

REPORT ON BOILERS.

No. 4590

Hull - 184127

Dun.

SAT 20 OCT 1906

Port of **MIDDLESBROUGH-ON-TEES.**

Received at London Office

No. in Survey held at **Stockton**

Date, first Survey **March 28**

Last Survey **Oct 17th 1906**

Reg. Book.

on the **Donkey Boiler (No 3688) S. S. Ban. Hong Liong**

(Number of Visits)

Tons { Gross
Net

Master _____ Built at _____ By whom built _____ When built _____
 Engines made at **Hull** By whom made **Eccles & Co.** when made **1906**
 Boilers made at **Stockton** By whom made **Riley Bros** when made **1905-6**
 Registered Horse Power _____ Owners _____ Port belonging to _____

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel

(Letter for record) Total Heating Surface of Boilers _____ Is forced draft fitted _____ No. and Description of Boilers _____
 Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____
 No. of Certificate _____ Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of safety valves to 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 _____ Mean dia. of boilers _____ Length _____
 Material of shell plates _____ Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____
 Descrip. of riveting: cir. seams _____ long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____
 Lap of plates or width of butt straps _____ Per centages of strength of longitudinal joint _____ Working pressure of shell by rules _____
 Size of manhole in shell _____ Size of compensating ring _____ No. and Description of Furnaces in each boiler _____
 Material _____ Outside diameter _____ Length of plain part _____ Thickness of plates _____
 Description of longitudinal joint _____ No. of strengthening rings _____ Working pressure of furnace by the rules _____ Combustion chamber _____
 plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____ Pitch of stays to ditto: Sides _____ Back _____
 Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____ Material of stays _____ Diameter at smallest part _____
 Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: Material _____ Thickness _____
 Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____ Diameter at smallest part _____
 Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____ Thickness _____ Material of Lower back plate _____
 Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____ Diameter of tubes _____
 Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____ Pitch across wide water spaces _____
 Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and thickness of girder at centre _____
 Length as per rule _____ Distance apart _____ Number and pitch of Stays in each _____
 Working pressure by rules _____ Superheater or Steam chest: how connected to boiler _____ Can the superheater be shut off and the boiler worked separately _____
 Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____
 Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____
 If stiffened with rings _____ Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____
 Working pressure of end plates _____ Area of safety valves to superheater _____ Are they fitted with easing gear _____

VERTICAL DONKEY BOILER— No. **One** Description **Vertical** Manufacturers of steel **J. Spencer & Sons Ltd**

Made at **Stockton** By whom made **Riley Bros (Boilermakers) Ltd** When made **11.5.06** Where fixed **on deck**
 Working pressure **80 lbs** tested by hydraulic pressure to **160 lbs** No. of Certificate **367** Fire grate area **26 sq ft** Description of safety valves **Spring**
 No. of safety valves **2** Area of each **4.910** Pressure to which they are adjusted **80 lbs** If fitted with easing gear **Yes** If steam from main boilers can enter the donkey boiler **No**
 Dia. of donkey boiler **6'-9"** Length **10'-6"** Material of shell plates **Steel** Thickness **7/16"** Range of tensile strength **28/32** Descrip. of riveting long. seams **DR Lap** Dia. of rivet holes **13/16"** Whether punched or drilled **drilled** Pitch of rivets **2 3/4"**
 Lap of plating **4 3/8"** Per centage of strength of joint _____ Rivets **73.3** Working pressure of shell by rules **84.7 lbs** Thickness of shell crown plates **3/4"**
 Plates **70.4** Radius of do. **flat** No. of Stays to do. **6** Dia. of stays **2 1/2 off** Diameter of furnace Top **5'-8 1/2"** Bottom **6'-0 1/2"** Length of furnace **4'-0"**
 Thickness of furnace plates **2 1/32** Description of joint **SR lap** Working pressure of furnace by rules **103 lbs** Thickness of furnace crown plates **23/32** Stayed by **as above** Diameter of uptake **18" etc.** Thickness of uptake plates **7/16"** Thickness of water tubes **3/8"**

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
 During progress of work in shops - - -
 During erection on board vessel - - -
 Total No. of visits _____

1906: March 28. April 4. 24. May 4. 10. 11

Is the approved plan of main boiler forwarded herewith

" " " donkey " "

© 2019

Lloyd's Register Foundation

W1202 0251

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

This boiler has been built under Special Survey. The materials and workmanship are good and efficient. After satisfactorily withstanding the hydraulic test it has been despatched for fitting on board.

This boiler has been fastened on deck. Tested under steam and safety valves adjusted to 90 lbs. per sq inch

James Barclay.

Certificate (if required) to be sent to
The Surveyors are required not to write on or below the space for Committee's Minute.

The amount of Entry Fee...	£	:	:	When applied for.
Special	£	:	:	19
Donkey Boiler Fee ...	£	2	2	When received, Lon.
Travelling Expenses (if any) £	:	:	:	15/6 1906 M.R.

R.D. Shilston

Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **TUES. 23 OCT 1906**

Assigned



© 2019
Lloyd's Register
Foundation