

REPORT ON BOILERS.

No. 10303

Received at London Office

FRI. JAN. 19. 1917

Date of writing Report 11 November 1916. When handed in at Local Office

Port of Rotterdam

No. in Survey held at *Blushing*

Date, First Survey 29 November Last Survey June 26 1916

Reg. Book.

on the

Steel Screw Steamer "Proland"

(Number of Visits 8)

Gross

Net

Master

Built at *Hendrik J. de Groot* by whom built *Janssen, Lams*

When built 1916

Engines made at *Bolnes*

By whom made *N.V. Machinefabriek Bolnes* When made 1916

Boilers made at *Blushing*

By whom made *Van der Schelde* When made 1916

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Phonix Ch. Hoerde Verein*

(Letter for record *S*) Total Heating Surface of Boilers *2 x 1650 sq ft* Is forced draft fitted *No* No. and Description of

Boilers *2 Horizontal Main boilers* Working Pressure *180 lb.* Tested by hydraulic pressure to *560 lb.* Date of test *13.7.16*

No. of Certificate *613* Can each boiler be worked separately *Yes* Area of fire grate in each boiler *44 1/2 sq ft* No. and Description of

safety valves to each boiler *two Spring loaded* Area of each valve *4 sq in* Pressure to which they are adjusted *80 lbs*

Are they fitted with easing gear *Yes* In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler *None*

Smallest distance between boilers or uptakes and bunkers or woodwork *over 18 in* Mean dia. of boilers *12 1/2 in* Length *10 1/2 in*

Material of shell plates *Steel* Thickness *1 3/32* Range of tensile strength *28/52 ton* Are the shell plates welded or flanged *No*

Descrip. of riveting: cir. seams *lap butt riv.* long. seams *butt. triple rivets* Diameter of rivet holes in long. seams *1 1/16* Pitch of rivets *4 1/16*

Lap of plates or width of butt straps *18 1/2 in* Per centages of strength of longitudinal joint rivets *89%* plate *85%* Working pressure of shell by

rules *180 lb.* Size of manhole in shell *12 in x 16 in* Size of compensating ring *8 1/2 in x 1 in* No. and Description of Furnaces in each

boiler *2 main* Material *Steel* Outside diameter *4 1/2 in* Length of plain part *top* Thickness of plates *5/8 in* bottom *5/8 in*

Description of longitudinal joint *Welded* No. of strengthening rings *0* Working pressure of furnace by the rules *180 lb.* Combustion chamber

plates: Material *Steel* Thickness: Sides *1 1/16* Back *1 1/16* Top *1 1/16* Bottom *1 in* Pitch of stays to ditto: Sides *8 x 4 1/2* Back *8 x 4 1/2*

Top *8 x 8* If stays are fitted with nuts or riveted heads *nutted main* Working pressure by rules *202 lb.* Material of stays *Steel* Diameter at

smallest part *1.48 in* Area supported by each stay *60 sq in* Working pressure by rules *146 lb.* End plates in steam space: Material *Steel* Thickness *3/4 + 1/2*

Pitch of stays *8 x 1 1/4* How are stays secured *stays, nutted* Working pressure by rules *240 lb.* Material of stays *Steel* Diameter at smallest part *6.49 in*

Area supported by each stay *306* Working pressure by rules *220 lb.* Material of Front plates at bottom *Steel* Thickness *1 in* Material of

Lower back plate *Steel* Thickness *1 3/16* Greatest pitch of stays *1 3/2 x 4 1/4* Working pressure of plate by rules *195 lb.* Diameter of tubes *3 1/4 in*

Pitch of tubes *4 1/2 x 4 1/8* Material of tube plates *Steel* Thickness: Front *1 in* Back *1 1/16 in* Mean pitch of stays *1 3/2 x 8 1/4* Pitch across wide

water spaces *13 1/4 in* Working pressures by rules *190 lb.* Girders to Chamber tops: Material *Steel* Depth and thickness of

girder at centre *8 1/2 x 2 x 3/4* Length as per rule *32 in* Distance apart *8 in* Number and pitch of Stays in each *30 8 in*

Working pressure by rules *180 lb.* Superheater or Steam chest: how connected to boiler *0* Can the superheater be shut off and the boiler worked

separately *0* Diameter *0* Length *0* Thickness of shell plates *0* Material *0* Description of longitudinal joint *0* Diam. of rivet

holes *0* Pitch of rivets *0* Working pressure of shell by rules *0* Diameter of flue *0* Material of flue plates *0* Thickness *0*

If stiffened with rings *0* Distance between rings *0* Working pressure by rules *0* End plates: Thickness *0* How stayed *0*

Working pressure of end plates *0* Area of safety valves to superheater *0* Are they fitted with easing gear *0*

The foregoing is a correct description,

Koninklijke Maatschappij "De Schiedamsche Schepsbouw en Werktuigenfabriek" Manufacturer.

Dates of Survey while building

During progress of work in shops - - -
During erection on board vessel - - -

November 29, Jan 5, Feb 21, March 15, April 13, May 17, June 26 Is the approved plan of boiler forwarded herewith *Yes*

Total No. of visits *8*

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

The boilers have been made in accordance with the approved plan and Secretary's letters, material tested as required and workmanship good.

Survey Fee ... *129.60* : When applied for, *14/11 1916*
Travelling Expenses (if any) *27.-* : When received, *23/11 1916*

P. N. Beemster
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. JAN. 23. 1917

Assigned

