

## REPORT ON BOILERS.

No. 42289

Received at London Office WED. NOV. 8 1922

Date of writing Report *9/11/22* When handed in at Local Office *2/11/22* Port of *Glasgow*

No. in Survey held at *Dalmuir* Date, First Survey *8th Mar 1921* Last Survey *27th Oct 1922*

Reg. Book. on the *S.S. "British Merchant"* (Number of Visits *37*) Tons { Gross *6994* Net *4017*

Master Built at *Dalmuir* By whom built *Tom Beardmore & Co. Ltd. (622)* When built *1922*

Engines made at *Dalmuir* By whom made *Tom Beardmore & Co. Ltd. (622)* When made *1922*

Boilers made at *Dalmuir* By whom made *Tom Beardmore & Co. Ltd. (622)* When made *1922*

Registered Horse Power Owners *British Tanker Co. Ltd.* Port belonging to *London*

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ DONKEY.—Manufacturers of Steel *W. Beardmore & Co. Ltd.*

(Letter for record *(7)*) Total Heating Surface of Boilers *10137* Is forced draft fitted *yes* No. and Description of Boilers *one single ended* Working Pressure *180* Tested by hydraulic pressure to *320* Date of test *31/3/22*

No. of Certificate *16040* Can each boiler be worked separately *✓* Area of fire grate in each boiler *oil fuel* No. and Description of safety valves to each boiler *1 pair direct spring* Area of each valve *3.97* Pressure to which they are adjusted *155 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 *13"* Mean dia. of boilers *10' 6"* Length *10' 6"*

Material of shell plates *steel* Thickness *29/32"* Range of tensile strength *28 to 32* Are the shell plates welded or flanged *no*

Descrip. of riveting: cir. seams *lap double long. seams butt treble* Diameter of rivet holes in long. seams *1"* Pitch of rivets *7"*

Lap of plates or width of butt straps *15"* Per centages of strength of longitudinal joint rivets *95.5%* Working pressure of shell by rules *180* Size of manhole in shell *16" x 12"* Size of compensating ring *26 1/2 x 30 1/2 x 29/32"* No. and Description of Furnaces in each boiler *2 Doughton* Material *steel* Outside diameter *36 1/16"* Length of plain part *top 1 bottom 1* Thickness of plates *crown 15/16 bottom 3/2*

Description of longitudinal joint *weld* No. of strengthening rings *1* Working pressure of furnace by the rules *183* Combustion chamber plates: Material *steel* Thickness: Sides *4/16"* Back *1 1/16"* Top *4/16"* Bottom *1 1/16"* Pitch of stays to ditto: Sides *9 1/4" x 9"* Back *9 1/2" x 8 3/4"*

Top *9 3/8" x 9"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *198* Material of stays *iron* Area at smallest part *1.73* Area supported by each stay *69* Working pressure by rules *183* End plates in steam space: Material *steel* Thickness *1"* Pitch of stays *16 x 15* How are stays secured *2 nuts* Working pressure by rules *190* Material of stays *steel* Area at smallest part *4.43*

Area supported by each stay *240* Working pressure by rules *180* Material of Front plates at bottom *steel* Thickness *15/16"* Material of Lower back plate *steel* Thickness *7/8"* Greatest pitch of stays *14 1/4"* Working pressure of plate by rules *200* Diameter of tubes *2 1/2"* Pitch of tubes *3 3/4" x 3 5/8"* Material of tube plates *steel* Thickness: Front *15/16"* Back *7/8"* Mean pitch of stays *11 1/16"* Pitch across wide water spaces *13 1/2"* Working pressures by rules *260* Girders to Chamber tops: Material *steel* Depth and thickness of girder at centre *7 1/8 x 3 1/4 double* Length as per rule *27 15/16"* Distance apart *9 1/8"* Number and pitch of Stays in each (2) *9"*

Working pressure by rules *182* 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 *none* 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 WILLIAM BEARDMORE & CO., LIMITED  
The foregoing is a correct description,  
*W. Beardmore*

ENGINEERING MANAGER

Dates of Survey { During progress of work in shops - - } *See Machinery report attached* Is the approved plan of boiler forwarded herewith *yes*

while building { During erection on board vessel - - } *✓* Total No. of visits *37*

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

*This boiler has been built under special survey, the materials and workmanship are of good description, it has been well fitted on board and tried under steam,*

Survey Fee ... *Charged on accompanying Machinery Report* When applied for, ... 19...

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

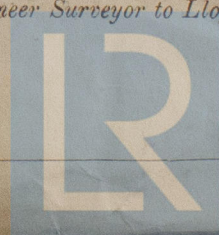
Committee's Minute

GLASGOW

7-NOV 1922

Assigned *See accompanying machinery report.*

*A. M. McLeod*  
Engineer Surveyor to Lloyd's Register of Shipping.



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