

REPORT ON WATER TUBE BOILERS.

No. 49593

Date of writing Report

191

When handed in at Local Office

9.9.1929

Received at London Office

Port of

Glasgow

11 SEP 1929

No. in

Survey held at

Glasgow

Date, First Survey

8.1.29

Last Survey

30.11.29

Reg. Bk.

40752

on the

Steel Linn Locomotive "Shwin"

Number of Visits

40

Gross

970.11

Tons

Net 377.39

Master

Built at

Glasgow

By whom built

Dr. W. Henderson

When built

1929

Engines made at

Glasgow

By whom made

James & Co. Ltd

When made

1929

Boilers made at

Glasgow

By whom made

James & Co. Ltd

When made

1929

Registered Horse Power

Owners South Indian Railway Co. Ltd

Port belonging to

Glasgow

WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.

(Letter for Record

Date of Approval of plan

21.12.29

Manufacturers of Steel

Steel Company of Scotland

of Boilers

2 James

Working Pressure

225 lbs

Tested by Hydraulic Pressure to

388

Date of Test

22.4.29

No. of Certificate

8262/3

Can each boiler be worked separately

Yes

Total Heating Surface of Boilers

5000 sq ft

Is forced draught fitted

Yes

Area of fire grate (coal) in each Boiler

58 1/2 sq ft

Total grate area of boilers in vessel including

Main and Auxiliary

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

2 Improved High Pressure

No. and description of safety valves on

each boiler

2 Improved High Pressure

Area of each valve

3.98

Pressure to which they are adjusted

225 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

Well clear

Height of Boiler

10' 8"

Width and Length

15' 7" x 10' 3"

Steam Drums:—Number in each boiler

One

Inside diameter

50"

Material of plates

S

Thickness

7/8"

Range of Tensile Strength

26-30 tons

Are drum shell plates welded or flanged

No

Description of riveting:—

Cir. seams

DR. overlap

long. seams

DR. overlap

Pitch of Rivets

3 1/2"

Lap of plates or width of butt straps

8"

Thickness of straps

1/2"

Percentage strength of long. joint:—Plate

77

Rivet

85.5

Diameter of tube holes in drum

1 3/4"

Pitch of tube holes

2 1/2"

Percentage strength of shell in way of tubes

33.3

If Drum has a flat side state method of staying

Yes

Depth and thickness of girders at centre

(if fitted)

Yes

Distance apart

Number and pitch of stays in each

Working pressure

by rules

233

Steam Drum Heads or Ends:—Material

S

Thickness

1 1/8"

Radius or how stayed

50"

Size of Manhole or Handhole

16 x 12

Water Drums:—Number in each boiler

Two

Inside Diameter

30"

Material of plates

S

Thickness

3/8"

Range of tensile strength

26-30 tons

Are drum shell plates welded

or flanged

No

Description of riveting:—Cir. seams

DR. overlap

long. seams

DR. overlap

long. seams

Yes

Pitch of rivets

3 1/2"

Lap of plates or width of butt straps

8"

Thickness of straps

1/2"

Percentage strength of long. joint:—Plate

75.8

Rivet

88.0

Diameter of tube holes in drum

1 3/4"

Pitch of tube holes

2 1/2"

Percentage strength of drum shell in way of tubes

33.3

Water Drum Heads or Ends:—Material

S

Thickness

3/4"

Radius or how stayed

30"

Size of manhole or handhole

16 x 12

Headers or Sections:—Number

Material

S

Thickness

3/8"

Tested by Hydraulic Pressure to

Material of Stays

Area at smallest part

Area supported by each stay

Working Pressure by Rules

Tubes:—Diameter

Thickness

S

Number

S

Crown or End Plates:—Material

S

Thickness

3/8"

How stayed

Working Pressure of shell

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

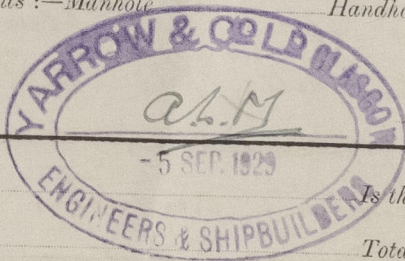
Handhole

Handhole plates

The foregoing is a correct description,

Manufacturer.

Dates of Survey
During progress of work in shops - -
while building - -
During erection on board vessel - -



Is the approved plan of boiler forwarded herewith

Total No. of visits

GENERAL REMARKS

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

These Boilers have been built under special Survey and in accordance with the Rules. The Materials & workmanship are good. On completion the boiler has been tested by hydraulic pressure and found tight and afterwards efficiently secured in position on board.

Survey Fee ... £

When applied for

191

Travelling Expenses (if any) £

When received

191

Committee's Minute GLASGOW

10 SEP 1929

Assigned See accompanying machinery report.

Geoffrey Munn
Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation