

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 1922* 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. (Ld) (622)* When built *1922*
 Engines made at *Dalmuir* By whom made *Tom Beardmore & Co. (Ld) (622)* When made *1922*
 Boilers made at *Dalmuir* By whom made *Tom Beardmore & Co. (Ld) (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 *Wm Beardmore & Co. Ld.*

(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 2 1/2* No. and Description of Furnaces in each

boiler *2 Dighton* Material *steel* Outside diameter *36 1/16"* Length of plain part *top / bottom* Thickness of plates *15" / 32"*

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 1/16"* Back *1 1/16"* Top *4 1/16"* 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 3/4" 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,
Wm Beardmore
 ENGINEERING MANAGER

Dates of Survey } During progress of } *See Machinery*
 work in shops - - }
 while building } During erection on } *report attached*
 board vessel - - - }
 Is the approved plan of boiler forwarded herewith *yes*
 Duplicate of the
 Total No. of visits *37*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &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. Beardmore
 Engineer Surveyor to Lloyd's Register of Shipping.



If a Report also sent on the hull of the ship