

REPORT ON WATER TUBE BOILERS.

No. 1040.

Received at London Office

16 FEB 1928

Date of writing Report 5th Feb 1928 When handed in at Local Office

19

Port of Bremen

No. in

Survey held at

Vignacade

Date, First Survey

6th Jan.

Last Survey

1st Feb 1928

Reg. Bk.

40275

on the

STEEL TWIN SC "C.O. STILLMAN"

(Number of Visits)

2

Gross

16436

Net

9643

Master

Built at

Vignacade

By whom built

Kramer Vulkan

When built

1928

Engines made at

Vignacade

By whom made

Kramer Vulkan

When made

1925-28

Boilers made at

Kiel

By whom made

Friedr. Krupp, Germaniawerk

When made

1926

Registered Horse Power

Owners

International Petroleum Co. Ltd.

Port belonging to

Toronto

WATER TUBE BOILERS

MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Krupp, Essen, Germany

(Letter for Record)

Date of Approval of plan

21/1/1926

Number and Description or Type

of Boilers 2 Water Tube Donkey Boilers

Working Pressure

17.5 kg/cm² (250 lb)

Tested by Hydraulic Pressure to

425 lb

Date of Test

3/9/26

No. of Certificate

440-441

Can each boiler be worked separately

Yes

Total Heating Surface of Boilers

300 sq. m

Is forced draught fitted

Yes

Area of fire grate (coal) in each Boiler

oil fired

Total grate area of boilers in vessel including

Main and Auxiliary

Yes

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

3, Krupp

No. and description of safety valves on

each boiler

2 spring loaded

Area of each valve

3818.3 mm²

Pressure to which they are adjusted

17.5 kg/cm²

Are they fitted with easing gear

Yes

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

No

Smallest distance between boilers or uptakes and bunkers or woodwork

750 mm

Height of Boiler

5124 mm

Width and Length

3358 mm

Steam Drums:—Number in each boiler

1

Inside diameter

1400 mm

Material of plates

Steel

Thickness

24 mm

Range of Tensile Strength

44-50 kg/cm²

Are drum shell plates welded or flanged

flanged

Description of riveting:—

Cir. seams

lap double

long. seams

double butt double

Diameter of rivet holes in long. seams

28 mm

Pitch of Rivets

93 mm

Lap of plate or width of butt straps

266 mm

Thickness of straps

19 mm

Percentage strength of long. joint:—Plate

69.5%

Rivet

84.6%

Diameter of tube holes in drum

95 mm

Pitch of tube holes

225 mm

Percentage strength of shell in way of tubes

57.8%

If Drum has a flat side state method of staying

Yes

Depth and thickness of girders at centre

(if fitted)

Yes

Distance apart

Yes

Number and pitch of stays in each

Yes

Working pressure

by rules

17.98 kg/cm²

Steam Drum Heads or Ends:—Material

Steel

Thickness

30 mm

Radius or how stayed

1260 mm

Size of Manhole or Handhole

320 x 425 mm

Water Drums:—Number in each boiler

Yes

Inside Diameter

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

2

Material

Steel

Thickness

22 mm - 19 mm

Tested by Hydraulic Pressure to

425 lb

Material of Stays

Steel

at smallest part

34 mm

Area supported by each stay

24000 mm²

Working Pressure by Rules

17.98 kg/cm²

Tubes:—Diameter

85 mm

Thickness

6.5 mm - 5 mm

Number

31 - 140

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

Yes

by Rules

Yes

Crown or End Plates:—Material

Yes

Thickness

Yes

How stayed

Yes

SUPERHEATER.

Type Schmidt Patent

Date of Approval of Plan

25/5/26

Tested by Hydraulic Pressure to

Date of Test

11/10/26

Is a safety valve fitted to each section of the superheater which can be shut off from the Boiler

Yes

Diameter of Safety Valve

30 mm

Pressure to which each is adjusted

17.5 kg/cm²

Is easing gear fitted

Yes

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

Yes

Number, diameter, and thickness of tubes

8 coils - 32 mm - 3 mm

Spare Gear.

Tubes

Yes

Gaskets or joints:—Manhole

Yes

Handhole

Yes

Handhole plates

Yes

The foregoing is a correct description,

(Please see Hamburg Report No 17211) Manufacturer.

Is the approved plan of boiler forwarded herewith

with Hamburg Report No. 17211

Total No. of visits

2

Dates

During progress of

work in shops

During erection on

board vessel

6/1 & 1/2. 1928

GENERAL REMARKS

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

Three Water Tube Donkey Boilers

have been satisfactorily fitted on board examined under steam found tight and

their safety valves have been adjusted to 17.5 kg/cm² (250 lb). Thickness of adjusting

washers: Forward. Apt. Superheater.

Steam and Boiler 16.7 mm. 17.3 mm. 11.2 mm.

Port " 18.8 " 18.4 " 10.5 "

In my opinion these Boilers are eligible to

be classed in the Register Book with record of

14.2. 1928 Water Tube B. R. 250 lb.

Survey Fee

£

4

0

0

0

When applied for,

14.2.

1928

Water Tube B. R. 250 lb.

Travelling Expenses (if any) £

0

0

10

When received,

5.3.

1928

Water Tube B. R. 250 lb.

Y. H. C. Ham.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUES. 6 " " 1928

Assigned

See B.R. 41. attached



© 2021

Lloyd's Register Foundation

005726-005739-0220