

REPORT ON BOILERS.

No. 13891

17 DEC '96

Received at London Office

Date of writing Report 14 Dec 1936 When handed in at Local Office

Port of Amsterdam

No. in Reg. Book. Survey held at

Amsterdam

Date, First Survey

6 Oct

Last Survey 20 Nov

1936

on the *Memorandum of J. Gussen's & Co's Ford No 640*

(Number of Visits / 3)

Gross Tons
Net

Master

Built at *Krupp*By whom built *Messrs G. & J. Gussen & Co*

Yard No. 640

When built 1936

Engines made at

Amsterdam

By whom made

Messrs Winkhoff

Engine No.

When made 1936

Boilers made at

Amsterdam

By whom made

Messrs Winkhoff

Boiler No.

When made 1936

Nominal Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS ~~MAIN~~, AUXILIARY, OR DONKEY.Manufacturers of Steel *Shell Co of Scotland Brownside Boiler Works Ltd*(Letter for Record *S.*)

Total Heating Surface of Boilers

2560

Is forced draught fitted *Yes*Coal or Oil fired *oil fired*

No. and Description of Boilers

one horizontal Multitubular boiler

Working Pressure 180 lbs

Tested by hydraulic pressure to

3204 lbs

Date of test 20.11.36

No. of Certificate 405

Can each boiler be worked separately *Yes*

Area of Firegrate in each Boiler

16.40

No. and Description of safety valves to each boiler

2 spring loaded

Area of each set of valves per boiler

as fitted 19.600

Pressure to which they are adjusted 180 lbs

Are they fitted with easing gear *Yes*

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Thickens washers F 17.5 mm. A 20.5 mm. between deck and engine room

Smallest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers *no*

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated *Yes*

Largest internal dia. of boilers

4400 mm

Length 3460 mm

Shell plates: Material *SMS*

Tensile strength 24-25 ton

Thickness

29 mm

Are the shell plates welded or flanged *no*

Description of riveting: circ. seams

end all riveted

long. seams

all butt straps

Diameter of rivet holes in

circ. seams 30 mm

Pitch of rivets

20 mm

Percentage of strength of circ. end seams

plate 67.5%

rivets 42.3%

Percentage of strength of circ. intermediate seam

plate *Yes*rivets *Yes*

Percentage of strength of longitudinal joint

plate 85%

rivets 85%

Working pressure of shell by Rules 184 lbs

Thickness of butt straps

outer 25 mm

inner 25 mm

No. and Description of Furnaces in each Boiler

3 Morrison's furnaces

Material

SMS

Tensile strength

26-30 ton

Smallest outside diameter 1130 mm

Length of plain part

top *Yes*bottom *Yes*

Thickness of plates

crown 15 mm

bottom 15 mm

Description of longitudinal joint *welded*

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules 193 lbs

End plates in steam space: Material

SMS

Tensile strength

26-30 ton

Thickness

29 mm

Pitch of stays 440x450

How are stays secured

all nuts

Working pressure by Rules 190 lbs

Tube plates: Material

front *SMS*back *SMS*

Tensile strength

26-30 ton

Thickness

23 mm

22 mm

Mean pitch of stay tubes in nests

240 mm

Pitch across wide water spaces

360 mm

Working pressure

front 230 lbs

back 210 lbs

Girders to combustion chamber tops: Material

SMS

Tensile strength

20-32 ton

Depth and thickness of girder

at centre 220x30 mm

Length as per Rule

780 mm

Distance apart 220 mm

No. and pitch of stays

in each 3. 200 mm

Working pressure by Rules

210 lbs

Combustion chamber plates: Material *SMS*

Tensile strength

26-30 ton

Thickness: Sides

10 mm

Back

19 mm

Top

10 mm

Bottom

25 mm

Pitch of stays to ditto: Sides

200x200 mm

Back

226x195 mm

Top

200x220 mm

Are stays fitted with nuts or riveted over *riveted over*

Working pressure by Rules

196 lbs

Front plate at bottom: Material

SMS

Tensile strength

26-30 ton

Thickness

23 mm

Lower back plate: Material

SMS

Tensile strength

26-30 ton

Thickness

23 mm

Pitch of stays at wide water space

366 mm

Are stays fitted with nuts or riveted over *fitted with nuts*

Working Pressure

190 lbs

Main stays: Material

SMS

Tensile strength

20-32 ton

Diameter

At body of stay, 3"

Over threads

No. of threads per inch

8

Area supported by each stay 306 sq"

Working pressure by Rules

2204 lbs

Screw stays: Material

SMS

Tensile strength

26-30 ton

Diameter

At turned off part, 1 1/2"

Over threads

No. of threads per inch

16

Area supported by each stay 60.25 sq"

Working pressure by Rules 105 lbs Are the stays drilled at the outer ends Yes Margin stays: Diameter At turned off part, 1 5/8"
 No. of threads per inch 11 Area supported by each stay 77.50" Working pressure by Rules 126 lbs
 Tubes: Material Iron External diameter Plain 2 3/4" Thickness Nº 9 5/8" No. of threads per inch 11
 Pitch of tubes 100 x 90 mm Working pressure by Rules Plain 2 15 lbs - 1/16" - 195 lbs Manhole compensation: Size of opening in
 shell plate 370 x 470 Section of compensating ring 370" No. of rivets and diameter of rivet holes 54 - 32 mm
 Outer row rivet pitch at ends 220 mm Depth of flange if manhole flanged 80 mm 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
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ Rivets _____
 stays _____ Inner radius of crown _____ Working pressure by Rules _____ No. and diameter of
 How connected to shell _____ 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

Number of elements _____ Material of tubes _____ Manufacturers of Tubes
Steel castings
 Material of headers _____ Tensile strength _____ Internal diameter and thickness of tubes _____
 the boiler be worked separately _____ Thickness _____ Can the superheater be shut off and
 Area of each safety valve _____ Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
 Rules _____ Are the safety valves fitted with easing gear _____ Working pressure as per
 tubes _____ Pressure to which the safety valves are adjusted _____ Hydraulic test pressure:
 _____, 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 22 inclusive for boilers been complied with Yes.

The foregoing is a correct description,

WERKSPOR N.V.

Manufacturer.

Dates of Survey During progress of Oct 6, 12, 20, 21, 22, 24, 27, 28
work in shops - - Nov. 2, 5, 9, 16, 20
while During erection on
building board vessel - - -

Are the approved plans of boiler and superheater forwarded herewith E-P-4-35
 (If not state date of approval.)

Total No. of visits _____

Is this Boiler a duplicate of a previous case Yes

If so, state Vessel's name and Report No. Mota vessel "MIRALDA" Am up 13/6

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

The Boiler has been made in accordance with the approved plan and Secretary's
 letters, material tested as per rules, workmanship throughout good.
 Boiler hydraulic tested as per rules found sound & tight
 The Boiler has been sent to Kumpen's a Yvel Polder dam district and will be
 placed aboard on Mems G. v. d. Gessen's Yard Nº 640

Survey Fee ... 204

Travelling Expenses (if any) 7

When applied for, 19

When received, 19 37

See Hunking's letter
7-1-37

Engdoff

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 16 MAR 1937

Assigned See Rot 25333



© 2021

Lloyd's Register
Foundation