

REPORT ON MACHINERY.

No. 23457

Port of Glasgow.

Received at London Office JUL 23 JAN 1906

No. in Survey held at
Reg. Book.
on the

Glasgow.

Date, first Survey 7th Sept 1905 Last Survey 16th Jan 1906

(Number of Visits)

S.S. "SEA NYMPH."

Master

Built at

Greenock

By whom built

G. Brown & Co.

Gross
Tons
Net

When built 1906.

Engines made at

Glasgow.

By whom made

Colin Houston & Co.

when made 1906.

Boilers made at

Glasgow

By whom made

Meyer & Sons & Lawson (No 707)

when made 1905

Registered Horse Power

Owners

Port belonging to Kings Lynn.

Nom. Horse Power as per Section 28 47

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted No.

ENGINES, &c.—Description of Engines Compound.—Screw.

No. of Cylinders 2

No. of Cranks 2

Dia. of Cylinders 14 $\frac{1}{2}$ " & 30"

Length of Stroke 21

Revs. per minute 120

Dia. of Screw shaft

as per rule 6.44"

as fitted 6.5"

Material of screw shaft

iron

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 2" 2"

Dia. of Tunnel shaft

as per rule 5.97"

as fitted none

Dia. of Crank shaft journals

as per rule 6.27"

as fitted 6.5"

Dia. of Crank pin 6 $\frac{1}{2}$ "Size of Crank webs 14 $\frac{1}{4}$ " 14"

Dia. of thrust shaft under

collars 6 $\frac{1}{2}$ "

Dia. of screw 7" 6"

Pitch of screw 9" 6"

No. of blades 4

State whether moveable no

Total surface 21 sq. ft.

No. of Feed pumps 1

Diameter of ditto 2 $\frac{1}{4}$ "Stroke 10 $\frac{1}{2}$ "

Can one be overhauled while the other is at work ✓

No. of Bilge pumps 1

Diameter of ditto 2 $\frac{1}{4}$ "Stroke 10 $\frac{1}{2}$ "

Can one be overhauled while the other is at work ✓

No. of Donkey Engines 2

Sizes of Pumps

{5 x 3 $\frac{1}{2}$ x 6 duplex
3 x 2 x 4 single}

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 2" dia. ✓

In Holds, &c. One 2" dia. ✓

No. of bilge injections 1

sizes 2 $\frac{1}{2}$ "

Connected to condenser, or to circulating pump pump

Is a separate donkey suction fitted in Engine room & size yes 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

What pipes are carried through the bunkers none

How are they protected ✓

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 before launch Is the screw shaft tunnel watertight none

Is it fitted with a watertight door ✓

worked from ✓

BOILERS, &c.—No. of Certificate 7846 (Letter for record (S)) Total Heating Surface of Boilers 877.7 Is forced draft fitted No.

No. and Description of Boilers One single ended

Working Pressure 130 lb Tested by hydraulic pressure to 260 lb

Date of test 7.12.05 Can each boiler be worked separately ✓

Area of fire grate in each boiler 36"

No. and Description of safety valves to

each boiler 2 patent spring

Area of each valve 4.9"

Pressure to which they are adjusted 135 lbs

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork 6"

Mean dia. of boilers 10" 6"

Length 10" 0"

Material of shell plates Steel

Thickness 11/16"

Range of tensile strength 29.6 32

Are they welded or flanged No.

Descrip. of riveting: cir. seams

Double riv. long. seams Double straps

Diameter of rivet holes in long. seams 13/16"

Pitch of rivets 5"

Lap of plates or width of butt straps 11 3/4

Per centages of strength of longitudinal joint

rivets 12.4

plate 8.1

Working pressure of shell by rules 130 lb

Size of manhole in shell 16" x 12"

Size of compensating ring 6" x 11/16"

No. and Description of Furnaces in each boiler Two plain

Material Steel Outside diameter 41"

Length of plain part

top 7" 0"

bottom 7" 0"

Thickness of plates

crown 11/16"

bottom 11/16"

Description of longitudinal joint Welded

No. of strengthening rings

Angle at back of

Working pressure of furnace by the rules 145 lb

Combustion chamber plates: Material Steel

Thickness: Sides 1/2"

Back 35/64"

Top 1/2"

Bottom 1/2"

Pitch of stays to ditto: Sides 8 x 7

Back 8 1/2 x 8 1/2

Top 7 x 7

If stays are fitted with nuts or riveted heads Nuts

Working pressure by rules 137

Material of stays Steel

Diameter at smallest part 1.24"

Area supported by each stay 70 1/8"

Working pressure by rules 147

End plates in steam space:

Material Steel

Thickness 25/32"

Pitch of stays 14" x 14"

How are stays secured Nuts

Working pressure by rules 139 lb

Material of stays Steel

Diameter at smallest part 2.5"

Area supported by each stay 14" x 14"

Working pressure by rules 130 lb

Material of Front plates at bottom Steel

Thickness 11/16"

Material of Lower back plate Steel

Thickness 9/16"

Greatest pitch of stays 14" x 8 1/4"

Working pressure of plate by rules 156 lb

Diameter of tubes 3 1/2"

Pitch of tubes 5 1/4" x 4 3/4"

Material of tube plates Steel

Thickness: Front 11/16"

Back 11/16"

Mean pitch of stays 10"

Pitch across wide water spaces 14"

Working pressures by rules 160 lb

Girders to Chamber tops: Material Steel

Depth and

thickness of girder at centre 6 x 11/16"

Length as per rule 25 3/4"

Distance apart 7"

Number and pitch of Stays in each Two at 7"

Working pressure by rules 146 lb

Superheater or Steam chest; how connected to boiler None

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

✓

✓

✓

✓

✓

✓

✓

✓

✓

If not, state whether, and when, one will be sent?

Is a Report also sent on the Hull of the Ship?

DONKEY BOILER— No. *One* Description *Ordinary vertical two cross tubes in front.*
 Made at *Glasgow* By whom made *Myers, Irving & Lawson (No 716)* Date of test *20.12.05* Where fixed *In Stothard*
 Working pressure *80 lb* tested by hydraulic pressure to *160 lb* No. of Certificate *7921* Fire grate area *11 1/2* Description of safety valves *patent spring*
 No. of safety valves *One* Area of each *4.9* Pressure to which they are adjusted *85 lb* If fitted with easing gear *yes* If steam from main boilers can enter the donkey boiler *no* Dia. of donkey boiler *4' 5 1/4"* Length *8' 10 1/2"* Material of shell plates *Steel* Thickness *3/8"* Range of tensile strength *27,632* Descrip. of riveting long. seams *Double riv. lap.* Dia. of rivet holes *13/16* Whether punched or drilled *Drilled* Pitch of rivets *2 3/8"*
 Lap of plating *3 7/8* Per centage of strength of joint Rivets *89.8* Thickness of shell crown plates *1/2"* Radius of do. *4' 6"* No. of Stays to do. *No stays*
 Dia. of stays. *✓* Diameter of furnace Top *42 7/8"* Bottom *48"* Length of furnace *48"* Thickness of furnace plates *7/16"* Description of joint *Welded* Thickness of furnace crown plates *17/32* Stayed by *Uptake only* Working pressure of shell by rules *101 lb*
 Working pressure of furnace by rules *93 lb* Diameter of uptake *10"* Thickness of uptake plates *7/16"* Thickness of water tubes *3/8"*

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

The foregoing is a correct description,
Colin Houston & Co Manufacturer.

Dates of Survey while building { During progress of work in shops - 1905 Sept 7 27 Oct 5 11 18 24 27 31 Nov 10 15 17 21 30 Dec 6 7 12 19 22 26 28
 { During erection on board vessel - 1906 Jan 16
 Total No. of visits 20

Is the approved plan of main boiler forwarded herewith *Yes*

General Remarks (State quality of workmanship, opinions as to class, &c. " " " donkey " " " *yes*)
The machinery of this vessel has been constructed under special survey, the materials and workmanship are of good quality, it has been securely fitted on board tried under steam & found to be satisfactory.
In my opinion, it is eligible to be classed in the Register Book with the record of L.M.C. 1.06.

It is submitted that
 this vessel is eligible for
 THE RECORD L.M.C. 1.06.

23.1.06
23.1.06

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. £ *1* : : When applied for,
 Special £ *8* : : 22 JAN 1906
 Donkey Boiler Fee £ : :
 Travelling Expenses (if any) £ : : When received,
 3. 2. 06

Committee's Minute *Glasgow 22 JAN 1906*

Assigned *-:- L.M.C. 1.06*

Arthur L. Jones & J. W. Dimmock.
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2021

Lloyd's Register Foundation

MINISTRY CERTIFICATE
 WRITTEN 23.1.06