

REPORT ON WATER TUBE BOILERS.

No. 16920

Received at London Office

14 JUL 1926

6 AUG 1926

Writing Report 30th June 1926 When handed in at Local Office 19 Port of HAMBURG
 in Survey held at Kiel Date, First Survey 31st April Last Survey 21st June 1926
 on the Steel Twin S.S. M.S. "ARDOR" - YARD No. 206 Number of Visits 9 Tons Gross
 being Built at MUGGIANO By whom built ANSALDO SAN GIORGIO When built 1926
 By whom made Kiel When made 1926
 By whom made FRIED. KRUPP-GERMANIAWERKE When made 1926
 Owners Port belonging to

WATER TUBE BOILERS - MAIN, AUXILIARY, OR DONKEY. - Manufacturers of Steel Henschel & Sohn - Hallingee.
 Date of Approval of plan 16/2/26 Number and Description or Type 2 Water Tube Donkey Boilers
 Working Pressure 200 lb. Tested by Hydraulic Pressure to 400 lb. Date of Test 18/6-21/6/26
 Certificate 431-432 Can each boiler be worked separately Yes Total Heating Surface of Boilers 240 sq. m.
 draught fitted Yes Area of fire grate (coal) in each Boiler oil fired Total grate area of boilers in vessel including
 and Auxiliary Yes No. and type of burners (oil) in each boiler 2 Dohle burners No. and description of safety valves on
 boiler 2 Spring loaded Area of each valve 38, 48 sq. cm. Pressure to which they are adjusted 20
 fitted with easing gear Yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler Yes
 Distance between boilers or uptakes and bunkers or woodwork Yes Height of Boiler 4596 mm. Width and Length 2900-4720 mm.
 Drums: - Number in each boiler 1 Inside diameter 1300 mm. Material of plates Steel Thickness 21 mm.
 of Tensile Strength 44.8 - 50 kg/cm² Are drum shell plates welded or flanged Flanged Description of riveting: -
 seams Double long. seams Double butt, double Diameter of rivet holes in long. seams 28 mm. Pitch of Rivets 90 mm.
 of plate or width of butt straps 268 mm. Thickness of straps 16 mm. Percentage strength of long. joint: - Plate 69.9% Rivet 95%
 Diameter of tube holes in drum 95 mm. Pitch of tube holes 185 mm. Percentage strength of shell in way of tubes 48.6%
 drum has a flat side state method of staying Yes Depth and thickness of girders at centre
 Distance apart Yes Number and pitch of stays in each Yes Working pressure
 Steam Drum Heads or Ends: - Material Steel Thickness 25 mm - 28 mm. Radius or how stayed 1300 mm
 of Manhole or Handhole 300 x 400 mm. Water Drums: - Number in each boiler Yes Inside Diameter Yes
 Material of plates Yes Thickness Yes Range of tensile strength Yes Are drum shell plates welded
 Description of riveting: - Cir. seams Yes long. seams Yes Diameter of Rivet Holes in
 Pitch of rivets Yes Lap of plates or width of butt straps Yes Thickness of straps Yes
 Percentage strength of long. joint: - Plate Yes Rivet Yes Diameter of tube holes in drum Yes Pitch of tube holes Yes
 Percentage strength of drum shell in way of tubes Yes Water Drum Heads or Ends: - Material Yes Thickness Yes
 Size of manhole or handhole Yes Headers or Sections: - Number 2
 Tested by Hydraulic Pressure to 400 lb. (28 kg/cm²) Material of Stays Steel
 Area supported by each stay 224/19 cm. Working Pressure by Rules 17.75 kg/cm² Tubes: - Diameter 95 mm. (externally)
 Number 161 Steam Dome or Collector: - Description of Joint to Shell Yes
 Diameter Yes Thickness of shell plates Yes Material Yes
 Diameter of Rivet Holes Yes Pitch of Rivets Yes Working Pressure of shell Yes
 Crown or End Plates: - Material Yes Thickness Yes How stayed Yes

REHEATER. Type Yes Date of Approval of Plan Yes Tested by Hydraulic Pressure to Yes
 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes
 Pressure to which each is adjusted Yes Is easing gear fitted Yes
 Number, diameter, and thickness of tubes Yes

MARK ON BOILERS:
 No. 431 - 432
 440 YD'S TEST
 400 LB.
 18.6.26

The foregoing is a correct description,
FRIED. KRUPP
GERMANIAWERKE Manufacturer.
 Aldershausen

During progress of work in shops 31/3 - 27/4 - 4/5 - 14/5 - 1/6 - 8/6 - 11/6 - 18/6 - 21/6/26 Is the approved plan of boiler forwarded herewith Yes
 During erection on board vessel Yes Total No. of visits 9

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These two Water Tube Donkey Boilers have been
under Special Survey in accordance with the approved plan, the Lordar's letter E. 16.2.26 and otherwise in con-
with the requirements of the Rules. The material and workmanship are of a good quality and when tested for work-
ing pressure were found light & satisfactory and in my opinion eligible for notification (W.T.B.F.W.T.) - 26, subject
examination under steam & adjustment of safety valves, after having been satisfactorily fitted on board.

Survey Fee ... £ 8 : 8 : - When applied for, 12th July 1926
 Travelling Expenses (if any) £ 3 : - : - When received, 17. 7. 1926

Friedrich Hill
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 23 AUG 1927
 Signed See Gen. Report No 9975

FRI. 30 SEP 1927
 TUES. 8 NOV 1927

