

REPORT ON MACHINERY

Std. No. 22485

New No. 49600.

Port of SunderlandReceived at London Office WED. 1 NOV 1905

No. in Survey held at Sunderland Date, first Survey 27 June 1905 Last Survey 10 October 1905
 Reg. Book. Steel screw steamer Gillygate (Number of Visits 19)
 Master A. Davies Built at North Shields By whom built Smiths Dock Co Tons Gross 207
 Engines made at Sunderland By whom made Mac Coll & Pollock Lim^d when made 1905
 Boilers made at Sunderland By whom made Mac Coll & Pollock Lim^d when made 1905
 Registered Horse Power 71 Owners Phoenix Trawling Co Port belonging to London
 Nom. Horse Power as per Section 28 71 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Inverted triple expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 12", 20", 32" Length of Stroke 23" Revs. per minute 106 Dia. of Screw shaft as per rule 6.9" Material of steel
 Is 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
 in the propeller boss yes If the liner is in more than one length are the joints burned ✓ If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ✓ If two
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 30"
 Dia. of Tunnel shaft as per rule 6.1" Dia. of Crank shaft journals as per rule 6.4" Dia. of Crank pin 6 3/4" Size of Crank webs 4 1/2 x 10 1/2" Dia. of thrust shaft under
 collars 6 3/4" Dia. of screw 8.6" Pitch of screw 11.0" No. of blades 4 State whether moveable no Total surface 29.5
 No. of Feed pumps one Diameter of ditto 2 1/4" Stroke 11 1/2" Can one be overhauled while the other is at work ✓
 No. of Bilge pumps one Diameter of ditto 2 1/4" Stroke 11 1/2" Can one be overhauled while the other is at work ✓
 No. of Donkey Engines one Sizes of Pumps 5 1/4" x 3 1/2" x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room two of 2" In Holds, &c. one of 2"
 No. of bilge injections 1 sizes 2 1/2" Connected to condenser, or to circulating pump pump Is a separate donkey suction fitted in Engine room & size Episton 2 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 ✓
 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
 What pipes are carried through the bunkers Forward Bilge suction How are they protected wood casing
 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock now Is the screw shaft tunnel watertight nil
 Is it fitted with a watertight door ✓ worked from ✓

BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 1330 Is forced draft fitted no
 No. and Description of Boilers one single ended cylindrical Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs
 Date of test 29.9.05 Can each boiler be worked separately ✓ Area of fire grate in each boiler 35 No. and Description of safety valves to
 each boiler 2 spring Area of each valve 3.98 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 11" Mean dia. of boilers 12.6" Length 10.3" Material of shell plates Steel
 Thickness 1 1/32" Range of tensile strength 28 1/2/32 Are they welded or flanged no Descrip. of riveting: cir. seams d-r. lap long. seams t.r. double
 Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 3/4" Lap of plates or width of butt straps 15 1/2"
 Per centages of strength of longitudinal joint 92.5 Working pressure of shell by rules 182.9 lbs Size of manhole in shell 16 x 12"
 Size of compensating ring 7 1/2 x 1 1/2" No. and Description of Furnaces in each boiler 1 plain Material steel Outside diameter 41 1/2"
 Length of plain part top 6.0" Thickness of plates bottom 49/64 Description of longitudinal joint weld No. of strengthening rings ✓
 Working pressure of furnace by the rules 184 lbs Combustion chamber plates: Material steel Thickness: Sides 1/16" Back 1/16" Top 1/16" Bottom 1"
 Pitch of stays to ditto: Sides 9 x 9 3/4" Back 11 x 7 3/4" Top 8 3/4 x 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 180.4 lbs
 Material of stays steel Diameter at smallest part 1.57 x 1.43 Area supported by each stay 85.7 x 94 Working pressure by rules 201 x 169 End plates in steam space:
 Material steel Thickness 1 3/16" Pitch of stays 18 3/4 x 16" How are stays secured double nuts Working pressure by rules 187 lbs Material of stays steel
 Diameter at smallest part 2.78 Area supported by each stay 337 Working pressure by rules 180.7 Material of Front plates at bottom steel
 Thickness 27/32" Material of Lower back plate steel Thickness 13/16" Greatest pitch of stays 13 1/4" Working pressure of plate by rules 193.5 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 4 5/8 x 4 7/8" Material of tube plates steel Thickness: Front 27/32" Back 27/32" Mean pitch of stays 11 7/8"
 Pitch across wide water spaces 15 1/4" Working pressures by rules 198 Girders to Chamber tops: Material steel Depth and
 thickness of girder at centre 9 x 12 1/2" Length as per rule 31 3/4" Distance apart 9' Number and pitch of Stays in each 2 - 8 3/4"
 Working pressure by rules 182.14 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 ✓

W1115-0050

Lloyd's Register
Foundation

Made at	By whom made	When made	Where fixed
Working pressure	tested by hydraulic pressure to	No. of Certificate	Fire grate area
Description of safety valves	No. of safety valves	Area of each	Pressure to which they are adjusted
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	Thickness of shell crown plates	Radius of do.
No. of Stays to do.	Plates	Dia. of stays.	Diameter of furnace Top
Bottom	Length of furnace	Thickness of furnace plates	Description of joint
Thickness of furnace crown plates	Stayed by	Working pressure of shell by rules	Working pressure of furnace by rules
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } During erection on board vessel - - } 1905:- June 27, July 3, 10, 18, 24, Aug: 2, 14, 17, 21, Sept. 8, 14, 21, 26, 29, Oct 2, 4, 6, 9, 10.
 Total No. of visits 19. Is the approved plan of main boiler forwarded herewith Yes

Is the approved plan of main boiler forwarded herewith yes

“ “ “ *donkey* “ “

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

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We beg to recommend that this vessel in
our opinion is eligible in our opinion to have the record L.M.C.
10-05, in the Register Book

It is submitted that
this vessel is eligible for
THE RECORD **H** L M C 10.05.

The amount of Entry Fee...	£	1	:	0	:	0	When applied for,
Special	£	10	:	13	:	0	23 rd Oct: 1903
Donkey Boiler Fee	£	:	:	:	:	:	When received,
Travelling Expenses (if any) £	:	:	:	:	:	:	11. 11. 0

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

Committee's Minute

FRI, 3 NOV 1905

Assigned

+ Lm 1003

MACHINERY CERTIFICATE
WRITTEN.

Lloyd's Register
Foundation