

## REPORT ON BOILERS.

No. 10323

Received at London Office

18 APR 1929

Survey Report 6.4.1929 When handed in at Local Office

192

Port of Rotterdam

Survey held at Rotterdam

Date, First Survey 29.8.28 Last Survey 22.2.1929

on the Heel screw steamer "JOSEPHINE CHARLOTTE"

(Number of Visits 19)

Gross 3421  
Tons Net 2055

Built at Rotterdam By whom built Pott Droogd My Yard No. 152 When built 1929

made at Rotterdam By whom made Pott Droogd My Engine No. 172 When made 1929

made at Rotterdam By whom made Pott Droogd My Boiler 448.79-80 When made 1929

Horse Power 396 Owners Lloyds Royal Belge Port belonging to Antwerp

TITUBULAR BOILERS—MAIN, ~~AUXILIARY~~, OR ~~BUNKER~~.

Manufacturers of Steel Withvoorts Bergbau und Eisenhütte Gesellschaft (Letter for Record 5)

Heating Surface of Boilers 6171 sq ft Is forced draught fitted Yes Coal or Oil fired Coal

Description of Boilers 3 single ended Multitubular Working Pressure 180 lbs

by hydraulic pressure to 320 lb Date of test 22.2.29 No. of Certificate 908 Can each boiler be worked separately Yes

of Firegrate in each Boiler 56.4 sq ft No. and Description of safety valves to each boiler 2 spring loaded

of each set of valves per boiler {per Rule 28 lb as fitted 90 lb 2 mells Pressure to which they are adjusted 180 lb Are they fitted with easing gear Yes

of donkey boilers, state whether steam from main boilers can enter the donkey boiler No donkey boiler

least distance between boilers or uptakes and bunkers or woodwork Over 30" Is oil fuel carried in the double bottom under boilers No

least distance between shell of boiler and tank top plating 36" Is the bottom of the boiler insulated Yes

internal dia. of boilers 14' 0" Length 11' 0" Shell plates: Material S. M. Steel Tensile strength 28-32 tons

Are the shell plates welded or flanged No Description of riveting: circ. seams {end lap 2 x riv inter. 3/4" Pitch of rivets {8" 3/4"

Diameter of rivet holes in {circ. seams 1 1/16" long. seams 1 3/16" Pitch of rivets {8" 3/4"

Percentage of strength of circ. end seams {plate 68.3% rivets 49.9% Percentage of strength of circ. intermediate seam {plate 105.1% rivets 104% combined 91%

Working pressure of shell by Rules 180 lbs

Percentage of strength of longitudinal joint {plate 105.1% rivets 104% combined 91%

No. and Description of Furnaces in each Boiler 3 Doughton patent 3 c.f.

Material S. M. Steel Tensile strength 26-30 tons Smallest outside diameter 3' 6 1/8"

Thickness of plates {crown 9/16" bottom 1 1/16" Description of longitudinal joint Welded

Working pressure of furnace by Rules 193 lbs

plates in steam space: Material S. M. Steel Tensile strength 26-30 tons Thickness 1 1/8" Pitch of stays 16 1/2 x 17"

Working pressure by Rules 187 lbs

plates: Material {front S. M. Steel Tensile strength 26-30 tons Thickness 7/8" back S. M. Steel Tensile strength 26-30 tons Thickness 7/8"

Working pressure {front 233 lbs back 194 lbs

pitch of stay tubes in nests 8 3/4 x 13 1/8" Pitch across wide water spaces 16 1/16"

plates to combustion chamber tops: Material S. M. Steel Tensile strength 28-32 tons Depth and thickness of girder

tre 8 x 2 x 3/4" Length as per Rule 2' 5 3/8" Distance apart 10" No. and pitch of stays

Working pressure by Rules 232 lbs Combustion chamber plates: Material S. M. Steel

Tensile strength 26-30 tons Thickness: Sides 1 1/16" Back 3/4" Top 1 1/16" Bottom 7/8"

of stays to ditto: Sides 10 x 8" Back 8 1/16 x 8" Top 10 x 10" Are stays fitted with nuts or riveted over Riveted over

Working pressure by Rules 194 lbs Front plate at bottom: Material S. M. Steel Tensile strength 26-30 tons

Thickness 7/8" Lower back plate: Material S. M. Steel Tensile strength 26-30 tons Thickness 1 1/16"

of stays at wide water space 13" Are stays fitted with nuts or riveted over Fitted with nuts

Working Pressure 149 lbs Main stays: Material S. M. Steel Tensile strength 28-32 tons

At body of stay, 2 7/8" No. of threads per inch 9 Area supported by each stay 280.5 sq"

Over threads 2 3/4" Screw stays: Material S. M. Steel Tensile strength 26-30 tons

Working pressure by Rules 196 lbs At turned off part, 1 1/2" No. of threads per inch 9 Area supported by each stay 80 sq"

Over threads 1 1/8" 100 sq"



