

REPORT ON BOILERS.

No. 1299

THE DEC. 14 1920

Received at London Office

Date of writing Report

1921

When handed in at Local Office

Nov. 15th 1920

Port of

Halifax N.S.

No. in Survey held at

New Glasgow Amherst N.S.

Date, First Survey

April 23/20

Last Survey

Sept. 28th 1920

Reg. Book.

on the *Steel Single screw steamer "Volunda" (Yard No. 7)*

(Number of Visits 33)

Gross 1788.83
Net 1055.80

Master

James Mack

Built at

New Glasgow N.S.

By whom built

Nova Scotia Steel & Coal Co. Ltd.

When built

1920

Engines made at

Hubbrook, Quebec

By whom made

Canadian Engineers Ltd.

When made

1920

Boilers made at

" " New Glasgow N.S.

By whom made

Nova Scotia Steel & Coal Co. Ltd.

When made

1920

Registered Horse Power

166

Owners

Nasis Steamship Co. Ltd.

Port belonging to

Pictou, N.S.

MULTITUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel Luker Steel Co. Porterville, Pa.

Letter for record

Total Heating Surface of Boilers

2900

Is forced draft fitted

no

No. and Description of

Boilers 2 Scotch Multitubular Marine

Working Pressure

185 lbs.

Tested by hydraulic pressure to

370

Date of test

Aug. 1st / 20

No. of Certificates

11412

Can each boiler be worked separately

yes

Area of fire grate in each boiler

42 sq'

No. and Description of

safety valves to each boiler

2 spring loaded

Area of each valve

7.06

Pressure to which they are adjusted

185 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

12"

Mean dia. of boilers

12'-9"

Length

10'-9"

Material of shell plates

Steel

Thickness

1 3/16"

Range of tensile strength

28-32

Are the shell plates welded or flanged

flanged

Descrip. of riveting: cir. seams

D.R. Lap joint

long. seams

T.R. D.B. straps

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

8 3/4"

Gap of plates or width of butt straps

1 9/16"

Per centages of strength of longitudinal joint

87.5%

Working pressure of shell by

rules

208

Size of manhole in shell

12 x 16"

Size of compensating ring

33 x 36"

No. and Description of Furnaces in each

boiler

2 Morrison

Material

Steel

Outside diameter

48 5/8"

Length of plain part

7 1/2'

Thickness of plates

5/8"

Description of longitudinal joint

yes

No. of strengthening rings

205

Working pressure of furnace by the rules

205

Combustion chamber

plates: Material

Steel

Thickness: Sides

9/16"

Back

9/16"

Top

9/16"

Bottom

1"

Pitch of stays to ditto: Sides

6 x 9"

Back

7 1/16 x 8"

Top

7/16 x 7/16"

If stays are fitted with nuts or riveted heads

inside nutted

Working pressure by rules

193

Material of stays

Steel

Area at

smallest part

1' 3/4"

Area supported by each stay

56.48

Working pressure by rules

240

End plates in steam space: Material

Steel

Thickness

1"

Pitch of stays

1/4 x 15"

How are stays secured

nutted

Working pressure by rules

208

Material of stays

Steel

Area at smallest part

3.98

Area supported by each stay

40.0

Working pressure by rules

197

Material of Front plates at bottom

Steel

Thickness

7/8"

Material of

lower back plate

Steel

Thickness

3"

Pitch of tubes

4 x 4 5/8"

Material of tube plates

Steel

Thickness: Front

7/8"

Back

7/8"

Mean pitch of stays

8.6"

Pitch across wide

water spaces

14' 2"

Working pressures by rules

240

Girders to Chamber tops: Material

Steel

Depth and thickness of

order at centre

9" x 1 1/2"

Length as per rule

33"

Distance apart

7 1/2"

Working pressure by rules

250

Steam dome: description of joint to shell

yes

% of strength of joint

yes

diameter

Thickness of shell plates

yes

Material

yes

Description of longitudinal joint

yes

Diam. of rivet holes

yes

Pitch of rivets

yes

Working pressure of shell by rules

yes

Crown plates

yes

Thickness

yes

How stayed

yes

PERHEATER. Type

yes

Date of Approval of Plan

yes

Tested by Hydraulic Pressure to

yes

Date of Test

yes

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

yes

Diameter of Safety Valve

yes

Pressure to which each is adjusted

yes

Is Easing Gear fitted

yes

The foregoing is a correct description,

Nov Scotia Steel & Coal Co. Limited
Manufacturer.

Dates

During progress of

work in shops - - - April 22, May 14, 20, 27, 28, June 3, 5, 7, 9, 16

while

During erection on

board vessel - - - July 6, 19, 20, 22, 27, Aug. 10

ilding

board vessel - - - Aug. 25, 9, 10, 12, 14, 18, 26, 29, Sept. 7, 23, 24, 27

28.

Is the approved plan of boiler forwarded herewith

yes

Total No. of visits

33

GENERAL REMARKS

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

These boilers have been constructed under special survey and in accordance with the Society's rules and approved plans, dated Oct. 14/18, the qualities of material and workmanship being satisfactory, and in my opinion, to be classed L.M.C.

Survey Fee

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When applied for,

191

Travelling Expenses (if any)

\$40 : 50 :

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When received,

11. 1. 191

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