

REPORT ON BOILERS

West Hartlepool No. 9881
TUE. 16 MAY. 1916

Date of writing Report 13.5.16 When handed in at Local Office 13.5.16 Port of Middlesbrough
 No. in Survey held at Stockton-on-Tees Date, First Survey Nov. 12th Last Survey May 8th 1916
 Reg. Book. on the Steel S.S. "Carmarthen" (Number of Visits (S.S. No. 868)) Tons Gross 4262.41
Net 2690.44
 Master G. Roberts - 14-16 Built at W. Hartlepool By whom built W. Gray & Co. Lim. When built 11.1916
 Engines made at W. Hartlepool By whom made Central Marine Engine Works When made 1916
 Boilers made at Stockton By whom made Thos. Riley Bros. Ltd (No. 4894) When made 1916
 Registered Horse Power 404 Owners James & David Jenkins (Jenkins Bros., Mgrs) Port belonging to Cardiff

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel John Spencer & Co.
 (Letter for record (S)) Total Heating Surface of Boilers 1091 sq ft Is forced draft fitted

Boilers One single ended Working Pressure 100 Tested by hydraulic pressure to 200 No. and Description of
 No. of Certificate 5642 Can each boiler be worked separately Yes Area of fire grate in each boiler 35 sq ft Date of test 8.5.16

safety valves to each boiler two (2), Spring Area of each valve 8.29 sq in Pressure to which they are adjusted 103 lbs No. and Description of
 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 14" 3 in dia. 11'-0" Length 10'-0"
 Material of shell plates steel Thickness 19/32 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 B - 2 Riv Diameter of rivet holes in long. seams 15/16 Pitch of rivets 5 1/2"
3 Rivets per pitch

width of butt straps 9 x 9/16 Per centages of strength of longitudinal joint rivets 95 Working pressure of shell by
 rules 103 Size of manhole in shell 19" x 15" Size of compensating ring 7 x 13/16 No. and Description of Furnaces in each
 boiler 2 plain Material steel Outside diameter 40" Length of plain part 75 3/4" Thickness of plates 5/8"
 top 5/8" bottom 1/2"

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 116 Combustion chamber
 plates: Material steel Thickness: Sides 3/8" Back 5/8" Top 3/8" Bottom 13/16" Pitch of stays to ditto: Sides 10" x 9" Back 9" x 10"

Top 10" x 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 121 Material of stays steel area
 smallest part 1.19 Area supported by each stay 90 Working pressure by rules 106 End plates in steam space: Material steel Thickness 13/16
 Pitch of stays 18" x 15" How are stays secured nuts & washers Working pressure by rules 120 Material of stays steel area
 Diameter at smallest part 2.87

Area supported by each stay 295 Working pressure by rules 101 Material of Front plates at bottom steel Thickness 13/16 Material of
 Lower back plate steel Thickness 13/16 Greatest pitch of stays 14" x 10" Working pressure of plate by rules 154 Diameter of tubes 3 1/2"

Pitch of tubes 4 1/2" x 4 1/2" Material of tube plates steel Thickness: Front 13/16 Back 5/8" Mean pitch of stays 10 3/8" Pitch across wide
 water spaces 14" Working pressures by rules 120 Girders to Chamber tops: Material steel Depth and thickness of
 girder at centre 7" x 1 1/4" Length as per rule 28" Distance apart 10" Number and pitch of Stays in each 209"

Working pressure by rules 122 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

SURVEY REQUEST
 NO. 1201 ATTACHED

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

Dates of Survey: During progress of work in shops - 1915. 11.12. Dec. 2. 21. 31. 1916 Mar 22. Apr 5. 11. 20. 27. Is the approved plan of boiler forwarded herewith yes
 while building (During erection on board vessel - - -) May 1. 8. Total No. of visits 11.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &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. And has now been fitted on board the above-named vessel.

Survey Fee ... £ 3. 13-0 When applied for Monthly 1916
 Travelling Expenses (if any) £ ✓ When received, 1916

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

Committee's Minute FRI. 1-DEC. 1916
 Assigned

