

REPORT ON WATER TUBE BOILERS.

No. 105222

Received at London Office

Date of writing Report

19

When handed in at Local Office

29 APR 1948

Port of *Newcastle-on-Tyne*

No. in

Survey held at

Blyth

Date, First Survey

8th March '48

Last Survey

24th March 1948

Reg. Bk.

*24330*on the *steel sc. steamer "FREEMAN HATCH"*(Number of Visits *8*)Gross *1793*Tons Net *995*Built at *Sturgeon Bay, Wisconsin, U.S.A.*

By whom built

Leatham D. Smith Shp. Co.

When built

*1943*Engines made at *Boring, Pa.*

By whom made

Apax Mifflaw.

When made

*1943*Boilers made at *Sagmar, Mich. U.S.A.*

By whom made

Millicks Boiler Co.

When made

*1943*Nominal Horse Power *394*

Owners

Ministry of Transport.

Port belonging to

London.

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel

Date of Approval of plan

of Boilers *Two, Water Tube, 3 drum (Millicks)*Design Press: *250 LBS/sq*Working Pressure *220 LBS/sq*

Number and Description or Type

No. of Certificate

Can each boiler be worked separately

yes

Total Heating Surface of Boilers

4800 sq ft.

Is forced draught fitted

yes

Area of fire grate (coal) in each Boiler

56 sq ft.

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

each boiler *two on drum, 1 on side*Area of each set of valve *5.52 + 1.23 sq = 6.75 sq*

No. and description of safety valves on

*DRUM 245 LBS/sq**SHR. 225 LBS/sq*

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

Height of boiler

Width and Length

Steam Drums:—Number in each boiler

One

Inside diameter

3' 9 1/2"

Thickness of plates

15/16"

Range of Tensile Strength

Are drum shell plates welded or flanged

Description of riveting:—

Cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plate or width of butt straps

Thickness of straps

Percentage strength of long. joint:—Plate

Rivet

Diameter of tube holes in drum

*2 1/2" x 1 1/2"*Pitch of tube holes *4 1/2" x 2 1/2"*

Percentage strength of shell in way of tubes

40

Working pressure by rules

Steam Drum Heads or Ends:—Range of tensile strength

Thickness of plates

1 1/8"

Radius or how stayed

Size of manhole or handhole

16" x 12"

Working pressure by rules

Water Drums:—Number

in each boiler

two

Inside Diameter

2' 3"

Thickness of plates

9/16"

Range of tensile strength

Are drum shell plates

welded or flanged

welded

Description of riveting:—Cir. seams

long. seam

Diameter of rivet holes in

long. seams

Pitch of rivets

Lap of plates or width of butt straps

Thickness of straps

Percentage strength of long. joint:—Plate

Rivet

Diameter of tube holes in drum

2 1/2" x 1 1/2"

Pitch of tube holes

4 1/2" x 2 1/2"

Percentage strength of drum shell in way of tubes

40

Working pressure by rules

Water Drum Heads or Ends:—Range of

Tensile strength

Thickness of plates

1 1/8"

Radius or how stayed

Size of manhole or handhole

16" x 12"

Working pressure by rules

Headers or Sections:—Number

Material

Thickness

Tested by Hydraulic Pressure to

Tubes:—Diameter

Thickness

Number

Steam Dome or Collector:—Description of Joint to Shell

Inside diameter

Thickness of shell plates

Range of tensile strength

Description of longitudinal joint

Diameter of rivet holes

Pitch of rivets

Lap of plate or width of

butt straps

Thickness of straps

Percentage strength of long. joint

Plate

Rivet

Working Pressure of shell by rules

Crown or End Plates:—Range of tensile strength

Thickness

Radius or how stayed

Working pressure by rules

SUPERHEATER. Drums or Headers:—Number in each boiler

two

Inside Diameter

6 1/2"

Thickness

3/4"

Material

Range of tensile strength

Are drum shell plates welded

or flanged

Description of riveting:—Cir. seams

long. seams

Diameter of rivet holes in

long. seams

Pitch of rivets

Lap of plates or width of butt straps

Thickness of straps

Percentage strength of long. joint:—Plate

Rivet

Diameter of tube holes in drum

Pitch of tube holes

Percentage strength of drum shell in way of tubes

Working pressure by rules

Drum Heads or Ends:—

Thickness

Range of tensile strength

Radius or how stayed

Size of manhole or handhole

Plugs

Working pressure by rules

Number, diameter, and thickness of tubes

8 x 1 1/2" x .15"

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

No. and description of Safety Valves

Superheater can not be shut off.

Area of each set of valves

Pressure to which they are adjusted

See above

Is easing gear fitted

Spare Gear. Has the spare gear required by the rules been supplied

yes

The foregoing is a correct description,

Manufacturer.

Dates of Survey

During progress of

work in shops - - -

while

During erection on

board vessel - - -

Is this boiler a duplicate of a previous case

*yes*If so, state vessel's name and report No. *"Lahan Howes"*

GENERAL REMARKS

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

*For the information of the**Committee*

Survey Fee

LICENCE SUPERVISION

Travelling Expenses (if any)

£

:

:

When applied for,

10

When received,

10

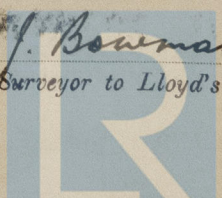
Committee's Minute

FRI. 28 MAY 1948

Assigned

See F.E. mch. rpt.

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register

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