

REPORT ON BOILERS.

Received at London Office
 Date of writing Report 15/4 1919 When handed in at Local Office 1919 Port of Bilbao WED. 30. APR. 1919
 No. in Survey held at Bilbao Date, First Survey 28/6/18 Last Survey 1/2 1919
 Reg. Book. on the S.S. "CONDE de ZUBIRIA" (Number of visits 11) Gross 3248 Tons Net 1940
 Master E Echevarria Built at Bilbao By whom built Soc. Espanola de Const. Naval When built 1919
 Engines made at Yuro (Spain) By whom made Soc. Espanola de Const. Naval When made 1919
 Boilers made at Barcelona By whom made Magnume Ferru y Martina When made 1919
 Registered Horse Power Owners Altos Hornos de Vizcaya Port belonging to Bilbao

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Altos Hornos de Vizcaya

Letter for record S Total Heating Surface of Boilers 422 f² Is forced draft fitted No No. and Description of Boilers One Multitubular Boiler Working Pressure 80 lb Tested by hydraulic pressure to 160 lb Date of test 23/1/19

No. of Certificate 30 Can each boiler be worked separately Area of fire grate in each boiler 12.5 f² No. and Description of Safety valves to each boiler one spring loaded Area of each valve 1.767 sq Pressure to which they are adjusted 80 lb

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 6" Mean dia. of boilers 6.0 1/2" Length 7.0 8"

Material of shell plates Steel Thickness 1/2" Range of tensile strength 28 3/2 Ton Are the shell plates welded or flanged neither

Descrip. of riveting: cir. seams S.R. long. seams D.R.L. Joint Diameter of rivet holes in long. seams 13/16" Pitch of rivets 2.5 2"

Top of plates or width of butt straps 4" Per centages of strength of longitudinal joint rivets 60% plate 68% Working pressure of shell by rules 102 lb Size of manhole in shell 11 x 15" Size of compensating ring 24 x 2" No. and Description of Furnaces in each boiler One plain Material Steel Outside diameter 3 1/2" Length of plain part 4.0 1/2" Thickness of plates crown 15/32" bottom 15/32"

Description of longitudinal joint S.R.L. Joint No. of strengthening rings Working pressure of furnace by the rules 88.5 lb Combustion chamber plates: Material Thickness: Sides Back Top Bottom Pitch of stays to ditto: Sides Back

Top If stays are fitted with nuts or riveted heads Working pressure by rules Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space: Material Steel Thickness 5/8"

Pitch of stays 14 x 14" How are stays secured D. NUTS Working pressure by rules 94 lb Material of stays Steel Area at smallest part 1.30

Area supported by each stay 126 sq Working pressure by rules 8 lb Material of Front plates at bottom Steel Thickness 5/8" Material of cover back plate Steel Thickness 5/8" Greatest pitch of stay Working pressure of plate by rules Diameter of tubes 3 1/2"

Pitch of tubes 4 3/8 x 4 3/8" Material of tube plates Steel Thickness: Front 5/8" Back 5/8" Mean pitch of stays 8 3/4" Pitch across wide water spaces Working pressures by rules 183 lb Girders to Chamber tops: Material Depth and thickness of

Order at centre Length as per rule Distance apart Number and pitch of Stays in each

Working pressure by rules Steam dome: description of joint to shell single riveted % of strength of joint 52.4

Diameter 24 int Thickness of shell plates 3/8" Material Steel Description of longitudinal joint S.R.L. Joint diam. of rivet holes 13/16"

Pitch of rivets 1 7/8" Working pressure of shell by rules 160 lb Crown plates Steel Thickness 3/4" How stayed

PERHEATER. Type 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

The foregoing is a correct description,
 SOCIEDAD ESPAÑOLA DE CONSTRUCCION NAVAL
 Manufacturer.

Dates During progress of work in shops: 28/6/18 15: 22: 27 4/18 5: 10: 14: 25/9/18 Is the approved plan of boiler forwarded herewith
 while (During erection on board vessel) 12/1/19 1/2/19 Total No. of visits 11

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

This Boiler has been built in accordance with the approved plan. The material & workmanship is good also the boiler has been tested in the presence of the undersigned by hydraulic pressure to 160 lb sq

Survey Fee £ 200/- When applied for, 24/4 1919
 Travelling Expenses (if any) £ 6/- When received, 25/4 1919

Committee's Minute TUE. 17. JUN. 1919
 signed W. J. H. R. Procter Engineer Surveyor to Lloyd's Register of Shipping.
 TUE. 27 MAY 1920



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