9 1/4 stays are fitted with nuts or riveted heads Nuts Working pressure by rules 184 Material of stays Steel Area at

smallest part 1 3/4 Area supported by each stay 81 sq in Working pressure by rules 223 End plates in steam space: Material Steel Thickness 1 1/8

Pitch of stays 1 1/2 x 18 How are stays secured D.N.W. Working pressure by rules 186 Material of stays Steel Area at smallest part 3

Area supported by each stay 312.5 sq in Working pressure by rules 212 Material of Front plates at bottom Steel Thickness 1 1/8 Material of

Lower back plate Steel Thickness 7/8 Greatest pitch of stays 14 x 9 Working pressure of plate by rules 226 Diameter of tubes 3 1/2

Pitch of tubes 4 3/4 x 4 7/8 Material of tube plates Steel Thickness: Front 1 1/8 Back 3/4 Mean pitch of stays 9 7/8 Pitch across wide

water spaces 1 1/2 Working pressures by rules 188 Girders to Chamber tops: Material Steel Depth and thickness of

girder at centre 9 x 1 1/2 Length as per rule 2-9 1/2 Distance apart 8 1/2 Number and pitch of Stays in each 2 @ 9 1/2

Working pressure by rules 211 Steam dome: description of joint to shell % 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

Palmers Shipbuilding & Iron Co., Ltd.

The foregoing is a correct description,

J. Cameron Manager, Hebburn Boiler Shop & Foundry Manufacturer.

Dates of Survey During progress of work in shops - - - 1922 Sept. 11, 26, Oct. 3, 17, 24, Nov. 23, Dec. 12, 19, 20, 21, 22, 28, Jan. 5, 11, 15. Is the approved plan of boiler forwarded herewith Yes Dup 1008

while building During erection on board vessel - - - Total No. of visits 15

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

This boiler has been built under special survey & the materials & workmanship are good. On completion it was tested by hydraulic pressure to 320 lbs & found sound & tight. It is stated the boiler is intended for a vessel building by Messrs Smith's Dock, Middlesbrough.

Survey Fee ... £ 12-4-0 When applied for, 19/1/23

Travelling Expenses (if any) £ : : When received, 26/2/23

Committee's Minute TUE. 27 FEB. 1923

J. Barbotte Engineer Surveyor to Lloyd's Register of Shipping

Assigned

