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REPORT ON BOILERS.

No. 19131

Received at London Office

Writing Report 30-12-1929 When handed in at Local Office 1929 Port of Rotterdam

Survey held at Rotterdam Date, First Survey Oct 2nd Last Survey Nov 29th 1929

on the Boilers of the S.S. "SOCOMBEL" (Number of Visits 9) Gross 1654.28 Tons Net 916.77

Built at Schiedam By whom built Scheydt & Co. Nieuwe Waterweg Yard No. 165 When built 1930

Boilers made at Schiedam By whom made Scheydt & Co. Nieuwe Waterweg Engine No. 106 When made 1930

Boilers made at Rotterdam By whom made Rott Droogdamp Boiler No. 491-98 When made 1929

Indicated Horse Power 234 Owners S.M. Socombel Transports. Port belonging to Piraeus

WATER TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel Societe Anonyme des Usines Metallurgiques de la Baso-Loire (Letter for Record 5)

Heating Surface of Boilers 3875 sq ft Is forced draught fitted Yes Coal or Oil fired Oil

Kind and Description of Boilers 2 Single ended Multitubular Mann 2 SB. Working Pressure 180 lbs

Tested by hydraulic pressure to 320 lbs Date of test 26-11-29 No. of Certificate 925 Can each boiler be worked separately Yes

No. of Firegrate in each Boiler 2 No. and Description of safety valves to each boiler 2 High lifted

Weight of each set of valves per boiler 4830 lbs Pressure to which they are adjusted 100 lb Are they fitted with easing gear Yes

Use of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes

Least distance between boilers or uptakes and bunkers or woodwork Over 2 feet Is oil fuel carried in the double bottom under boilers No

Least distance between shell of boiler and tank top plating 2 feet Is the bottom of the boiler insulated Yes

Least internal dia. of boilers 3800 mm Length 3400 mm Shell plates: Material S.M. Steel Tensile strength 44-50 kg/cm²

Thickness 27 mm Are the shell plates welded or flanged No Description of riveting: circ. seams end lap 2 x riv/mm² inter. Yes

Seams Double butt 3 x riv Diameter of rivet holes in circ. seams 28 mm Pitch of rivets 93 mm

Percentage of strength of circ. end seams plate 90% rivets 49% Percentage of strength of circ. intermediate seam plate 85% rivets 86.5% combined 87.3%

Percentage of strength of longitudinal joint plate 85% rivets 86.5% combined 87.3% Working pressure of shell by Rules 13.1 kg/cm²

Thickness of butt straps outer 21 mm inner 24 mm No. and Description of Furnaces in each Boiler 2 Moirons patent 2 cf

Material S.M. Steel Tensile strength 26-30 tons Smallest outside diameter 1078 mm

Length of plain part top 15 mm bottom 15 mm Thickness of plates crown 15 mm Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 14.5 kg/cm²

Stays and plates in steam space: Material S.M. Steel Tensile strength 41-47 kg/cm² Thickness 27 mm Pitch of stays 435 x 380 mm

How are stays secured Screwed in plates and nutted outside Working pressure by Rules 12.4 kg/cm²

Stays and plates: Material front S.M. Steel Tensile strength 41-47 kg/cm² Thickness 20 mm back S.M. Steel Tensile strength 41-47 kg/cm² Thickness 18 mm

Minimum pitch of stay tubes in nests 192 x 188 mm Pitch across wide water spaces 370 mm Working pressure front 13.4 kg/cm² back 12.4 kg/cm²

Stays and plates to combustion chamber tops: Material S.M. Steel Tensile strength 44-50 kg/cm² Depth and thickness of girder

centre 215 x 2 x 20 mm Length as per Rule 840 mm Distance apart 230 mm No. and pitch of stays

each 3 at 215 mm Working pressure by Rules 15.6 kg/cm² Combustion chamber plates: Material S.M. Steel

Tensile strength 41-47 kg/cm² Thickness: Sides 18 mm Back 18 mm Top 18 mm Bottom 19 mm

Pitch of stays to ditto: Sides 200 x 218 mm Back 200 x 205 mm Top 215 x 230 mm Are stays fitted with nuts or riveted over Riveted over

Working pressure by Rules 12.6 kg/cm² Front plate at bottom: Material S.M. Steel Tensile strength 41-47 kg/cm²

Thickness 20 mm Lower back plate: Material S.M. Steel Tensile strength 41-47 kg/cm² Thickness 18 mm

Pitch of stays at wide water space 370 mm Are stays fitted with nuts or riveted over Fitted with nuts

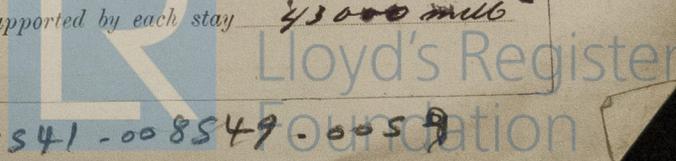
Working Pressure 20.6 kg/cm² Main stays: Material S.M. Steel Tensile strength 44-50 kg/cm²

Diameter At body of stay 65 mm No. of threads per inch 9 Area supported by each stay 165500 mm²

Over threads 90 mm Working pressure by Rules 15.4 kg/cm² Screw stays: Material S.M. Steel Tensile strength 41-47 kg/cm²

Diameter At turned off part 57 mm No. of threads per inch 9 Area supported by each stay 43000 mm²

Over threads 41 mm



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Working pressure by Rules 15.0 kg/cm² Are the stays drilled at the outer ends No Margin stays: Diameter { At turned off part, 43.5 mm or Over threads 47.5 mm

No. of threads per inch 9 Area supported by each stay 58425 mm² Working pressure by Rules 16.2 kg/cm²

Tubes: Material Steel External diameter { Plain 2 3/4" Stay 2 3/4" Thickness { 3/16" = 7/16" No. of threads per inch 9

Pitch of tubes 96 mm Working pressure by Rules 15 kg/cm² Manhole compensation: Size of opening in shell plate 420 x 520 mm Section of compensating ring 196 x 27 mm No. of rivets and diameter of rivet holes 38 @ 28 mm

Outer row rivet pitch at ends 190 mm Depth of flange if flanged 85 mm Steam Dome: Material -

Tensile strength - Thickness of shell - Description of longitudinal joint -

Diameter of rivet holes - Pitch of rivets - Percentage of strength of joint { Plate - Rivets -

Internal diameter - Working pressure by Rules - Thickness of crown - No. and diameter of stays -

How connected to shell - Inner radius of crown - Working pressure by Rules -

Size of doubling plate under dome - Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell -

Type of Superheater - Manufacturers of { Tubes - Steel castings -

Number of elements - Material of tubes - Internal diameter and thickness of tubes -

Material of headers - Tensile strength - Thickness - Can the superheater be shut off and the boiler be worked separately -

Is a safety valve fitted to every part of the superheater which can be shut off from the boiler -

Area of each safety valve - Are the safety valves fitted with easing gear - Working pressure as per Rules -

Pressure to which the safety valves are adjusted - Hydraulic test pressure: tubes -, castings - and after assembly in place - Are drain cocks or valves fitted to free the superheater from water where necessary -

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yes

The foregoing is a correct description,
10/1/30 A Knape Manufacturer.

Dates of Survey { During progress of work in shops - - 8/12, 9/11, 12/10, 25/11, 26/11 Are the approved plans of boiler and superheater forwarded herewith Retained (If not state date of approval.) 23.4.29.

while building { During erection on board vessel - - - } Total No. of visits 9

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These boilers have been in accordance with the Society's Rules, approved plans and Secretary's letters, material tested as required and workmanship good.

Survey Fee ... 310.00 } When applied for, 15/1 1930 AMK

Travelling Expenses (if any) 4.50 } When received, 31.1 1930 AMK

H. J. DeWoo
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 28 JAN 1930

Assigned See other report

