

REPORT ON BOILERS.

No. 45140

Received at London Office 18 NOV 1925

Date of writing Report *7th Nov. 1925* When handed in at Local Office *7.11.1925* Port of *Glasgow*

No. in Survey held at *Dalmuir* Date, First Survey *14.8.24* Last Survey *6th Nov. 1925*

on the *Twin Screw "Conte Biancamano"* (Number of Visits *114*) Gross *22883* Tons Net *15560*

Master Built at *Dalmuir* By whom built *W^m Beardmore & Co* Card No. *640* When built *1925*

Engines made at *Dalmuir* By whom made *W^m Beardmore & Co* Engine No. *640* When made *1925*

Boilers made at *Dalmuir* By whom made *W^m Beardmore & Co* Boiler No. *640* When made *1925*

Nominal Horse Power *4421* Owners *Lloyd Sabaudo Soc Anon per Azioni* Port belonging to *Genoa*

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel *W^m Beardmore & Co. L^d* (Letter for Record *S.*)

Total Heating Surface of Boilers *43960* *7 DB* Is forced draught fitted *Yes* Coal or Oil fired *Oil*

No. and Description of Boilers *7 double ended* Working Pressure *220*

Tested by hydraulic pressure to *380* Date of test *5.12.24. 17.12.24. 26.12.24. 16.1.25. 6.2.25. 23.2.25.* No. of Certificate *16676. 16681. 16688. 16702. 16725.* an each boiler be worked separately *Yes*

Area of Firegrate in each Boiler *147* No. and Description of safety valves to each boiler *2 Spring loaded high lift*

Area of each set of valves per boiler *25.132* Pressure to which they are adjusted *225* Are they fitted with easing gear *Yes*

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *Yes*

Smallest distance between boilers or uptakes and bunkers or woodwork *Well clear* Is oil fuel carried in the double bottom under boilers *No*

Smallest distance between shell of boiler and tank top plating *18"* Is the bottom of the boiler insulated *Yes*

Largest internal dia. of boilers *16'-6"* Length *22'-0"* Shell plates: Material *S* Tensile strength *30-34*

Thickness *1 5/8"* Are the shell plates welded or flanged *No* Description of riveting: circ. seams *end A.R. inter. T.R.*

ong. seams *T.R. D.B.S.* Diameter of rivet holes in *1 5/8"* Pitch of rivets *4.126"*

Percentage of strength of circ. end seams *47.4* Percentage of strength of circ. intermediate seam *86.8*

Percentage of strength of longitudinal joint *84.8* Working pressure of shell by Rules *233*

Thickness of butt straps *1 1/4"* No. and Description of Furnaces in each Boiler *8. mor.*

Material *S* Tensile strength *26-30* Smallest outside diameter *41 1/4"*

Length of plain part *5/8"* Thickness of plates *5/8"* Description of longitudinal joint *weld*

Dimensions of stiffening rings on furnace or c.c. bottom *Yes* Working pressure of furnace by Rules *221*

End plates in steam space: Material *S* Tensile strength *26-30* Thickness *1 1/4"* Pitch of stays *18 1/2" x 17"*

How are stays secured *A.N.* Working pressure by Rules *231*

Tube plates: Material *S* Tensile strength *26-30* Thickness *15/16"*

Pitch of stay tubes in nests *10 1/2"* Pitch across wide water spaces *14"* Working pressure *228*

Orders to combustion chamber tops: Material *S* Tensile strength *28-32* Depth and thickness of girder *232*

centre *9 5/8" x 1 1/2"* Length as per Rule *29 1/2"* Distance apart *8"* No. and pitch of stays *3 x 9"*

Tensile strength *26-30* Thickness: Sides *7/8"* Back *23/32"* Top *16 7/8"* Bottom *7/8"*

Pitch of stays to ditto: Sides *9" x 8"* Back *10" x 8"* Top *9" x 8"* Are stays fitted with nuts or riveted over *nuts*

Working pressure by Rules *221* Front plate at bottom: Material *S* Tensile strength *26-30*

Thickness *15/16"* Lower back plate: Material *S* Tensile strength *Yes* Thickness *Yes*

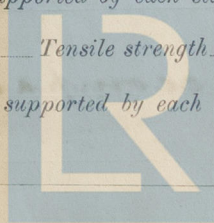
Pitch of stays at wide water space *Yes* Are stays fitted with nuts or riveted over *nuts*

Working Pressure *Yes* Main stays: Material *S* Tensile strength *28-32*

Diameter *3 3/8"* No. of threads per inch *6* Area supported by each stay *315"*

Working pressure by Rules *277* Screw stays: Material *S* Tensile strength *26-30*

Diameter *1 3/4"* No. of threads per inch *9* Area supported by each stay *80"*



Lloyd's Register Foundation

** Conte Biancamano **

Plans forwarded

Appx. Midship Section

Langway door above 1st Prom DK

Midship Section as built (forwarded in advance)

Profile & Deck

H.T. BW? Record 138-144

Boat deck

Saloon opening on C deck

House decks

Strong beams in Boiler Room

Upper Promenade Deck B

Shut plan at Langway door

Promenade Deck C

any of Bullets at Sidelight

General plan of Deck D 6-B 7A

Multiple punchy boat deck

Shut plan of bottom

Section at dk house

Shut plan general

Superstructure above D deck

Turbine Engine Seat

Keering Port

After end Framing

Robani Patent Lanching Gear (5 plan)

Fore end Framing

Steam frame & Rudder

Finder in double bottom

Multiple punchy deck

Deep deck water tank (5 Plan)

Outer finder & pillars

General plan of Pelas & tank finder

Inner finder & Pelas (3 plan)

finder & Pelas 100 lbs & frame

Inner finder detail plan

Main dk plating in way of 8 & 8 space

Shaft Brackets

Multiple punchy bottom

Sketch of bulthead at 14" Sidelight

Superstructure House

Bulthead

Oil fuel tanks (2 Plan)

Langway door

Finder at Corner of casing

Mask & rigging

Pelas in Engine Space

Hatches

Flat plate Keel & Cantle Girders

Langway door

Additional Chipping of 1st DK House

Bulthead at Square Port

Stern bar

Promenade Front

Lower DK plating for 1st

DK plating D deck in well

Stern Stuffing box compl.

Working pressure by Rules 227 Are the stays drilled at the outer ends *no* Margin stays: Diameter *At turned off part, 2"*
 No. of threads per inch 9 Area supported by each stay 72" Working pressure by Rules 343
 Tubes: Material *Lion* External diameter *3"* Thickness *8 L.S.C. 3/8"* No. of threads per inch 9
 Pitch of tubes *4 1/4" x 4 1/8"* Working pressure by Rules 250 Manhole compensation: Size of opening
 shell plate *21" x 17"* Section of compensating ring *39" x 30" x 1 3/8"* No. of rivets and diameter of rivet holes *36 - 1 5/8"*
 Outer row rivet pitch at ends *10 3/4"* Depth of flange if manhole flanged *4"* Steam Dome: Material *none*
 Tensile strength Thickness of shell Description of longitudinal joint
 Diameter of rivet holes Pitch of rivets Percentage of strength of joint *Plate Rivets*
 Internal diameter Working pressure by Rules Thickness of crown No. and diameter
 stays Inner radius of crown Working pressure by Rules
 How connected to shell Size of doubling plate under dome Diameter of rivet holes and pitch
 of rivets in outer row in dome connection to shell
 Type of Superheater *Robinson* Manufacturers of *Superheater Co. Ltd. Manchester*
 Number of elements *74 per tier* Material of tubes *steel* Internal diameter and thickness of tubes *7/8" 3/8"*
 Material of headers *Forged steel* Tensile strength Thickness *5/8"* Can the superheater be shut off at
 the boiler be worked separately *yes* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *yes*
 Area of each safety valve *4.908 sq"* Are the safety valves fitted with easing gear *yes* Working pressure as per
 Rules Pressure to which the safety valves are adjusted *225* Hydraulic test pressure
 tubes *1000* castings *660* and after assembly in place *440* Are drain cocks or valves fitted
 to free the superheater from water where necessary *yes*
 Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with *yes.*

The foregoing is a correct description,
 For WILLIAM BEAUMORE & CO., LIMITED
 W. O. Dyer

Dates of Survey: During progress of work in shops - - - Are the approved plans of boiler and superheater forwarded to the Registrar (If not state date of approval.)
 while building: During erection on board vessel - - - Total No. of visits

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *These boilers have been built under special survey in accordance with the approved plans, and the Society's Rules, and requirements, the materials and workmanship are good and they have been securely fitted on board the vessel.*

Safety valve Washers 7 double ended boilers. After boiler room. Start 4 outer boiler 2 1/64" 3/8", Start 4 inner boiler 1 1/32" 23/64". Port inner boiler 3/8" 19/64". Forward boiler room. Port outer boiler 2 5/64" 25/64". Port inner boiler 3/8" 23/64". Start 4 inner boiler 2 5/64" 13/32". Start 4 outer boiler 1 1/32" 11/32"

Survey Fee ... £ ... When applied for, 1925
 Travelling Expenses (if any) £ ... When received, 1925

James Cairns
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 17 NOV 1925
 Assigned See accompanying report.