

Rpt. 5c.

REPORT ON WATER TUBE BOILERS.

Phl. Rpt. No. 6889

DRUMS

No. 705

Received at London Office

13 APR 1935

Date of writing Report Oct. 16th 1934 When handed in at Local Office

19

Port of Cleveland, Ohio.

No. in Survey held at Cleveland, Ohio.

Date, First Survey June 26th

Last Survey August 30th 1934.

Reg. Bk.

on the Hull No. 414 now named SOCONY VACUUM.

(Number of Visits 18)

Tons Gross 9811.70

Net 8894

Master

Built at Camden N.J.

By whom built New York S. B. Corp.

When built 1935

Engines made at

Jenison No.

By whom made

De Laval Steam Turbine Co.

When made 1934

Boilers made at

Cleveland, Ohio.

By whom made

Foster Wheeler Corp.

When made 1934

Registered Horse Power

4000

Owners

Socony Vacuum Transportation Co.

Port belonging to

New York

WATER TUBE BOILERS—MAIN, ~~AUXILIARY~~ OR ~~DONKEY~~—Manufacturers of SteelOtis Steel Co.
Luken Steel Co.

(Letter for Record) Date of Approval of plan April 12th, 1934.

Number and Description or Type

of Boilers Drums 3 upper and 6 lower

Working Pressure 450 lbs. Tested by Hydraulic Pressure to 725 lbs.

Date of Test 7/16/34

No. of Certificate 242-243-244 Can each boiler be worked separately

Total Heating Surface of Boilers

Is forced draught fitted

Area of fire grate (coal) in each Boiler

Total grate area of boilers in vessel including

Main and Auxiliary

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

No. and description of safety valves on

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

Height of Boiler

Width and Length

Steam Drums:—Number in each boiler

one

Inside diameter

48"

Material of plates

steel

Thickness 1-9/16"

Tensile Strength

64,000 lbs. min.

Are drum shell plates welded or flanged

no

Description of riveting:—

Cir. seams

D.R.

long. seams D.R. D.B.S.

Diameter of rivet holes in long. seams 1-15/32"

Pitch of Rivets

4.8"

Width of butt straps

16.4"

Thickness of straps

1-1/16"

Percentage strength of long. joint:—Plate

69.5

Rivet

62.0

Diameter of tube holes in drum

1-17/32"

Pitch of tube holes

3-1/32"

Percentage strength of shell in way of tubes

49.4

If Drum has a flat side state method of staying

Depth and thickness of girders at centre

(If fitted)

Distance apart

Number and pitch of stays in each

Working pressure

by rules

512 lbs.

Steam Drum Heads or Ends:—Material

steel

Thickness

1-27/32"

Radius or how stayed

48"

Size of Manhole or Handhole

12" x 16"

Water Drums:—Number in each boiler

two

Inside Diameter

30"

Material of plates

steel

Thickness

1-3/32"

Tensile strength

64000 lbs. min.

Are drum shell plates welded

no

Description of riveting:—Cir. seams

D.R.

long. seams

D.R. D.B.S.

Diameter of Rivet Holes in

long. seams

1-7/32"

Pitch of rivets

4-3/8"

Width of butt straps

13"

Thickness of straps

3/4" & 1-1/16"

Percentage strength of long. joint:—Plate

72.0

Rivet

67.0

Diameter of tube holes in drum

1-17/32"

Pitch of tube holes

3-1/32"

Percentage strength of shell in way of tubes

49.4

Water Drum Heads or Ends:—Material

steel

Radius or how stayed

30"

Size of manhole or handhole

12" x 16"

Material of Stays

Tested by Hydraulic Pressure to

725 lbs.

Material of Stays

Area at smallest part

Area supported by each stay

Working Pressure by Rules

562 lbs.

Thickness No. 10 & 9 B.W.G.

Number

2

Steam Dome or Collector:—Description of Joint to Shell

Diameter

108-2"

Thickness of shell plates

Material

Description of longitudinal joint

Diameter of Rivet Holes

Pitch of Rivets

Working Pressure of shell

by Rules

Crown or End Plates:—Material

Thickness

How stayed

SUPERHEATER. 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

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

Number, diameter, and thickness of tubes

Spare Gear. Tubes

Gaskets or joints:—Manhole

Handhole

Handhole plates

The foregoing is a correct description,

O. Krigant. Work Mgr. Manufacturer.

Dates of Survey

During progress of

work in shops --

June 26, 27, July 3, 5, 9, 12, 16, 17, 24,

Is the approved plan of boiler forwarded herewith

yes

while

During erection on

building

board vessel --

25, August 2, 6, 13, 15, 21, 24, 27, 30.

Total No. of visits

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

This report covers the Drums for three

boilers intended for installation in New York Shipbuilding Company's Hull No. 414. The drums

were built in accordance with the approved plans. The materials and workmanship were found to be

sound and efficient. Boiler certificates Nos. 242-3-4 and approved plans accompany this report.

Survey Fee ...

When applied for, 19

Travelling Expenses (if any) £

When received, 19

Committee's Minute

Assigned

See Phl. Rpt. 6889

NEW YORK APR 3 - 1935

Engineer Surveyor to Lloyd's Register of Shipping.

© 2020

Lloyd's Register

Foundation