

REPORT ON BOILERS.

No. 5311

Received at London Office

Date of writing Report Apr. 29th 1922 When handed in at Local Office 191 Port of Hong Kong

No. in Survey held at Hong Kong Date, First Survey 10-1-21 Last Survey Apr. 28th. 1922

Reg. Book. on the Steel Screw Steamer "PLANORBIS" (Number of Visits 20) Tons } Gross 5818.86
Net 3491.36

Master Built at Hong Kong By whom built Hong Kong & Whampoa Dock Co. Ltd. When built 1922

Engines made at Hong Kong By whom made Hong Kong & Whampoa Dock Co. Ltd. When made 1922

Boilers made at Hong Kong By whom made Hong Kong & Whampoa Dock Co. Ltd. When made 1922

Registered Horse Power 517 Owners Anglo-Saxon Petroleum Co. Ltd. Port belonging to Hong Kong

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Wm. Beardmore & Co.

Letter for record 28/9/20 Total Heating Surface of Boilers 1228.7 sq. ft. Is forced draft fitted No No. and Description of

Boilers One Cylindrical Multitubular Working Pressure 120 lbs. Tested by hydraulic pressure to 230 lbs. Date of test 7-12-21

No. of Certificate 128 Can each boiler be worked separately Yes Area of fire grate in each boiler 33.3 sq. ft. No. and Description of

Safety valves to each boiler Two 2" spring loaded Area of each valve 3.1416 Pressure to which they are adjusted 120 lbs.

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No

Smallest distance between boilers or uptakes and bunkers or woodwork 5 ft. Up. Dk. Mean dia. of boilers 11'-6" Length 11'- $\frac{3}{4}$ "

Material of shell plates Steel Thickness $\frac{3}{8}$ " Range of tensile strength 28-32 Tons Are the shell plates welded or flanged No

Description of riveting: cir. seams double lap long. seams Triple Butt Diameter of rivet holes in long. seams $\frac{15}{16}$ " Pitch of rivets $5, \frac{11}{16}$ "

Width of plates or width of butt straps $14\frac{1}{2}$ " Percentages of strength of longitudinal joint rivets 96.5% Working pressure of shell by

Rules 135 lbs. Size of manhole in shell 16" x 12" Size of compensating ring 30" x 34" x $\frac{3}{4}$ " No. and Description of Furnaces in each

Boiler Two Deighton Material Steel Outside diameter 44 $\frac{1}{2}$ " Length of plain part top - bottom - Thickness of plates 13/32"

Description of longitudinal joint Welded No. of strengthening rings - Working pressure of furnace by the rules 141 lbs. Combustion chamber

Material Steel Thickness: Sides 19/32" Back 19/32" Top 19/32" Bottom $\frac{3}{4}$ " Pitch of stays to ditto: Sides 7 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ " Back 7 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ "

Nuts on marginal & girder stays remainder S. 129 lbs. Working pressure by rules B. 127 Material of stays Steel Diameter at

Smallest part 1.23" Area supported by each stay B. 63.6 Working pressure by rules B. 159 End plates in steam space: Material Steel Thickness $\frac{7}{8}$ "

How are stays secured Nuts & washers Working pressure by rules 122 lbs. Material of stays Steel Diameter at smallest part 2.16"

Area supported by each stay 298 Working pressure by rules 132 lbs. Material of Front plates at bottom Steel Thickness 25/32" Material of

Upper back plate Steel Thickness 11/16" Greatest pitch of stays 13" Working pressure of plate by rules B. 134 Diameter of tubes 3"

Material of tube plates Steel Thickness: Front 25/32" Back 21/32" Mean pitch of stays 12 $\frac{3}{8}$ " x 8 $\frac{1}{2}$ " Pitch across wide

Spaces 13 $\frac{1}{2}$ " Working pressures by Rules 149 Girders to Chamber tops: Material Steel Depth and thickness of

at centre 7" x $\frac{1}{4}$ " double Length as per rule 32 $\frac{1}{2}$ " Distance apart 8 $\frac{1}{4}$ " Number and pitch of Stays in each Three 8 $\frac{1}{2}$ "

Working pressure by rules 133 lbs. 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

Pitch of rivets - Working pressure of shell by rules - Diameter of flue - Material of flue plates - Thickness -

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 -

HONG KONG & WHAMPOA DOCK CO. LTD.
The foregoing is a correct description,

R. H. Day Manufacturer.

During progress of work in shops - - January 10th. 1921. Is the approved plan of boiler forwarded herewith Yes

During erection on board vessel - - April 28th. 1922. Total No. of visits 20

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

Noted for coal or oil fuel, boiler fixed in upper deck.

Thickness of safety valves washers :- $\frac{3}{8}$ " both.

IDENTIFICATION MARKS ON BOILER:-

No. 128 HKG.
LLOYD'S TEST
230 lbs.
W. P. 120 lbs.
7-12-21
T. S. M.

Survey Fee £67.00 When applied for, 28/4 1922

Travelling Expenses (if any) £ When received, See Rpt. 191 on machinery

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

FRI. JUN. 16 1922

Committee's Minute

Signed

See other report.
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