5c.

REPORT ON WATER TUBE BOILERS.

No. 19132

Received at London Office 7 FEB 1953

writing Report 29-12-52 19 When handed in at Local Office 25-1-1953 Port of GENOA

Survey held at GENOA Date, First Survey 1-3-51 Last Survey 22-12-52 19

on the TWIN SC. "ANDREA DORIA" (Number of Visits 45) Tons { Gross 29082, Net 15788 }

GENOA SESTRI By whom built S.A. ANSALDO - CANTIERI NAVALI Yard No. 918 When built 1952

made at GENOA - SAMPIERDARENA By whom made S.A. ANSALDO - STABILIM. MECCANICO Engine No. {1421, 1422} When made 1952

made at GENOA - SAMPIERDARENA By whom made S.A. ANSALDO - STABILIM. MECCANICO Boiler No. {5176, 5177} When made 1952

Horse Power Owners "ITALIA" Soc. per Azioni di NAVIGAZIONE Port belonging to GENOA

ER TUBE BOILERS ~~MAIN, AUXILIARY, OR~~ **DONKEY.**—Manufacturers of Steel { SOCIETA ITALIANA ACCIAIERIE CORNIGLIANO - DALMINE }

Approval of plan 6-12-50 No. and Description or Type

ers TWO - SECTIONAL HEADER W.T. BOILERS ✓ Working Pressure 10 Kg/cm² Tested by Hydraulic Pressure to 19 Kg/cm² Date of Test { 20-9-51, 4-10-51 }

Certificate 270 - 271 Can each boiler be worked separately YES ✓ Total Heating Surface of Boilers 560 sq.m. (6028 sq. feet)

draught fitted YES Area of Fire Grate (coal) in each Boiler ✓

type of burners (oil) in each boiler 2 - TODD SYSTEM. No. and description of safety valves on

boiler COCKBURNS IMPROVED HIGH LIFT DOUBLE SPRING ✓ Area of each set of valves per boiler { per rule as approved, as fitted 9074 m/m² } Pressure to which they

usted 10 Kg/cm² Are they fitted with easing gear YES ✓ In case of donkey boilers state whether steam from main boilers can enter

ey boiler NO Smallest distance between boilers or uptakes and bunkers ~~or woodwork~~ 1500 m/m. Height of boiler 4920 m/m

end length 3730 - 5020 m/m. **Steam Drums:**—Number in each boiler ONE Inside diameter 1062 m/m.

s of plates 22 m/m Range of tensile strength 41/47 Kg/mm² Are drum shell plates welded

FUSION WELDED If fusion welded, state name of welding firm S.A. ANSALDO - STABILIM. MECCANICO Have all the requirements of the Rules

I vessels been complied with YES Description of riveting:—Circ. seams ✓ long. seams ✓

r of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps ✓ Percentage strength of

int:—Plate ✓ Rivet ✓ Diameter of tube holes in drum { 102,7 m/m, 89,5 m/m } Pitch of tube holes { 184 m/m }

ge strength of shell in way of tubes 44 % **Steam Drum** ~~Heads or~~ **Ends:**—Range of tensile strength 41/47 Kg/mm²

s of plates 22 m/m Radius ~~or how stayed~~ 1000 m/m. Size of manhole ~~or handhole~~ 300 x 400 m/m. **Water Drums:**—Number

boiler ✓ Inside diameter ✓ Thickness of plates ✓ Range of tensile strength ✓ Are drum shell plates

r flanged ✓ If fusion welded, state name of welding firm ✓ Have all the requirements of the Rules

I vessels been complied with ✓ Description of riveting:—Circ. seams ✓ long. seams ✓

of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps ✓

ge strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in drum ✓ Pitch of tube holes ✓

ge strength of drum shell in way of tubes ✓ **Water Drum Heads or Ends:**—Range of tensile strength ✓

s of plates ✓ Radius or how stayed ✓ Size of manhole or handhole ✓

or Sections:—Number 30 Material S.M. STEEL Thickness 14 m/m. Tested by hydraulic pressure to 70 Kg/cm²

Diameter 102 - 89 - 51 m/m Thickness 5 - 5 - 3 x 3,5 m/m Number 45 - 15 - 360 x 60 **Steam Dome or Collector:**—Description of

hell ✓ Inside diameter ✓ Thickness of shell plates ✓ Range of tensile

Description of longitudinal joint ✓ If fusion welded, state name of welding

✓ Have all the requirements for the Rules for Class I vessels been complied with ✓ Diameter of rivet holes

rivets ✓ Thickness of straps ✓ Percentage strength of long. joint ✓ plate ✓ rivet ✓

r End Plates:—Range of tensile strength ✓ Thickness ✓ Radius or how stayed ✓

HEATER. Drums or Headers:—Number in each boiler ✓ Inside diameter ✓

✓ Material ✓ Range of tensile strength ✓ Are drum shell plates welded

✓ If fusion welded, state name of welding firm ✓ Have all the requirements of the Rules

I vessels been complied with ✓ Description of riveting:—Circ. seams ✓ long. seams ✓

of rivet holes in long. seams ✓ Pitch of rivets ✓ Thickness of straps ✓ Percentage strength of

t:—Plate ✓ Rivet ✓ Diameter of tube holes in drum ✓ Pitch of tube holes ✓ Percentage strength of

l in way of tubes ✓ **Drum Heads or Ends:**— ✓ Thickness ✓ Range of tensile strength ✓

how stayed ✓ Size of manhole or handhole ✓ Number, diameter, and thickness of tubes ✓

hydraulic pressure to ✓ Date of test ✓ Is a safety valve fitted to each section of the superheater which

t off from the boiler ✓ No. and description of safety valves ✓ Area of each set

✓ Pressure to which they are adjusted ✓ Is easing gear fitted ✓

ear. Has the spare gear required by the Rules been supplied YES

ANSALDO S. A.
STABILIMENTO MECCANICO
The foregoing is a correct description,
[signature]
Manufacturer.

During progress of work in shops FROM 1-3-51 TO 22-10-51 Is the approved plan of boiler forwarded herewith NO

During erection on board vessel FROM 30-10-51 TO 22-12-52 Total No. of visits 45.

er a duplicate of a previous case NO If so, state vessel's name and report No. ✓

AL REMARKS (State quality of workmanship, opinions as to class, &c. THESE BOILERS HAVE BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED AND ARE IN ACCORDANCE WITH THE APPROVED PLANS, SECRETARY'S LETTERS AND RULE REQUIREMENTS. THE MATERIALS, WORKMANSHIP AND WELDING ARE GOOD. THE BOILERS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE RULES FOR FUSION WELDED PRESSURE CLASS 1: THE X-RAY NEGATIVES TAKEN ON THE WELDED JOINTS HAVE BEEN EXAMINED AND WELDING FOUND SOUND. THE RESULTS OF THE TESTS WERE FOUND SATISFACTORY. UPON COMPLETION THE BOILERS HAVE BEEN EXAMINED UNDER HYDRAULIC PRESSURE TO 19 Kg/cm² TIGHT AND SOUND IN EVERY RESPECT AT THAT PRESSURE. AFTERWARDS THESE BOILERS HAVE BEEN SATISFACTORILY FITTED AND BOARD; SAME EXAMINED UNDER STEAM AND THEIR SAFETY VALVES ADJUSTED TO 10 Kg/cm².

t. 237.600=
~~vey Fee~~ Less 25% = Lit. 178.200= When applied for 3/2/ 1953
velling Expenses (if any) Lit. 21.454= When received 19
R FUND ------- Lit. 5.346=
REV. TAX ---- Lit. 6.150=

[signature]
Engineer Surveyor to Lloyd's Register of Shipping.

Date TUES. 24 FEB 1953

e's See F.E. mchy. rpt.

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