

REPORT ON BOILERS.

No. 10497

Received at London Office

Report 8. 10. 1919 When handed in at Local Office 8. 10. 1919 Port of Middlesbrough
 Survey held at Stockton-on-Tees Date, First Survey 12th April Last Survey 7th October 1919
 on the Admiralty Tug "St. Arstell"
 Built at Ht. Yarmouth By whom built Crabtree & Co No 175 When built 1920
 By whom made Crabtree & Co. When made 1920.
 By whom made Muson Riley Bros Ltd Nos 5167 When made 1919
5168
 Owners Admiralty Port belonging to London

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

for record (S) Total Heating Surface of Boilers 3384 sq ft Is forced draft fitted yes (Howdens) No. and Description of
Two single ended Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 9.9.19

Certificate 6029 Can each boiler be worked separately Yes. Area of fire grate in each boiler 43.5 sq ft No. and Description of
 valves to each boiler Two Spring Loaded Area of each valve 4.06 sq Pressure to which they are adjusted 183 lbs.
 fitted with easing gear Yes. In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

distance between boilers or uptakes and bunkers or woodwork 12" Inside dia. of boilers 12'-6" Length 11'-0"
 Material of shell plates Steel Thickness 1 1/2" Range of tensile strength 28-32 Are the shell plates welded or flanged no

Riveting: cir. seams 2 R. lap long. seams 2 Riv Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 7 1/8"
1" in 5 Rivts per pitch
 width of butt straps 16" x 25/32 Per centages of strength of longitudinal joint rivets 89.6 Working pressure of shell by
 plate 85.09

Size of manhole in shell 20" x 16" Size of compensating ring 5 1/2" x 1 1/2" No. and Description of Furnaces in each
3 Morrison Material steel Outside diameter 39 1/4" Length of plain part top Thickness of plates 1 1/2"
bottom

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 192 Combustion chamber
 Material Steel Thickness: Sides 2 1/32" Back 2 1/32" Top 2 1/32" Bottom 3/4" Pitch of stays to ditto: Sides 8" x 8 1/2" Back 9 1/2" x 8 1/2"

Working pressure by rules 200 Material of stays steel Area at
 top part 1.73 Area supported by each stay 74 Working pressure by rules 187 End plates in steam space: Material steel Thickness 1 1/2"

of stays 18" x 18" How are stays secured nuts & washers Working pressure by rules 185 Material of stays steel Area at smallest part 6.33
 supported by each stay 288 Working pressure by rules 229 Material of Front plates at bottom steel Thickness 15/16" Material of

back plate steel Thickness 27/32" Greatest pitch of stays 14" x 8 1/2" Working pressure of plate by rules 188 Diameter of tubes 2 1/2"

of tubes 3 1/4" x 3 1/8" Material of tube plates steel Thickness: Front 15/16" Back 23/32" Mean pitch of stays 8 1/2" Pitch across wide
 spaces 13 1/2" Working pressures by rules 185 Girders to Chamber tops: Material steel Depth and thickness of

at centre 7 1/2" x 1 1/4" Length as per rule 30 1/2" Distance apart 8 3/4" Number and pitch of Stays in each 2 @ 8 1/2"
 Working pressure by rules 184 Steam dome: description of joint to shell none % of strength of joint

Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes
 Working pressure of shell by rules Crown plates Thickness How stayed

REHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pressure to which each is adjusted Is Easing Gear fitted

The foregoing is a correct description,
FOR RILEY BROS. (ENGINEERS) LTD Manufacturer.

During progress of work in shops - - - Apr 12-17 25 May 8-14 23 Jul 4 9-15 26 Aug. 1-6 8-12 Is the approved plan of boiler forwarded herewith yes

During erection on board vessel - - - 27.30. Sep. 9. Oct 7. Total No. of visits 17

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

Survey Fee ... £ 11-6-0 When applied for, Monthly 19...
 Travelling Expenses (if any) £ ... When received, 19...

Committee's Minute
 Signed Wm Morrison & Robert Rae
 Engineer Surveyor to Lloyd's Register of Shipping.