

Rpt. 4.

REPORT ON MACHINERY

No. 34047

Date of writing Report 13-2-1923

When handed in at Local Office 14/2 1923

Received at London Office

SAT. FEB. 17 1923

No. in Survey held at
Reg. Book.

Hull

Port of Hull
Date, First Survey 20.9.22 Last Survey 6-2-1923

on the S.S. "GALLEON"

(Number of Visits 20)

Master

Built at

Selly

By whom built

Cochrane & Sons, Ltd.

Tons Gross 720.62

Net 348.92

When built 1923

Engines made at

Hull

By whom made

Amos & Smith Ltd (No. 3458) when made 1923

Boilers made at

Hull

By whom made

Amos & Smith Ltd (No. 3458) when made 1923

Registered Horse Power

Owners

Galleon Shipping Co. Ltd.

Port belonging to

Nom. Horse Power as per Section 28

90.8 91.

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

m

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

No. of Cranks

Dia. of Cylinders 13, 22½ + 37

Length of Stroke 26

Revs. per minute 112

Dia. of Screw shaft

as per rule 7.84

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

34

Dia. of Tunnel shaft

as per rule 7.02

Dia. of Crank shaft journals

as per rule 7.37

Dia. of Crank pin

7½

Size of Crank webs

14½ x 4½

Dia. of thrust shaft under

collars

7½

Dia. of screw

9-6

Pitch of Screw

10-10

No. of Blades 4

State whether moveable

no

Total surface

34 sq.

No. of Feed pumps

2

Diameter of ditto

28

Stroke

12

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

28

Stroke

12

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

SIZES OF PUMPS

6½ x 4½ x 6, 4 x 6 x 6, duplex

No. and size of

Suctions connected to both Bilge and Donkey pumps

In Engine Room

Two 2½, one forward & one aft.

In Holds, &c.

Two 2½, one port & one starboard.

No. of Bilge Injections

1

sizes

3½

Connected to condenser, or to circulating pump

pump

Is a separate Donkey Suction fitted in Engine room & size

yes, 2½

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

yes

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

hold 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

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

worked from

yes

BOILERS, &c.—(Letter for record S)

Manufacturers of Steel

John Spencer & Co.

Total Heating Surface of Boilers

1541 sq.

Is Forced Draft fitted

no

No. and Description of Boilers

1 S.E. main

Working Pressure

200 lb.

Tested by hydraulic pressure to

350 lb.

Date of test

2-1-23

No. of Certificate

3501

Can each boiler be worked separately

yes

Area of fire grate in each boiler

48.125 sq.

No. and Description of Safety Valves to

each boiler

2 spring loaded

Area of each valve

4.91 sq.

Pressure to which they are adjusted

205 lb.

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

About 2-6

dia. of boilers

13-9

Length

10-10

Material of shell plates

S

Thickness

1 3/16

Range of tensile strength

29/33 ton

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

DR.

long. seams

T.R.D.B.S.

Diameter of rivet holes in long. seams

1 1/4

Pitch of rivets

8 3/4

Length of plates or width of butt straps

17 3/4

Per centages of strength of longitudinal joint

rivets 87.83

plate 85.71

Working pressure of shell by rules

200

Size of manhole in shell

16 x 12

No. of strengthening rings

3

Size of compensating ring

40 x 30 x 1 3/16

No. and Description of Furnaces in each boiler

3 plain

Material

S

Outside diameter

3-2 1/2

Length of plain part

top 6-8 1/2

bottom 6-3

Thickness of plates

crown 13

bottom 16

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

220

Combustion chamber plates: Material

S

Thickness: Sides

11/16

Back

23/32

Top

11/16

Bottom

13/16

Pitch of stays to ditto: Sides

7 3/4 x 9 3/4

Back

8 1/2 x 9 5/8

Top

7 3/4 x 9

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

213

Material of stays

S

Area at smallest part

1 3/4

Area supported by each stay

75.56 sq.

Working pressure by rules

240

End plates in steam space:

Material

S

Thickness

1 5/32

Pitch of stays

17 3/4 x 17 3/4

How are stays secured

DN+W

Working pressure by rules

200

Material

S

Area at smallest part

3 1/4

Area supported by each stay

315 sq.

Working pressure by rules

255

Material of Front plates at bottom

S

Thickness

1

Material of Lower back plate

S

Thickness

29/32

Greatest pitch of stays

13 7/5 x 8 8/1

Working pressure of plate by rules

253

Diameter of tubes

3 1/2

Pitch of tubes

4 3/4 x 5

Material of tube plates

S

Thickness: Front

1

Back

27/32

Mean pitch of stays

9 1/2 x 10

Pitch across wide water spaces

13 3/4 x 9 1/2

Working pressures by rules

292

Girders to Chamber tops: Material

S

Depth and

thickness of girder at centre

9 3/4 x 2

Length as per rule

36

Distance apart

9"

Number and pitch of stays in each

3 at 7 3/4

Working pressure by rules

263

Steam dome: description of joint to shell

-

% of strength of joint

-

Diameter

-

Thickness of shell plates

-

Material

-

Description of longitudinal joint

-

Diam. of rivet holes

-

Pitch of rivets

-

Working pressure of shell by rules

-

Crown plates

-

Thickness

-

How stayed

-

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

W575-0074

If not, state whether, and when, one will be sent? In a Report also sent on the Hull of the Ship?

© 2020 Lloyd's Register Foundation

IS A DONKEY BOILER FITTED?

No

If so, is a report forwarded?

SPARE GEAR.

State the articles supplied:— Two top end bolts & nuts, 2 bottom end bolts & nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of air, feed, & bilge pump valves, 1 main check valve, 1 donkey check valve, 1 propeller & a quantity of assorted bolts & nuts, & iron of various sizes.

The foregoing is a correct description,

W. H. ROBINSON LTD.

W. H. Robinson

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1922: - Sep 20, Oct 18, 26, Nov 10, 20, 22, 29, Dec 6, 11, 1923: - Jan 2, 13.
During erection on board vessel -- 23, 24, 18, 26, 29, 30, Feb 1, 5, 6.
Total No. of visits 20

Is the approved plan of main boiler forwarded herewith

yes

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 22-11-22 Slides 22-11-22 Covers 22-11-22 Pistons 22-11-22 Rods 6-12-22.

Connecting rods 29-11-22 Crank shaft 11-12-22 Thrust shaft 11-12-22 Tunnel shafts Screw shaft 10-11-22 Propeller 10-11-22

Stern tube 10-11-22 Steam pipes tested 24-1-23 Engine and boiler seatings 13-1-23 Engines holding down bolts 18-1-23

Completion of pumping arrangements 6-2-23 Boilers fixed 23-1-23 Engines tried under steam 6-2-23

Completion of fitting sea connections 20-11-22 Stern tube 20-11-22 Screw shaft and propeller 20-11-22

Main boiler safety valves adjusted 1-2-23 Thickness of adjusting washers F. 3/8" A. 3/8"

Material of Crank shaft Steel Identification Mark on Do. No. 11, P.F. Material of Thrust shaft Steel Identification Mark on Do. No. 12, P.F.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Steel Identification Marks on Do. No. 9, P.F.

Material of Steam Pipes S. D. Copper. Test pressure 400 lbs per sq. in.

Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F.

Have the requirements of Section 49 of the Rules been complied with

Is this machinery duplicate of a previous case no If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The engines & boiler of this

vessel have been built under special survey, & the materials & workmanship are good. The machinery has been properly fitted & secured on board the S.S. "Gallen". The steam & feed pipes have been tested as required by the Rules, and the safety valves adjusted under steam & tested for accumulation. On completion the machinery was tried under working conditions and found satisfactory.

The machinery is now in a good and efficient condition, and eligible in my opinion to have the record + LMC 2.23 in the Register Book.

It is submitted that this vessel is eligible for THE RECORD + LMC 2.23. CL.

The amount of Entry Fee ... £ 2 : 0 : 0
Special ... £ 22 : 15 : 0
Donkey-Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 13/2/23
When received, 22/2/23

P. Fitzgerald.

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 23 FEB. 1923

Assigned

+ LMC 2.23
C.L.

FRI. SEP. 7 1923

FRI. 28 MAR. 1924



© 2020

Lloyd's Register Foundation