

REPORT ON BOILERS.

No. 6068

Copy
 Received at London Office Mon. Sep 18. 1922
 Date, First Survey 26th July 1921 Last Survey 8th August 1922
 Port of Bilbao
 Survey held at Bilbao
 Date, First Survey 26th July 1921 Last Survey 8th August 1922
 Ship Cristobal Colon
 No. of Visits 7
 Gross 10137
 Net
 Built at Ferrol
 By whom built Soc. Espanola de Constr. Naval
 When built 1922
 By whom made Soc. Espanola de Constr. Naval
 When made 1922
 By whom made Soc. Espanola de Constr. Naval
 When made 1922
 Owners Cia. Transatlantica
 Port belonging to Barcelona
 Horse Power

WATER TUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Alfonso Hornos. Sestao*
 Total Heating Surface of Boilers 20890 sq ft
 Is forced draft fitted Yes
 Working Pressure 180 lbs
 Tested by hydraulic pressure to 360 lbs
 Dates of tests 13.12.21, 13.2.22, 13.4.22, 13.6.22, 13.8.22, 13.10.22
 No. and Description of Boilers 7 16 Marine
 Can each boiler be worked separately Yes
 Area of fire grate in each boiler 68.57 sq ft
 No. and Description of Boilers 7 16 Marine
 Area of each valve 11.045
 Pressure to which they are adjusted 185 lbs
 In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes
 Mean dia. of boilers 16'-3"
 Length 11'-7 1/2"
 Material of shell plates Steel
 Thickness 1 3/8"
 Range of tensile strength 29 3/4-33
 Are the shell plates welded or flanged Yes
 Diameter of rivet holes in long. seams 1 7/16"
 Pitch of rivets 9 3/4"
 Per centages of strength of longitudinal joint rivets 84.7, plate 85.21
 Working pressure of shell by rules 199
 Combustion chamber
 Material Steel
 Thickness Sides 7/8" Back 7/8" Top 7/8" Bottom 1"
 Pitch of stays to ditto Sides 7/8" x 8 1/2" Back 8 1/2" x 8 1/2"
 Working pressure by rules 187
 Material of stays Iron
 Diameter at smallest part 5.56"
 Area supported by each stay 7.22"
 Working pressure by rules 210
 End plates in steam space: Material Steel Thickness 1/8"
 How are stays secured Washers
 Working pressure by rules 216
 Material of stays Steel
 Diameter at smallest part 5.56"
 Working pressure by rules 211
 Material of Front plates at bottom Steel
 Thickness 3/32"
 Material of back plate Steel
 Thickness 7/8"
 Greatest pitch of stays 13 1/2" x 8 1/2"
 Working pressure of plate by rules 208
 Diameter of tubes 2 1/2"
 Material of tube plates Steel
 Thickness Front 3/32" Back 13/16"
 Mean pitch of stays 10 1/2"
 Pitch across wide spaces 13 1/2"
 Working pressures by rules 210
 Girders to Chamber tops: Material Steel
 Depth and thickness of at centre 60 x 1 3/8"
 Length as per rule 32.762
 Distance apart 8 1/2"
 Number and pitch of Stays in each 3. 7 1/8" pitch
 Superheater or Steam chest: how connected to boiler
 Can the superheater be shut off and the boiler worked
 Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 End plates: Thickness How stayed
 Area of safety valves to superheater Are they fitted with easing gear

WATER TUBULAR 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
 Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter donkey boiler
 Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile
 Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets
 Per centage of strength of joint Rivets Working pressure of shell by rules Thickness of shell crown plates
 No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace
 Description of joint Working pressure of furnace by rules Thickness of furnace crown
 Radius of do. Stayed by Diameter of uptake Thickness of uptake plates

The foregoing is a correct description,

Manufacturer.

Is the approved plan of main boiler forwarded herewith

" " " donkey " "

" " " " "

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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 300 lbs per sq. inch and found satisfactory. The workmanship is good & 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. Cristobal Colon and have now been dispatched to S. Yessel.

These boilers have now been securely fitted on board and the Safety Valves adjusted under Steam. The thickness of adjusting washers are as follows:-

PORT AFT.
CENTRE AFT.
STAR ..
PORT FORW.
CENT ..
STAR ..
FORW BOILER

F. 15^{mm} A. 13^{mm}
F. 19^{mm} A. 19^{mm}
- 11^{mm} - 13^{mm}
- 13^{mm} - 13^{mm}
- 15^{mm} - 12^{mm}
- 11^{mm} - 11^{mm}
- 14^{mm} - 12^{mm}

Thomas Miller 31-8-23

The amount of Entry Fee .. £2450.00
Special £
Donkey Boiler Fee £
Travelling Expenses (if any) £
Rate at Builder's request
Committee's Minute

When applied for, 12.8.22
When received, 13.9.22

TUE. 18 SEP. 1923

Assigned

(Signed) W. B. King
(Signed) C. H. Fowling
Engineer Surveyor to Lloyd's Register of Shipping.
WED. 7 APR 1926
TUE. 30 OCT. 1923
TUE. 24 JUN 1924
TUE. 30 DEC 1924
FRI. 1 MAY 1925
TUES. 16 NOV 1925
FRI. 30 APR 1926
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