

REPORT ON BOILERS.

REC'D NEW YORK FEB 14 1922

No. 1911

Date of writing Report

June 9, 1921

When handed in at Local Office

June 20, 1921

Port of Montreal

Received at London Office

MON. MAR. 1922

No. in Survey held at

Montreal

Reg. Book.

Date, First Survey Nov. 17, 1920.

Last Survey July 3rd, 1921

1921

(Number of Visits 43)

Gross 7177.64

Net 4413.44

When built 1921-2

When made 1920

When made 1921

6790 Sapp on the Single Screw Steamer "Canadian Constructor"

Master

Webb

Built at

Halifax N.S.

By whom built

Halifax Shipyards Ltd.

Engines made at Three Rivers P.Q.

By whom made

Lidewater Shipbuilders

Boilers made at Montreal

By whom made

Canadian Dickers Ltd.

Registered Horse Power 326

Owners

Canadian Government Merchant Marine Corp. Port belonging to Halifax N.S.

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY

Manufacturers of Steel North Steel Co. DEL. USA.

(Letter for record S.)

Total Heating Surface of Boilers

10,848 sq ft

Is forced draft fitted

yes

No. and Description of

Boilers 4 Scotch Marine Type.

Working Pressure

180 lbs

Tested by hydraulic pressure to

360 lbs

Date of test 3-5-21

No. of Certificate 81

Can each boiler be worked separately

yes

Area of fire grate in each boiler

66.12 sq ft

No. and Description of

safety valves to each boiler 2 - 3 1/2" spring loaded.

Area of each valve

9.62 sq in

Pressure to which they are adjusted 180 lbs

Are they fitted with easing gear

yes

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

22"

Mean dia. of boilers

15' 6"

Length 11' 6"

Material of shell plates

S.

Thickness

1 3/8"

Range of tensile strength

26-30 tons

Are the shell plates welded or flanged

No.

Descrip. of riveting: cir. seams

D

long. seams T.R. DBS.

Diameter of rivet holes in long. seams

1 3/8"

Pitch of rivets

9 3/16"

Top of plates or width of butt straps

20"

Per centages of strength of longitudinal joint

rivets 85.0

plate 87.35

Working pressure of shell by

rules 187.5 lbs

Size of manhole in shell

16" x 12"

Size of compensating ring

37 1/2" x 33"

No. and Description of Furnaces in each

boiler 3 Heighon

Material S.

Outside diameter 4' 2 1/4"

Length of plain part

top 3 3/8"

bottom 3 3/8"

Thickness of plates crown 2 1/32"

bottom 1/32"

Description of longitudinal joint

Weld.

No. of strengthening rings

1

Working pressure of furnace by the rules

203 lbs

Combustion chamber

plates: Material S.

Thickness: Sides 5/8"

Back 5/8"

Top 5/8"

Bottom 1 5/8"

Pitch of stays to ditto: Sides 9' x 7 1/2"

Back 8' x 8 1/4"

Top 9' x 7 1/2" If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

197 lbs

Material of stays

S.

smallest part 1.760 Area supported by each stay

67.50"

Working pressure by rules

225

End plates in steam space: Material S.

Thickness 1 1/8"

Pitch of stays 16' x 18"

How are stays secured

D.H. nuts

Working pressure by rules

203

Material of stays

S.

Area supported by each stay

298 sq in

Working pressure by rules

192 lbs

Material of Front plates at bottom

S.

Lower back plate

S.

Thickness 1 3/16"

Greatest pitch of stays 13 1/2" x 8 1/4"

Working pressure of plate by rules

187.5 lbs

Diameter of tubes 2 1/2"

Pitch of tubes 3 3/4" x 3 3/4"

Material of tube plates

S.

Thickness: Front 1 3/16"

Back 3/4"

Mean pitch of stays 11 1/4" x 7 1/2"

water spaces 1 3/2"

Working pressures by rules

185 lbs

Girders to Chamber tops: Material

S.

Depth and thickness of

order at centre 10" x 3/4" 86"

Length as per rule

30 5/8"

Distance apart

9"

Number and pitch of Stays in each

3 - 7 1/2"

Working pressure by rules

211 lbs

Steam dome: description of joint to shell

✓

% of strength of joint

Diameter

✓

Thickness of shell plates

✓

Material

✓

Description of longitudinal joint

✓

Pitch of rivets

✓

Working pressure of shell by rules

✓

Crown plates

✓

Thickness

✓

How stayed

✓

PERHEATER. Type

✓

Date of Approval of Plan

✓

Tested by Hydraulic Pressure to

✓

Date of Test

✓

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

✓

Diameter of Safety Valve

✓

Pressure to which each is adjusted

✓

Is Easing Gear fitted

✓

FOR CANADIAN VIKERS LIMITED

The foregoing is a correct description,

W. J. Alderson

Manufacturer.

During progress of 1920. Nov. 17. 30 Dec 6. 13. Jan 12. 24. 31 Feb 4. 9. 18. 23. Mar 1. Is the approved plan of boiler forwarded herewith

work in shops -- 15. 24. 28. Apr. 11. 22. May 14. 31. June 9.

During erection on 1921 Sept 28-29 Oct 3-4 5-12-14-17-21-28-31 Nov 4-8-11-15-22-25-28. Total No. of visits 43

board vessel -- Dec 9-15-21. 1921 Jan 3-4

GENERAL REMARKS

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

These Boilers have been constructed under special survey and in accordance with the rules and the approved plans. The materials have been tested according to rule & the workmanship is good. They will be forwarded to Halifax N.S. for installing in the vessel. The boilers have been installed on board together with mountings & accessories & tested by hydraulic pressure 320 lbs. and afterwards under steam and safety valves adjusted to 180 lbs. In my opinion they are eligible for record of LMC 1-22

Survey Fee

7.50

Travelling Expenses (if any)

11.50

When applied for June 9 1921

When received June 16 1921

Committee's Minute

FRI. 10 MAR. 1922

Signed

W. J. Alderson

Engineer Surveyor to Lloyd's Register of Shipping.

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Lloyd's Register Foundation

W280-0101

W280-0102