

No. 1080

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. 1051 No. in Register Book 1633.

S.S. BUCEGI *now PETSAMO*

Makers of Engines *John G. Kincaid & Co. Ltd.*

Works No. 394

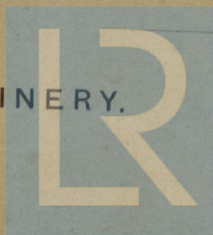
Makers of Main Boilers *John G. Kincaid & Co. Ltd.*

Works No. 394

Makers of Donkey Boiler

Works No.

MACHINERY.



© 2020

Lloyd's Register
Foundation

003369-003376-0071

No.

THE BRITISH CORPORATION FOR THE SURVEY

AND

REGISTRY OF SHIPPING.

Report No. 1051 No. in Register Book 1633

Received at Head Office 8/9/13

Surveyor's Report on the New Engines, Boilers, and Auxiliary
Machinery of the Steel Screw Steamer

Port of Registry

Registered Owners

Surveyor's District

Date of Completion of Engines

" " " " Main Boilers

" " " " Donkey

Trial Run at

First Visit

Total Number of Visits

Bucegi

Braila

Roumanian State Maritime
Service (S.M.R.)

Galatz

8-13

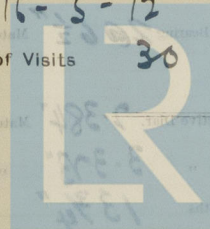
8-13

✓ Skelmorlie

Date 13-8-13

Last Visit 13-8-13

30



Lloyd's Register
Foundation

ENGINES.

Made by

John P. Kincaid & Co. Ltd.

at

Greenock

Works No.

394

Description

3 crank triple expansion surface condensing.

No. of Cylinders, each Engine

3

Diars.

25" 41" 68"

Stroke

48"

Cub. feet in each L.P. Cyl.

100.88

Revol. per Min.

68

I.H.P.

2500

Pressure in I.P. Receiver at full Power

60

I.P.

L.P.

15

Thickness of Metal in H.P. Cylr.

1 1/4

I.P.

1 1/2

"

—

"

1 1/2

" " " " Liner

1 3/8

"

—

"

—

"

—

Valve Chest

1 1/4

1 1/8

"

—

"

1 1/8

Are Spring-loaded Relief Valves fitted to Top and Bottom of each Cylr.?

Top.

" " " " each Receiver?

Yes

Number of Bolts in H.P. Cylr. Cover

24

I.P.

24

2nd I.P.

—

L.P.

26

Eff. Diar.

1 1/4"

"

1 1/4"

"

—

"

1 1/4"

Pitch

4 1/4"

"

5 3/8"

"

—

"

8 5/8"

Type of H.P. Valves (Piston or Slide)

Piston

"

Flat D.P.

"

—

"

Flat D.P.

" Valve Gear

Stephenson Link

Diameter of Piston Rods (plain part)

6 1/2"

All Bottom of Thread

4.93

Makers

"

Material

Iron Steel

Diameter of Connecting Rods (smallest part)

6 1/4"

Material

Iron Steel

Makers

"

Bochumer Verein

Diar. of Crosshead Gudgeons

6 1/2"

Length of Bearing

20 6 1/2"

Material

Steel

No. of Top End Bolts (each Rod)

4

Effective Diar.

2.384"

Material

Steel

" Bot. " "

2

"

3.373"

"

Steel

" Main Bearings

6

Lengths

13 3/4"

" Bolts in each

2

Effective Diar.

3.192"

Material

Steel.

No. of Holding Down Bolts, each Engine

84

No. of Metal Chocks

54

Eff. Diar. " " "

1.162"

Average Pitch

12 to 16"

Are the Engines bolted directly to the Tank Top?

Yes

Are the Bolts tapped through the Tank Top and fitted with Nuts inside

Yes

Date of Test of Tank by Water Pressure with Holding Down Bolts in place

13/10/1914

SKETCHES.



© 2020

Lloyd's Register
Foundation

SKETCHES.

SKETCHES.

SHAFTING.

Are Crank Shafts Built? *Yes* No. of Lengths in each *83* Angle of Cranks *120°*

Diar. of Crank Shafts by Rule *13.08"* Actual *13 5/8* Diar. in Way of Webs *13 5/8*

Makers of " *Burmeister Wain* Material *I. S.*

Diar. of Crank Pins *13 5/8* Diar. in Way of Web *13 5/8*

Makers of " *Burmeister Wain* Material *I. S.*

Width across Crank Webs at Centre of Shaft *25 1/4* Thickness *8 3/4*

" " " Crank Pins *25 1/4* " *8 3/4*

" " " Narrowest part *20* " *8 3/4*

Makers of Crank Webs *Burmeister Wain* Material *I. S.*

Diar. or Breadth of Keys in Crank Webs *2* Length *5 1/2*

" of Dowel Pins in Crank Pins *2* Length *5 1/2* Screwed or Plain *plain*

No. of Bolts in each Coupling *6* Diar. at Mid Length *3* Diar. of Pitch Circle *19 1/4*

Material of Coupling Bolts *Steel*

Crank Shafts Finished by *Burmeister Wain*

Greatest Distance from edge of Main Bearing to Crank Web *1/4*

Description of Thrust Blocks *Horse shoe adjustable*

Number " " Rings *5*

Diar. of Thrust Shafts by Rule *13.08"* Actual (at bot. of Collars) *13 5/8* Over Collars *22 1/2*

" " at Forward Coupling *13 5/8* After Coupling *13 5/8*

No. of Thrust Collars *5* Thickness *2 3/4* Distance apart *5 1/2*

Thrust Shafts Forged by *Burmeister Wain* Material *I. S.*

" Finished by *do*

Diar. of Intermediate Shafting by Rule *12.476* Actual *12 7/8*

No. of Lengths, each Engine *6* No. of Tunnel Bearings *7*

Diar. of Bearings *13* Length *15 1/2* Distance apart *18 1/2"*

No. of Bolts, each Coupling **6** Diam. at Mid Length **3** Diam. of Pitch Circle **19 1/4**
 Intermediate Shafts Forged by **Burmeister & Wain** Material **IS**
 " " Finished by **do**
 Diam. of Propeller Shafts by Rule **14.59** / Actual **15** At Couplings **13 5/8**
 Are Propeller Shafts fitted with Continuous Brass Liners? **Yes**
 Diam. over Liners **16 1/2** Length of After Bearings **5'-0"**
 Of what Material are the After Bearings composed? **Lignum Vitae**
 Distance from After Bearing in Stern Tube to nearest Tunnel Bearing **12'-3"**
 Are the After Bearings lubricated with Oil or Sea Water? **Sea Water**
 What means are adopted to prevent Sea Water entering the Stern Tubes? **✓**
 Propeller Shafts Forged by **Regy. Usher** Material **Iron**
 " " Finished by **J. G. Knead & Co.**
 No. of Propellers **1** Diam. **17'-6"** Pitch **17'-9"**
 " Blades, each Propeller **4** Fitted or Solid **Solid**
 Material of Blades **Manganese Bronze** Boss
 Surface, each Propeller **95 #** Diam. of Propeller **16.055**
 Coefficient of Displacement of Vessel at 1/2 Moulded Depth **.77**

SKETCHES

B.C.
 11-9-12
 B 317.

mark stamped on crank shaft

B.C.
 18-2-13
 B. 372

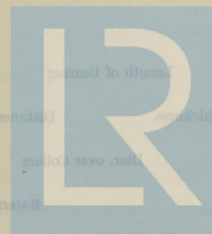
mark stamped on thrust shaft.

B.C.
 5-3-13
 B 370

mark stamped on tunnel shafts
 B 371 B 374 B 375
 5-3-13 25-2-13 25-2-13

B.C.
 No. 1855
 D.M.C.A.
 12-6-13

mark stamped on 2 Tail shafts



© 2020

Lloyd's Register
 Foundation

TURBINE ENGINES.

Type

No. of H.P. Turbines

No. of L.P. Turbines

No. of Astern

How arranged

Revs. per Min.

Horse Power

Diar. of H.P. Turbine Drums

MATERIAL

THICKNESS OF METAL

Material of H.P. Turbine Casings

Lengths of Blades in H.P. Turbines

No. of Rows of Blades of each Length

Pitch of

Diar. of L.P. Turbine Drums

MATERIAL

THICKNESS OF METAL

Material of L.P. Turbine Casings

Lengths of Blades in L.P. Turbines

No. of Rows of Blades of each Length

Pitch of

Diar. of Astern Turbine Drums

MATERIAL

THICKNESS OF METAL

Material of Astern Turbine Casings

Lengths of Blades in Astern Turbines

No. of Rows of Blades of each Length

Pitch of

Diar. of Turbine Spindles

Length of Bearing

No. of Thrust Collars on each Spindle

Thickness

Distance apart

Diar. of Spindles at Bottom of Collars

Diar. over Collars

Spindles Forged by

Material

,, Finished by

SKETCHES.



© 2020

Lloyd's Register
Foundation

SKETCHES.

Sketch of a pump
with a 3" pipe

SKETCHES.

Sketch of a pump
with a 3" pipe
and a 1/2" pipe

Sketch of a pump
with a 3" pipe
and a 1/2" pipe

Sketch of a pump
with a 3" pipe
and a 1/2" pipe

Sketch of a pump
with a 3" pipe
and a 1/2" pipe

Sketch of a pump
with a 3" pipe
and a 1/2" pipe



© 2020

Lloyd's Register
Foundation

PUMPS, ETC.

No. of Air Pumps 1
 Type of " Edwards'
 Diar. of Air Pump Rod 3" Material Muntz Metal
 How are Air Pumps Worked? By lines from L.P. crosshead

No. of Centrifugal Circulating Pumps ————
 " Reciprocating " " 1 Diar. 12 1/2 Stroke 27
 Diar. of Circulating Pump Rods 3" Material Muntz metal
 How are Circulating Pumps Worked? by air pump lines.

Diar. of Circulating Pump Suction from Sea 9"
 Has each Circulating Pump a Bilge Suction with Non-return Valve? Yes Diar. 6"

No. of Feed Pumps on each Engine 2 Diar. 3 1/2 Stroke 27
 Where do they pump from? Hotwell
 " " discharge to? To boilers thro' heater
 Are Spring-loaded Relief Valves fitted to each Pump? Yes
 Can one Pump be overhauled while the others are at work? Yes

No. of Bilge Pumps on each Engine 2 Diar. 4 Stroke 27
 Where do they pump from? Fore! Bilges aft-Sea bilges
 " " discharge to? Overboard Deck & overboard
 Can one Pump be overhauled while the others are at work? Yes
 A relief valve is fitted to discharge side of

No. of Bilge Injections connected to Condensers ———— Diar. ————
 Are all Bilge Suctions fitted with Roses? Yes
 Are the Valves, Cocks, and Pipes so arranged as to prevent unintentional connection between Sea and Bilges? Yes

Are all Sea Connections made with Valves or Cocks fitted direct to the Hull Plating? Yes

Are they placed so as to be easily seen and accessible? Yes

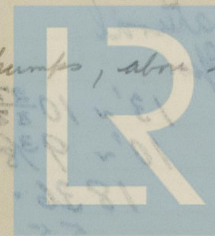
Are the Discharge Chests placed above the Deep Load Line? Yes

Are they fitted direct to the Hull Plating and easily accessible? Yes

Are all Blow-off Cocks or Valves fitted with Spigots through the Hull Plating and Covering Plates or

Flanges on the outside? Yes.

after 24 pumps, above the delivery valves



© 2020

Lloyd's Register
 Foundation

BOILERS.

Boilers made by

John G. Kincaid & Co. Ltd.

at

Greenock

Works No.

394.

Date when Plan approved

1. 11. 1911.

Boiler Plates, Iron or Steel

Steel

Makers of Shell Plates

James Dunlop & Co. Ltd.

Internal Plates

do

Furnaces

John Brown & Co.

Stay Bars

Lanarkshire Steel Co.

Rivets

Rivets, Bolt Nut Co.

Material tested by (B.C., B.T., etc.)

B.C.

No. of Boilers

3.

Single or Double-ended

Single ended.

No. of Furnaces, each Boiler

3

Type of Furnaces

Brightons, Morrisons

Approved Working Pressure

180 lb./in.²

Hydraulic Test Pressure

360 lb./in.²

Date of Hydraulic Test

11-4-13

when Safety Valves set

25-7-13

Pressure on Valves

180 lbs

Date of Steam Accumulation Test

25-7-13

Max. Pressure under Accumulation Test

187 lbs

System of Draught

Natural

Can Boilers be worked separately?

Yes.

Greatest inside Diam. of Boilers

13' ~ 10 $\frac{27}{32}$ "

Length

10' ~ 9 $\frac{3}{8}$ "

Square Feet of Heating Surface, each Boiler

1836.75

Grate

55.



© 2020

Lloyd's Register
Foundation

No. of Safety Valves, each Boiler

Diar. " " "

Area " " "

Are the Valves fitted with Easing Gear?

No. of Pressure Gauges, each Boiler

" Water " "

" Test Cocks,

" Salinometer Cocks, "

Are Water Gauge Pillars attached by Pipes to Steam and Water Spaces?

Are these Pipes connected to Boilers by Cocks or Valves?

Are Blow-off Cocks or Valves fitted on Boiler Shells?

No. of Strakes of Shell Plating in each Boiler

" Plates in each Strake

Thickness of Shell Plates by Rule

" " Approved

" " in Boilers

Are the Rivet Holes Punched or Drilled?

Are Rivets Iron or Steel?

Are the Longitudinal Seams Butt or Lap Joints?

Are the Double Butt Straps of equal width?

Thickness of outside Butt Straps

" Inside "

Are Longitudinal Seams Hand or Machine Riveted?

Are they Single, Double, or Treble Riveted?

Diar. of Rivet Holes

Pitch "

Width of Overlap

Percentage of Strength in Longitudinal Seams

2
 2 3/4"
 11.8790"

Yes.

one
 one
 3
 one

Yes
 Cocks
 Valves

Boilers are exactly same as
 Boilers Nos 391 & 392, by same
 Builders, fitted on board Ships No
 339 & 340 built by the Greenock &
 Grangemouth Dockyard Co. Ltd. is in
 S/S "Strathcarron"
 K in S/S "River Oronter"



© 2020

Lloyd's Register
 Foundation

No. of Rows of Rivets in Centre Circumferential Seams

Are these Seams Hand or Machine Riveted?

Diam. of Rivet Holes

Pitch "

Width of Overlap

No. of Rows of Rivets in End Circumferential Seams

Are these Seams Hand or Machine Riveted?

Diam. of Rivet Holes

Pitch "

Width of Overlap

Size of Manholes in Shell

Dimensions of Compensating Rings

Thickness of End Plates in Steam Space by Rule

" " " " Approved

" " " " in Boilers

Pitch of Steam Space Stays

Eff. Diam. " " " by Rule

" " " " " Approved

" " " " " in Boilers

Material of " " "

How are Stays Secured?

Diam. and Thickness of Loose Washers on End Plates

" " Riveted " " "

Width " " Doubling Strips " "

Thickness of Middle Back End Plate by Rule

" " " " " Approved

" " " " " in Boilers

Thickness of Doubling in Wide spaces between Flanges

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "

" " " " " "



© 2020

Lloyd's Register
Foundation

Thickness of Doublings in Wide Spaces between Fireboxes

Pitch of Stays at " " " "

Eff. Diar. of Stays by Rule

" " " Approved

" " " in Boilers

Material "

Are Stays fitted with Nuts outside?

Thickness of Back End Plates at Bottom by Rule

" " " " " Approved

" " " " " in Boilers

Pitch of Stays at Wide Spaces between Fireboxes

Thickness of Doublings in " "

Thickness of Front End Plates at Bottom by Rule

" " " " " Approved

" " " " " in Boilers

No. of Long Stays in Spaces between Furnaces

Eff. Diar. of Stays by Rule

" " " " Approved

" " " " in Boilers

Material of "

Thickness of Front Tube Plates by Rule

" " " " Approved

" " " " in Boilers

Pitch of Stay Tubes at Spaces between Stacks of Tubes

Thickness of Doublings in " " "

" Stay Tubes at " " "



© 2020

Lloyd's Register
Foundation

Are Stay Tubes fitted with Nuts at Front End?

Thickness of Back Tube Plates by Rule

"	"	"	Approved
"	"	"	in Boilers

Pitch of Stay Tubes in Back Tube Plates

" Plain "

Thickness of Stay Tubes

" Plain "

External Diar. of Tubes

Material " "

Thickness of Furnace Plates by Rule

"	"	"	Approved
"	"	"	in Boilers

Smallest outside Diar. of Furnaces

Length between Tube Plates

Width of Combustion Chambers (Front to Back)

Thickness of " " Tops, by Rule

"	"	"	Approved
"	"	"	in Boilers

Pitch of Screwed Stays in C.C. Tops

Ext. Diar. " " by Rule

"	"	"	Approved
"	"	"	in Boilers

Material " "

Thickness of Combustion Chamber Sides by Rule

Thickness of Combustion Chamber Sides by Rule

" " " in Boilers

Pitch of screw stays in C.C. sides

Ext. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Thickness of Combustion Chamber Sides by Rule

" " " Approved

" " " in Boilers

Pitch of screw stays in C.C. Sides

Ext. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Are all screw stays fitted with Nuts inside C.C.?

Thickness of Combustion Chamber Bottoms

No. of Girders over each W.ing Chamber

" " " " " " "

Depth and Thickness of Girders

Material of Girders

No. of stays in each



© 2020

Lloyd's Register
Foundation

Thickness of Combustion Chamber Sides Approved

" " " " in Boilers

Pitch of Screwed Stays in C.C. Sides

Eff. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Thickness of Combustion Chamber Backs by Rule

" " " " Approved

" " " " in Boilers

Pitch of Screwed Stays in C.C. Backs

Eff. Diar. " " by Rule

" " " Approved

" " " in Boilers

Material " "

Are all Screwed Stays fitted with Nuts inside C.C.?

Thickness of Combustion Chamber Bottoms

No. of Girders over each Wing Chamber

" " " Centre "

Depth and Thickness of Girders

Material of Girders

No. of Stays in each

No. of Stay Tubes, each Boiler

" " Plain " " "

Size of Lower Manholes

VERTICAL DONKEY BOILERS.

If the Donkey Boilers are Vertical the following particulars should be stated in addition to those on

previous pages applicable to such Boilers—

Type of Boilers

Height of Boiler Crown above Fire Grate

Are Boiler Crowns Flat or Dished?

Internal Radius of Dished Boilers

Description of Stays in Boiler Crown

Pitch of Rivet Holes

Height of Boiler Crown above Fire Grate

Are Boilers (Crown Flat or Dished)?

External Radius of Dished Crowns

No. of Crown Stays

External Radii of Boilers at Top

No. of Water Tubes

Material of Water Tubes

No. of Staywires Stays in Firebox Shell

Are they fitted with Nuts inside?

SUPERHEATERS

Description of Superheater

When installed

What boiler are they connected to?

Can superheater be used on white boilers or working?

No. of safety valves on superheater.

Lloyd's Register
Foundation



© 2020

VERTICAL DONKEY BOILERS.

If the Donkey Boilers are Vertical the following particulars should be stated in addition to those on previous Pages applicable to such Boilers:—

Type of Boilers

Height of Boiler Crown above Fire Grate

Are Boiler Crowns Flat or Dished?

Internal Radius of Dished Ends.

Thickness of Plates

Description of Seams in Boiler Crowns

Diam. of Rivet Holes

Pitch

Width of Overlap

Height of Firebox Crowns above Fire Grate

Are Firebox Crowns Flat or Dished?

External Radius of Dished Crowns

Thickness of Plates

No. of Crown Stays

Effective Diam.

Material

External Diam. of Firebox at Top

Bottom

Thickness of Plates

No. of Water Tubes

Int. Diam.

" "

Material of Water Tubes

No. of Screwed Stays in Firebox Sides

Eff. Diam.

Material

Are they fitted with Nuts inside?

Outside?

SUPERHEATERS.

Description of Superheaters

Where situated

Which Boilers are connected to Superheaters?

Can Superheaters be shut off while Boilers are working?

No. of Safety Valves on Superheaters.

Diam.

Area

Are " " fitted with Easing Gear?

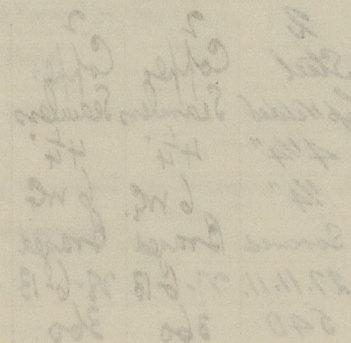
Date of Hydraulic Test

Test Pressure

Date when Safety Valves set

Pressure on Valves

SKETCHES.



REFRIGERATORS



© 2020

Lloyd's Register
Foundation

MAIN STEAM PIPES.

No. of Lengths	2	2	2
Material	Steel	Copper	Copper
Brazed, Welded, or Seamless	Lap Welded	Seamless	Seamless
Internal Diam.	4 1/4"	4 1/4"	4 1/4"
Thickness	1/4"	6 wg.	6 wg.
How are Flanges Secured?	Screwed	Brazed	Brazed
Date of Hydraulic Test	27.11.11.	27.6.13	28.6.13
Test Pressure	540	360	360

REFRIGERATORS.

No. of Machines Makers

Description

When any part of the Vessel is to be used for the Carriage of Refrigerated Cargo the following particulars should be stated:—

Total Cubic Capacity of Refrigerated Spaces

Nature, Construction, Thickness, &c., of Insulation

Are all Pipes, Air Trunks, &c., well secured and protected from risk of damage?

Are all Bilge, Suction, Sounding, and Air Pipes in Insulated Spaces properly insulated?

Are Thermometer Tubes so arranged that Water cannot enter and freeze in the Tubes?

Are Sluice Valves fitted on any of the Bulkheads of Insulated Spaces?

Are these fitted with Brass Non-return Valves?

Are they always accessible?

Are the Bilges and Bilge Rose Boxes always accessible?

Are the Steam Suctions to Bilges fitted with Non-return Valves?

Is the Machine Room effectively separated from Insulated Spaces?

" " properly Ventilated and Drained?

No. of Steam Cylinders, each Machine

Diars.

" Compressors, "

Diam. of Crank Shafts

No. of Cranks

Give particulars of Pumps in connection with Refrigerating Plant, and state whether worked by

Refrigerating Machines or independently

Are Brine and other Regulating Valves placed so as to be accessible without entering the Insulated Spaces?

Date of Test under Working Conditions

Fall of Temperature in Insulated Spaces

Time required to obtain this Result

Articles of Spare Gear for Refrigerating Plant carried on board



© 2020

Lloyd's Register
Foundation

SKETCHES.

ELECTRIC LIGHTING.

Installation Fitted by *Arch. Watson Esq. Ld.*
 No. and Description of Dynamos *One Compound wound*
 Makers of Dynamos *Brompton Esq.*
 Capacity *70* Amperes, at *110* Volts, *300* Revols. per Min.
 Current Alternating or Continuous *Continuous*
 Position of Dynamos *Engine Room bottom platform*
 Main Switch Board *Convenient to dynamo*
 No. of Circuits to which Switches are provided on Main Switch Board *6*
 Particulars of these Circuits:—

No. of Circuit.	Name of Circuit.	Number of Lights.	Candle Power.	Current Required. Amps.	Size of Conductor.	Current Density.	Conductivity of Conductor.	Insulation Resistance per Mile.
1	Law.	2 4	8 32	9	7/18	750	100%	600 meg.
2	Saloon	7 17	16 16	9.45	"	"	"	"
3	Engine	19	16	10.35	"	850	"	"
4	Fore	9	16	5	7/2 1/2	1000	"	"
5	St. Room	24	16	13	7/6	700	"	"
6	Cargo Chests	30	16	16.5	7/6	850	"	"

Total No. of Lights *112* No. of Motors driving Fans, &c. *5* No. of Heaters *✓*
 Current required for Motors and Heaters *3 amperes.*

Positions of Auxiliary Switch Boards, with No. of Switches on each

Wheelhouse 6 switches
Engine Room 6 "

Are Out-outs fitted as follows?—

On Main Switch Board, to Cables of Main Circuits

On Aux. " " each Auxiliary Circuit

Wherever a Cable is reduced in size

To each Lamp Circuit

To both Flow and Return Wires of all Circuits when the Double-Wire System is adopted

Are the Fuses of Standard Sizes?

Are all Switches and Out-outs constructed of Non-inflammable Material?

Are they placed so as to be always and easily accessible?

Smallest Single Wire used, No. 18 S.W.G., Largest, No. 18 S.W.G.

How are Conductors in Engine and Boiler Spaces protected?

" " Saloons, State Rooms, &c., " ?

What special protection is provided in the following cases?—

(1) Conductors exposed to Heat or Damp

(2) " " passing through Bunkers or Cargo Spaces

(3) " " Deck Beams or Bulkheads

Armoured Lead covered
do
W.T. brass glands

Are all Joints in Cables properly soldered and thoroughly Insulated so that the efficiency of the Cables is unimpaired? No joints

Are all Joints in accessible positions, none being made in Bunkers or Cargo Spaces? —

Are all Hull Connections for Single-Wire Systems made with Screws of large Surface? —

Are the Dynamos, Motors, Main and Branch Cables, so placed that the Compasses are not injuriously affected by them? Yes

Have Tests been made to prove that this condition has been satisfactorily fulfilled? Yes

Has the Insulation Resistance over the whole system been tested? Yes

What does the Resistance amount to? 2 meg. Ohms.

Is the Installation supplied with a Voltmeter? Yes

" " " an Ampere Meter? Yes

Date of Trial of complete Installation 13th Aug 1913 Duration of Trial 6 hrs.

© 2020

Lloyd's Register
Foundation

EVAPORATORS.

No. *One* Type *Vertical* Tons per Day *20*
 Makers *Andrews & Cameron*
 Working Pressure *75 lb* Test Pressure *50 lb* Date of Test *25-3-13*
 Date of Test of Safety Valves under Steam *13-8-13 Set to 18 lb.*

FEED WATER HEATERS.

No. *one* Type *Surface* *3 1/2"*
 Makers *J. G. Kincaid & Co*
 Working Pressure *180* Test Pressure *432* Date of Test *Filter*

DONKEY

No. of Donkeys *Ballast*
 Type *one*
 Makers *Vertical*
 Single or Duplex *Kincaid's*
 " Double-Acting *Duplex*
 " *Double*
 Diar. of Steam Cylinders *9*
 " Pumps *13*
 Stroke of " *10*
 Where do they pump from? *Sea, tanks, bilges*
direct bilge, deep tank
 Where do they discharge to? *Overboard, tanks*
deep tank, Condensers.

Capacity, Tons per Hour of Ballast Donkey

Diar. of Pipe required by Rule for

FEED WATER FILTERS.

No. *Help to 100* Type *1* Size *1*
 Makers *1*
 Working Pressure *1* Test Pressure *1* Date of Test *1*

FORCED DRAUGHT FANS.

No. of Fans. *1* Diar. *1* Revols. per min. *1*
 How are Fans driven? *1*

PUMPS.

General *Oil Pump.* *Feed*
 one *one*
 Vertical *Hor.* *Vert.*
 Kincaid's *Duplex* *Kincaid*
 Duplex *Double* *Duplex*
 Double *Lamont.* *Double*
 8" *9* *5 1/4"*
 5" *10* *3 1/2"*
 8" *10* *5*
 Sea, tanks *Tanks* *Hotiwell*
 Condensers *Condensers*
 Hotiwell, boiler *Sea.*
 Heale, boiler *Deck Boiler*
 Cond. over *Deck.* *Heale.*
 Deck.

Largest Ballast Tank

Velocity of Water in Pipe

SPARE GEAR.

No. of Top End Bolts	2	No. of Bot. End Bolts	2
" Main Bearing Bolts	2	" Coupling Bolts	1 set of shaft 1 set of main
" Cylr. Cover Studs	6	" Valve Chest Cover Studs	6
" Feed Pump Valves	1 set	" Bilge Pump Valves	1 set
" Safety Valve Springs	2	" Fire Bars	150
" Piston Rings	-	" Junk Ring Studs	12
" Piston Rods	-	" Connecting Rods	-
" Valve Spindles	-	" Air Pump "	-
" Air Pump Valves	1 set	" " " Buckets	-
" Crank Pin Bushes	-	" Crosshead Bushes	-
" Crank Shafts	-	" Propeller Shafts	one
" Propellers	1 Cast iron	" " Blades	-
" Boiler Tubes	12	" Condenser Tubes	12

OTHER ARTICLES OF SPARE GEAR:—

1 set of pump valves
 1 " ballast
 1 feed pump relief valve spring
 1 set feed donkey valves
 Bolts nuts plate iron assorted

GENERAL CONSTRUCTION.

Have all the Requirements under Sections 31 and 32 of the Rules been complied with? *Yes*

If not, give details of the points of difference, and state when these were sanctioned by the Chief Surveyor.

Are the Steam Pumping Arrangements in accordance with the approved Plan? *Yes*

If not, state in what respects they differ and when such differences were sanctioned by the Chief

Surveyor

Are the Materials used in the Construction of Engines and Boilers, so far as could be seen, sound and trustworthy? *Yes*

Is the Workmanship throughout thoroughly satisfactory? *Yes*

The above correctly describes the Machinery of the S.S.

as ascertained by me from personal examination

© 2020
Lloyd's Register
 Engineer Surveyor to the British Corporation for the
 Survey and Registry of Shipping

Fees—

GENERAL CONSTRUCTION

MAIN BOILERS.

H.S.

5510.25

Sq. ft.

19 : 10 : 0

G.S.

165

DONKEY BOILERS.

H.S.

Sq. ft.

G.S.

None

ENGINES.

L.P.C.

100.88

Cub. ft.

21 : 0 : 0

Testing, &c.

Expenses

Total

40 : 10 : 0

It is submitted that this Report be approved,

Chief Surveyor.

Approved by the Committee,

for the class of M.B. 5%
on the 28th September 1913.

Fees applied for

15th August 1913.

Fees paid

22nd August 1913.Robert Manning
Secretary.

© 2020

Lloyd's Register
Foundation

Fees

U.S. Dollars

19.10.0

U.S. 165

Deposit Interest

U.S.

U.S.

U.S. None

Fees

160.88 Oct. 2 11 0 0

Total

Deposit

Total

19.10.0

It is submitted that this Report be approved.

J. L. King

Clerk

Approved by the Committee

for the class of 1933
on the 22nd September 1933.

This report for

13th August 1933

This report

22nd August 1933

Robert Williams



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation