

No. 1859

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. 1650 No. in Register Book 2909

S.S. "Glenaldie"

Makers of Engines Swan Hunter Co. (Napton works)

Works No. 1144

Makers of Main Boilers Swan Hunter Co. (Napton works)

Works No. 1144

Makers of Donkey Boiler None fitted.

Works No.

MACHINERY.

© 2020

Lloyd's Register
Foundation.

004591-004595-0002

No.

THE BRITISH CORPORATION FOR THE SURVEY

AND

REGISTRY OF SHIPPING.

Report No. 1658 No. in Register Book 2909

Received at Head Office 15th August 1923

Surveyor's Report on the New Engines, Boilers, and Auxiliary Machinery of the ^{Single Triple} Screw Steamer, "GLENGLADE".

Official No. 145518 Port of Registry Newcastle

Registered Owners

Glen L. & Co. of Midland
Ontario

Engines Built by

Swan Hunter & Co. Ltd. Newcastle

at

Newton Works, Walker, N.C.

Main Boilers Built by

do. do. do.

at

Newton Works, Walker, N.C.

Donkey

at

None fitted

Date of Completion

26-4-23

First Visit

20/12/22

Last Visit

26/4/23

Total Visits

50

Lloyd's Register
Foundation

REPEAT FOR Nos 1148-50 RECIPROCATING ENGINES.

Works No. 1144 No. of Sets one Description Triple expansion

No. of Cylinders each Engine 3 No. of Cranks 3
Diars of Cylinders 16"-26 1/2"-44" Stroke 33"

Cubic feet in each L.P. Cylinder 29

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

Yes
Yes

" " each Receiver?

Type of H.P. Valves,

Piston valve

" 1st I.P. "

Jack slide valve

" 2nd I.P. "

D.P. slide valve

" L.P. "

Stephenson link

" Valve Gear

" Condenser

Surface (stail) Cooling Surface 908 sq. ft.

Diameter of Piston Rods (plain part)

4 1/2" Screwed part (bottom of thread) 2.91"

Material

Rollad steel bar

Diar. of Connecting Rods (smallest part)

4 1/4"

Material

forged steel

" Crosshead Gudgeons 20 4 1/2" Length of Bearing 5"

Material

Forged steel

No. of Crosshead Bolts (each)

4 Diar. over Thrd. 2"

Thrds. per inch

6

Material

steel

" Crank Pin "

2 " 2 3/8" "

6

"

do.

" Main Bearings

6 Lengths 9 1/4

" Bolts in each

2 Diar. over Thread 2"

Threads per inch

6

Material

steel

" Holding Down Bolts, each Engine

68 Diar. 1 1/4"

No. of Metal Chocks

68

Are the Engines bolted to the Tank Top or to a Built Seat?

Yank

Are the Bolts tapped through the Tank Top and fitted with Nuts Inside?

Yes

If not, how are they fitted?

—

Connecting Rods, Forged by

Messrs. Hingley & Son Dudley

Piston

" "

do.

do.

Crossheads,

" "

do.

do.

Connecting Rods, Finished by

Swan Hunter & Co.

Piston

" "

" "

" "

" "

Crossheads,

" "

" "

" "

" "

Date of Harbour Trial

20-4-23

" Trial Trip

26-4-23

Trials run at

Halfway mile

Were the Engines tested to full power under Sea-going conditions?

Yes

If so, what was the I.H.P.?

1025.

Revs. per min.

195.7

Pressure in 1st I.P. Receiver,

71

lbs., 2nd I.P., —

lbs., L.P.,

16 1/2 lbs., Vacuum, 22 ins.

Speed on Trial

10.96 knots.

If the Conditions on Trial were such that full power records were not obtained give the following estimated

data:—

Builders' estimated I.H.P.

Revs. per min.

Estimated Speed



© 2020

Lloyd's Register
Foundation

No. TURBINE ENGINES.

Works No.

Type of Turbines

No. of H.P. Turbines

No. of L.P.

No. of L.P.

No. of Astern

Are the Propeller Shafts driven direct by the Turbines or through Gearing?

Is Single or Double Reduction Gear employed?

Diam. of 1st Reduction Pinion

Width

Pitch of Teeth

" 1st " Wheel

Estimated Pressure per lineal inch

Diam. of 2nd Reduction Pinion

Width

Pitch of Teeth

" 2nd " Wheel

Estimated Pressure per lineal inch

Revs. per min. of H.P. Turbines at Full Power

S.H.P.

" " I.P. " "

" " L.P. " "

" " 1st Reduction Shaft

" " 2nd " "

" " Propeller Shaft

Total Shaft Horse Power

Date of Harbour Trial

" Trial Trip

Trials run at

Speed on Trial

Knots. Propeller Revs. per min.

S.H.P.

Turbine Spindles forged by

" Wheels forged or cast by

Reduction Gear Shafts forged by

" Wheels forged or cast by

DESCRIPTION OF INSTALLATION.



© 2020

Lloyd's Register
Foundation

No. TURBO-ELECTRIC PROPELLING MACHINERY.

No. of Turbo-Generating Sets

Capacity of each

Type of Turbines employed

Description of Generators

No. of Motors driving Propeller Shafting

Are the Propeller Shafts driven direct by the Motors or through Gearing?

Is Single or Double Reduction Gear employed?

Description of Motors

Diam. of 1st Reduction Pinion

" 1st " Wheel

Estimated Pressure per lineal inch

Diam. of 2nd Reduction Pinion

" 2nd " Wheel

Estimated Pressure per lineal inch

Revs. per min. of Generators at Full Power

" Motors "

" " 1st Reduction Shaft

" " 2nd "

" " Propellers at Full Power

Total Shaft Horse Power

Date of Harbour Trial

" Trial Trip

Trials run at

Speed on Trial

Knots. Propeller Revs. per min.

S.H.P.

Makers of Turbines

" Generators

" Motors

" Reduction Gear

Turbine Spindles forged by

" Wheels forged or cast by

Reduction Gear Shafts forged by

" Wheels forged or cast by

DESCRIPTION OF INSTALLATION.

Type of Turbine Block
 No. of Turbine Shafts at bottom of Collars
 Diam. of Turbine Shafts at bottom of Collars
 Forward Coupling
 At All Coupling
 No. of Collars
 Diam. of Pinion Shafts
 Diam. at Mid Length
 No. of Holes, each Coupling
 Diam. of Propeller Shafts by Hole
 Actual
 10" At Coupling
 Are Propeller Shafts fitted with Continuous Thrust Lines?
 Of what Material are the After Bearings composed?
 Are Means provided for lubricating the After Bearings with Oil?
 To prevent sea water entering the Steam Pipes?
 If sea water enters the...

SHAFTING.

Are the Crank Shafts Built or Solid?

Built

No. of Lengths in each

3

Angle of Cranks

120°

Diar. by Rule

8.578"

Actual

8.578"

In Way of Webs

9 1/8"

,, of Crank Pins

8.578"

Length between Webs

8.578"

Greatest Width of Crank Webs

16 7/8"

Thickness

5 3/8"

Least

12 1/4"

,,

5.378"

Diar. of Keys in Crank Webs

1 7/8"

Length

5"

,, Dowels in Crank Pins

1 7/8"

Length

5"

Screwed or Plain

plain

No. of Bolts each Coupling

6

Diar. at Mid Length

2 1/8"

Diar. of Pitch Circle

12 3/8"

Greatest Distance from Edge of Main Bearing to Crank Web

3 1/16"

Type of Thrust Blocks

Four Shoe

No. ,, Rings

5 (5 faces ahead - of stern)

Diar. of Thrust Shafts at bottom of Collars

8 3/8"

No. of Collars

5

,, ,, Forward Coupling

8.578"

At Aft Coupling

8.578"

Diar. of Intermediate Shafting by Rule

8.7

Actual

No. of Lengths

No. of Bolts, each Coupling

-

Diar. at Mid Length

-

Diar. of Pitch Circle

-

Diar. of Propeller Shafts by Rule

9.9"

Actual

10"

At Couplings

8.78"

Are Propeller Shafts fitted with Continuous Brass Liners?

Yes

Diar. over Liners

11 1/8"

Length of After Bearings

3'-4"

Of what Material are the After Bearings composed?

Lignum Vitae

Are Means provided for lubricating the After Bearings with Oil?

No

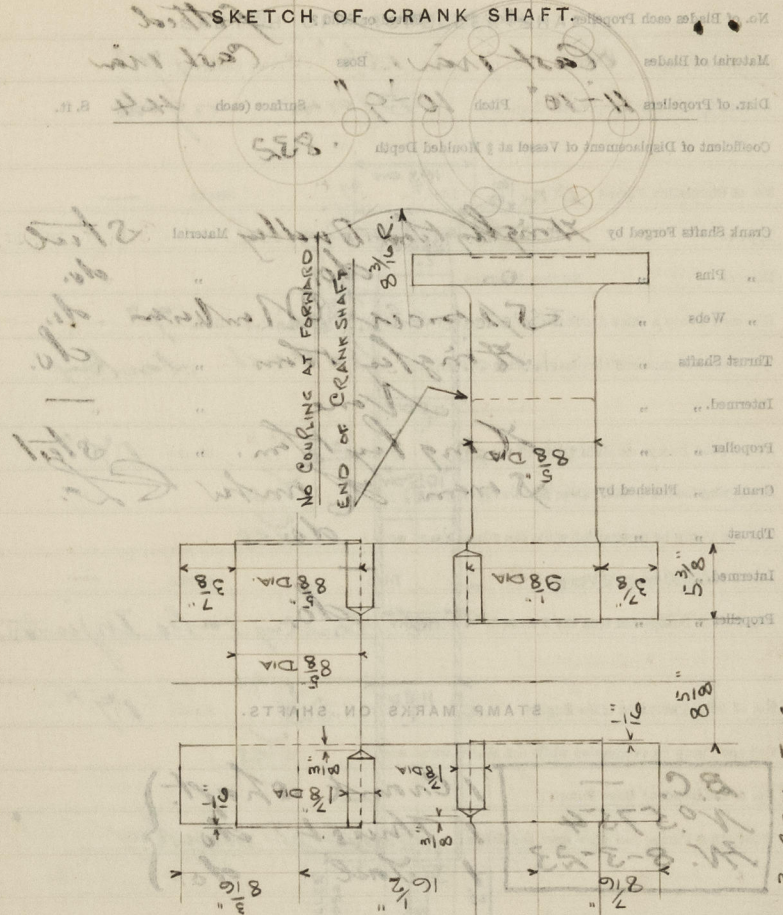
,, ,, to prevent Sea Water entering the Stern Tubes?

No.

If so, what Type is adopted?

-

SKETCH OF CRANK SHAFT.



© 2020

Lloyd's Register
Foundation

No. of Blades each Propeller

Fitted or Solid?

Material of Blades

Boss

Diam. of Propellers

Pitch

Surface (each

S. ft.

Coefficient of Displacement of Vessel at $\frac{1}{2}$ Moulded Depth

Crank Shafts Forged by

Material

Pins

Webs

Thrust Shafts

Intermed. "

Propeller "

Crank " Finished by

Thrust "

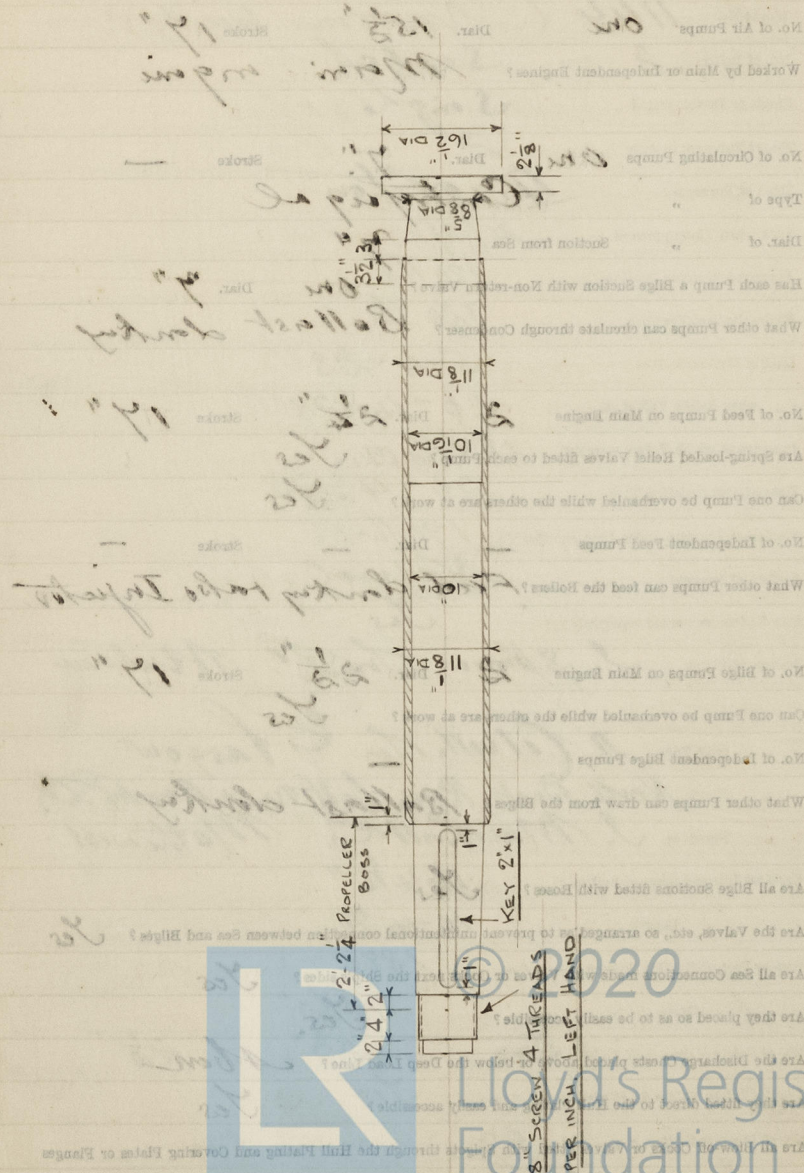
Intermed. "

Propeller "

STAMP MARKS ON SHAFTS.

B.C. —	1 Crank shaft.
N ^o . 5754	1 Thrust do.
N ^o . 8-3-23	1 Tail do.

SKETCH OF PROPELLER SHAFT.



PUMPS, ETC.

No. of Air Pumps *one* Diar. *15½"* Stroke *17"*

Worked by Main or Independent Engines? *Main engine*

No. of Circulating Pumps *one* Diar. *7"* Stroke *—*

Type of *Centrifugal*

Diar. of *7"* Suction from Sea

Has each Pump a Bilge Suction with Non-return Valve? *one* Diar. *7"*

What other Pumps can circulate through Condenser? *Ballast tank*

No. of Feed Pumps on Main Engine *2* Diar. *2¼"* Stroke *17"*

Are Spring-loaded Relief Valves fitted to each Pump? *Yes*

Can one Pump be overhauled while the others are at work? *Yes*

No. of Independent Feed Pumps *—* Diar. *—* Stroke *—*

What other Pumps can feed the Boilers? *Feed tank & Inj. tank*

No. of Bilge Pumps on Main Engine *2* Diar. *2½"* Stroke *17"*

Can one Pump be overhauled while the others are at work? *Yes*

No. of Independent Bilge Pumps *—*

What other Pumps can draw from the Bilges? *Ballast tank*

Are all Bilge Suctions fitted with Roses? *Yes*

Are the Valves, etc., so arranged as to prevent unintentional connection between Sea and Bilges? *Yes*

Are all Sea Connections made with Valves or Cocks next the Ship's sides? *Yes*

Are they placed so as to be easily accessible? *Yes*

Are the Discharge Chests placed above or below the Deep Load Line? *Above*

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*

BOILERS

Works No.

No. of Boilers

Single or Double-ended

No. of Furnaces in each

Type of Furnaces

Date when Plan approved

Approved Working Pressure

Hydraulic Test Pressure

Date of Hydraulic Test

When Safety Valves set

Pressure at which Valves were set

Date of Accumulation Test

Maximum Pressure under Accumulation Test

System of Draining

Can Boilers be worked separately?

Notes of Plates

Boiler Room

Notes of Plates

Notes of Plates

Greatest Internal Diam. of Boilers

Length

Boilers Feet of Heating Surface each Boiler

Girth

No. of Safety Valves each Boiler

Are the Safety Valves fitted with Blow-off Cocks?

No. of Pressure Cocks each Boiler

Test Cocks

© 2020 Lloyd's Register Foundation

BOILERS

Works No. 1144 (NEPTUNE WORKS)

No. of Boilers 2 Type Scotch

Single or Double-ended Single

No. of Furnaces in each 2

Type of Furnaces Deighton

Date when Plan approved 21/12/22

Approved Working Pressure 180 lbs

Hydraulic Test Pressure 320 lbs

Date of Hydraulic Test 5-4-23

" when Safety Valves set 20-4-23

Pressure at which Valves were set 185 lbs

Date of Accumulation Test 20-4-23

Maximum Pressure under Accumulation Test 190 lbs

System of Draught Natural.

Can Boilers be worked separately? Yes

Makers of Plates J. Spruce & Son Ltd. Middlesbrough

" Stay Bars D. Colvill & Son Glasgow

" Rivets North West Rivet Co. Ltd. Farnley Rd.

" Furnaces J. Marshall & Co. Motherwell

Greatest Internal Diam. of Boilers 12-4 1/16"

" " Length " 10-4 7/16" see letter from

Square Feet of Heating Surface each Boiler 1385 Newcastle 2/5/23

" " Grate " " 42 1/2"

No. of Safety Valves each Boiler Two Rule Diam 2 3/8" Actual 2 1/2"

Are the Safety Valves fitted with Easing Gear? Yes

No. of Pressure Gauges, each Boiler One

No. of Water Gauges one

" Test Cocks " Three

" Salinometer Cocks one

Andrie

Diam. of Stays Approved

2 5/8"

Threads per Inch

6

" " in Boilers

2 7/8"

6

Material "

Steel

Thickness of Front Tube Plates Approved

1 1/2"

" " " " in Boilers

Pitch of Stay Tubes at Spaces between Stacks of Tubes

14 1/4" x 8 3/4"

Thickness of Doublings in

" " "

5 7/16"

" Stay Tubes at

" " "

Are Stay Tubes fitted with Nuts at Front End?

4 Corn Tube only

Thickness of Back Tube Plates Approved

1 3/16"

" " " in Boilers

Pitch of Stay Tubes in Back Tube Plates

13 5/8" x 9"

" Plain "

4 1/2" x 4 3/8"

Thickness of Stay Tubes

7/16"

" Plain "

9. W. G.

External Diam. of Tubes

3 1/4"

Material "

Lapwelded steel

Thickness of Furnace Plates Approved

9/16"

" " " in Boilers

9/16"

Smallest outside Diam. of Furnaces

11 4/5"

Length between Tube Plates

7-0 3/8"

Width of Combustion Chambers (Front to Back)

2' 6" - all plates at top

Thickness of " " Tops Approved

1/2"

" " " in Boilers

1/2"

Pitch of Screwed Stays in C.C. Tops

9 1/2" x 8"

Diam. of Screwed Stays Approved

1 1/2"

" " " in Boilers

1 1/2"

Material "

Steel

Thickness of Combustion Chamber sides Approved

" " " in Boilers

Pitch of screw Stays in C.C. sides

Diam. " " Approved

" " " in Boilers

Material "

Thickness of Combustion Chamber Backs Approved

" " " in Boilers

Pitch of screw Stays in C.C. Backs

Diam. " " Approved

" " " in Boilers

Material "

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

Thickness of Combustion Chamber Bottoms

No. of Girders over each Water Chamber

" " " " " " "

Depth and Thickness of Girders

Material of Girders

No. of Stays in each

No. of Tubes each Boiler

Size of lower flange



© 2020

Lloyd's Register
Foundation

Diar. of Screwed Stays Approved

Threads per Inch

9

" " " in Boilers

9

Material " "

Thickness of Combustion Chamber Sides Approved

" " " in Boilers

Pitch of Screwed Stays in C.O. Sides

Diar. " " Approved

Threads per Inch

9

" " " in Boilers

Material " "

Thickness of Combustion Chamber Backs Approved

" " " in Boilers

Pitch of Screwed Stays in C.O. Backs

Diar. " " Approved

Threads per Inch

9

" " " in Boilers

Material " "

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

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 Tubes, each Boiler

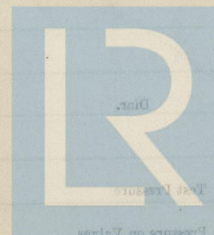
Size of Lower Manholes

VERTICAL DONKEY BOILERS

No. of Boilers
Type
Greatest Int. Diam.
Height
Height of Boiler Crown above Fire Grate
Are Boiler Crowns Flat or Dished?
Internal Radius of Dished Ends
Description of Stems in Boiler Crowns
Pitch
Diam. of Rivet Holes
Height of Pinchon Crown above Fire Grate
Are Pinchon Crowns Flat or Dished?
External Radius of Dished Crowns
Thickness of Plates
Diam.
No. of Crown Stays
External Diam. of Pinchon at Top
Bottom
Thickness
No. of Water Tubes
Material of Water Tubes
Size of Manhole in Shell
Dimensions of Compensating Ring
Heating surface, each Boiler
Grate surface

SUPERHEATERS

Description of Superheaters
Where situated?
Which boilers are connected with superheaters?
Can superheaters be used on other boilers?
No. of Safety Valves on each superheater
Are " filled with boiler water?
Date of Hydrostatic Test
Date when Safety Valves set



© 2020

Lloyd's Register
Foundation

No. VERTICAL DONKEY BOILERS.

No. of Boilers _____ Type _____

Greatest Int. Diar. _____ Height _____

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 _____

Diar. 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 _____ Diar. _____ Material _____

External Diar. of Firebox at Top _____ Bottom _____ Thickness of Plates _____

No. of Water Tubes _____ Ext. Diar. _____ Thickness _____

Material of Water Tubes _____

Size of Manhole in Shell _____

Dimensions of Compensating Ring _____

Heating Surface, each Boiler _____ Grate Surface _____

No. 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 each Superheater _____ Diar. _____

Are " " fitted with Lasing Gear? _____

Date of Hydraulic Test _____ Test Pressure _____

Date when Safety Valves set _____ Pressure on Valves _____

MAIN STEAM PIPES

No. of Lengths _____

Material _____

Braced, Welded or Seamed _____

Internal Diar. _____

Thickness _____

How are Flanges secured? _____

Date of Hydraulic Test _____

Test Pressure _____

No. of Lengths _____

Material _____

Braced, Welded or Seamed _____

Internal Diar. _____

Thickness _____

How are Flanges secured? _____

Date of Hydraulic Test _____

Test Pressure _____

No. of Lengths _____

Material _____

Braced, Welded or Seamed _____

Internal Diar. _____

Thickness _____

How are Flanges secured? _____

Date of Hydraulic Test _____

Test Pressure _____



© 2020

Lloyd's Register
Foundation

MAIN STEAM PIPES.

No. of Lengths	On	Yms
Material	W. Iron	W. iron
Brazed, Welded or Seamless	L. W.	L. W.
Internal Diam.	4 3/8"	3 5/8"
Thickness	5/8"	1/4"
How are Flanges secured?	Screwed	Screwed
Date of Hydraulic Test	17-4-23	17-4-23
Test Pressure	540 lb	540 lb

No. of Lengths

Material

Brazed, Welded or Seamless

Internal Diam.

Thickness

How are Flanges secured?

Date of Hydraulic Test

Test Pressure

No. of Lengths

Material

Brazed, Welded or Seamless

Internal Diam.

Thickness

How are Flanges secured?

Date of Hydraulic Test

Test Pressure

EVAPORATORS.

No.	Type	Working Pressure	Date of Test	Test Pressure	Test Pressure
6 x 4 1/2"	Feed chimney	H. Water			
4 x 2 3/4" x 1 1/4"	Smoking chimney	H. Water			
9 x 11 x 12"	Boiler chimney	H. Water			
0-18"	Feed water heater	H. Water			
5 x 5"	Feed water heater	H. Water			

FEED WATER FILTERS.

No.	Type	Working Pressure	Date of Test	Test Pressure	Test Pressure
180 lb	Feed water filter	H. Water			



© 2020

Lloyd's Register
Foundation

NO EVAPORATORS.

No. *One* Type *Feed* Tons per Day
 Makers *W. I. M. Union*
 Working Pressure *200* Test Pressure *250* Date of Test
 Date of Test of Safety Valves under Steam *3/20/00*

(ONE) FEED WATER HEATERS.

No. *1* Type *Exhaust*
 Makers *Holden & Brooks*
 Working Pressure *WALW=180* Test Pressure Date of Test

FEED WATER FILTERS.

No. *One* Type *Pressure* Size *2 1/2"*
 Makers *HENRY*
 Working Pressure *180 lb* Test Pressure Date of Test

LIST OF DONKEY PUMPS.

6" x 4" x 6" Feed donkey H. Watson
4" x 2 3/4" x 4" Smoothing donkey do.
9" x 11" x 12" Ballast donkey H. Watson
One - 1 1/2" Injector for feeding boiler by G. Watson & Co.



© 2020

Lloyd's Register
Foundation

No. of Top End Bolts.	No. of Bot. End Bolts.	No. of Cylinder Cover Studs.
" Coupling Bolts	" Main Bearing Bolts	" Valve Chest "
" Junk Ring Bolts	" Feed Pump Valves	" Bilge Pump Valves
" H.P. Piston Rings	" I.P. Piston Rings	" L.P. Piston Rings
" " Springs	" " Springs	" " Springs
" Safety Valve "	" Fire Bars	" Feed Check Valves
" Piston Rods	" Connecting Rods	" Valve Spindles
" Air Pump Rods	" Air Pump Buckets	" Air Pump Valves
" Clr. " "	" Clr. " "	" Clr. " "
" Crank Shafts	" Crank Pin Bushes	" Crosshead Bushes
" Propeller Shafts	" Propellers	" Propeller Blades
" Boiler Tubes	" Condenser Tubes	" Condenser Ferrules

OTHER ARTICLES OF SPARE GEAR:—

1 set down by pump valve - 6 Laminated glass & brass studs
1 doz. T. Glasses & washers: 12 assorted studs nuts.
6 ass^d. brass studs nuts 36 ass^d. bolt & nuts.
5 C scape valve springs.

© 2020

Lloyd's Register
Foundation

No. REFRIGERATORS.

No. of Machines	Capacity of each	No. of Valves, or Cranks
Makers		
Description		
No. of Steam Cylinders, each Machine	No. of Compressors	No. of Cranks
Particulars of Pumps in connection with Refrigerating Plant and whether worked by Refrigerating Machines or Independently		
<p>System of Refrigeration</p> <p>Insulation</p> <p>Are Brine and other Regulating Valves placed so as to be accessible without entering the Insulated Spaces?</p> <p>Are all Pipes, Air Trunks, &c., well secured and protected from risk of damage?</p> <p>Are all Bilge, Sounding, and Air Pipes in Insulated Spaces properly insulated?</p> <p>Are Thermometer Tubes so arranged that Water cannot enter and freeze in them?</p> <p>Date of Test under Working Conditions</p>		

RESULTS OF TRIALS.

No. and Name of Compartment.	Temp. at beginning of Trial.	Temp. at end of Trial.	Time required to obtain this Result.	Rise of Temp. after hours.
History of Operation	Understand & report	10 min	175	100%
Capacity	68	10	175	100%
Current, Alternating or Continuous	Continuous			
Single or Double Wire System	Double wire system			
Location of Apparatus	Engine room	Closest to engine	175	100%
Make, Brand, Model	See by name	10 min	175	100%
No. of Observers at which Station are provided on Main Switch Board	4			
Particulars of these Circuits—				
Circuit	Temp. at beginning	Temp. at end	Time required	Rise of Temp. after hours
Engine	75	77.1	7/029	1560
Boiler Room	14	25	7/029	1560
2. Aft Accom.	27	28	7/029	1560
	27	26	7/029	1560
3. Fore Accom.	25	25	7/029	1560
	10	10	7/029	1560

Articles of Spare Gear for Refrigerating Plant carried on board:—

© 2020

Lloyd's Register
Foundation

ELECTRIC LIGHTING.

Installation Fitted by *Iwan Hunter, Wigham Richardson Ltd.*
 No. and Description of Dynamos *1. 7½ H.P. Steam driven Comp. wound.*
 Makers of Dynamos *Sunderland Forge Engⁿ Co. Ltd.*
 Capacity *68* Amperes, at *110* Volts, *275* Revols. per Min.
 Current Alternating or Continuous *Continuous.*
 Single or Double Wire System *Double wire system.*
 Position of Dynamos *Engine room starboard, aft, on lower platform.*
 Main Switch Board *Near dynamo, lower platform.*
 No. of Circuits to which Switches are provided on Main Switch Board *4.*

Particulars of these Circuits:—

Circuit.	Number of Lights.	Candle Power.	Current Required. Amps.	Size of Conductor.	Current Density.	Conductivity of Conductor.	Insulation Resistance per Mile.
1. Engine & Boiler rooms	14	25	7.1	7/029	1560	100%	600 Ω
2. Aft Accom ^{da}	27	25	27.5	7/044	2679	Pure Copper	"
	27	16					
3. Ford Accom ^{da}	25	25	18.8	7/064	849	"	"
	10	16					
	2	8					
4. Navigation	4	32	5.09	7/036	726	"	"
	2	16					

Total No. of Lights *111* No. of Motors driving Fans, &c. No. of Heaters

Current required for Motors and Heaters

© 2020

Lloyd's Register
Foundation

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

No auxiliary switchboards fitted

Are Cut-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 Cut-outs constructed of Non-inflammable Material?

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

Smallest Single Wire used, No. *1/044* S.W.G., Largest, No. *1/044* S.W.G.

How are Conductors in Engine and Boiler Spaces protected? *Lead covered & armoured.*

" Saloons, State Rooms, &c., " ? *Lead covered.*

What special protection is provided in the following cases?—

(1) Conductors exposed to Heat or Damp *Lead covered & armoured.*

(2) " passing through Bunkers or Cargo Spaces *Lead covered - in casing.*

(3) " " Deck Beams or Bulkheads *W. T. Bulkhead flange*

Are all Joints in Cables properly soldered and thoroughly Insulated so that the efficiency of the Cables

is unimpaired? *none made.*

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

Are all Hull Connections for Single-Wire Systems made with Screws of large Surface? *none*

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? *10,000 ohms.* Ohms,

Is the Installation supplied with a Voltmeter? *Yes. fitted on main switchbo*

" " " an Ampere Meter? *-*

Date of Trial of complete Installation *24th April 23* Duration of Trial *6 hours.*

Have all the requirements of Section 42 been satisfactorily carried out? *Yes.*

© 2020

Lloyd's Register
Foundation

GENERAL CONSTRUCTION.

Have the Machinery and Boilers been constructed in accordance with the requirements of the Rules and the

Approved Plans? *Yes*

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

Surveyor. *Are the Dynamometer and Branch Capes as placed that the Compresses are*

affected by them?

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

Has the Insulation Resistance over the whole system been tested?

What does the Resistance amount to?

Is the Insulation supplied with a Voltmeter?

Are the Motors

Date of Trial of complete installation

Have all the requirements of Section 12 been satisfactorily carried out?

Are Out-lets fitted as follows?

On Main Engine Room, 10 feet to 12 feet to 14 feet

On Deck, 10 feet to 12 feet to 14 feet

Whenever a Cable is replaced in size

To each Lamp Circuit

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*

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

Smallest Single Wire used No. 1/0000

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

as ascertained by ^{us} ~~me~~ from personal examination

What special protection is provided in the following cases?

(1) Conductors exposed to Heat or Friction

(2) Conductors passing through Holes in Bulkheads or Deck

(3) Deck Beams or Bulkheads

"Glengetdie"

John H. Hill

John H. Hill
Engineer Surveyor to the British Corporation for the
Survey and Registry of Shipping.

Fees—

MAIN BOILERS.

H.S. *2735.0* Sq. ft. : :

G.S. *85* " : :

No DONKEY BOILERS.

H.S. ——— Sq. ft. : :

G.S. ——— " : :

£ : :

ENGINES.

L.P.C. *29* Cub. ft. : :

£ : :

Testing, &c. : :

£ : :

Expenses : :

Total ... £ : :

It is submitted that this Report be approved,

John H. Hill
Chief Surveyor.

Approved by the Committee for the Class of M.B.S.* on the *22nd August 1933*

Fees advised

Fees paid



© 2020

Lloyd's Register
Foundation
Secretary.

GENERAL CONSTRUCTION

MAIN BOILER

H.A. 2732.0

H.A. 2732.0

DOCKERY BOILER

H.A. 2732.0

H.A. 2732.0

ENGINEER

L.E.C. 2732.0

L.E.C. 2732.0

Testing &c.

L.E.C. 2732.0

L.E.C. 2732.0

L.E.C. 2732.0

L.E.C. 2732.0

It is submitted that this Report be approved.

The above report of the Committee for the Glass of M.B.S. on the 18th December 1933

Approved by the Committee for the Glass of M.B.S. on the 18th December 1933

It is submitted that this Report be approved.

The above report of the Committee for the Glass of M.B.S. on the 18th December 1933

L.E.C. 2732.0

L.E.C. 2732.0

L.E.C. 2732.0

It is submitted that this Report be approved.

The above report of the Committee for the Glass of M.B.S. on the 18th December 1933



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation



© 2020

Lloyd's Register
Foundation