

REPORT ON WATER TUBE BOILERS.

No. 1040.

Received at London Office

16 FEB 1928

Date of writing Report 5th Feb 1928 When handed in at Local Office

19

Port of Krimer

No. in Survey held at Vignade

Date, First Survey 6th Jan. Last Survey 1st Feb 1928

Reg. Bk. 40275 on the STEEL TWIN SC "C.O. STILLMAN" (Number of Visits 2) Tons { Gross 16436 Net 9643

Master Vignade Built at Vignade By whom built Krimer Vulkan When built 1928

Engines made at Vignade By whom made Krimer Vulkan When made 1925-28

Boilers made at Kill By whom made Feiler, Krupp, Germania works When made 1926

Registered Horse Power _____ Owners International Petroleum Co. Ltd. Port belonging to Toronto

WATER TUBE BOILERS - MAIN, AUXILIARY, OR DONKEY. - Manufacturers of Steel Humboldt, Tom, Nottingham

(Letter for Record 2) Date of Approval of plan 21/1/1926 Number and Description or Type of Boilers 2 Water Tube Donkey Boilers Working Pressure 17.5 kg/cm² Tested by Hydraulic Pressure to 425 lb Date of Test 3/9/26

No. of Certificate 440-441 Can each boiler be worked separately Yes Total Heating Surface of Boilers 300 sq. m

Is forced draught fitted Yes Area of fire grate (coal) in each Boiler oil fired Total grate area of boilers in vessel including Main and Auxiliary Yes No. and type of burners (oil) in each boiler 3, Krupp No. and description of safety valves on each boiler 2 spring loaded Area of each valve 3818.3 mm² Pressure to which they are adjusted 17.5 kg/cm²

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 750 mm Height of Boiler 5124 mm Width and Length 9358 mm

Steam Drums: - Number in each boiler 1 Inside diameter 1400 mm Material of plates Steel Thickness 24 mm

Range of Tensile Strength 44-50 kg/cm² Are drum shell plates welded or flanged flanged Description of riveting: - Cir. seams lap double long. seams double butt double Diameter of rivet holes in long. seams 28 mm Pitch of Rivets 93 mm

Lap of plate or width of butt straps 266 mm Thickness of straps 19 mm Percentage strength of long. joint: - Plate 69.5% Rivet 84.6% Diameter of tube holes in drum 95 mm Pitch of tube holes 225 mm Percentage strength of shell in way of tubes 57.8%

If Drum has a flat side state method of staying Yes Depth and thickness of girders at centre (if fitted) Yes Distance apart Yes Number and pitch of stays in each Yes Working pressure by rules 17.98 kg/cm² Steam Drum Heads or Ends: - Material Steel Thickness 30 mm Radius or how stayed 1260 mm

Size of Manhole or Handhole 320 x 425 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 or flanged Yes Description of riveting: - Cir. seams Yes long. seams Yes Diameter of Rivet Holes in long. seams Yes 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

Radius or how stayed Yes Headers or Sections: - Number 2 Material Steel Material Steel Thickness 22 mm - 19 mm Tested by Hydraulic Pressure to 425 lb Material of Stays Steel

Area supported by each stay 24000 mm² Working Pressure by Rules 17.98 kg/cm² Tubes: - Diameter 85 mm Thickness 6.5 mm - 5 mm Number 31 - 140 Steam Dome or Collector: - Description of Joint to Shell Yes

Percentage strength of Joint Yes Diameter Yes Thickness of shell plates Yes Material Yes Description of longitudinal joint Yes Diameter of Rivet Holes Yes Pitch of Rivets Yes Working Pressure of shell by Rules Yes Crown or End Plates: - Material Yes Thickness Yes How stayed Yes

SUPERHEATER. Type Horizontal Date of Approval of Plan 25/5/26 Tested by Hydraulic Pressure to Yes Date of Test 11/10/26 Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler Yes

Diameter of Safety Valve 30 mm Pressure to which each is adjusted 17.5 kg/cm² Is easing gear fitted Yes Is a drain cock or valve fitted at lowest point of superheater Yes Number, diameter, and thickness of tubes 8 coils - 32 mm - 3 mm

Spare Gear. Tubes Yes Gaskets or joints: - Manhole Yes Handhole Yes Handhole plates Yes

The foregoing is a correct description, (Please see Hamburg Report No 17211) Manufacturer.

Is the approved plan of boiler forwarded herewith with Hamburg Report No. 17211 Total No. of visits 2

Dates of Survey while building: During progress of work in shops 6/1 & 1/2. 1928 During erection on board vessel ---

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These Water Tube Donkey Boilers have been satisfactorily fitted on board examined under steam found tight and their safety valves have been adjusted to 17.5 kg/cm² (250 lb). Thickness of adjusting washers: Forward. aft. Superheater. Steam and boiler 16.7 mm. 17.3 mm. 11.2 mm. Port " 18.8 " 18.4 " 10.5 " In my opinion these Boilers are eligible to be classed in the Register Book with record of 28 Water Tube S. R. 250 lb.

Survey Fee £ 4 : 0 : 0 When applied for, 14. 2. 1928 Travelling Expenses (if any) £ 0 : 10 : 0 When received, 5. 3. 1928 G. H. C. HAM

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUES. 6 FEB 1928 Assigned See list of attached

