

REPORT ON BOILERS.

No. 6340

Received at London Office 27 DEC 1928

Date of writing Report
19
When handed in at Local Office
19
Port of
Kobe

No. in Survey held at
Harima
Date, First Survey
29/10/28
Last Survey
24/11/1928

Reg. Book
on the
Twin Screw Motor Vessel "TANIM MARU" Ex HALLFRIED
(
Number of Visits
3
)
(
Gross
5154.91
Net
3653.75
)

Built at
Rotterdam
By whom built
Wij. Voth Rijke & Co
Yard No.
162
When built
1922

Engines made at
Amsterdam
By whom made
Werkspoor
Engine No.
When made
1922

Boilers made at
Amsterdam
By whom made
Werkspoor
Boiler No.
1875
When made
1921

Owners
Taiyo Kaimu Kab. Kaisha
Port belonging to
Fuefu

VERTICAL DONKEY BOILER.

Made at
Amsterdam
By whom made
Werkspoor
Boiler No.
1875
When made
1921
Where fixed
In E.R. aft.

Manufacturers of Steel
Unknown

Total Heating Surface of Boiler
245 sq
Is forced draught fitted
No
Coal or Oil fired
oil fired

No. and Description of Boilers
one vertical
Working pressure
100 lb (703 kg)

Tested by hydraulic pressure to
200 lb/sq
Date of test
17/11/28
No. of Certificate

Area of Firegrate in each Boiler
No. and Description of safety valves to each boiler
one 2" twin spring loaded

Area of each set of valves per boiler
per rule
as fitted
2" dia
Pressure to which they are adjusted
102 lb
Are they fitted with easing gear
Yes

State whether steam from main boilers can enter the donkey boiler
Smallest distance between boiler or uptake and bunkers
or woodwork
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

Shell plates: Material
Steel
Tensile strength
41-47 Kg/cm²
Thickness
22 mm at centre 11 mm at ends

Are the shell plates welded or flanged
Description of riveting:
circ. seams
end
S.R. rivets
inter
S.R. rivets
long. seams
D. Riveted

Dia. of rivet holes in
circ. seams
22 mm
Pitch of rivets
Percentage of strength of circ. seams
plate
59
rivets
56
of Longitudinal joint
plate
70.6
rivets
81.1
combined

Working pressure of shell by rules
9.6 Kg.
Thickness of butt straps
outer
Butt Lap
inner

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat
spherical dished end
Material
Steel

Tensile strength
38-44 Kg/cm²
Thickness
14 mm
Radius
1700 mm
Working pressure by rules
approved

Description of Furnace: Plain, spherical, or dished crown
dished crown
Material
Steel
Tensile strength
38-44 Kg/cm²

Thickness
152.18 mm top
External diameter
top
1130 mm
bottom
Length as per rule
855 mm
Working pressure by rules
side
10.1 Kg
lap
7.55 Kg

Pitch of support stays circumferentially
and vertically
Are stays fitted with nuts or riveted over

Diameter of stays over thread
Radius of spherical or dished furnace crown
1488 mm
Working pressure by rule
7.55

Thickness of Ogee Ring
20 mm
Diameter as per rule
D
1400 mm
a
1130 mm
Working pressure by rule
9.88 Kg.

Combustion Chamber: Material
Tensile strength
Thickness of top plate

Radius if dished
Working pressure by rule
Thickness of back plate
Diameter if circular

Length as per rule
Pitch of stays
Are stays fitted with nuts or riveted over

Diameter of stays over thread
Working pressure of back plate by rules

Tube Plates: Material
front
and
back
Steel
Tensile strength
41 Kg
Thickness
22 mm
Mean pitch of stay tubes in nests

comprising shell, Dia. as per rule
front
61 mm
back
23/8 dia
Pitch in outer vertical rows
94 mm
Dia. of tube holes FRONT
stay
61 mm
plain
BACK
stay
23/8 dia
plain

each alternate tube in outer vertical rows a stay tube
Working pressure by rules
front
approved
back

Girders to combustion chamber tops: Material
Tensile strength

Depth and thickness of girder at centre
Length as per rule

Distance apart
No. and pitch of stays in each
Working pressure by rule

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 unknown External diameter { plate 2 3/8" dia Thickness 9 L.S.G.
 No. of threads per inch ☒ Pitch of tubes 90 x 94 7/8 Working pressure by rules approved
Manhole Compensation: Size of opening in shell plate 350 x 450 24 Section of compensating ring 600 x 700 x 25 1/2 No. of rivets and diameter of rivet holes ☒ Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged 30 1/2
Uptake: External diameter ☒ Thickness of uptake plate ☒
Cross Tubes: No. ☒ External diameters { ☒ Thickness of plates ☒
 Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yes

The foregoing is a correct description,

Manufacturer.

Dates of Survey { During progress of work in shops - - ☒
 while building { During erection on board vessel - - ☒

Is the approved plan of boiler forwarded herewith (If not state date of approval.)

Total No. of visits Two

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

This Donkey boiler has been examined over all parts (with lagging part removed) & the scantlings verified with the approved plan. The materials & workmanship appear to be good, & the boiler was water tested to twice the working pressure, found sound & tight, & afterwards tested under steam with satisfactory results.

It is eligible in my opinion to have the notation of D.B. 100 lbs in the Register Book.

Survey Fee ... £ See Machinery When applied for, 19
 Travelling Expenses (if any) £ 1st Entry Rpt. When received, 19

Committee's Minute

Assigned

FRI. 11 JAN 1929

TUE. 11 MAR 1930

H.D. Buchanan
 Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 12 AUG 1930

Lloyd's Register
 Foundation