

# REPORT ON BOILERS.

No. 10939

THU. 3 FEB. 1921

Received at London Office

Date of writing Report 29.1.21 When handed in at Local Office 1.2.21 Port of Middlesbrough  
 No. in Survey held at Stockton-on-Tees Date, First Survey 21.5.20 Last Survey 27.1.21 19  
 Reg. Book. on the (Number of Visits 15) Tons } Gross }  
 (S.S. No. 195) Net }  
 Master Built at By whom built Chas Remoldson & Co When built  
 Engines made at By whom made When made  
 Boilers made at Stockton By whom made Messrs Riley Bros Ltd Nos 5271 When made 1921  
5272  
 Registered Horse Power Owners Port belonging to

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

(Letter for record (5)) Total Heating Surface of Boilers 1900  $\text{sq ft}$  Is forced draft fitted No. and Description of Boilers 2 single ended Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 27.1.21

No. of Certificate 6201 Can each boiler be worked separately Area of fire grate in each boiler 3 1/4  $\text{sq ft}$  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 Inside Mean dia. of boilers 10'-6" Length 10'-3"

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 2-R. lap long. seams 2 R-3 Riv? Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 7/8"  
5 Rivets per pitch

Lap of plates or width of butt straps 16" x 1 3/4" Per centages of strength of longitudinal joint rivets 98.8 Working pressure of shell by rules 181 Size of manhole in shell 19" x 15" Size of compensating ring 7" x 1" 9/16" rail No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 39" Length of plain part top 76 1/2" Thickness of plates crown 25/32 bottom 27/32 mean

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 187 Combustion chamber plates: Material steel Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 1 5/16" Pitch of stays to ditto: Sides 9 3/4" x 8" Back 8 1/2" x 9 1/2"

Top 9 3/4" x 8" If stays are fitted with nuts or riveted heads none Working pressure by rules 182 Material of stays steel Area at smallest part 2.03 Area supported by each stay 80.75 Working pressure by rules 226 End plates in steam space: Material steel Thickness 1 1/2"

Pitch of stays 19 1/2" x 14 1/2" How are stays secured nuts & washers Working pressure by rules 191 Material of stays steel Area at smallest part 4.57

Area supported by each stay 256 Working pressure by rules 185 Material of Front plates at bottom steel Thickness 1 1/2" Material of Lower back plate steel Thickness 1 1/2" Greatest pitch of stays 14" x 9 1/2" Working pressure of plate by rules 256 Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates steel Thickness: Front 1 1/2" Back 25/32" Mean pitch of stays 10 13/32" Pitch across wide water spaces 14 1/4" Working pressures by rules 187 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 8" x 1 1/2" Length as per rule 28" Distance apart 9 3/4" Number and pitch of Stays in each 2 @ 8"

Working pressure by rules 188 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

UPERHEATER. Type Y 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

SURVEY REQUESTS  
 NO. 1573/4 ATTACHED

FOR THE FOREGOING IS A CORRECT DESCRIPTION,  
 RILEY BROS. (BOILERMAKERS) LIMITED.

Dates of Survey } During progress of work in shops - - } 1920, May 21, June 2, 4, 11, 15, 24, Nov. 29, Dec. 7, 13, 21. Is the approved plan of boiler forwarded herewith } yes  
 while building } During erection on board vessel - - - }  
 Total No. of visits 15

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been built under special survey: are of good material and workmanship and on completion were tested by hydraulic pressure with satisfactory results

Survey Fee ... £ 12-13-0 When applied for, monthly 19  
 Travelling Expenses (if any) £ ✓ When received, 19

Committee's Minute TUE. 15 NOV. 1921 THE FEB 28 1922

Assigned

Wm Morrison  
 Engineer Surveyor to Lloyd's Register of Shipping.



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