

REPORT ON MACHINERY.

No. 24015

MAY 22 1906

Port of Glasgow

Received at London Office

No. in Survey held at Glasgow

Date, first Survey 5 Sept 05 Last Survey 30 April 1906

g. Book. on the S.S. VISIGOTH

(Number of Visits)

Tons ^{Gross} _{Net}

ster Built at Dumbarton By whom built A. Mc Millan & Son When built 1906

ines made at Glasgow By whom made Dunsmuir & Jackson Ltd when made 1906

ilers made at Glasgow By whom made do do when made 1906

gistered Horse Power Owners Joss Sons & Co Port belonging to Southampton

n. Horse Power as per Section 28 314 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

GINES, &c. — Description of Engines Triple expansion - screw No. of Cylinders 3 No. of Cranks 3

a. of Cylinders 23", 38 1/2", 64" Length of Stroke 45 Revs. per minute 70 Dia. of Screw shaft 13 3/4" Material of iron

the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tight

the propeller boss yes If the liner is in more than one length are the joints burned yes If the liner does not fit tightly at the part

ween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If two

ers are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 7.6"

a. of Tunnel shaft 12 3/4" Dia. of Crank shaft journals 12 3/4" Dia. of Crank pin 1 3/4" Size of Crank webs 8 3/8" Dia. of thrust shaft under

bars 12 3/4" Dia. of screw 16.6" Pitch of Screw 17.9" No. of Blades 4 State whether moceable yes Total surface 90 sq. ft.

. of Feed pumps 2 Diameter of ditto 4" Stroke 22" Can one be overhauled while the other is at work yes

. of Bilge pumps 2 Diameter of ditto 4" Stroke 22" Can one be overhauled while the other is at work yes

. of Donkey Engines 4 Sizes of Pumps Wells 6x8x21 - Ballast 6x4 1/4 x 6 - 11' x 4' x 11" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room Four 3 1/2" dia. In Holds, &c. One 3 1/2" in after hold & tunnel well

Two 3 1/2" dia. in Nos. 1, 2, 3 & 4 holds.

. of Bilge Injections 1 sizes 5" Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size yes 3 1/2"

Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible none

Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes

How are they protected yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes

Dates of examination of completion of fitting of Sea Connections before launch of Stern Tube do Screw shaft and Propeller do

Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from top platform

MANUFACTURERS, &c. — (Letter for record (S)) Manufacturers of Steel Stewart, Lloyd & DeLisle Sons

Total Heating Surface of Boilers 4054 Is Forced Draft fitted yes No. and Description of Boilers 2 Single ended

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 16.1.06 No. of Certificate 7932

Can each boiler be worked separately yes Area of fire grate in each boiler 45 sq. ft. No. and Description of Safety Valves to

each boiler 2 Patent Spring Area of each valve 8.29 Pressure to which they are adjusted 185 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 2.6" Mean dia. of boilers 13.6" Length 11.9" Material of shell plates steel

Thickness 1 1/8" Range of tensile strength 28 to 32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams double

g. seams treble Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 8 3/8" Lap of plates or width of butt straps 17 1/2"

Percentages of strength of longitudinal joint rivets 87.4 plate 85.8 Working pressure of shell by rules 184 lbs Size of manhole in shell 16" x 18"

Use of compensating ring McNeil's No. and Description of Furnaces in each boiler 3 Deighton Material steel Outside diameter 3' 7"

Length of plain part top 14" Thickness of plates bottom 14" Description of longitudinal joint welded No. of strengthening rings yes

Working pressure of furnace by the rules 190 lbs Combustion chamber plates: Material steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8"

Pitch of stays to ditto: Sides 8" x 9" Back 8 1/2" x 8 1/2" Top 7 1/2" x 9 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 184 lbs

Material of stays steel Area at smallest part 1.76 Area supported by each stay 73.3 Working pressure by rules 192 lbs End plates in steam space:

Material steel Thickness 1 1/2" Pitch of stays 19" x 19" How are stays secured nuts Working pressure by rules 194 lbs Material of stays steel

Area at smallest part 6.9 Area supported by each stay 361 Working pressure by rules 191 Material of Front plates at bottom steel

Thickness 13/16" Material of Lower back plate steel Thickness 27/32" Greatest pitch of stays 13 1/2" x 8 5/8" Working pressure of plate by rules 192 lbs

Diameter of tubes 2 1/2" Pitch of tubes 3 5/8" x 3 5/8" Material of tube plates steel Thickness: Front 3/32" Back 1/16" Mean pitch of stays 7 1/4"

Pitch across wide water spaces 13 1/2" Working pressures by rules 184 lbs Girders to Chamber tops: Material iron Depth and

Thickness of girder at centre 2 - 10" x 1" Length as per rule 2.10 3/4" Distance apart 9 1/2" Number and pitch of stays in each 3 - 7 1/2"

Working pressure by rules 200 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked

separately yes Diameter yes Length yes Thickness of shell plates yes Material yes Description of longitudinal joint yes Diam. of rivet

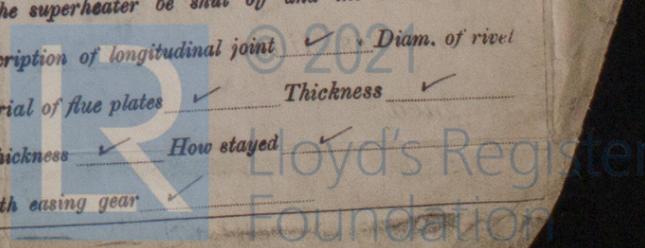
plates yes Pitch of rivets yes Working pressure of shell by rules yes Diameter of flue yes Material of flue plates yes Thickness yes

Stiffened with rings yes Distance between rings yes Working pressure by rules yes End plates: Thickness yes How stayed yes

Working pressure of end plates yes Area of safety valves to superheater yes Are they fitted with easing gear yes

W1272-0214

96
79
17



VERTICAL DONKEY BOILER— Manufacturers of Steel ✓

No. One Description Single ended, see separate report attached to this
 Made at _____ By whom made _____ When made _____ Where fixed _____
 Working pressure tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description of Safety
 Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ Date of adjustment _____
 If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Dia. of donkey boiler _____ Length _____
 Material of shell plates _____ Thickness _____ Range of tensile strength _____ Descrip. of riveting long. seams _____
 Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets
 Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____ Plates
 Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____
 Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____
 Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— Two top end & two bottom end connecting rod bolts, two main bearing bolts, one set of coupling bolts, one set of feed & bilge valves, etc.

The foregoing is a correct description,
pro Dunsmuir & Jackson
Jas. F. Adams Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1905 - Sep 5, 19, Oct 9, 16, 22, 26, 30 for 9, 16, 21 Dec 14, 21, 26, 1906; Jan 9, 16
 { During erection on board vessel - - } 24, 31 Feb 5, 8, 19, 20, 22 Mar 6, 15, 16 April 19, 30
 Total No. of visits 27

Is the approved plan of main boiler forwarded herewith yes.

Dates not specifically noted.

" " " donkey " " " yes.

Dates of Examination of principal parts—Cylinders ✓ Slides ✓ Covers ✓ Pistons ✓ Rods ✓
 Connecting rods ✓ Crank shaft ✓ Thrust shaft ✓ Tunnel shafts ✓ Screw shaft ✓ Propeller ✓
 Stern tube ✓ Steam pipes tested ✓ Engine and boiler seatings ✓ Engines holding down bolts ✓
 Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam ✓
 Main boiler safety valves adjusted _____ Thickness of adjusting washers _____
 Material of Crank shaft steel Identification Mark on Do. see foregoing reports Material of Thrust shaft steel Identification Mark on Do. _____
 Material of Tunnel shafts steel Identification Marks on Do. _____ Material of Screw shafts iron Identification Marks on Do. see foregoing reports
 Material of Steam Pipes iron Test pressure 540 lbs

General Remarks (State quality of workmanship, opinions as to class, &c. The materials & workmanship of this vessel's machinery are of good quality, it has been constructed under special survey, it has been tried under steam & found to be satisfactory. In my opinion it is eligible to be classed in the Register Book with the record of +LMC 5.06.

It is submitted that this vessel is eligible for THE RECORD FLMC 4.06 F.D.

Certificate (if required) to be sent to _____

J.F.S.
23.5.06
Paul
23.5.06

The amount of Entry Fee. . . £ 3 : : When applied for, 21 MAY 1906
 Special . . . £ 25.14 : :
 Donkey Boiler Fee . . . £ : :
 Travelling Expenses (if any) £ : :
 When received, 23.5.06

J.W. Dinmock
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute Glasgow 21 MAY 1906
 Assigned + LMC 4.06.

JUN 12 1906

MACHINERY CERTIFICATE WRITTEN 22-3706

