

Rpt. 5a.

# REPORT ON BOILERS.

No. 9475.

Received at London Office

Date of writing Report

191

When handed in at Local Office

5/10/16

191

Port of

Middlesbrough

No. in Survey held at

Stockton-on-Tees

Date, First Survey

July 7

Last Survey

Sept 29 1916

Reg. Book.

5484 on the steel ss. "MAGRIX" not known

(Number of Visits)

Gross

Tons

Net

Master

Built at

Selly

By whom built

Cochrane &amp; Sons.

When built

1916.

Engines made at

Aberdeen

By whom made

Reconstructed by Wrypool Eng. Co

When made

1916.

Boilers made at

Stockton

By whom made

Thos Riley &amp; Son (No 4998)

When made

1916

Registered Horse Power

Owners

Robt Rix &amp; Sons

Port belonging to

Hull

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Thos John Hume &amp; Sons

(Letter for record (S) Total Heating Surface of Boilers 1007 sq ft Is forced draft fitted no No. and Description of

Boilers One single ended Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 29.9.16

No. of Certificate 3688 Can each boiler be worked separately Area of fire grate in each boiler 29.2 sq ft No. and Description of

safety valves to each boiler 2 Spring-loaded Area of each valve 4.91 sq in Pressure to which they are adjusted 185 lbs

Are they fitted with easing gear yes 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 15 in Mean dia. of boilers 11'-6" Length 9'-6"

Material of shell plates steel Thickness 1 1/2 Range of tensile strength 28 3/4 - 32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams 2 R. lap long. seams 2 B - 3 Riv Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 7 3/8

Lap of plates or width of butt straps 16 1/2 x 1 1/2 5 Rivs per pitch Per centages of strength of longitudinal joint rivets 87.3 Working pressure of shell by

rules 203 Size of manhole in shell 19" x 15" Size of compensating ring 9 x 1 in 9 Riv No. and Description of Furnaces in each

boiler 2 plain Material steel Outside diameter 41 Length of plain part top 66 3/4 Thickness of plates crown 1 1/2

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 180 Combustion chamber

plates: Material steel Thickness: Sides 2 1/32 Back 2 1/32 Top 2 1/32 Bottom 7/8 Pitch of stays to ditto: Sides 8 1/2 x 8 3/4 Back 8 1/2 x 8 3/4

Top 8 x 8 3/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 200 Material of stays steel Area at

smallest part 2.03 Area supported by each stay 72.19 Working pressure by rules 253 End plates in steam space: Material steel Thickness 1 1/2

Pitch of stays 16 x 15 1/2 How are stays secured nuts + 6 x 7/8 washers Working pressure by rules 200 Material of stays steel Area at smallest part 5.05

Area supported by each stay 246 Working pressure by rules 214 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 8 3/4 Working pressure of plate by rules 270 Diameter of tubes 3 1/2

Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 1 1/2 Back 7/8 Mean pitch of stays 10 3/8 Pitch across wide

water spaces 14 Working pressures by rules 208 Girders to Chamber tops: Material steel Depth and thickness of

girder at centre 7 3/4 x 1 1/2 Length as per rule 28 1/2 Distance apart 8 Number and pitch of Stays in each 2 @ 8 3/4

Working pressure by rules 213 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 none Date of Ap. reveal 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 REQUEST  
NO. 1285 ATTACHED.

FOR  
The foregoing is a correct description,  
RILEY BROS. (BOILERMAKERS) LIMITED

Manufacturer.

Dates During progress of 1916 Jul. 7-17-21 Aug. 4-8-11-25 Sep. 1-8-18-22-25-29 Is the approved plan of boiler forwarded herewith yes

while During erection on board vessel Total No. of visits 13 See also Boiler No. 4999

building

GENERAL REMARKS (State quality of workmanship, opinions as to class, &amp;c.) This boiler has been built under

Special Survey: is of good material and workmanship and on completion was tested by  
hydraulic pressure with satisfactory results

Survey Fee ... £ 3-7-0 When applied for Monthly Ac. 191

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

Committee's Minute

FRI. DEC. 29. 1916

Assigned

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

Lloyd's Register  
Foundation

8000-11200-90700