

# REPORT ON BOILERS.

No. 10554

WED. DEC. 24, 1919

SAT. DEC. 11 1920

Date of writing Report 13/12/1919 When handed in at Local Office 16/12/1919 Port of MIDDLESBRO'  
 No. in Survey held at Stockton-on-Tees & Co. Date, First Survey 6<sup>th</sup> Aug. Last Survey 12<sup>th</sup> Dec. 1919  
 Reg. Book. 18529 on the Shel Swedish Twin Sc. 4 Shel. Sc. "DANFOLK" (YARD No 3) Tons Gross 1685.93  
 Master A. A. Hansen Built at Rodbyhavn By whom built Rodbyhavn Jernskibtraeft When built 1920  
 Engines made at Gloster By whom made Gloster Dieselmotor Fabrik When made 1920  
 Boilers made at Stockton By whom made Hussar Riley Bros Ltd (No 5208) When made 1919  
 Registered Horse Power 320 Owners A. S. Rodby Havns Jernskibtraeft Port belonging to Denmark

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

Letter for record (S) Total Heating Surface of Boilers 555  $\text{ft}^2$  Is forced draft fitted No No. and Description of Boilers One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 12.12.19  
 No. of Certificate 6065 Can each boiler be worked separately ✓ Area of fire grate in each boiler 28  $\text{ft}^2$  No. and Description of safety valves to each boiler 2 off, directly spring loaded Area of each valve 4.908  $\text{sq}^2$  Pressure to which they are adjusted 100 lbs. per sq. in.  
 Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No main boiler  
 Smallest distance between boilers or uptakes and bunkers or woodwork 14" Mean dia. of boilers 8'-8" Length 8'-8"  
 Material of shell plates steel Thickness  $\frac{17}{32}$ " Range of tensile strength 28-32 Are the shell plates welded or flanged no  
 Description of riveting: cir. seams single lap long. seams 2 B-2 Riv Diameter of rivet holes in long. seams  $\frac{13}{16}$ " Pitch of rivets 4 $\frac{1}{2}$ "  
 Spacing of plates or width of butt straps 8 $\frac{1}{2}$ " x  $\frac{1}{2}$ " Per centages of strength of longitudinal joint rivets 97.0 Working pressure of shell by rules 82.0  
 Rules 112 Size of manhole in shell 19 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " Size of compensating ring 7 x  $\frac{17}{16}$ " No. and Description of Furnaces in each boiler 2 plain Material steel Outside diameter 32" Length of plain part top 63 $\frac{3}{8}$ " Thickness of plates crown  $\frac{17}{32}$ " bottom  $\frac{17}{32}$ "  
 Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 107 Combustion chamber plates: Material steel Thickness: Sides  $\frac{17}{32}$ " Back  $\frac{17}{32}$ " Top  $\frac{17}{32}$ " Bottom  $\frac{17}{32}$ " Pitch of stays to ditto: Sides 9" x 9" Back 9" x 8 $\frac{1}{2}$ "  
 Top 9" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 150 Material of stays steel Area at smallest part 96 Area supported by each stay 76.5 Working pressure by rules 100 End plates in steam space: Material steel Thickness  $\frac{3}{4}$ "  
 Tech of stays 14 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " How are stays secured nuts & washers Working pressure by rules 100 Material of stays steel Area at smallest part 2.87  
 Area supported by each stay 228 Working pressure by rules 104 Material of Front plates at bottom steel Thickness  $\frac{3}{4}$ " Material of over back plate steel Thickness  $\frac{3}{4}$ " Greatest pitch of stays 13 $\frac{1}{2}$ " x 9" Working pressure of plate by rules 147 Diameter of tubes 3 $\frac{1}{2}$ "  
 Tech of tubes 4 $\frac{1}{2}$ " x 4 $\frac{1}{4}$ " Material of tube plates steel Thickness: Front  $\frac{3}{4}$ " Back  $\frac{5}{8}$ " Mean pitch of stays 11 Pitch across wide for spaces 13 $\frac{1}{2}$ " Working pressures by rules 116 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 8 $\frac{1}{2}$ " x 14" Length as per rule 26" Distance apart 8" Number and pitch of Stays in each 2 @ 9"  
 Working pressure by rules 113 Steam dome: description of joint to shell none % of strength of joint  
 Diameter of rivets ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet holes ✓  
 Tech 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 ✓

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

Manufacturer.

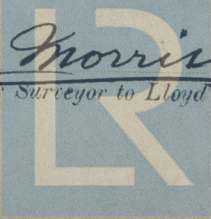
During progress of work in shops - 1919  
 During erection on board vessel - 1920  
 Is the approved plan of boiler forwarded herewith no  
 Total No. of visits 13 Forwarded with report no  
 No. 10505

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. A duplex Worthington feed pump, 4 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " and feed injector have been fitted to the donkey boiler.

Survey Fee £ 2-2-0 When applied for Monthly  
 Travelling Expenses (if any) £ When received 1919

Committee's Minute FRI. 17 DEC. 1920  
 Signed ✓

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



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 Foundation