

REPORT ON WATER TUBE BOILERS.

No. 19576

Received at London Office 23 OCT 1930

Date of writing Report 16th Oct. 1930 When handed in at Local Office 19 Port of HAMBURG

No. in Survey held at **KIEL** Date, First Survey 11th Aug 1930 Last Survey 6th Oct. 1930
 Reg. Bk. on the **M.S. J.H. SENIOR** (Number of Visits 7) Tons } Gross
 Master Built at **EMDEN** By whom built **NORDSEEWERKE 173** When built
 Engines made at **KIEL** By whom made **FRIED. KRUPP-GERMANIAWERFT A.G.** When made 1930
 Boilers made at **KIEL** By whom made **FRIED. KRUPP-GERMANIAWERFT A.G.** No 3398 3799 When made 1930
 Registered Horse Power 1496 Owners **HANNOVER SHIPPING Comp** Port belonging to **DANZIG**

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel Mess. Ruhrstahl A.G. Henrichshütte Hattingen

(Letter for Record 5) Date of Approval of plan 14.5.30 Number and Description or Type of Boilers 2 Water Tube Donkey Boilers Working Pressure 200 lbs Tested by Hydraulic Pressure to 400 lbs Date of Test 3.10.30
 No. of Certificate 523/24 Can each boiler be worked separately yes Total Heating Surface of Boilers 2 x 192 m²
 Is forced draught fitted yes Area of fire grate (coal) in each Boiler Total grate area of boilers in vessel including Main and Auxiliary No. and type of burners (oil) in each boiler 2 of Todd System No. and description of safety valves on each boiler 2 spring loaded Area of each valve 2 x 5026 mm² Pressure to which they are adjusted
 Are they fitted with easing gear yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler no
 Smallest distance between boilers or uptakes and bunkers or woodwork Height of Boiler 5320 mm Width and Length 4300/3820 mm
Steam Drums:—Number in each boiler 1 Inside diameter 1100 mm Material of plates S.M. Steel Thickness 15 mm
 Range of Tensile Strength 44-55 kg/cm² Are drum shell plates welded or flanged flanged Description of riveting:—
 Cir. seams lap double long. seams dk butt strap Diameter of rivet holes in long. seams 24 mm Pitch of Rivets 82 mm
 Lap of plate or width of butt straps 230/150 mm Thickness of straps 14/15 mm Percentage strength of long. joint:—Plate 70% Rivet 112%
 Diameter of tube holes in drum 102.5/104.5 mm Pitch of tube holes 176 mm Percentage strength of shell in way of tubes 40.5%
 If Drum has a flat side state method of staying— Depth and thickness of girders at centre (if fitted) Distance apart Number and pitch of stays in each Working pressure by rules 14.9 kg/cm²
Steam Drum Heads or Ends:—Material S.M. Steel Thickness 20.5/18.5 mm Radius or how stayed R = 900 mm
 Size of Manhole or Handhole 300 x 400 mm **Water Drums:**—Number in each boiler Inside Diameter
 Material of plates Thickness Range of tensile strength Are drum shell plates welded or flanged Description of riveting:—Cir. seams long. seams Diameter of Rivet Holes in long. seams Pitch of rivets Lap of plates or width of butt straps Thickness of straps Percentage strength of long. joint:—Plate Rivet Diameter of tube holes in drum Pitch of tube holes Percentage strength of drum shell in way of tubes **Water Drum Heads or Ends:**—Material Thickness Radius or how stayed Size of manhole or handhole **Headers or Sections:**—Number 17 Material S.M. Steel Thickness 14 mm Tested by Hydraulic Pressure to 400 lbs Material of Stays Area at smallest part Area supported by each stay Working Pressure by Rules **Tubes:**—Diameter 102 mm Thickness 4.5/5.0 mm Number 221 **Steam Dome or Collector:**—Description of Joint to Shell Percentage strength of Joint Diameter Thickness of shell plates Material Description of longitudinal joint Diameter of Rivet Holes Pitch of Rivets Working Pressure of shell by Rules **Crown or End Plates:**—Material Thickness How stayed

SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to Date of Test Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Diameter of Safety Valve Pressure to which each is adjusted Is easing gear fitted Is a drain cock or valve fitted at lowest point of superheater Number, diameter, and thickness of tubes
 Spare Gear. Tubes 24 Gaskets or joints:—Manhole 10 Handhole Handhole plates 14

The foregoing is a correct description,

Fried. Krupp Germania-Werft
 Manufacturer.

Dates of Survey } During progress of work in shops - - - 11th Aug. 3. 17. 26. Sept. 1. 3. 6. Oct. 1930 Is the approved plan of boiler forwarded herewith yes
 while } During erection on board vessel - - - Total No. of visits 7

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Boilers have been constructed under Special Survey in accordance with the requirements of the Rules and the approved plans. Materials & workmanship are of good quality. The boilers have been shipped to Emden

marked: No 523/24
 Lloyd's Test
 W.P. 200 lbs
 A.C. 2. 10. 30

Survey Fee ... £ 9.11 : - : } When applied for, 18.10.1930
 Travelling Expenses (if any) £ - : - : } When received, 25.11.1930

A. Carstensen
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 5 MAY 1931
 Assigned *See F.B. Rep*

