

REPORT ON BOILERS.

No. 1.

Date of writing Report

Octbr. 1916

When handed in at Local Office

191

Port of

Received at London Office

MON. JAN. 3 1921

No. in Survey held at
Reg. Book.

Hamburg

Date, First Survey 4. Octbr. 1915 Last Survey 22 Septbr. 1916

(Number of Visits 15)

Gross
Tons
Net

on the

S.S. Tiurao

Master

Built at

By whom built

When built

Engines made at

By whom made

When made

Boilers made at

Hamburg

By whom made

Kfz. Blohm & Voß

When made 1916

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel *Thyssen & Co., Düsseldorf*

(Letter for record S.)

Total Heating Surface of Boilers

9851.2 sq. ft. Is forced draft fitted no

No. and Description of

Boilers 4 single ended multitubular

Working Pressure

180 lbs. Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of

safety valves to each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers 15.5 1/2" Length 11' 11"

Material of shell plates steel Thickness 1.25"

Range of tensile strength 28-32, 1/2 Are the shell plates welded or flanged

Descrip. of riveting: cir. seams lap donk. riv. long. seams triple rivetted

Diameter of rivet holes in long. seams 1.28" Pitch of rivets 8.81"

Lap of plates or width of butt straps 18.25 x 1.25 Per centages of strength of longitudinal joint

rivets 85.62%

Working pressure of shell by

rules 184.90 lbs. Size of manhole in shell 15.25 x 12.8"

Size of compensating ring 40.25 x 37.20 x 1.65"

No. and Description of Furnaces in each

boiler 3 horizontal Material steel

Outside diameter 47.25"

Length of plain part

top 6"

bottom 6"

Thickness of plates

crown 0.59"

bottom 0.59"

Description of longitudinal joint welded

No. of strengthening rings none

Working pressure of furnace by the rules 199.35 lbs. Combustion chamber

plates: Material steel Thickness: Sides 0.62"

Back 0.635"

Top 0.62"

Bottom 0.62"

Pitch of stays to ditto: Sides 8.81 x 8.5"

Top 8.81 x 8.5" If stays are fitted with nuts or riveted heads nuts

Working pressure by rules 198.14 lbs. Material of stays steel Diameter at

smallest part 1.52" Area supported by each stay 1.936"

Working pressure by rules 252.45 lbs.

End plates in steam space: Material steel Thickness 1.4"

Pitch of stays 21 x 23" How are stays secured

Working pressure by rules 207.0 lbs.

Material of stays steel Diameter at smallest part 3.3"

Area supported by each stay 8.55 sq. ft.

Working pressure by rules 183.00 lbs.

Material of Front plates at bottom steel Thickness 1.02"

Lower back plate steel Thickness 0.945"

Greatest pitch of stays 18 x 12.5"

Working pressure of plate by rules 312.24 lbs. Diameter of tubes 3"

Pitch of tubes 4.25 x 4.13"

Material of tube plates steel Thickness: Front 1.48-1.02"

Back 0.83"

Mean pitch of stays 8.50"

Pitch across wide

water spaces 14.25"

Working pressures by rules 349.05 lbs.

Girders to Chamber tops: Material steel Depth and thickness of

girder at centre 9.25 x 1.5"

Length as per rule 34.25"

Distance apart 8"

Number and pitch of Stays in each 3-8.8"

Working pressure by rules 196.22 lbs. Superheater or Steam chest: how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

The foregoing is a correct description,

Manufacturer.

Dates

During progress of

1915: 4/10, 14/10, 4/11, 12/12

of Survey

work in shops

1916: 13/1, 5/2, 12/3, 8/4, 8/5, 3/6, 8/7, 8/8,

while

During erection on

24/8, 11/9 and 22/9.

building

board vessel

Is the approved plan of boiler forwarded herewith no

Total No. of visits 15.

GENERAL REMARKS

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

These boilers have been built under

special survey in accordance with the approved plan. - As far as the boilers were constructed here,

workmanship and materials are of best description and the boilers are eligible to be fitted on board

a vessel classed with Pentas Austro Ungarica after having been rivetted up and tested with 360 lbs.

pressure. - The results of tests of the material will be found attached. -

Survey Fee £ 46.600-00:

When applied for, 23/9 1916

Travelling Expenses (if any) £ :

When received, 16/10 1916

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

FRI. APR. 1 1921

FRI. APR. 29 1921

Committee's Minute

Assigned

TUE. 11 JAN. 1921

VERITAS
AUSTRO-UNGARICO
HAMBURG.

Lloyd's Register

W90-0177 Foundation

W90-0178