

REPORT ON BOILERS.

No. 16

Received at London Office JUL -1 1938

Writing Report 30TH JUNE 1938 When handed in at Local Office

Port of BIRMINGHAM

Survey held at WOLVERHAMPTON

Date, First Survey 29/3/38

Last Survey 22ND JUNE 1938

on the COMPOSITE THIMBLE TUBE BOILER
FOR A/S NARSKOV SKIBSVAERFTS YARD N^o 86

(Number of Visits) Gross Tons Net

By whom built

Yard No.

When built

By whom made

Engine No.

When made

By whom made

Boiler No.

When made

Port belonging to

COMPOSITE THIMBLE TUBE
DONKEY BOILER.

By whom made JOHN THOMPSON (WOL) LTD. Boiler No. J.T. 107 When made 1938 Where fixed

Manufacturers of Steel PARK GATE IRON & STEEL CO LTD

Heating Surface of Boiler 660 Sq Ft

Is forced draught fitted

Coal or Oil fired

Description of Boilers ONE SPIRAL RO COMPOSITE BOILER

Working pressure 114 LBS/SQ

by hydraulic pressure to 220 LBS/SQ

Date of test 21ST JUNE 1938

No. of Certificate 15

Firegrate in each Boiler

No. and Description of safety valves to each boiler

each set of valves per boiler

per rule

Pressure to which they are adjusted

Are they fitted with easing gear

Whether steam from main boilers can enter the donkey boiler

Smallest distance between boiler or uptake and bunkers

Is oil fuel carried in the double bottom under boiler

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

Largest internal dia. of boiler

Height

Material S.M. OPEN HEARTH STEEL

Tensile strength 28/32 TONS

Thickness 7/16

shell plates welded or flanged

Description of riveting

circ. seams

long. seams

rivet holes in

circ. seams

long. seams

Pitch of rivets

Percentage of strength of circ. seams

plate

rivets

combined

pressure of shell by rules

139 LBS/SQ

Thickness of butt straps

outer

inner

Whether complete hemisphere, dished, partial, spherical, or flat

DISHED

Material S.M. STEEL

strength 26/30 TONS

Thickness 7/8

Radius 6'-0"

Working pressure by rules APPROVED 114 LBS/SQ

Form of Furnace: Plain, spherical, or dished crown

PLAIN

Material S.M. STEEL

Tensile strength 26/30 TONS

External diameter

4'-4 1/2"

Length as per rule

2'-5"

Working pressure by rules 126 LBS/SQ

support stays circumferentially

and vertically

Are stays fitted with nuts or riveted over

of stays over thread

Radius of spherical or dished furnace crown

Working pressure by rule

of Ogee Ring

1"

Diameter as per rule

71 7/8"

Working pressure by rule APPROVED 114 LBS/SQ

ion Chamber: Material

Tensile strength

Thickness of top plate

dished

Working pressure by rule

Thickness of back plate

Diameter if circular

per rule

Pitch of stays

Are stays fitted with nuts or riveted over

of stays over thread

Working pressure of back plate by rules

Material

S.M. STEEL

Tensile strength

26/30 TONS

Thickness

1/2"

Mean pitch of stay tubes in nests

ing shell, Dia. as per rule

front

back

Pitch in outer vertical rows

Dia. of tube holes

FRONT

stay

plain

BACK

stay

plain

Alternate tube in outer vertical rows a stay tube

Working pressure by rules

Combustion chamber tops: Material

Tensile strength

Thickness of girder at centre

Length as per rule

part

No. and pitch of stays in each

Working pressure by rule

003181-003190-0173

Crown stays: Material ☒ Tensile strength ☒ Diameter ☒ { at body of stay, or over threads.

No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒

Screw stays: Material ☒ Tensile strength ☒ Diameter ☒ { at turned off part, or over threads. No. of threads per inch ☒

Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒

Tubes: Material ☒ External diameter ☒ { plain 1 1/4" or stay 2" Thickness ☒ { 11/16" or 1/4"

No. of threads per inch 9 Pitch of tubes 2 3/8" Working pressure by rules 270 lb/sq

Manhole Compensation: Size of opening in shell plate 16 1/2 x 12 1/2" Section of compensating ring 9/8 x 7 1/2" No. of rivets and of rivet holes 60 @ 13/16" Outer row rivet pitch at ends 3" Depth of flange if manhole flanged 2 1/4" Thickness of uptake plate 5/8"

Uptake: External diameter 1-11 1/4" Thickness of uptake plate 5/8"

Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

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

The foregoing is a correct description
JOHN THOMPSON (WOLVERHAMPTON) LTD.

Dates of Survey ☒ During progress of work in shops - 29/3, 4-6, 12-13, 25/4, 2 11-18/5/38 Is the approved plan of boiler forwarded herewith ☒ YES (If not state date of approval.)
☒ During erection on board vessel - 1-9, 21, 22/6/38 Total No. of visits 14

Is this Boiler a duplicate of a previous case ☒ If so, state Vessel's name and Report No. ☒

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

The boiler has been constructed under special licence and in accordance with the approved plans. The materials for same have been tested by Bureau to the Society at an approved steel works. The fusion welded longitudinal seam, between the tube plates has been carried out in accordance with Section 2 (Class 1) of the Society's Requirements for fusion welded pressure vessels with satisfactory results. The workmanship good and the boiler has been examined under a hydraulic test of 220 lb/sq with satisfactory results.

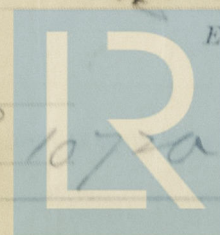
TUBES 1-11-6
Survey Fee £ 5 : 5 : When applied for, 30th JUNE 1938.
Travelling Expenses (if any) £ 1 : 1 : When received, 2/9 1938.

H. M. C. Minick.

Committee's Minute
Assigned

TUE 8 NOV 1938

See 6pm. 28 10720



Engineer Surveyor to Lloyd's Register of Shipping
Lloyd's Register Foundation