

REC'D NEW YORK DEC 14 1920

Is Japan Arrow Boston report 1427

REPORT ON BOILERS.

No. 3779

Received at London Office

of writing Report 22nd April 1920 When handed in at Local Office 23rd April 1920 Port of Philadelphia, Pa. MON. 3 JAN. 1921
Survey held at Wilmington, Del. Date, First Survey Last Survey 191
Book. (Number of Visits) Gross Tons Net
on the Yae River Plant Hull 1386
Built at By whom built When built
By whom made When made
Wilmington, Del. By whom made Bethlehem Shipbuilding Corp^{ts} Ltd When made 1920
Registered Horse Power Owners Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Lukens Iron & Steel Co.
atter for record (7) Total Heating Surface of Boilers 9315 sq ft Is forced draft fitted No. and Description of
Boilers Three Scotch Single ended. Working Pressure 230. Tested by hydraulic pressure to 330. Date of test (1) 14-4-20
of Certificate 440 Can each boiler be worked separately Area of fire grate in each boiler No. and Description of
Safety valves to each boiler Two direct spring Area of each valve 9.62 sq in Pressure to which they are adjusted
May 16, 1920 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 15'-4 1/2" Length 11'-6"
Material of shell plates Steel Thickness 1 1/8" Range of tensile strength 60,000 Are the shell plates welded or flanged No
Description of riveting: cir. seams D.R. LAP long. seams T.R. D.B.S. Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 9 1/8"
Width of butt straps 22 3/8" Per centages of strength of longitudinal joint rivets 90.0 Working pressure of shell by
plate 83.3.
Size of manhole in shell 12" x 16" Size of compensating ring 38" x 32 1/2" x 1 1/2" No. and Description of Furnaces in each
Boiler 3 Corrugated Material steel Outside diameter 48 3/8" Length of plain part top 11' 1/2" Thickness of plates crown 1 1/8" bottom 1 1/8"
Description of longitudinal joint Welded. No. of strengthening rings 1 Working pressure of furnace by the rules 234 Combustion chamber
Material Steel Thickness: Sides 1 1/8" Back 1 1/8" Top 1 1/8" Bottom 1" Pitch of stays to ditto: Sides 7 1/2" x 7" Back 7 1/2" x 7 1/2"
7 1/2" x 7" If stays are fitted with nuts or riveted heads Riveted heads Working pressure by rules 238 Material of stays Iron Area at
Smallest part 2.06 sq ft Area supported by each stay 53.5 sq ft Working pressure by rules 239 End plates in steam space: Material Steel Thickness 1 1/8"
Pitch of stays 16 1/2" x 15" How are stays secured Double nut Working pressure by rules 230 Material of stays Steel Area at smallest part 6.49 sq ft
Area supported by each stay 247.5 sq ft Working pressure by rules 272 Material of Front plates at bottom Steel Thickness 1 1/8" Material of
Over back plate Steel Thickness 1 1/8" Greatest pitch of stays 13" x 7 1/2" Working pressure of plate by rules 396 Diameter of tubes 2 1/2"
Pitch of tubes 3 1/2" x 3 1/2" Material of tube plates Steel Thickness: Front 1 1/8" Back 3/4" Mean pitch of stays 9" Pitch across wide
Pitch across narrow spaces 12 3/4" Working pressures by rules 278 Girders to Chamber tops: Material Steel Depth and thickness of
Girders at centre 9" x 2" Length as per rule 2'-11" Distance apart 7 3/8" Number and pitch of Stays in each 4-7"
Working pressure by rules 266 Steam dome: description of joint to shell % 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

SUPERHEATER. 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,
BETHLEHEM SHIPBUILDING CORP., LTD. HARBAN PLANT
E. J. Germain Manufacturer.

During progress of survey work in shops - - -
During erection on board vessel - - -
Is the approved plan of boiler forwarded herewith Copy
Total No. of visits

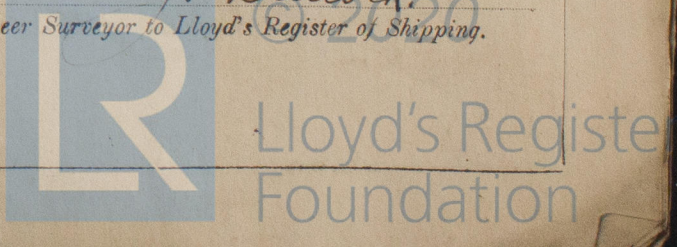
GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under Special Survey and in accordance with approved plan. The materials and workmanship are good and efficient. To complete the survey, the boilers to be installed on board, all mountings to be fitted and safety valves adjusted under steam.

Survey Fee ... £ : : When applied for, 191
Travelling Expenses (if any) £ : : When received, 10/1/21
Shipping Fee \$8.50

Committee's Minute New York DEC 14 1920

Signed Dec Box 1427

Engineer Surveyor to Lloyd's Register of Shipping.



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