

# REPORT ON BOILERS.

#12

Received at London Office - 8 SEP 1942

Date of writing Report **May 23rd 1941** When handed in at Local Office **1941** Port of **NEW YORK**

No. in Survey held at **Schenectady, N. Y.** Date, First Survey **April 17th.** Last Survey **May 22nd 1941**

Reg. Book. on the **British Government Freighters** *Ed. "Ocean Strength"* (Number of Visits **31**) } Gross **7173**  
Tons } Net **4278**

Master  Built at **S. Portland, Me.** By whom built **Todd-Bath Iron Shipbuilding Corp.** When built **1941**

Engines made at **Hamilton, Ohio** By whom made **General Machinery Corporation** When made **1941**

Boilers made at **Schenectady, N. Y.** By whom made **American Locomotive Co.** When made **1941**

Nominal Horse Power **503** *505* Owners **British Government** Port belonging to **London**

## MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY - Manufacturers of Steel **Worth Steel Co.**

(Letter for record (S) ) Total Heating Surface of Boiler **7140 sq. ft.** *total for 3 blrs* Is forced draft fitted **Yes** No. and Description of

Boiler **One (1) Scotch Type** Working Pressure **220 lbs** Tested by hydraulic pressure to **380 lbs** Date of test **22-5-41**

No. of Certificate **S-16** Can each boiler be worked separately **Yes** Area of fire grate in each boiler **43 sq. ft.** No. and Description of

safety valves to each boiler **2 spring load high lift** Area of each valve **5.52 sq. in.** Pressure to which they are adjusted **225 lbs.**

Are they fitted with easing gear **Yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **Report**

Smallest distance between boilers or uptakes and bunkers or woodwork **See Installation/** Mean dia. of boilers **14'-6-3/16"** Length **11'-8-1/32"**

Material of shell plates **Steel** Thickness **1-13/32** Range of tensile strength to **65000 lbs** Are the shell plates welded or flanged **No**

Descrip. of riveting: cir. seams **Double lap** long. seams **T.R.D.B.S.** Diameter of rivet holes in long. seams **1 1/2"** Pitch of rivets **10"**

Lap of plates or width of butt straps **22-1/8"** Per centages of strength of longitudinal joint rivets **93.5** Working pressure of shell by plate **85**

rules **222 lbs.** Size of manhole in shell **None** Size of compensating ring **-** No. and Description of Furnaces in each

boiler **3 Morrison** Material **Steel** Outside diameter **44 1/2"** Length of plain part top **(9-3/16"** Thickness of plates crown **(21/32"**

Description of longitudinal joint **Welded** No. of strengthening rings **None** Working pressure of furnace by the rules **231 lbs** Combustion chamber

plates: Material **Steel** Thickness: Sides **25/32"** Back **23/32"** Top **25/32"** Bottom **25/32"** Pitch of stays to ditto: Sides **9" x 10-3/16"** Back **9" x 9"**

Top **11" x 7-5/8"** If stays are fitted with nuts or riveted heads **Nuts** Working pressure by rules **225 lbs** Material of stays **Steel** Area at

smallest part **2.02 sq. in.** Area supported by each stay **100 sq. in.** Working pressure by rules **224 lbs.** End plates in steam space: Material **Steel** Thickness **1-7/16"**

Pitch of stays **21-1/4" x 21"** How are stays secured **Double Nuts** Working pressure by rules **242 lbs.** Material of stays **Steel** Area at smallest part **9.62 sq. in.**

Area supported by each stay **446 sq. in.** Working pressure by rules **242 lbs.** Material of front plates at bottom **Steel** Thickness **31/32"** Material of

Lower back plate **Steel** Thickness **29/32"** Greatest pitch of stays **14 1/2" x 9"** Working pressure of plate by rules **232 lbs.** Diameter of tubes **3"**

Pitch of tubes **4 1/8" x 4-1/8"** Material of tube plates **Steel** Thickness: Front **31/32"** Back **13/16"** Mean pitch of stays **9.45"** Pitch across wide

water spaces **14 1/2" x 8 1/4"** Working pressures by rules **233 lbs.** Girders to Chamber tops: Material **Steel** Depth and thickness of

girder at centre **10 1/4" x 1-3/4"** Length as per rule **2' 10"** Distance apart **11"** Number and pitch of Stays in each **3 - 7-5/8"**

Working pressure by rules **229 lbs** Steam dome: description of joint to shell **No Dome** % 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 **N.E. Marine Engine Co.** Date of Approval of Plan **See Installation Report** 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 **-**

*The foregoing is a correct description,*  
*R. J. Arch* *Mech. Engr. for* *Worth Steel Co. Manufacturer.*

Dates of Survey **April 17th 1941 to May 22nd 1941** Is the approved plan of boiler forwarded herewith **Retained for 90**

while building **Continuous Attendance** Total No. of visits **Thirty-one Days**

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

The boiler has been built under special survey in accordance with the Rules and approved plans, and the workmanship and material is good. It has been satisfactorily tested to 380 lbs by hydraulic pressure in presence of the undersigned. It has been forwarded to S. Portland, Maine to be fitted on board and when this has been done in accordance with the rules the vessel will be eligible in my opinion to receive the notation **† LMC** with date, and **220 lbs.** and **FD** in the Register Book

Survey Fee ... **See: Mch. report** When applied for, **191**

Travelling Expenses (if any) **See: Mch. report** When received, **191**

Committee's Minute **NEW YORK AUG 26 1942**

Assigned *See N.Y.K. RPT. NO. 42712.*

