Rpt. 5a.

REPORT ON BOILERS.

No. 11434.

SAT. JAN. 13 1923

Received at London Office

Date of writing Report 28th Dec 19 When handed in at Local Office 12th Jan. 1923. Port of Southampton.

No. in Reg. Book. Survey held at Southampton Date, First Survey 9th Jan. 22. Last Survey 9th Jan. 1923. (Number of Visits)

on the BOILER FOR STEAM HOPPER "FOREMOST VII" Tons Gross 598 Net 283.23

Master Built at Southampton By whom built White Bros. When built 1922.

Engines made at Southampton By whom made J. S. Thornycroft & Co Ld when made 1922

Boilers made at do. By whom made J. S. Thornycroft W678E when made 1922.

Registered Horse Power Owners R. E. V. James, Ld. Port belonging to London

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

(Letter for record S.) Total Heating Surface of Boilers 1620 ft² Is forced draft fitted no. No. and Description of Boilers One single-ended. Working Pressure 180 lbs Tested by hydraulic pressure to 320 lbs Date of test 2.9.22.

No. of Certificate 368. Can each boiler be worked separately ✓ Area of fire grate in each boiler 51 ft² No. and Description of safety valves to each boiler 2 Spring-loaded. Area of each valve 5.9 □" Pressure to which they are adjusted 185 lbs.

Are they fitted with easing gear yes. 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 12" ~~Mean~~ Int dia. of boilers 13'-6" Length 11-0

Material of shell plates S. Thickness 1 11/16" Range of tensile strength 28-32 tons Are the shell plates welded or flanged ✓

Descrip. of riveting: cir. seams DRL long. seams TR. DBS. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8"

~~Lap of plates or~~ width of butt straps 17 3/4. Per centages of strength of longitudinal joint rivets 85.15. plate 94.4. Working pressure of shell by rules 182. Size of manhole in shell 16"×12" Size of compensating ring 33×29.

No. and Description of Furnaces in each boiler 2 Corrugated Material S. Outside diameter 55 5/16" Length of plain part top ✓ bottom ✓ Thickness of plates crown bottom 21/32"

Description of longitudinal joint welded. No. of strengthening rings ✓ Working pressure of furnace by the rules 183. Combustion chamber plates: Material S. Thickness: Sides 22/32" Back 5/8" Top 22/32" Bottom 27/32" Pitch of stays to ditto: Sides 10 3/8×8 1/4 Back 9 1/4×8

Top 10 1/2"×8 1/4" stays are fitted with nuts or riveted heads nuts. Working pressure by rules 183. Material of stays S. ~~Diameter~~ area at smallest part 1.65 □" Area supported by each stay 86.6 □" Working pressure by rules 181. End plates in steam space: Material S. Thickness 1 11/32"

Pitch of stays 17 1/2"×14" How are stays secured DNs Working pressure by rules 239. Material of stays S. ~~Diameter~~ AREA at smallest part 5.05 6.1

Area supported by each stay 141 □" Working pressure by rules 185. Material of Front plates at bottom S. Thickness 1 3/64 Material of Lower back plate S. Thickness 55/64" Greatest pitch of stays 13 3/4"×8" Working pressure of plate by rules 238. Diameter of tubes 3 1/2" EXT.

Pitch of tubes 4 3/4"×4 3/4" Material of tube plates S. Thickness: Front 1 3/64" Back 25/32" Mean pitch of stays 10.97. Pitch across wide water spaces 14 1/2 dblg. Working pressures by rules 295. Girders to Chamber tops: Material S. Depth and thickness of girder at centre 9 1/8"×1 3/4" Length as per rule 34.59" Distance apart 10 1/2" Number and pitch of Stays in each 3 @ 8 1/4"

Working pressure by rules 181. Superheater or Steam chest; how connected to boiler 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

The foregoing is a correct Description,

See Machinery Report.

Manufacturer.

Dates of Survey while building: During progress of work in shops - - During erection on board vessel - - -

Is the approved plan of boiler forwarded herewith

Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This Boiler has been built in accordance with the Rules and approved plan. The materials & workmanship are sound & good. It was tested by hydraulic pressure to 320 lbs. is now fitted on board & well secured, and was tight & satisfactory under full pressure

Survey Fee ... ... £ : : When applied for, 19

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

J. G. Mackillop

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute FRI. JAN. 19 1923

Assigned

Lloyd's Register Foundation

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