

REPORT ON WATER TUBE BOILERS.

No. 975.

Received at London Office 23 JUL 1927

of writing Report 18th July 1927 When handed in at Local Office 19 Port of Bremen

No. in Survey held at Bremen Date, First Survey 7th Apr. 1926 Last Survey 12th July 1927
 g. Bk. on the STEELSC "ADRIA" (Number of Visits 60) Tons { Gross 6358
 Net 3637
 ster Built at Bremen By whom built Deutsche Schiff- u. Maschinenbau A.G. U.S.A. Reg. No. 11112 When built 1927
 gines made at Bremen By whom made " When made 1927
 ilers made at " By whom made " When made 1926/27
 gistered Horse Power " Owners Bremen Öl. Transport G. m. b. H. Port belonging to Bremen

WATER TUBE BOILERS MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Mannmann, Bremen - U.S.A. Reg. No. 11112 - U.S.A. Reg. No. 11112
 etter for Record 5 Date of Approval of plan 21st May 1926 Number and Description or Type 2 - Flathead - Wilcox
 Boilers Working Pressure 14 kg/cm² Tested by Hydraulic Pressure to 24.5 kg/cm² Date of Test 7/4/27
 of Certificate ✓ Can each boiler be worked separately Yes Total Heating Surface of Boilers 100 sq. meters
 forced draught fitted ✓ Area of fire grate (coal) in each Boiler ✓ Total grate area of boilers in vessel including
 in and Auxiliary ✓ No. and type of burners (oil) in each boiler 2 Vulcan Type No. and description of safety valves on
 h boiler 2 Spring loaded Area of each valve 2 x 5026 mm² Pressure to which they are adjusted 14 kg/cm²
 e they fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler No
 allest distance between boilers or uptakes and bunkers or woodwork 560 mm. Height of Boiler 4280 mm. Width and Length 2565 x 4741 mm.
 eam Drums:—Number in each boiler 1 Inside diameter 1300 mm. Material of plates 7. M. Steel Thickness 21 mm.
 ange of Tensile Strength 44-51 kg/cm² Are drum shell plates welded or flanged No Description of riveting:—
 seams double long. seams double Diameter of rivet holes in long. seams 23 mm. Pitch of Rivets 81 mm.
 p of plate or width of butt straps 230 mm. Thickness of straps 18 mm. Percentage strength of long. joint:—Plate 71.6% Rivet 75.1%
 ameter of tube holes in drum 95 mm. Pitch of tube holes 160 x 195 mm. Percentage strength of shell in way of tubes 51.4%
 Drum has a flat side state method of staying ✓ Depth and thickness of girders at centre
 fitted) ✓ Distance apart ✓ Number and pitch of stays in each ✓ Working pressure
 rules 17.1 kg/cm² Steam Drum Heads or Ends:—Material 7. M. Steel Thickness 20 x 23 mm. Radius or how stayed 1170 mm.
 ze of Manhole or Handhole 300 x 400 mm. Water Drums:—Number in each boiler 2 Inside diameter 170 mm.
 aterial of plates 7. M. Steel Thickness 19 x 22 mm. Range of tensile strength 41-48 kg/cm² Are drum shell plates welded
 flanged No Description of riveting:—Cir. seams single long. seams ✓ Diameter of Rivet Holes in
 g. seams 26 mm. Pitch of rivets 70 mm. Lap of plates or width of butt straps ✓ Thickness of straps ✓
 Percentage strength of long. joint:—Plate ✓ Rivet ✓ Diameter of tube holes in 98 x 95 mm. Pitch of tube holes 160 x 140 mm.
 Percentage strength of drum shell in way of tubes 51.4% Water Drum Heads or Ends:—Material ✓ Thickness ✓
 dius or how stayed ✓ Size of manhole or handhole ✓ Headers or Sections:—Number ✓
 aterial ✓ Thickness ✓ Tested by Hydraulic Pressure to ✓ Material of Stays ✓
 ea at smallest part ✓ Area supported by each stay ✓ Working Pressure by Rules ✓ Tubes:—Diameter ✓
 ickness ✓ Number ✓ Steam Dome or Collector:—Description of Joint to Shell ✓
 Percentage strength of Joint ✓ Diameter ✓ Thickness of shell plates ✓ Material ✓
 scription of longitudinal joint ✓ Diameter of Rivet Holes ✓ Pitch of Rivets ✓ Working Pressure of shell
 Rules ✓ Crown or End Plates:—Material ✓ Thickness ✓ How stayed ✓

SUPERHEATER. Type ✓ Date of Approval of Plan ✓ Tested by Hydraulic Pressure to ✓
 te of Test ✓ Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler ✓
 ameter of Safety Valve ✓ Pressure to which each is adjusted ✓ Is easing gear fitted ✓
 a-drain cock or valve fitted at lowest point of superheater ✓ Number, diameter, and thickness of tubes ✓
 pare Gear. Tubes ✓ Gaskets or joints:—Manhole ✓ Handhole ✓ Handhole plates ✓

The foregoing is a correct description,
 Deutsche Schiff- und Maschinenbau A.G. Bremen
 Manufacturer.

Dates } During progress of 1926:—7/9, 11/10, 22/11; 1927:—5/2, 2+28/37/4 as the approved plan of boiler forwarded herewith 21/5/26.
 Survey } work in shops - - -
 while } During erection on 1927:—28/6, 4 x 12/7. Total No. of visits 10.
 ilding } board vessel - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been constructed under Special Survey in accordance with the approved plan and instructions and in conformity with the Rules. The material used in the construction and the workmanship are good. They are eligible in my opinion to be classed in the Register Book with record of 199 lbs. Provision of adjusting washers of safety valves: Starboard " 25.7 mm. Starboard " 26 mm. Starboard " 25.4 " " 23 "

Survey Fee ... £ 8 : 8 : } When applied for, 19.7. 1927
 Travelling Expenses (if any) £ : : } When received, 1.9. 1927

G. H. C. Kramer
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 29 JUL 1927
 signed See 2nd rpt attached

