

REPORT ON BOILERS.

No. 9424

of writing Report 29/5/1926 When handed in at Local Office 29/5/1926 Port of Ghana.

Survey held at Accra. Date, First Survey 24/7/25 Last Survey 7/4/1926

on the Ship N° 20 - Venezia. (Number of Visits 13.) Tons { Gross Net

ter Built at Mestre Venezia By whom built Soc. Ital. Ernesto Breda. Yard No. 20 When built 1926

nes made at By whom made Engine No. When made

rs made at Mestre Venezia. By whom made Soc. Ital. Ernesto Breda. Boiler No. C/20 When made 1926.

al Horse Power Owners Port belonging to

LONGITUDINAL BOILERS—MAIN, AUXILIARY, OR DONKEY.

facturers of Steel Messrs. Mannesmannrohren-Werke, Abt. Schalby Knaack. (Letter for Record (S))

Heating Surface of Boilers 125 m² Is forced draught fitted Coal or Oil fired

Description of Boilers 2. S.E. Horizontal Marine. Working Pressure 14.0 Kp. cm²

hydraulic pressure to 25 Kp. Dates of test 24.3.26 7.4.26 Nos of Certificate 174 & 176 Can each boiler be worked separately

Firegrate in each Boiler 3.42 m² No. and Description of safety valves to each boiler

each set of valves per boiler { per Rule as fitted Pressure to which they are adjusted Are they fitted with easing gear

of donkey boilers, state whether steam from main boilers can enter the donkey boiler

distance between boilers or uptakes and bunkers or woodwork Is oil fuel carried in the double bottom under boilers

distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

internal dia. of boilers 3200 Length 3250 Shell plates: Material Steel Tensile strength 44/55

ss 23.5 Are the shell plates welded or flanged No. Description of riveting: circ. seams { end inter. DR-Lap J

ms: D.B. Straps - T.R. Diameter of rivet holes in { circ. seams 28 1/2 long. seams 28 7/8 Pitch of rivets { 92 182

age of strength of circ. end seams { plate 69.6 rivets 43.5 Percentage of strength of circ. intermediate seam { plate rivets

age of strength of longitudinal joint { plate 84.6 rivets 103.5 combined 89.9 Working pressure of shell by Rules 14.2 Kp.

ms of butt straps { outer 19 1/2 inner 22 7/8 No. and Description of Furnaces in each Boiler 2 corrugated

Steel Tensile strength 41/47 Smallest outside diameter 978 7/8

of plain part { top bottom Thickness of plates { crown 14 7/8 bottom 14 7/8 Description of longitudinal joint Welded.

ons of stiffening rings on furnace or c.c. bottom Nil. Working pressure of furnace by Rules 14 Kps.

tes in steam space: Material Steel Tensile strength 41/47 Thickness 25 Pitch of stays 400.

e stays secured D. Nuts & riveted washers. Working pressure by Rules 14.9 Kp.

ates: Material { front back Steel Tensile strength 41/47 Thickness { 27 20

ch of stay tubes in nests 198. Pitch across wide water spaces 360 Working pressure { front 17.4 back 16.5

to combustion chamber tops: Material Steel Tensile strength 44/55 Depth and thickness of girder

190 x 14 double Length as per Rule 720 Distance apart 200 7/8 No. and pitch of stays

2 - 200 Working pressure by Rules 14 Kps. Combustion chamber plates: Material Steel

strength 41/47 Thickness: Sides 17 Back 17 Top 17 Bottom 17

stays to ditto: Sides 200 x 200 Back 190 x 185 Top 200 x 200 Are stays fitted with nuts or riveted over Nuts.

pressure by Rules 14 Kps. Front plate at bottom: Material Steel Tensile strength 41/47

27 Lower back plate: Material Steel Tensile strength 41/47 Thickness 25

stays at wide water space 390 Are stays fitted with nuts or riveted over Nuts.

Pressure 19.3 Main stays: Material Steel Tensile strength 44/50

At body of stay, 80 No. of threads per inch 6 Area supported by each stay 16000

Over threads pressure by Rules 21.9 Screw stays: Material Steel Tensile strength 44/50

At turned off part, 38.1 No. of threads per inch 9 Area supported by each stay 40000

Over threads

Working pressure by Rules 14.3 Are the stays drilled at the outer ends no. Margin stays: Diameter { At turned off part, or Over threads 47.6 ✓
 No. of threads per inch 9 ✓ Area supported by each stay 4000 Working pressure by Rules 24.2 1/2 ✓
 Tubes; Material Steel External diameter { Plain 76 ✓ Thickness { 7.85 + 11.0 No. of threads per inch 9 ✓
 Pitch of tubes 99 x 99 Working pressure by Rules 17.5 1/2 ✓ Manhole compensation: Size of opening in shell plate 400 x 300 ✓ Section of compensating ring 225 x 23.5 No. of rivets and diameter of rivet holes 30 12.28 ✓
 Outer row rivet pitch at ends 170 ✓ Depth of flange if manhole flanged ✓ Steam Dome: Material Iron
 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 of 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 Manufacturers of { Tubes Steel castings
 Number of elements Material of tubes Internal diameter and thickness of tubes
 Material of headers Tensile strength Thickness Can the superheater be shut off and the boiler be worked separately
 Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
 Area of each safety valve Are the safety valves fitted with easing gear Working pressure as per Rules
 Pressure to which the safety valves are adjusted Hydraulic test pressure: tubes, castings and after assembly in place Are drain cocks or valves fitted to free the superheater from water where necessary

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with

SOCIETÀ ITALIANA ERNESTO BREDA
 SEZIONE LOCOMOTIVE E MECCANICA GENERALE
 The foregoing is a correct description
 Manufacturer.

Dates of Survey { During progress of work in shops - - 24/7/25, 22/8, 11/9, 26/10, 7-19/11, 9-22/12/25
 while building { During erection on board vessel - - 5/1/26, 15/2/26, 18-24/3/26, 7/4/26
 Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) 4/6/25
 Total No. of visits 13

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

These Boilers have been constructed under special survey, & the materials & workmanship found sound & good. Upon the boiler being subjected to a hydraulic pressure test of 25 Kps. upon the completion of the survey, they were found to be tight & efficient. These boilers are in my opinion eligible to be fitted in a classed vessel, & for purposes of identification have been stamped as follows:-

NO. 174 C. N. S. 24/3/26	NO. 176 C. N. S. 7/4/26
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Survey Fee ... £11. 46 00 ✓ When applied for, 12/4/1926
 Travelling Expenses (if any) £11. 27 00 ✓ When received, 5-10-1926

C. Norman Stuart
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 21 JAN 1927
 Assigned See Tri. 28 7395