

REPORT ON BOILERS.

No. 9978.

Received at London Office TUE. 18 DEC. 1917

Date of writing Report

191

When handed in at Local Office 15.12.17

Port of Middlesbrough

No. in Survey held at

Stockton-on-Tees

Date, First Survey

21st June/17. Last Survey 14th Dec. 1917

Reg. Book.

on the

S. S. "Maindy Dene"

(Number of Visits 12)

(S.S. No 191)

Gross Tons

Net

Master

Built at

Stockton

By whom built

Messrs Craig Taylor & Co

When built

Engines made at

Sunderland

By whom made

N.E. Marine Eng Co

When made 1918

Boilers made at

Stockton

By whom made

Messrs Riley Bros Ltd (No 4973)

When made 1917

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer & Son

(Letter for record (S)) Total Heating Surface of Boilers 880 ft^2 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 14.12.17

No. of Certificate 5844 Can each boiler be worked separately ☒ Area of fire grate in each boiler 29 ft^2 No. and Description of

safety valves to each boiler 2 direct spring Area of each valve 3.98 Pressure to which they are adjusted 185 lb

Are they fitted with easing gear yes In case of ~~any~~ ^{any} boilers, state whether steam from main boilers can enter the ~~any~~ ^{any} boiler yesSmallest distance between boilers or uptakes and bunkers ~~or~~ ^{or} ~~woodwork~~ ^{woodwork} 1'-6" Inside Mean dia. of boilers 10'-0" Length 10'-0" ☒Material of shell plates Steel Thickness $27/32$ Range of tensile strength 28-32 Are the shell plates welded or flanged noDescrip. of riveting: cir. seams 2 R. lap long. seams 2 B-3 Riv Diameter of rivet holes in long. seams $15/16$ Pitch of rivets 7"Lap of plates or width of butt straps $13\frac{1}{2} \times 1\frac{1}{2}$ Per centages of strength of longitudinal joint rivets 87.3 Working pressure of shell byrules 183 Size of manhole in shell 19×15 Size of compensating ring 7×1 No. and Description of Furnaces in eachboiler 2 plain Material Steel Outside diameter 36" Length of plain part top $74\frac{1}{2}$ Thickness of plates crown $23/32$ bottom $15/16$ bottom 79 mean

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 183 Combustion chamber

plates: Material Steel Thickness: Sides $21/32$ Back $4/16$ Top $21/32$ Bottom $7/8$ Pitch of stays to ditto: Sides 10×8 Back $9\frac{1}{2} \times 9$ Top 10×8 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 180 Material of stays steel Diameter atsmallest part 2.03 Area supported by each stay 85.5 Working pressure by rules 214 End plates in steam space: Material steel Thickness 1"Pitch of stays $19 \times 12\frac{1}{4}$ How are stays secured nuts & washers Working pressure by rules 181 Material of stays steel Diameter at smallest part 5.05

Area supported by each stay 264 Working pressure by rules 199 Material of Front plates at bottom steel Thickness 1" Material of

Lower back plate steel Thickness 1" Greatest pitch of stays 14×9 Working pressure of plate by rules 249 Diameter of tubes $3\frac{1}{4}$ "Pitch of tubes $4\frac{3}{8} \times 4\frac{1}{4}$ Material of tube plates steel Thickness: Front 1" Back $3/4$ " Mean pitch of stays $10\frac{1}{8}$ " Pitch across wide

water spaces 14" Working pressures by rules 182 Girders to Chamber tops: Material steel Depth and thickness of

girder at centre $8 \times 1\frac{1}{2}$ Length as per rule 28 Distance apart 10 Number and pitch of Stays in each $2 @ 8$ "

Working pressure by rules 182 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. 1349. ATTACHED.FOR The foregoing is a correct description,
RILEY BROS. (BOILERMAKERS) LIMITED.

Manufacturer.

SECRETARY.

Dates of Survey	During progress of work in shops - -	1917 June 21. 25. 27. 29. July 10. Sep 10.	Is the approved plan of boiler forwarded herewith	yes
while building	During erection on board vessel - - -	Nov 19. 23. 27. Dec 5. 10. 14	Total No. of visits	12

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. The boiler is to be fitted on board at this port. The boiler has been satisfactorily secured on board, examined under steam and safety valves adjusted.

Survey Fee

£ 2 - 19 - 0

When applied for,

Monthly a/c

Travelling Expenses (if any) £

When received,

191

Committee's Minute

FRI. 10 MAY. 1918

Assigned

See fee rph. attached
2d 27/186. Ind. 10/103

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

© 2020

Lloyd's Register
Foundation

W 1286 - 0173