

REPORT ON BOILERS.

No. 24 046

THUR. 1 NOV 1906

Port of Glasgow Received at London Office

No. in Survey held at Aman Date, first Survey 8th May Last Survey 22 May 1906
 Reg. Book. "Marion" (Number of Visits 3)

on the Donkey Boiler for S. S. (Gross 260 Tons) Net

Master Albion Built at Albion By whom built John Guthrie & Co. Ltd. When built 1906
 Engines made at Glasgow By whom made W. B. E. Rederwood Coalbridge when made 1906
 Boilers made at — By whom made A. & W. Dalglisk when made 1906
 Registered Horse Power 69.68 Owners North Eastern Shipping Co. Port belonging to Albion

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 rivets plate 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 top Thickness of plates crown bottom

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. 4113 Description Cochran Manufacturers of steel Clydebridge

Made at Aman By whom made Cochran & Co. Aman When made 1906 Where fixed Litchfield Working pressure 100

tested by hydraulic pressure to 200 Date of test 22/5/06 No. of Certificate 8098 Fire grate area Description of safety valves Spring loaded

No. of safety valves 1 Area of each 4.04 Pressure to which they are adjusted 100 lb If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler No

Dia. of donkey boiler 4'-9" Length 10'-3" Material of shell plates Steel Thickness 1/32" + 1/32" Range of tensile strength 24/32

Descrip. of riveting long. seams Double butt Dia. of rivet holes 25/32 Unreduced drilled Pitch of rivets 2 5/8

Lap of plating 3 3/8 Per centage of strength of joint Rivets 46% Plates 40% Working pressure of shell by rules 108 lb Thickness of shell crown plates 5/16"

Radius of do. 2'-4 1/2" No. of Stays to do. None Dia. of stays Diameter of furnace Top 2 ft Bottom 1'-3" Length of furnace 2 ft

Thickness of furnace plates 10/32 Description of joint Single lap Working pressure of furnace by rules 114 lb Thickness of furnace crown plates 8/16"

Radius of do. 2 ft Stayed by Diameter of uptake 11 x 16 5/8 Thickness of uptake plates 9/16"

Thickness of water tube plates 10/16" + 1/32"

The foregoing is a correct description,

FOR COCHRAN & CO., AMAN, LIMITED. Manufacturer.

Dates of Survey while building { During progress of work in shops - - - } 1906: May 8, 14, 22.
 { During erection on board vessel - - - }
 Total No. of visits 3

Is the approved plan of main boiler forwarded herewith

" " " donkey "

W839-0099

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

This boiler has been made under survey the material & workmanship are of good description and hydraulic test satisfactory. Jm

Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£		When applied for,
Special ...	£		
Donkey Boiler Fee ...	£	2 : 2 :	When received,
Travelling Expenses (if any) £			19

Committee's Minute

Assigned

Transmit to London. Mord

Glasgow - 4 JUN 1908

FRI. NOV 2 1908

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

Clyde District

TUES JAN 15 1907

TUES JAN 20 1907
FRI. 7 JUN 1907

Lloyd's Register Foundation