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REPORT ON BOILERS. No 18800

Received at London Office 15 JUL 1929

of writing Report 17th June 1929 When handed in at Local Office 192 Port of HAMBURG

in Book. Survey held at HAMBURG Date, First Survey 6th Novemb 28 Last Survey 11th June 1929

on the Steel Sc. VENDÉMIAIRE (Number of Visits 15) Tons Gross 9117 Net 6731

er Built at HAMBURG By whom built DEUTSCHE WERFT A.G. Yard No. 119 When built 1929

nes made at HAMBURG By whom made DEUTSCHE WERFT A.G. Engine No. 588 When made 1929

rs made at HAMBURG By whom made DEUTSCHE WERFT A.G. Boiler No. 335/37 When made 1929

inal Horse Power 545 Owners COMPAGNIE NATIONALE DE NAVIGATION Port belonging to ROUEN

LTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

ufacturers of Steel Messrs. Vereinigte Stahlwerke A.G. f. Mülheim/Ruhr Messrs. Gutehoffnungshütte of Oberhausen (Letter for Record 5)

l Heating Surface of Boilers 3 x 270 = 810 m² = 8719 sq ft Is forced draught fitted yes Coal or Oil fired oil fired

nd Description of Boilers 3 Multitubular Main Boilers 3SB **Working Pressure** 200 lbs (14 kg/cm²)

d by hydraulic pressure to 350 lbs Date of test 15.4.29. No. of Certificate 484/86 Can each boiler be worked separately yes

of Firegrate in each Boiler oil fired No. and Description of safety valves to each boiler 2 spring loaded safety valves

of each set of valves per boiler {per Rule 13230 m² / as fitted 14176 m²} Pressure to which they are adjusted 200 lbs Are they fitted with easing gear yes

se of donkey boilers, state whether steam from main boilers can enter the donkey boiler — no donkey boiler

lest distance between boilers or uptakes and bunkers or woodwork — Is oil fuel carried in the double bottom under boilers no

lest distance between shell of boiler and tank top plating 500 m/m Is the bottom of the boiler insulated yes

est internal dia. of boilers 4600 m/m Length 3487 m/m **Shell plates:** Material S.M. Steel Tensile strength 47-55 kgs/mm²

ness 33 m/m Are the shell plates welded or flanged flanged (no) Description of riveting: circ. seams {end Gp double / inter.}

seams {Treble Rvd double butt straps} Diameter of rivet holes in {circ. seams 35 m/m / long. seams 35 m/m} Pitch of rivets {104 m/m / (114 m/m) / 228 mean pitch}

ntage of strength of circ. end seams {plate 66 % / rivets 43 %} Percentage of strength of circ. intermediate seam {plate / rivets}

ntage of strength of longitudinal joint {plate 84 % / rivets 92 % / combined 87 %} Working pressure of shell by Rules 14,2 kgs/cm²

ness of butt straps {outer 29 m/m / inner 29 m/m} **No. and Description of Furnaces in each Boiler** 3 corrugated (Morison) furnaces 9 cf.

rial S.M. Steel Tensile strength 41-47 kgs/mm² Smallest outside diameter 1074 m/m

h of plain part {top / bottom} Thickness of plates {crown 17 m/m / bottom 17 m/m} Description of longitudinal joint welded

nsions of stiffening rings on furnace or c.c. bottom — Working pressure of furnace by Rules 16,3 kgs/cm²

plates in steam space: Material S.M. Steel Tensile strength 41-47 kgs/mm² Thickness 25 m/m Pitch of stays 400 x 440 m/m

are stays secured nuts fitted inside & outside Working pressure by Rules 16 kgs/cm²

plates: Material {front S.M. Steel / back S.M. Steel} Tensile strength {41-47 kgs/mm² / 41-47 kgs/mm²} Thickness {23,5 m/m / 22,5 m/m}

pitch of stay tubes in nests 224 x 330 m/m Pitch across wide water spaces 220 x 360 Working pressure {front 14,5 kgs/cm² / back 17,- kgs/cm²}

rs to combustion chamber tops: Material S.M. Steel Tensile strength 44-55 kgs/mm² Depth and thickness of girder

tre 220 x 32 m/m Length as per Rule 750 m/m Distance apart 233 m/m No. and pitch of stays

h 2 of 240 m/m pitch Working pressure by Rules 14,2 kgs/cm² **Combustion chamber plates:** Material S.M. Steel

e strength 41-47 kgs/mm² Thickness: Sides 18 m/m Back 20 m/m Top 18 m/m Bottom 25 m/m

of stays to ditto: Sides 240 x 220 m/m Back 200 x 200 m/m Top 240 x 233 m/m Are stays fitted with nuts or riveted over partly riveted over fitted with nuts

ing pressure by Rules 14,3 kgs/cm² **Front plate at bottom:** Material S.M. Steel Tensile strength 41-47 kgs/mm²

ness 23,5 m/m (+double) **Lower back plate:** Material S.M. Steel Tensile strength 41-47 kgs/mm² Thickness 23,5 m/m

of stays at wide water space 360 x 200 m/m Are stays fitted with nuts or riveted over fitted with nuts

ng Pressure 14,5 kgs/cm² **Main stays:** Material S.M. Steel Tensile strength 41-47 kgs/mm²

ter {At body of stay, / Over threads 76 m/m; 72 m/m} No. of threads per inch 6 Area supported by each stay 440 x 580 m/m

ng pressure by Rules 14,2 kgs/cm² **Screw stays:** Material S.M. Steel Tensile strength 41-47 kgs/mm²

ter {At turned off part, / Over threads 39/41/50/54 m/m} No. of threads per inch 9 Area supported by each stay 200 x 200 m/m

Working pressure by Rules 15 kg/cm² Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, / Over threads 50 m/m }

No. of threads per inch 9 Area supported by each stay 200 × 360 m/m Working pressure by Rules 15 kg/cm²

Tubes: Material S. M. Steel External diameter { Plain 83 m/m / Stay 83 m/m } Thickness { 4 m/m / 8 m/m 10 m/m } No. of threads per inch 9

Pitch of tubes 112 × 110 m/m Working pressure by Rules 16 kg/cm² **Manhole compensation:** Size of open

shell plate 320 × 420 m/m Section of compensating ring 265 × 33 m/m No. of rivets and diameter of rivet holes 28 rivets of 35

Outer row rivet pitch at ends 160 m/m Depth of flange if manhole flanged **Steam Dome:** Material S. M. Steel

Tensile strength 41-47 kg/mm² Thickness of shell 16 m/m Description of longitudinal joint welded with an inside strap

Diameter of rivet holes 24 m/m Pitch of rivets 57 m/m Percentage of strength of joint { Plate / Rivets }

Internal diameter 900 m/m Working pressure by Rules Thickness of crown 20 m/m No. and diam

stays Inner radius of crown 750 m/m Working pressure by Rules

How connected to shell riveted Size of doubling plate under dome Diameter of rivet holes an

of rivets in outer row in dome connection to shell 32 m/m rivets 285 m/m (scalloped edge)

Type of Superheater Patent Schmidt Manufacturers of { Tubes Rheinmetall, Düsseldorf / Steel ~~castings~~ forgings Press & Walzwerk Reisholz }

Number of elements 58 Material of tubes S. M. Steel Internal diameter and thickness of tubes 19 m/m 2,5 m/m

Material of headers forged steel Tensile strength 41-47 kg/mm² Thickness 25 m/m Can the superheater be shut

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

Area of each safety valve 962 m/m² Are the safety valves fitted with easing gear yes Working pressure

Rules 53 kg/cm² Pressure to which the safety valves are adjusted 200 lbs 14 kg/cm² Hydraulic test pr

tubes 700 lbs ~~castings~~ forgings 700 lbs and after assembly in place 700 lbs Are drain cocks or valve

to free the superheater from water where necessary yes .

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

The foregoing is a correct description,

X DEUTSCHE WERFT AKTIENGESELLSCHAFT Manuf

Dates of Survey while building

During progress of work in shops: 6/11, 14/12, 28, 26/4, 4/2, 23/2, 13/3, 21/3, 27/3, 8/4 15/4, 26/4. 29.

During erection on board vessel: 7/5, 17/5, 11/6 1929

Are the approved plans of boiler and superheater forwarded herewith yes (If not state date of approval.)

Total No. of visits 15

GENERAL REMARKS (*State quality of workmanship, opinions as to class, &c.*) These Boilers & superheaters have been built under special Survey in accordance with the approved plans the Secretary's and otherwise in conformity with the requirements of the Rules. The Mat used in the construction are made at Works recognized by the Committee tested by the Soc. Surveyor. Material & workmanship are of good quality. The arrangement of the oil fuel installation is carried out as required by the R Under steam joints of boilers & superheaters tight and their Safety Valves have been adjusted to 14 kg/cm² 200 lbs p. sq. in each

Thickness of adjusting washers:

Port Boiler: port 16,5 m/m; start 22 m/m; superheater 10,5 m/m

Centre Boiler: port 17 m/m; start 20 m/m superheater 13,- m/m

Start. Boiler port 24,5 m/m Start 22,5 m/m superheater 14 m/m

Please see report on Machinery.

Survey Fee ... ... £ : :

Travelling Expenses (if any) £ : :

When applied for, 192

When received, 192

P. Carstens

Engineer Surveyor to Lloyd's Register of Sh

Committee's Minute TUE. 23 JUL 1929 FRI. 2 AUG 1929 TUE. 20 AUG 1929

Assigned See other report