

REPORT ON BOILERS.

Received at London Office

APR 28 1939

Date of writing Report 20-1-1939 When handed in at Local Office 19 Port of Rotterdam

No. in Reg. Book. 24.6.19 Survey held at Flushing Date, First Survey 16-6-38 Last Survey 6-1-1939

on the Donkey Boiler my "CERONIA" (Number of Visits 16) Tons {Gross Net

Master Built at Schiedam By whom built Wilton-Tyenoord Yard No. 665 When built 1939

Engines made at Schiedam By whom made Wilton-Tyenoord Engine No. 1065 When made 439.

Boilers made at Flushing By whom made Hon Mr. "De Schelde" Boiler No. 1050 When made 1939

Nominal Horse Power 502 Owners Ned. Petroleum Maats. La Corona. Port belonging to Grownhage

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

Manufacturers of Steel The Steel Co of Scotland (Letter for Record S)

Total Heating Surface of Boilers 2560^{sq} Is forced draught fitted Yes Coal or Oil fired Oil

No. and Description of Boilers One Multitubular Marine Boiler Working Pressure 180 lbs

Tested by hydraulic pressure to 320 LBS Date of test 6-1-39 No. of Certificate 1015 Can each boiler be worked separately

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

Area of each set of valves per boiler per Rule as fitted 90 mm Pressure to which they are adjusted 100 lb Are they fitted with easing gear Yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler Thickness washers 15 mm

Smallest distance between boilers or uptakes and bunkers or woodwork Bricks in 'tween deck Is oil fuel carried in the double bottom under boilers

Smallest distance between shell of boiler and tank top plating Is the bottom of the boiler insulated

Largest internal dia. of boilers 4400 mm Length 3468 mm Shell plates: Material S.M. Steel Tensile strength 46.8-52 kg/mm²

Thickness 29 mm Are the shell plates welded or flanged of Buttstraps Description of riveting: circ. seams Lap 2 x riv. end inter.

Long. seams Double buttstraps 3 x riv Diameter of rivet holes in circ. seams 30 mm Pitch of rivets 83 mm

Long. seams 30 mm Pitch of rivets 200 mm

Percentage of strength of circ. end seams plate 64% rivets 50% Percentage of strength of circ. intermediate seam plate rivets

Percentage of strength of longitudinal joint plate 85% rivets 85% combined 87% Working pressure of shell by Rules 12.8 kg/cm²

Thickness of butt straps outer 25 mm inner 25 mm No. and Description of Furnaces in each Boiler 3 Morrison Patent

Material S.M. Steel Tensile strength 41-47 kg/mm² Smallest outside diameter 1150 mm

Length of plain part top bottom Thickness of plates crown bottom 15 mm Description of longitudinal joint Welded

Dimensions of stiffening rings on furnace or c.c. bottom Working pressure of furnace by Rules 13.22 kg/cm²

Head plates in steam space: Material S.M. Steel Tensile strength 41-47 kg/mm² Thickness 29 mm Pitch of stays 440x450 mm

How are stays secured Screwed in plates with nuts inside and outside Working pressure by Rules 12.65 kg/cm²

Material of the plates: Material front S.M. Steel Tensile strength 41-47 kg/mm² Thickness 23 mm

back S.M. Steel Tensile strength 41-47 kg/mm² Thickness 22 mm

Pitch of stay tubes in nests 200x194 mm Pitch across wide water spaces 360 mm Working pressure front 17.8 kg/cm² back

Orders to combustion chamber tops: Material S.M. Steel Tensile strength 44-50 kg/mm² Depth and thickness of girder

centre 220x2x19 mm Length as per Rule 776 mm Distance apart 220 mm No. and pitch of stays

each 3 at 200 mm Working pressure by Rules 17.2 kg/cm² Combustion chamber plates: Material S.M. Steel

Tensile strength 41-47 kg/mm² Thickness: Sides 18 mm Back 19 mm Top 18 mm Bottom 25 mm

Pitch of stays to ditto: Sides 250 mm Back 200x195 mm Top 200x220 mm Are stays fitted with nuts or riveted over Riveted over

Working pressure by Rules 13.3 kg/cm² Front plate at bottom: Material S.M. Steel Tensile strength 41-47 kg/mm²

Thickness 23 mm Lower back plate: Material S.M. Steel Tensile strength 41-47 kg/mm² 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 17.4 kg/cm² Main stays: Material S.M. Steel Tensile strength 44-50 kg/mm²

meter { At body of stay, 3" No. of threads per inch 9 Area supported by each stay 190000 mm²

Over threads 3 1/4" Working pressure by Rules 15.5 kg/cm² Screw stays: Material S.M. Steel Tensile strength 41-47 kg/mm²

meter { At turned off part, 1 3/8" No. of threads per inch 9 Area supported by each stay 40100 mm²

Over threads 1 1/2"

Working pressure by Rules 14.1 kg/cm² Are the stays drilled at the outer ends Yes Margin stays: Diameter 1 7/16"
 No. of threads per inch 9 Area supported by each stay 50091 Working pressure by Rules 14.1 kg/cm²
 Tubes: Material Iron External diameter 2 3/4" Thickness 5/16" No. of threads per inch 9
 Pitch of tubes 98 x 100 mm Working pressure by Rules 215 lb Manhole compensation: Size of opening in
 shell plate 370 x 470 mm Section of compensating ring 780 x 880 x 32 mm 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 100 mm Steam Dome: Material -
 Tensile strength - Thickness of shell - Description of longitudinal joint -
 Diameter of rivet holes - Pitch of rivets - Percentage of strength of joint -
 Internal diameter - Working pressure by Rules - Thickness of crown - No. and diameter of
 stays - Inner radius of crown - Working pressure by Rules -
 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 - Manufacturers of -
 Number of elements - Material of tubes - Internal diameter and thickness of tubes -
 Material of headers - Tensile strength - Thickness - Can the superheater be shut off and
 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 casing gear - Working pressure as per
 Rules - Pressure to which the safety valves are adjusted - Hydraulic test pressure
 tubes - forgings and castings - and after assembly in place - Are drain cocks
 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 -

The foregoing is a correct description,
 p. proc. N.V. Kon. Mij. "De Schelde" Manufacture

Dates of Survey 16/5, 22/9, 13/24, 11/4, 22/11 Are the approved plans of boiler and superheater forwarded herewith Retained
 while building 2/2, 9/12, 17/12, 24/12, 29/12, 5/1, 12/1, 19/1, 26/1, 1939 Total No. of visits 10

Is this Boiler a duplicate of a previous case Yes If so, state Vessel's name and Report No. Anglo-Danish tanker

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been made in accordance with the approved plan, Society's Rules and Secretary's letters. Material tested as required and workmanship good.

Survey Fee ... 204.80 When applied for, 30.1 1939
 Travelling Expenses (if any) 1.2.00 When received, 9.2.1939

H. J. Schuur
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute
 Assigned

TUE 2 MAY 1939
 See Rob. J.E. 28700

