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REPORT ON BOILERS.

No. 15081 B

Received at London Office JUN 8 1939

f writing Report 2 May 1939 When handed in at Local Office 19 Port of Amsterdam

in Book. Survey held at Amsterdam Date, First Survey 6 Dec Last Survey 23 May 1939.

46 on the M.V. Twin Screw "SCOTTISH MAIDEN" (Number of Visits 17.) Tons Gross 6993 Net 4036.

er Built at Barrow By whom built Vickers Ld. Yard No. 2057. When built 1921

nes made at Amsterdam By whom made N.V. Werkspoor Engine No. 751/752 When made 1939

r made at Amsterdam By whom made N.V. Werkspoor Boiler No. 2057 When made 1939

nal Horse Power 446 (of main engines) Owners Tankers Ld. Port belonging to London

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LTITUBULAR BOILERS ~~MAIN, AUXILIARY,~~ OR DONKEY.

ufacturers of Steel Stal Cy of Scotland Broomside Boiler works (Letter for Record .....)

l Heating Surface of Boilers 2560 Is forced draught fitted Yes Coal or Oil fired oil fired

nd Description of Boilers One horizontal Multitubular **Working Pressure** 180 lbs

d by hydraulic pressure to 320 lbs Date of test 15-3-39 No. of Certificate 439 Can each boiler be worked separately ✓

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

of each set of valves per boiler { per Rule approved / as fitted 19.69" } Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes

se of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

llest distance between boilers or uptakes and bunkers or woodwork Seperate platforms In Motorroom oil fuel carried in the double bottom under boilers ✓

llest distance between shell of boiler and tank top plating ✓ Is the bottom of the boiler insulated Yes

est internal dia. of boilers 4490 mM Length 3450 mM **Shell plates:** Material SMS Tensile strength 29.35. 33 ton

kness 29 mM Are the shell plates welded or flanged ✓ Description of riveting: circ. seams { end dbl riveted / inter. ✓

. seams dbl butt straps tublezig-zag-riveted Diameter of rivet holes in { circ. seams 30 mM / long. seams 30 mM } Pitch of rivets { 87 mM / 200 mM }

centage of strength of circ. end seams { plate 67.5 % / rivets 42.3 % } Percentage of strength of circ. intermediate seam { plate / rivets }

centage of strength of longitudinal joint { plate 85 % / rivets 85 % / combined 87 % } Working pressure of shell by Rules 184 lbs

ckness of butt straps { outer 25 mM / inner 25 mM } **No. and Description of Furnaces in each Boiler** 3 Morrison's furnaces

erial SMS Tensile strength 26-30 ton Smallest outside diameter 1120 mM

gth of plain part { top ✓ / bottom ✓ } Thickness of plates { crown / bottom } 15 mM. Description of longitudinal joint welded.

nensions of stiffening rings on furnace or c.c. bottom ✓ Working pressure of furnace by Rules 193 lbs.

d plates in steam space: Material SMS. Tensile strength 26-30 ton Thickness 29 mM. Pitch of stays 440 x 450 mM

w are stays secured dbl nuts. Working pressure by Rules 198 lbs

be plates: Material { front SMS / back SMS } Tensile strength { 26-30 ton / do } Thickness { 25 mM / 22 mM }

an pitch of stay tubes in nests 249 mM Pitch across wide water spaces 369 mM Working pressure { front 230 lbs / back 210 lbs }

ders to combustion chamber tops: Material SMS Tensile strength 28-32 ton Depth and thickness of girder

centre 220 x 30 mM Length as per Rule 780 mM. Distance apart 220 mM No. and pitch of stays

each 3 x 250 mM Working pressure by Rules 210 lbs **Combustion chamber plates:** Material SMS

nsile strength 26-30 ton Thickness: Sides 18 mM Back 19 mM Top 18 mM Bottom 25 mM

ch of stays to ditto: Sides 200 x 200 Back 226 x 195 mM Top 200 x 220 mM Are stays fitted with nuts or riveted over welded over

rking pressure by Rules 196 lbs **Front plate at bottom:** Material SMS Tensile strength 26-30 ton

ickness 23 mM **Lower back plate:** Material SMS Tensile strength 26-30 ton Thickness 23 mM

ch of stays at wide water space 366 mM Are stays fitted with nuts or riveted over fitted with nuts

rking Pressure 190 lbs **Main stays:** Material SMS Tensile strength 28-32 ton

ameter { At body of stay, or Over threads 3" } No. of threads per inch 8 Area supported by each stay 306 □"

rking pressure by Rules 220 lbs **Screw stays:** Material SMS Tensile strength 26-30 ton

ameter { At turned off part, or Over threads 1¼" } No. of threads per inch 11 Area supported by each stay 68.25 □"

J. Price 27/6/39

Working pressure by Rules 185 LBS Are the stays drilled at the outer ends Jes Margin stays: Diameter { At turned off part, or Over threads } 15/8"

No. of threads per inch 11 Area supported by each stay 77.5 □" Working pressure by Rules 196 lbs

Tubes: Material Iron External diameter { Plain 2 3/4" Stay 2 3/4" } Thickness { No 9 L.S.G. 5/16" & 7/16" } No. of threads per inch 11

Pitch of tubes 100 x 98 m/m Working pressure by Rules plain 215 LBS 7/16" 195 LBS **Manhole compensation:** Size of open

shell plate 370 x 470 Section of compensating ring 370 □" abt 240" No. of rivets and diameter of rivet holes 54 - 32 m/m

Outer row rivet pitch at ends 220 m/m Depth of flange if manhole flanged 80 m/m **Steam Dome:** Material none

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 diame

stays Inner radius of crown Working pressure by Rules

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

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 o

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 o

Rules Pressure to which the safety valves are adjusted Hydraulic test pres

tubes , castings and after assembly in place Are drain cocks or valves

to free the superheater from water where necessary .

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with .

WERKSPOOR N.V.

The foregoing is a correct description,

Manufac

Dates of Survey { During progress of work in shops - - } Dec 6 Jan 16-23 Febr 1-16-17-23 March 1-9-13-15 Are the approved plans of boiler and superheater forwarded herewith E 9-1

(If not state date of approval.)

{ During erection on board vessel - - - } April 11-17-22 May 10-17-23 Total No. of visits 17

Is this Boiler a duplicate of a previous case Jes If so, state Vessel's name and Report No. M.V. Oculla Ams rep 1564

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

The boiler has been made under special survey to approved plans,
Secretary's letter and the Society's rules
Material duly tested workmanship throughout good
Boiler hydraulic tested as per rules found sound & tight
The boiler has been fitted aboard on a special made platform in
Motorroom, efficiently secured & good

Survey Fee ... ... £ 20.4 : When applied for, 7-6- 1939

Travelling Expenses (if any) £ : When received, 19

Engineer Surveyor to Lloyd's Register of Shipp

Committee's Minute FRI 7 JUL 1939

Assigned See Ams. 15680