

REPORT ON WATER TUBE BOILERS.

No. 137

Received at London Office OCT 14 1938

Date of writing Report 23. Sept 1938 When handed in at Local Office 8th Oct 1938 Port of Danzig

No. in Survey held at Danzig Date, First Survey 6 Dec 1937 Last Survey 12 September 1938

Reg. Bk. 87015 on the TWIN SCREW M.V. "ARENDSKERK" Number of Visits 8 Tons Gross 7889 Net 4753

Master Built at Danzig By whom built Messrs F. Schichau G.m.b.H. When built 1938

Engines made at Elbing By whom made Messrs F. Schichau G.m.b.H. When made 1938

Boilers made at Danzig By whom made International S. B. & C. Co. Ltd. When made 1938

Registered Horse Power Owners Vereenigde Nedelandische Scheepvaart Port belonging to The Hague

WATER TUBE BOILERS MAIN, AUXILIARY, OR DONKEY. — Manufacturers of Steel Messrs Stala Kawa Walcoronia Run Poland; Messrs Mitteldutsche Stahlwerke A.G. Essen

(Letter for Record) Date of Approval of plant 16th June 1937 Number and Description or Type of Boilers 1 Lamont Waste Heat Working Pressure 7 kg/cm² Tested by Hydraulic Pressure to 14 kg/cm² Date of Test 22. 12. 37

No. of Certificate 9 Can each boiler be worked separately Total Heating Surface of Boilers 60 m²

Is forced draught fitted no 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 No. and description of safety valves on each boiler 2 Spring loaded Area of each calce 1256 mm² Pressure to which they are adjusted 7 kg/cm²

Are they fitted with casing gear yes In case of donkey boilers state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork Height of Boiler 1985 mm Width and Length 1600 mm dia

Steam Drums:—Number in each boiler 2 Inside diameter 100/80 mm Material of plates S.M. Steel Thickness 20 mm

Range of Tensile Strength 41-47 kg/cm² Are drum shell plates welded or flanged Solid drawn Description of riveting:—

Cir. seams long. seams Diameter of rivet holes in long. seams Pitch of Rivets

Lap of plate or width of butt straps Thickness of straps Percentage strength of long. joint:—Plate Rivet

Diameter of tube holes in drum 38.5 mm Pitch of tube holes 92 mm Percentage strength of shell in way of tubes 58.6%

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 **Steam Drum Heads or Ends:**—Material S.M. Steel Thickness 13+15 mm Radius or how stayed 560 mm

Size of Manhole or Handhole 400/300 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

Material Thickness Tested by Hydraulic Pressure to Material of Stays

Area at smallest part Area supported by each stay Working Pressure by Rules **Coils:**—Diameter 38 mm outside

Thickness 3 mm Number 10 **Steam Drum or Collector:**—Description of Joint to Shell Single riveted

Percentage strength of Joint 57.5% Diameter 720 mm Thickness of shell plates 10 mm Material S.M. Steel

Description of longitudinal joint Fusion welded Diameter of Rivet Holes Pitch of Rivets Working Pressure of shell by Rules 21.5 kg/cm² **End Plates:**—Material S.M. Steel Thickness 13+15 mm 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 casing gear fitted

Is a drain cock or valve fitted at lowest point of superheater Number, diameter, and thickness of tubes

Spare Gear. Tubes Gaskets or joints:—Manhole Handhole Handhole plates

The foregoing is a correct description,
THE INTERNATIONAL SHIPBUILDING AND ENGINEERING CO. LTD. Manufacturer.
 (Danziger Werft und Eisenbahnwerkstätten A.G.)

Dates of Survey } During progress of 1937. Dec. 6, 17, 22. 1938. March 7. Is the approved plan of boiler forwarded herewith Yes.
 while } During erection on 1938 June 24. July 21. Sept. 7, 12. Total No. of visits 8
 building } board vessel - - -

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) The donkey boiler and Steam Collector have been constructed in accordance with the Society's Rules and approved plans, materials and workmanship are of good quality. The donkey boiler and Steam Collector have been satisfactorily fitted on board the vessel and are eligible in my opinion to have record of D.B. (WT). 100 lbs

Survey Fee BOILER & STEAM COLLECTOR. £ 10 : 3 : } When applied for, 20/9/1938 (From 9/11/38)
 Travelling Expenses (if any) £ : : } When received, 15/11/1938 MK 21/11

R. Shaw.
 Engineer Surveyor to Lloyd's Register of Shipping.

OCT 25 1938

Committee's Minute Assigned See minute on P.C. book

