

REPORT ON BOILERS.

No. 1362

TUE. JAN. 9-1917

Completion of Barron Report No. 1672

Received at London Office

of writing Report

191

When handed in at Local Office

191

Port of *Montreal*

Survey held at *Montreal*

Date, First Survey *July 14*

Last Survey *Dec. 15*

1916

on the *Swedish Submarine "Mikula Selianinovitch"*

(Number of Visits)

Gross *3514*

Net *2041*

Master *John L. Reid*

Built at *Montreal*

By whom built *Canadian Vickers Ltd.*

When built *1916*

Engines made at *Barron in Furness*

By whom made *Vickers Ltd.*

When made *1916*

Boilers made at

By whom made

When made *1916*

Registered Horse Power

Owners *Imperial Russian Government* Port belonging to *Petrograd.*

ULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel

from Beardmore Ltd. & Babcock & Wilcox Ltd. Frothingham & Co.

Letter for record

(5)

Total Heating Surface of Boilers *11056 sq ft*

Is forced draft fitted *Yes*

No. and Description of

Boilers *4 Nos double ended.*

Working Pressure *180 lbs*

Tested by hydraulic pressure to *360*

Date of test *19/5/16*

of Certificate *278*

Can each boiler be worked separately *Yes*

Area of fire grate in each boiler *70 sq ft*

No. and Description of

Safety valves to each boiler *1 No spring loaded*

Area of each valve *12.56 sq in*

Pressure to which they are adjusted *183 lbs*

Are they fitted with easing gear *Yes*

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

Smallest distance between boilers or uptakes and bunkers or woodwork *18 in*

Mean dia. of boilers *15.7 7/16* Length *11' 6"*

Material of shell plates *Steel*

Thickness *17/16*

Range of tensile strength *28 1/2 tons*

Are the shell plates welded or flanged *No.*

Description of riveting: cir. seams *D.R. lap*

long. seams *J.R. double butt*

Diameter of rivet holes in long. seams *1 1/32*

Pitch of rivets *1 1/8"*

Gap of plates or width of butt straps *22 1/4"*

Per centages of strength of longitudinal joint

87.7

Working pressure of shell by

Size of manhole in shell *20" x 16"*

Size of compensating ring *3' 6 1/4" x 2' 6 1/4" x 1 1/16"*

No. and Description of Furnaces in each

Boiler *3 bonneted*

Material *Steel*

Outside diameter *4' 3 1/4"*

Length of plain part

top

Thickness of plates

bottom

5/8"

Description of longitudinal joint *Weld*

No. of strengthening rings *1*

Working pressure of furnace by the rules *196 lbs*

Combustion chamber

Material *Steel*

Thickness: Sides *9/32"*

Back *9/32"*

Top *9/32"*

Bottom *1"*

Pitch of stays to ditto: Sides *8 3/4" x 7 3/8"*

8 3/4" x 7 3/8" If stays are fitted with nuts or riveted heads *Nuts*

Working pressure by rules *186 lbs*

Material of stays *Steel*

Diameter at

Smallest part *1.44 sq ft*

Area supported by each stay *64.5 sq in*

Working pressure by rules *180 lbs*

End plates in steam space: Material *Steel*

Thickness *1 1/4"*

Area

Area of stays *18" x 18"*

How are stays secured *Drilled nuts*

Working pressure by rules *180 lbs*

Material of stays *Steel*

Diameter at smallest part *7.23 sq in*

Area supported by each stay *324 sq in*

Working pressure by rules *232 lbs*

Material of Front plates at bottom *Steel*

Thickness *27/32*

Material of

Inner back plate *Steel*

Thickness *27/32*

Greatest pitch of stays *3 1/4" x 8 3/4"*

Working pressure of plate by rules *195 lbs*

Diameter of tubes *2 1/2"*

Material of tube plates *Steel*

Thickness: Front *27/32"*

Back *1 1/8"*

Mean pitch of stays *9.06*

Pitch across wide

Spaces *12 3/4"*

Working pressures by rules *190 lbs*

Girders to Chamber tops: Material *Steel*

Depth and thickness of

Under at centre *9 1/2" x 1 1/2"*

Length as per rule *32"*

Distance apart *8 3/4"*

Number and pitch of Stays in each *3 - 7 1/8"*

Working pressure by rules *210 lbs*

Superheater or Steam chest: how connected to boiler *None*

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

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

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

VERTICAL DONKEY BOILER—

No.

Description

Manufacturers of steel

Made at

By whom made

When made

Where fixed

Working pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Fire grate area

Description of safety valves

No. of safety valves

Area of each

Pressure to which they are adjusted

If fitted with easing gear

If steam from main boilers can

Enter the donkey boiler

Dia. of donkey boiler

Length

Material of shell plates

Thickness

Range of tensile

Length

Descrip. of riveting long. seams

Dia. of rivet holes

Whether punched or drilled

Pitch of rivets

Gap of plating

Per centage of strength of joint

Boiler

Working pressure of shell by rules

Thickness of shell crown plates

Radius of do.

No. of Stays to do.

Dia. of stays

Diameter of furnace Top

Bottom

Length of furnace

Thickness of furnace plates

Description of joint

Working pressure of furnace by rules

Thickness of furnace crown

Radius

Radius of do.

Stayed by

Diameter of uptake

Thickness of uptake plates

Thickness of water tubes

The foregoing is a correct description,

Manufacturer.

Dates

During progress of work in shops -- *Mar. 1916. 1. 3. 6. 8. 10. 14. 15. 17. 20. 22. 27. 28. 30. April 4. 7. 10. 5. 18. 20. 26. 28. May 1. 3. 5. 6. 9. 12. 15. 19. 22. 24. 27. 30. June 1. 3. 6. 7. 14.*

Survey

During erection on board vessel -- *July. 14. 17. 19. 21. 24. Aug. 2. 5. 14. 19. 22. 28. 30. 31. Sept. 1. 5. 6. 13. 20. 29. Oct. 2. 3. 4. 6. 7. 10. 12. 21. 24. 27. 28. Nov. 7. 8.*

Building

Total No. of visits *In Montreal 39.*

Is the approved plan of main boiler forwarded herewith *No.*

" " " donkey " " " *No.*

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

Certificate (if required) to be sent to
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee .. £	:	:	When applied for,
Special £	:	:19.....
Donkey Boiler Fee £	:	:	When received,
Travelling Expenses (if any) £	:	:19.....

Committee's Minute

See other report

New York DEC 28 1916

Assigned

Engineer Surveyor to Lloyd's Register of British & Foreign Ships

FRI. 23 JUN. 1922
FRI. JUL. 14 1922

Lloyd's Register
Foundation