

REPORT ON BOILERS.

No. 6068

Received at London Office

MON. SEP. 18 1922

Date of writing Report 9th Aug. 1922. When handed in at Local Office 9th Aug. 1922 Port of BILBAO.

No. in Survey held at BILBAO. Date, First Survey 26th JULY 1921 Last Survey 8th AUGUST 1922

Reg. Book. on the S/S "CRISTOBAL COLON" N^o. 5 SHIP (FERROL.) (Number of Visits 76.) Tons } Gross } Net }

Master Built at FERROL. By whom built SOC. ESPAÑOLA DE CONSTR. NAVAL When built

Engines made at By whom made When made

Boilers made at BILBAO. By whom made SOC. ESPAÑOLA DE CONSTR. NAVAL When made 1922.

Registered Horse Power Owners CIA TRASATLANTICA. Port belonging to Barcelona.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY. Manufacturers of Steel ALTOS HORNOS. SESTAO.

(Letter for record T) Total Heating Surface of Boilers 20890 sq ft Is forced draft fitted

Boilers 7. S. E. MARINE. Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs No. and Description of

Nos of Certificates 80, 81, 82. Can each boiler be worked separately Area of fire grate in each boiler 68.57 sq ft No. and Description of

safety valves to each boiler Area of each valve Pressure to which they are adjusted

Are 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 16'-3" Length 11'-7²⁷/₃₂"

Material of shell plates STEEL Thickness 1³/₈" Range of tensile strength 29³/₄-33 Are the shell plates welded or flanged

Descrip. of riveting: cir. seams DR. Riv. LAP. long. seams DOUBLE BUTT STRAPS Diameter of rivet holes in long. seams 1⁷/₁₆" Pitch of rivets 9³/₄"

Lap of plates or width of butt straps 21" Per centages of strength of longitudinal joint rivets 84.7. Working pressure of shell by

rules 191 Size of manhole in shell 16" x 12" Size of compensating ring 40" x 36" plate 85.26 No. and Description of Furnaces in each

boiler 3 SUSPENSION Material STEEL Outside diameter 4'-4¹/₈" Length of plain part top } Thickness of plates } 41" bottom } 64"

Description of longitudinal joint WELD No. of strengthening rings Working pressure of furnace by the rules 199 Combustion chamber

plates: Material STEEL Thickness: Sides 5⁵/₈" Back 5⁵/₈" Top 5⁵/₈" Bottom 1" Pitch of stays to ditto: Sides 7⁷/₈" x 8¹/₂" Back 8¹/₂" x 8¹/₂"

Top 8¹/₂" x 7⁷/₈" If stays are fitted with nuts or riveted heads NUTS Working pressure by rules 187 Material of stays IRON Area at

smallest part 2.03 Area supported by each stay 7.22 Working pressure by rules 210 End plates in steam space: Material STEEL Thickness 1¹/₈"

Pitch of stays 18" x 15¹/₄" How are stays secured By nuts & washers Working pressure by rules 216 Material of stays STEEL Area at smallest part 5.56

Area supported by each stay 274. Working pressure by rules 211 Material of Front plates at bottom STEEL Thickness 3¹/₃₂" Material of

lower back plate STEEL Thickness 7⁷/₈" Greatest pitch of stays 13¹/₂" x 8¹/₂" Working pressure of plate by rules 208 Diameter of tubes 2¹/₂"

Pitch of tubes 3³/₄" x 3³/₄" Material of tube plates STEEL Thickness: Front 3¹/₃₂" Back 1³/₁₆" Mean pitch of stays 10¹/₂" Pitch across wide

water spaces 13¹/₂" Working pressures by rules 210 Girders to Chamber tops: Material STEEL Depth and thickness of

order at centre 10" x 1³/₈" Length as per rule 32.762 Distance apart 8¹/₂" Number and pitch of Stays in each 3. 7⁷/₈" PITCH

Working pressure by rules 211 Steam dome: description of joint to shell % 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

PERHEATER. 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

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

VERTICAL DONKEY BOILER—No. Description Manufacturers of steel

By whom made When made Where fixed Working pressure

Tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can

enter the donkey boiler Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile

strength Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

No. of plating Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates

Diam. of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown

plates Radius of do. Stayed by Diameter of uptake Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description,

Manufacturer.

1921
During progress of work in shops -- July 26, 28, Aug 4, 8, 24, Sept 23, 27, 29, Oct 3, 4, 5, 7, 10, 11, 13, 17, 25, Nov 6, 7, 10, 20, 25, 29, Dec 12, 13, 20, 22, 27, 29, 31
1922
During erection on board vessel -- Jan 11, 23, 25, 31, Feb 9, 16, 21, 22, 23, 24, March 13, 20, 22, 24, 30, 31, April 4, 11, 13, 20, 27, 29, June 2, 6, 8, 9, 14, 20, 27, May 5, 10, 17
July 4, 6, 12, 14, 17, 18, 27, 28, Aug 1, 8, 8
Total No. of visits 76.

Is the approved plan of main boiler forwarded herewith No. (Required for Register)

Approved. 15/6/17.

W506-0103

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

These boilers have been built under Special Survey at this Port and on completion the boilers were subjected to a hydraulic test of 360 lbs. per Sq. and found satisfactory. The workmanship is good and the boilers after they have been satisfactorily installed on board are eligible in our opinion to be classed in this Society.

The boilers are intended for the S/S 'CRISTOBAL COLON' and have now been despatched to Ferrol.

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Bilbao.

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ..	\$2450.00.	When applied for,	14/8/22
Special	£	When received,	19
Donkey Boiler Fee	£		
Travelling Expenses (if any) f	44.00.		
See fee at Builders request.	28.00.		
Committee's Minute			

Purchar.

WED. 7 APR 1926

C. H. Foulmer & Co
 Engineer Surveyor to Lloyd's Register of Shipping

FRI. 30 APR 1926

TUES. 16 NOV 1926



Lloyd's Register
 Foundation

Assigned