

## REPORT ON BOILERS.

No. 15164<sup>D</sup>

MAR -3 1938

Received at London Office

Date of writing Report 22 Feb 1938 When handed in at Local Office

19

Port of Amsterdam

No. in  
Reg. Book

Survey held at

Hengelo Amsterdam Date, First Survey 3 Sept

Last Survey 16 Feb

1938

on the

Single Screw Motor Vessel "TRAFALGAR"

(Number of Visits 12.)

Gross 5642

Tons Net 3300.51

Built at Amsterdam

By whom built Ned Scheepb M'g

Yard No. 260 When built 1930

Engines made at Hengelo

By whom made N.V. Stork &amp; Co

Engine No. 4000 When made 1930

Boilers made at Hengelo

By whom made N.V. Stork &amp; Co

Boiler No. 4040 When made 1937/0

Owners Wm. Wilhelmsen

Port belonging to

Tjnsberg

## VERTICAL DONKEY BOILER. ECONOMISER.

Made at Hengelo By whom made N.V. Stork &amp; Co Boiler No. 4040 When made 1937 Where fixed 1930

Manufacturers of Steel Ruhrstahl A.G. Abt Hennrich hütte Hattingen

Total Heating Surface of Boiler

Is forced draught fitted

Coal or Oil fired exhaust gas

No. and Description of Boilers 1 Clarkson G420 Lupton Silencer-economiser

Working pressure 7 1/2 kg/cm<sup>2</sup>

Tested by hydraulic pressure to

14 kg

Date of test

26-10-37

No. of Certificate 415

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler 1-30 mm dth high lifting marine type

Area of each set of valves per boiler

per rule 7.1 cm<sup>2</sup>  
as fitted 7.1 cm<sup>2</sup>

Pressure to which they are adjusted 100 lbs

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

yes

Largest internal dia. of boiler 1200 mm Height 3480 mm

Shell plates: Material

SMS

Tensile strength

44-50 kg

Thickness

15 mm

Are the shell plates welded or flanged

Ends of long seams welded

Description of riveting: circ. seams

end single riveted

long. seams double riveted

Dia. of rivet holes in

circ. seams 23 mm

Pitch of rivets

53.5 mm

Percentage of strength of circ. seams

plate 56.2

of Longitudinal joint

plate 75.2

Working pressure of shell by rules

10.2 kg

Thickness of butt straps

outer 13 mm

inner 13 mm

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

Dished drumheads

Material

SMS

Tensile strength

41-47 kg

Thickness

Top drumhead 10 mm

Bottom 15 mm

Radii R. 1200 r. 120

Working pressure by rules 10.4 kg

Description of Furnace: Plain, spherical, or dished crown

Material

Tensile strength

Thickness

External diameter

top

Length as per rule

Working pressure by rules

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

Working pressure by rule

Thickness of Ogee Ring

Diameter as per rule

D

Working pressure by rule

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 15 mm

back

Tensile strength

40-50 kg

Thickness

15 mm

Mean pitch of stay tubes in nests

of comprising shell, Dia. as per rule

front

Pitch in outer vertical rows

150 mm

Dia. of tube holes FRONT

stay

BACK

stay

each alternate tube in outer vertical rows a stay tube

Working pressure by rules

front

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

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Foundation

W224-0057



**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 SM S External diameter ☒ plain 2" Thickness ☒ 4mm  
 No. of threads per inch ☒ Pitch of tubes Horizontal staggered Working pressure by rules 16.84  
66 mm between rows  
**Manhole Compensation:** Size of opening in shell plate ☒ Section of compensating ring ☒ No. of rivets and diameter ☒  
 of rivet holes ☒ Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged 75 mm  
**Uptake:** External diameter ☒ Thickness of uptake plate ☒  
**Cross Tubes:** No. ☒ External diameters ☒ Thickness of plates ☒  
 Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with ☒

The foregoing is a correct description,  
 MACHINEFABRIEK GEBR. STORK & Co. N.V.

Manufactured by

Dates of Survey while building ☒ During progress of work in shops - ☒ 3. Sept. 2. Sept. 3. Sept. 11-15. 22-26  
 Is the approved plan of boiler forwarded herewith E 20-6-30  
 (If not state date of approval.)  
 During erection on board vessel - ☒ Nov. 25. Dec. 20. Jan. 6. Feb. 16  
 Total No. of visits 12

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 Silencer economiser has been built under special survey in accordance with approved plan & Secretary's letters, workmanship throughout good

Survey Fee ... £ 50.40 : When applied for. 19  
 Travelling Expenses (if any) £ : When received. 22.3 19 38 24/3

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
 Assigned

TUE 15 MAR 1934  
 See Ans. JE 15164

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