Rpt. 5a.

REPORT ON BOILERS

No. 11023

SAT. 7 MAY, 1921

Received at London Office

Date of writing Report ... 10 ... When handed in at Local Office 3.5.21 10 Port of Middlesbrough

No. in Reg. Book. ... Survey held at Stockton-on-Tees Date, First Survey 2nd February Last Survey 29th April 1921

on the S.S. "Glen Mary" (Number of Visits 12) Tons { Gross / Net

Master ... Built at Gt Yarmouth By whom built Crabtree & Co When built 1921

Engines made at Gt Yarmouth By whom made Messrs Crabtree & Co When made 1921

Boilers made at Stockton By whom made Messrs Riley Bros Ltd (No 5309) When made 1921

Registered Horse Power ... Owners Nelson Bros, Bobbin Co. Ltd Port belonging to Liverpool

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Messrs J. Spencer & Sons

(Letter for record (S)) **Total Heating Surface of Boilers** 1540 ☐ft Is forced draft fitted **No. and Description of Boilers** One single ended **Working Pressure** 180 Tested by hydraulic pressure to 320 Date of test 29.4.21

No. of Certificate 6224 Can each boiler be worked separately **Area of fire grate in each boiler** 44½ ☐ft No. and Description of safety valves to each boiler ... Area of each valve ... Pressure to which they are adjusted ...

Are they fitted with easing gear ... 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 ... Mean dia. of boilers 13'-0" Length 10'-1⅞" ✓

Material of shell plates steel Thickness 1 1/16" 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 R - 3 Rivets 5 Rivets per pitch Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 8½"

~~Lap of plates or~~ width of butt straps 17½" × 15/16" Per centages of strength of longitudinal joint rivets 91.6 plate 86.0 Working pressure of shell by rules 182 Size of manhole in shell 19" × 15" Size of compensating ring 8 × 1⅝ Mss Weil **No. and Description of Furnaces in each boiler** 3 plain Material steel Outside diameter 39 Length of plain part top 73 4/16 bottom 103½ Thickness of plates crown 13/16 bottom 7/8 mean

Description of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 204 Combustion chamber plates: Material steel Thickness: Sides 21/32" Back 5/8" Top 21/32" Bottom 15/16" Pitch of stays to ditto: Sides 9" × 9" Back 8" × 8½" Top 9" × 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 183 Material of stays steel Area at smallest part 1.73 Area supported by each stay 72 Working pressure by rules 192 End plates in steam space: Material steel Thickness 1⅛" Pitch of stays 18" × 17½" How are stays secured nuts & washers 7" × 5/8" Working pressure by rules 235 Material of stays steel Area at smallest part 5.56 Area supported by each stay 306 Working pressure by rules 189 Material of Front plates at bottom steel Thickness 1" Material of Lower back plate steel Thickness 7/8" Greatest pitch of stays 14" × 8½" Working pressure of plate by rules 197 Diameter of tubes 3¼" Pitch of tubes 4½" × 4¼" Material of tube plates steel Thickness: Front 1" Back 7/8" Mean pitch of stays 10 1/16" Pitch across wide water spaces 14" Working pressures by rules 183 Girders to Chamber tops: Material steel Depth and thickness of girder at centre 8" × 1½" Length as per rule 30" Distance apart 9" Number and pitch of Stays in each 2 @ 9"

Working pressure by rules 180 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 ... 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 RILEY BROS. (BOILERMAKERS) LIMITED.

The foregoing is a correct description,

SECRETARY.

Manufacturer.

Dates of Survey while building: During progress of work in shops 1921. 7.9.6.2.14.18.28. Dec 8.14. Apl 5.8.11.20.27.29. During erection on board vessel ...

Is the approved plan of boiler forwarded herewith yes

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

Survey Fee ... ... £ 10-5-0 When applied for, Monthly a/c.

Travelling Expenses (if any) £ ✓ : : When received, ... 19...

Wm Morrison

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 22 SEP. 1921

Assigned ...

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