

# REPORT ON BOILERS.

No. 7373

8 JAN 1929

Received at London Office

5a.

Writing Report 4th January 1929 When handed in at Local Office 5th January 1929 Port of Gothenburg

Survey held at Gothenburg Date, First Survey 28th November 1927 Last Survey 27th December 1928

on the STEEL TWIN SC. "GLARONA" (Number of Visits 12) Gross 9912 Tons Net 5221

Built at GOETHEBURG By whom built AKT. GÖTAVERKEN When built 1928

Boilers made at GOETHEBURG By whom made AKT. GÖTAVERKEN When made 1928

Boilers made at GOETHEBURG By whom made AKT. LINDHOLMEN - NOTALA When made 1928

Registered Horse Power 724 Owners H. Tschudis Tankrederi A/S Port belonging to Oslo

**MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY.** - Manufacturers of Steel Plates: Messrs. Henschel & Sohn, Haltingen. Stays: Messrs. A.B. Lindholm, Notala, Notala, Sweden. Tubes: Messrs. Metallgesellschaft, Stahlwerk, Düsseldorf, Germany.

Total Heating Surface of Boilers 24330 m<sup>2</sup> [24316.5 sq ft] Is forced draft fitted yes No. and Description of Boilers 2 cylindrical multitubular Working Pressure 10.55 kg/cm<sup>2</sup> [150 lbs] Tested by hydraulic pressure to 19.4 kg/cm<sup>2</sup> Date of test 22.6.28

of Certificate 225/226 Can each boiler be worked separately yes Area of fire grate in each boiler Oil fired No. and Description of Safety valves to each boiler Double spring loaded Area of each valve 75 m<sup>2</sup> Pressure to which they are adjusted 150 lbs

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No main boilers

Smallest distance between boilers and 7 foot tank bulkhead 750 m Mean dia. of boilers 3505 m Length 3380 m

Material of shell plates S.M. Steel Thickness 20 m Range of tensile strength 45.7-49.0 kg/cm<sup>2</sup> Are the shell plates welded or flanged No

Description of riveting: cir. seams Double riv lap long. seams Double butt straps Diameter of rivet holes in long. seams 23.8 m Pitch of rivets 186 m

Gap of plates or width of butt straps Outer 378 m Per centages of strength of longitudinal joint riets 105 Working pressure of shell by plate 90.1

Number of tubes 11.3 kg/cm<sup>2</sup> Size of manhole in shell 400 x 500 m Size of compensating ring 800 x 700 x 20 m Flanged No No. and Description of Furnaces in each Boiler 2 corrugated (Harrison) Material S.M. Steel Outside diameter 1200 m Length of plain part top Thickness of plates bottom 12 m

Description of longitudinal joint Welded No. of strengthening rings Working pressure of furnace by the rules 10.25 kg/cm<sup>2</sup> Combustion chamber

Plates: Material S.M. Steel Thickness: Sides 17 m Back 17 m Top 17 m Bottom 17 m Pitch of stays to ditto: Sides 210 x 210 m Back 205 x 215 m

Are stays fitted with nuts or riveted heads Riveted over Working pressure by rules 10.70 kg/cm<sup>2</sup> Material of stays S.M. Steel Diameter of

Area supported by each stay 260 x 205 m Working pressure by rules 10.56 kg/cm<sup>2</sup> End plates in steam space: Material S.M. Steel Thickness 20 x 21 m

How are stays secured Double nuts & outside Working pressure by rules 11.2 kg/cm<sup>2</sup> Material of stays S.M. Steel Area at smallest part 57 m<sup>2</sup>

Area supported by each stay 405 x 230 m Working pressure by rules 12.0 kg/cm<sup>2</sup> Material of Front plates at bottom S.M. Steel Thickness 20 m Material of

Lower back plate S.M. Steel Thickness 20 m Greatest pitch of stays as per plan Working pressure of plate by rules 10.9 kg/cm<sup>2</sup> Diameter of tubes 2 1/2 m

Pitch of tubes 89 x 95 m Material of tube plates S.M. Steel Thickness: Front 20 m Back 18 m Mean pitch of stays 280 m Pitch across wide

water spaces 330 m Working pressures by rules 11.52 kg/cm<sup>2</sup> Girders to Chamber tops: Material S.M. Steel Depth and thickness of

girder at centre 185 x 17 m Length as per rule 725 m Distance apart 207 m Number and pitch of Stays in each 2 - 210 m

Working pressure by rules 12.13 kg/cm<sup>2</sup> Steam dome: description of joint to shell Working pressure by rules 12.13 kg/cm<sup>2</sup> % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

**SUPERHEATER.** Type Date of Approval of Plan Tested by Hydraulic Pressure to Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Date of Test Pressure to which each is adjusted Is Easing Gear fitted

Diameter of Safety Valve The foregoing is a correct description, Manufacturer.

Dates of Survey During progress of 1927: 28/11, 6/12, 21/12, 30/12 1928: 23/1, 14/1, 14/4 22/6 Is the approved plan of boiler forwarded herewith plans approved 30.6.27. Total No. of visits 12

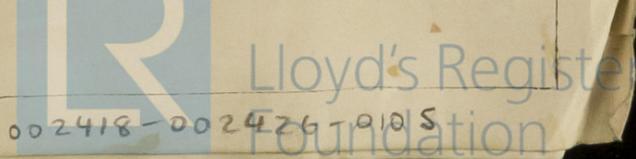
**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)

*These boilers have been built under Special Survey in accordance with the Society's Rules & approved plans. The workmanship is good. The material for these boilers as per test sheets forwarded with report No. 7328*

Survey Fee ... £ 345.80 : When applied for, 5th January 1929  
Travelling Expenses (if any) £ : When received, 16.4.1929

Committee's Minute FRI. 11 JAN 1929  
Assigned See P. 8. rpt. attached

*E. Bernelius*  
Engineer Surveyor to Lloyd's Register of Shipping.



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