

REPORT ON WATER TUBE BOILERS.

No. 19830

Received at London Office

WED. 16 FEB 1921

Date of writing Report *Aug 20 1920* When handed in at Local Office

191

Port of *New York*No. in
Reg. Bk.

Survey held at

Bayonne N.J.

Date, First Survey

Last Survey

191

on the

Water tube boiler for Motor S.B. Co's 2154

Number of Visits

Gross *1625*Net *962*

Master

H. Heinke

Built at

Elizabethport N.J.

By whom built

Bethlehem S.B. Co. (New Plant)

Engines made at

Buffalo

By whom made

A. G. Trout Co

When made

1920

Boilers made at

Bayonne N.J.

By whom made

Babcock & Wilcox Co

When made

1920

Registered Horse Power

Owners

International Products S.S. Co

Port belonging to

*New York*WATER TUBE BOILERS—MAIN, ~~AUXILIARY OR DONKEY~~

Manufacturers of Steel

Midvale Steel & Lukens Co

(Letter for Record

S)

Date of Approval of plan

June 7 1920

Number and Description or Type

of Boilers

2 Water tube

Working Pressure

200

Tested by Hydraulic Pressure to

400

Date of Test

2-12-20

No. of Certificate

433

Can each boiler be worked separately

Yes

Total Heating Surface of Boilers

8220

Is forced draught fitted

Yes

Area of fire grate (coal) in each Boiler

58.3

Total grate area of boilers in vessel including

Main and Auxiliary

2 Spring loaded

No. and type of burners (oil) in each boiler

3, Lodi

No. and description of safety valves on

each boiler

2 Spring loaded

Area of each valve

7.07

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 bulkheads or woodwork

24 Bulkhead

Height of Boiler

14.9

Width and Length

10' 9 1/2" x 15' 0 9/16"

Steam Drums:—Number in each boiler

One

Inside diameter

42"

Material of plates

Steel

Thickness

1/2"

Range of Tensile Strength

55/65,000 lbs

Are drum shell plates welded or flanged

No

Description of riveting

Cir. seams

S.R.LAP

long. seams

D.R.D.B.S.

Diameter of rivet holes in long. seams

29/32

Pitch of Rivets

29/32 9 1/4"

Lap of plates or width of butt straps

9 3/4" 14 3/4"

Thickness of straps

9/16"

Percentage strength of long. joint:—Plate

80

Rivet

107

Diameter of tube holes in drum

4 1/32"

Pitch of tube holes

7"

Percentage strength of shell in way of tubes

42

If Drum has a flat side, state method of staying

Yes

Depth and thickness of girders at centre

(if fitted)

233 lbs

Distance apart

Yes

Number and pitch of stays in each

Yes

Working pressure

by rules

233 lbs

Steam Drum Heads or Ends:—Material

Steel

Thickness

19/32

Radius or how stayed

42

Size of Manhole or Handhole

15" x 11"

Water Drums:—Number in each boiler

Yes

Inside Diameter

Yes

Material of plates

Yes

Thickness

Yes

Range of tensile strength

Yes

Are drum shell plates welded

or flanged

Yes

Description of riveting:—Cir. seams

Yes

long. seams

Yes

Diameter of Rivet Holes in

long. seams

Yes

Pitch of rivets

Yes

Lap of plates or width of butt straps

Yes

Thickness of straps

Yes

Percentage strength of long. joint:—Plate

Yes

Rivet

Yes

Diameter of tube holes in drum

Yes

Pitch of tube holes

Yes

Percentage strength of drum shell in way of tubes

Yes

Water Drum Heads or Ends:—Material

Yes

Thickness

Yes

Radius or how stayed

Yes

Size of manhole or handhole

Yes

Headers or Sections:—Number

17

Material

Steel

Thickness

1/2"

Tested by Hydraulic Pressure to

500 lbs

Material of Stays

Yes

Area at smallest part

Yes

Area supported by each stay

Yes

Working Pressure by Rules

256

Tubes:—Diameter

4"

Thickness

6 1/8 B.W.G.

Number

340

Steam Dome or Collector:—Description of Joint to Shell

Yes

Percentage strength of Joint

Yes

Diameter

Yes

Thickness of shell plates

Yes

Material

Yes

Description of longitudinal joint

Yes

Diameter of Rivet Holes

Yes

Pitch of Rivets

Yes

Working Pressure of shell

by Rules

Yes

Crown or End Plates:—Material

Yes

Thickness

Yes

How stayed

Yes

SUPERHEATER.

Type

Not

Date of Approval of Plan

Fitted

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

Is a drain cock or valve fitted at lowest point of superheater

Yes

Number, diameter, and thickness of tubes

Yes

Spare Gear.

Yes

Gaskets or joints:—Manhole

Yes

Handhole

Yes

Handhole plates

Yes

The foregoing is a correct description.

Yes

The Babcock & Wilcox Co. Manufacturer.

Rev W Hubbard Marine Dept

Is the approved plan of boiler forwarded herewith

Yes

Total No. of visits

Yes

Dates

1920, Oct 21

During progress of

*work in shops**2*

During erection on

*board vessel**2*

while building

*2**2**2**2**2**2**2**2**2**2**2**2**2**2**2**2*

GENERAL REMARKS

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

*These Boilers have been constructed under**Special Survey in accordance with the Rules & approved plans. The materials & workmanship are good**& efficient. The hydraulic test on main drums & tube sections proved satisfactory.**The Boilers have been fitted on board in a satisfactory manner**and proved satisfactory under steam.**Survey Fee**When applied for, 191**Travelling Expenses (if any)**When received, 191**Committee's Minute**New York**FEB -1 1921**Assigned**See other Rpt - May 1920**191*