

No. 1757

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. 1964 No. in Register Book 3294

S.S. "SPOSA"

Makers of Engines Carter Dock Co Ltd.

Works No. 294

Makers of Main Boilers BARCLAY, CURLEY & CO., LTD.
Richardsons Wedgath & Co. Ltd.

Works No. D166. CS2.

Makers of Donkey Boiler

Works No.

MACHINERY



Lloyd's Register
Foundation

No.

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. No. in Register Book

Received at Head Office

22nd September 1926.

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

"Shosa"

Official No. 1148 262.

Port of Registry

Leith.

Registered Owners

South Georgia Coy. Ltd.

Engines Built by

Syntex Sps. Ltd.

at

Coth Bank-on-Sea.

Main Boilers Built by

Richardson & Galt 16 Ltd.

at

West Hants Road.

Donkey

at

Date of Completion

8-26.

First Visit

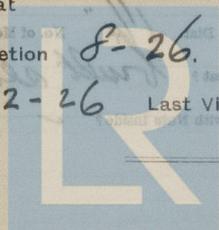
1-2-26

Last Visit

24-8-26

Total Visits

50



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RECIPROCATING ENGINES.

Works No. 294

No. of Sets 1

Description

Triple expansion.
S.P. 3 crks.

No. of Cylinders each Engine

3

No. of Cranks

3

Diars of Cylinders

16" - 26" - 43"

Stroke

26"

Cubic feet in each L.P. Cylinder

21.8

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

Yes.

" " each Receiver?

Yes.

Type of H.P. Valves,

Piston
Piston

" 1st L.P. "

" 2nd L.P. "

" L.P. "

" Valve Gear

slip.
Stephenson link.

" Condenser

Surface

Cooling Surface 1280 sq. ft.

Diameter of Piston Rods (plain part)

1 1/2"

Screwed part (bottom of thread)

3.16"

Material

m. steel

Diar. of Connecting Rbds (smallest part)

4 1/4"

Material

In. S.

" Crosshead Gudgeons

4 3/4"

Length of Bearing

5 3/16"

Material

In. S.

No. of Crosshead Bolts (each)

4

Diar. over Thrd.

2 1/8"

Threads per inch

8

Material

In. S.

" Crank Pin

2

Diar. over Thrd.

2 1/8"

Threads per inch

6

Material

In. S.

" Main Bearings

6

Lengths

10 7/8"

" Bolts in each

2

Diar. over Thread

2 3/8"

Threads per inch

6

Material

In. S.

" Holding Down Bolts, each Engine

70

Diar.

1 1/4"

No. of Metal Checks

70

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

Built seat.

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

✓

If not, how are they fitted?

Connecting Rods, Forged by

Piston " "

Crossheads,

Connecting Rods, Finished by

Piston " "

Crossheads,

Date of Harbour Trial

23-7-26.

" Trial Trip

24-8-26

Trials run at

In Sea Bay.

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

Yes.

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

1116

Revs. per min.

138

Pressure in 1st L.P. Receiver,

59

lbs., 2nd L.P.,

lbs., L.P.,

10.6

lbs., Vacuum,

25

Speed on Trial

12.9 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



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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? _____

Diar. of 1st Reduction Pinion _____ Width _____ Pitch of Teeth _____

1st Wheel _____

Estimated Pressure per lineal inch _____

Diar. 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. _____

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

L.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.

No. of Turbo-Generating sets _____

Quantity of each _____

Type of Turbines employed _____

Description of Generator _____

No. of Motors driving Propeller Shafts _____

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

Is Single or Double Reduction Gear employed? _____

Description of Motors _____

Diar. of 1st Reduction Pinion _____ Width _____ Pitch of Teeth _____

1st Wheel _____

Estimated Pressure per lineal inch _____

Diar. of 2nd Reduction Pinion _____ Width _____ Pitch of Teeth _____

2nd Wheel _____

Estimated Pressure per lineal inch _____

Revs. per min. of Generator at Full Power _____

Motor _____

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 _____



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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 } 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 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 Thrust Hooks

No. of Thrust Hooks

Diam. of Thrust Shafts at bottom of Collars

No. of Collars

Forward Coupling

Backward Coupling

No. of Bolts each Coupling

Diam. at Mid Length

Diam. of Pitch Circle

At the Coupling

Actual

No. of Intermediate Shafts by Hubs

Actual

Diam. of Intermediate Shafts by Hubs

Actual

Are Propeller Shafts fitted with Continuous Brass Liners?

Diam. over Liners

Of what Material are the Aft Bearings composed?

Are Means provided for adjusting the Aft Bearings with Oil?

Are the Bearings set West during the Harbour Trials?

Is the Aft type of Bearings

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SHAFTING.

Are the Crank Shafts Built or Solid? *Built.*

No. of Lengths in each *4* Angle of Cranks *120°*

Diar. by Rule *8.25* Actual *8 1/2* In Way of Webs *8 7/8*

„ of Crank Pins *8 3/4* Length between Webs *11*

Greatest Width of Crank Webs *24* Thickness *5 1/4*

Least „ „ *13* „ *5 1/4*

Diar. of Keys in Crank Webs *1 1/2* Length *4*

„ Dowels in Crank Pins *1* Length *3 1/2* Screwed or Plain *Plain*

No. of Bolts each Coupling *6* Diar. at Mid Length *2* Diar. of Pitch Circle *12 1/2*

Greatest Distance from Edge of Main Bearing to Crank Web *3/16*

Type of Thrust Blocks *Horseshoe*

No. „ Rings *6*

Diar. of Thrust Shafts at bottom of Collars *8 1/2* No. of Collars *6*

„ „ Forward Coupling *8 1/2* At Aft Coupling *8 1/2*

Diar. of Intermediate Shafting by Rule Actual No. of Lengths

No. of Bolts, each Coupling Diar. at Mid Length Diar. of Pitch Circle

Diar. of Propeller Shafts by Rule *8.4* Actual *8 7/8* At Couplings *8 1/2*

Are Propeller Shafts fitted with Continuous Brass Liners? *Continuous*

Diar. over Liners *10* Length of After Bearings *4-0.2*

Of what Material are the After Bearings composed? *Sigum Nitro*

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.

Handwritten notes and sketches of crank shaft details, including dimensions and material specifications.

Material: Cast Iron

Finish: Turned

Web: Turned

Pin: Turned

Key: Turned

Collar: Turned

Propeller: Turned

Intermediate: Turned

Shaft: Turned

Thrust: Turned

Propeller: Turned

Same as of Swona



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No. of Blades each Propeller ⁴ Fitted or Solid? ^{solid}
 Material of Blades ^{Cast steel} Boss ^{Cast Steel}
 Diam. of Propellers ^{10'-0"} Pitch ^{10'-4 1/2"} Surface (each) ^{41.5} S. ft.

Coefficient of Displacement of Vessel at $\frac{3}{4}$ Moulded Depth

Crank Shafts Forged by ^{Yips Forge Co.} Material ^{I.S.}
 " Pins " " " "
 " Webs " " " "
 Thrust Shafts " " " "
 Intermed. " " " "
 Propeller " " " "
 Crank " Finished by " "
 Thrust " " " "
 Intermed. " " " "
 Propeller " " " "

STAMP MARKS ON SHAFTS.

Crank Shaft:-

BC.
 No 10080
 8-3-26
 R.S.

Thrust Tail Shaft:-

BC.
 No 10082
 26-3-26
 R.S.

Shaft Tail Shaft:-

BC.
 No 10082
 26-3-26
 R.S.

SKETCH OF PROPELLER SHAFT.

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BOILERS.

Works No. **D 166**

No. of Boilers **1** Type **Cylindrical multitubular.**

Single or Double-ended **single.**

No. of Furnaces in each **3**

Type of Furnaces **Deighton.**

Date when Plan approved **30-1-26**

Approved Working Pressure **200 lbs.**

Hydraulic Test Pressure **350**

Date of Hydraulic Test **21-4-26**

„ when Safety Valves set **23-7-26**

Pressure at which Valves were set **206 lbs.**

Date of Accumulation Test **23-7-26**

Maximum Pressure under Accumulation Test **210 lbs.**

System of Draught **Howden's C.A.**

Can Boilers be worked separately? **yes.**

Makers of Plates **Dalzell & Sons Ltd.**

„ Stay Bars **R. B. & Co. Ltd.**

„ Rivets **Leeds Forge Co.**

„ Furnaces **Leeds Forge Co.**

Greatest Internal Diam. of Boilers **15'-3"**

„ „ Length „ **12'-1"**

Square Feet of Heating Surface each Boiler **2890 ϕ**

„ „ Grate „ „ **61 ϕ**

No. of Safety Valves each Boiler **2** Rule Diam. Actual **3"**

Are the Safety Valves fitted with Easing Gear? **yes.**

No. of Pressure Gauges, each Boiler **2** No. of Water Gauges **2**

„ Test Cocks „ **✓** „ Salinometer Cocks **1**

NEW BOILER BY BARCLAY, CURLE & CO., LTD.

Works No. **CS 2**

No. of Boilers **1** Type **Cylindrical Multitubular**

Single or Double-ended **Single**

No. of Furnaces in each **3**

Type of Furnaces **Deighton**

Date when Plan approved **29-4-30**

Approved Working Pressure **200 lb/sq"**

Hydraulic Test Pressure **350 „**

Date of Hydraulic Test **15-8-30**

„ when Safety Valves set

Pressure at which Valves were set

Date of Accumulation Test

Maximum Pressure under Accumulation Test

System of Draught **Howden's C.A.**

Can Boilers be worked separately? **Yes.**

Makers of Plates **D. Leville & Sons, Ltd.**

„ Stay Bars **do.**

„ Rivets **R. B. & M. Co. Ltd.**

„ Furnaces **Broomside Boiler Wks. Leeds, Ltd.**

Greatest Internal Diam. of Boilers **15'-3"**

„ „ Length „ **12'-0"**

Square Feet of Heating Surface each Boiler **2890 ϕ**

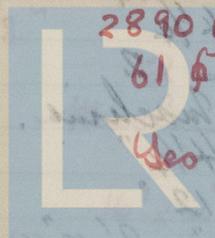
„ „ Grate „ „ **61 ϕ**

No. of Safety Valves each Boiler **2** Rule Diam. Actual **3"**

Are the Safety Valves fitted with Easing Gear? **Yes.**

No. of Pressure Gauges, each Boiler **2** No. of Water Gauges **2**

„ Test Cocks „ **✓** „ Salinometer Cocks **1**



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New Boilers by Barclay Curle & Co. Ltd

Are the Water Gauges fitted direct to the Boiler Shells or mounted on Pillars? *on pillars direct*

Are the Water Gauge Pillars fitted direct to the Boiler Shells or connected by Pipes? *direct*

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 *1*

Plates in each Strake *2*

Thickness of Shell Plates Approved *1 3/8"*

in Boilers *1 3/8"*

Are the Rivets Iron or Steel? *steel*

Are the Longitudinal Seams Butt or Lap Joints? *butt*

Are the Butt Straps Single or Double? *double*

Are the Double Butt Straps of equal width? *✓*

Thickness of outside Butt Straps *1 1/16"*

inside *1 3/16"*

Are Longitudinal Seams Hand or Machine Riveted? *machine*

Are they Single, Double, or Treble Riveted? *treble*

No. of Rivets in a Pitch *5*

Diar. of Rivet Holes *1 7/16"* Pitch *9 7/8"*

No. of Rows of Rivets in Centre Circumferential Seams *✓*

Are these Seams Hand or Machine Riveted? *✓*

Diar. of Rivet Holes *✓* Pitch *✓*

No. of Rows of Rivets in Front End Circumferential Seams *2*

Are these Seams Hand or Machine riveted? *Hand*

Diar. of Rivet Holes *1 7/16"* Pitch *4 1/4"*

No. of Rows of Rivets in Back End Circumferential Seams *2*

Are these Seams Hand or Machine Riveted? *Machine*

Diar. of Rivet Holes *1 7/16"* Pitch *4 1/4"*

Size of Manholes in Shell *16" x 12"*

Dimensions of Compensating Rings *2'-9" x 2'-5" x 1 3/8"*

on pillars direct

✓

✓

1

3

1 1/32"

1 1/32"

Steel Butt Double

Yes

1 1/16"

1 3/16"

Machine Treble

5

1 3/8"

9 1/2"

✓

✓

✓

2

Hand

1 3/8"

2

Machine

1 3/8"

16" x 12"

2' 9 1/2" x 3' 1 1/2" x 1 1/32"

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Thickness of End Plates in Steam Space Approved

$1\frac{1}{32}$ "
 $1\frac{1}{32}$ "

" " " " " in Boilers

Pitch of Steam Space Stays

$1\text{'-}9\frac{1}{2}$ "

Diar. " " " " Approved

$3\frac{1}{8}$ " Threads per Inch 6

" " " " " in Boilers

$3\frac{1}{2}$ " " 6

Material of " " "

Steel.

How are Stays Secured?

double nuts + washers.

Diar. and Thickness of Loose Washers on End Plates

$12\frac{1}{2}$ " x 1"

" " Riveted " " "

Width " " Doubling Strips "

Thickness of Middle Back End Plates Approved

$3\frac{1}{32}$ "

" " " " " in Boilers

$3\frac{1}{82}$ "

Thickness of Doublings in Wide Spaces between Fireboxes

Pitch of Stays at

$14\frac{1}{2}$ " x $8\frac{5}{8}$ "

Diar. of Stays Approved

$1\frac{7}{8}$ " Threads per Inch 9

" " in Boilers

$1\frac{3}{8}$ " " 9

Material "

steel.

Are Stays fitted with Nuts outside?

y/ls.

Thickness of Back End Plates at Bottom Approved

$3\frac{1}{32}$ "

" " " " " in Boilers

$3\frac{1}{32}$ "

Pitch of Stays at Wide Spaces between Fireboxes

$14\frac{1}{2}$ " x $8\frac{5}{8}$ "

Thickness of Doublings in " "

Thickness of Front End Plates at Bottom Approved

$\frac{7}{8}$ "

" " " " " in Boilers

$\frac{7}{8}$ "

No. of Longitudinal Stays in Spaces between Furnaces

1

$1\frac{23}{64}$ "
 $1\frac{23}{64}$ "

$1\text{'-}9\frac{1}{2}$ " x $1\text{'-}8\frac{1}{2}$ "

$3\frac{3}{8}$ " 6

$3\frac{3}{8}$ " 6

Steel

Double Nuts

✓

✓

✓

✓

$2\frac{5}{32}$ "

$2\frac{5}{32}$ "

✓

$13\frac{1}{2}$ " x 8"

$1\frac{7}{8}$ " 9

$1\frac{7}{8}$ " 9

Steel

Yes.

$2\frac{5}{32}$ "

$2\frac{5}{32}$ "

$13\frac{1}{2}$ " x 8"

$3\frac{1}{4}$ "

$2\frac{7}{32}$ "

$2\frac{7}{32}$ "

$2\frac{7}{32}$ "

1

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Diar. of Stays Approved 3" Threads per Inch 9
" " in Boilers 3" " 9

Material " *steel.*

Thickness of Front Tube Plates Approved $\frac{7}{8}$ "
" " " " in Boilers $\frac{7}{8}$ "

Pitch of Stay Tubes at Spaces between Stacks of Tubes $13\frac{1}{2}" \times 7\frac{1}{4}"$

Thickness of Doublings in " " "
" Stay Tubes at " " " $\frac{1}{2}" \times \frac{3}{8}"$

Are Stay Tubes fitted with Nuts at Front End? *yes.*

Thickness of Back Tube Plates Approved $2\frac{5}{32}"$
" " " in Boilers $2\frac{5}{32}"$

Pitch of Stay Tubes in Back Tube Plates $9\frac{1}{16}" \times 7\frac{1}{2}"$
" Plain " $3\frac{5}{8}" \times 3\frac{3}{4}"$

Thickness of Stay Tubes $\frac{1}{2}" \times \frac{3}{8}" \times \frac{5}{16}"$
" Plain " *8 W. 8.*

External Diar. of Tubes $2\frac{1}{2}"$
Material " *iron.*

Thickness of Furnace Plates Approved $\frac{5}{8}"$
" " " in Boilers $\frac{5}{8}"$

Smallest outside Diar. of Furnaces $3'-8\frac{3}{4}"$
Length between Tube Plates $8'-3"$

Width of Combustion Chambers (Front to Back) $3'-1\frac{7}{16}"$

Thickness of " " Tops Approved $\frac{1}{16}"$
" " " in Boilers $\frac{1}{16}"$

Pitch of Screwed Stays in C.C. Tops $9\frac{1}{2}" \times 8\frac{1}{4}"$

$2\frac{3}{4}"$ Threads per Inch 6
 $2\frac{3}{4}"$ " 6

Steel

$2\frac{1}{32}"$
 $2\frac{1}{32}"$

$13\frac{1}{2}" \times 7\frac{1}{4}"$

$\frac{3}{8}"$
Yes

$\frac{3}{4}"$
 $\frac{3}{4}"$

$4\frac{1}{2}" \times 7\frac{1}{4}"$
 $3\frac{3}{4}" \times 3\frac{5}{8}"$

$\frac{3}{8}" \times \frac{1}{4}"$
9 W. 8.
 $2\frac{1}{2}"$

Steel

$\frac{5}{8}"$
 $\frac{5}{8}"$

$3'-8\frac{3}{4}"$
 $8'-3"$

$2'-9\frac{9}{16}"$

$\frac{1}{16}"$
 $\frac{1}{16}"$

$10" \times 8"$



Diar. of Screwed Stays Approved $1\frac{3}{4}$ " Threads per Inch 9
 " " " in Boilers $1\frac{3}{4}$ " 9
 Material " " *steel*

Thickness of Combustion Chamber Sides Approved $2\frac{1}{32}$ "
 " " " " in Boilers $2\frac{1}{32}$ "
 Pitch of Screwed Stays in C.C. Sides $8\frac{1}{2}$ " x $8\frac{1}{4}$ "
 Diar. " " Approved $1\frac{5}{8}$ " Threads per Inch 9
 " " " in Boilers $1\frac{5}{8}$ " 9
 Material " " *steel*

Thickness of Combustion Chamber Backs Approved $2\frac{1}{32}$ "
 " " " " in Boilers $2\frac{1}{32}$ "
 Pitch of Screwed Stays in C.C. Backs $8\frac{5}{8}$ " x $8\frac{3}{4}$ "
 Diar. " " Approved $1\frac{7}{8}$ " + $1\frac{5}{8}$ " Threads per Inch 9
 " " " in Boilers $1\frac{7}{8}$ " + $1\frac{5}{8}$ " 9
 Material " " *steel*

Are all Screwed Stays fitted with Nuts inside C.O.? *Yes*
 Thickness of Combustion Chamber Bottoms $1\frac{3}{16}$ "

No. of Girders over each Wing Chamber 3
 " " " Centre " 2
 Depth and Thickness of Girders 10 " x $1\frac{5}{8}$ "
 Material of Girders *steel*
 No. of Stays in each 3

No. of Tubes, each Boiler 439
 Size of Lower Manholes 16 " x 12 "

$1\frac{3}{4}$ "
 $1\frac{3}{4}$ "
 Steel

$1\frac{1}{16}$ "
 $1\frac{1}{16}$ "
 $10\frac{1}{4}$ " x $8\frac{1}{4}$ "
 $1\frac{3}{4}$ " x 9
 $1\frac{3}{4}$ " 9
 Steel

$1\frac{1}{16}$ "
 $1\frac{1}{16}$ "
 $10\frac{1}{4}$ " x $8\frac{1}{4}$ "
 $1\frac{7}{8}$ " + $1\frac{3}{4}$ "
 $1\frac{7}{8}$ " + $1\frac{3}{4}$ "
 Steel

Yes
 $3\frac{1}{4}$ "
 4
 2

$9\frac{1}{2}$ " x 2 @ $1\frac{3}{16}$ "
 Steel
 439
 $16\frac{1}{4}$ " x 12"



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MAIN STEAM PIPES.

No. of Lengths	1	1	1
Material	Copper.		
Brazed, Welded or Seamless	solid drawn.		
Internal Diam.	4"	4"	4"
Thickness	5-10/16"		
How are Flanges secured?	braked.		
Date of Hydraulic Test	4-6-26	7-6-26	9-6-26.
Test Pressure	400 lbs.		

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.	1
Type	Vertical
Material	Steel
Working Pressure	6" x 4" x 6"
Date of Test	6-7-26
Test Pressure	400 lbs.

FEED WATER HEATERS

No.	1
Type	Vertical
Material	Steel
Working Pressure	200 lbs.
Date of Test	6-7-26
Test Pressure	400 lbs.

FEED WATER FILTERS

No.	
Type	
Material	
Working Pressure	
Date of Test	
Test Pressure	



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REFRIGERATORS.

No. of Machines 2 Capacity of each 2
 Makers Description
 No. of Steam Cylinders, each Machine 2 No. of Compressors 2 No. of Cranks 2
 Particulars of Pumps in connection with Refrigerating Plant and whether worked by Refrigerating Machines or Independently
 System of Refrigeration
 Insulation
 Are Brine and other Regulating Valves placed so as to be accessible without entering the Insulated Spaces?
 Are all Pipes, Air Trunks, &c., well secured and protected from risk of damage?
 Are all Bilge, Sounding, and Air Pipes in Insulated Spaces properly insulated?
 Are Thermometer Tubes so arranged that Water cannot enter and freeze in them?
 Date of Test under Working Conditions

RESULTS OF TRIALS.

COMPARTMENT.	Temp. at beginning of Trial.	Temp. at end of Trial.	Time required to obtain this Result.	Rise of Temp. after hours.
Forward	63.0	5.1	7/036	1389
Aft	57.0	5.4	7/036	1389

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

Wrenches 15 7/036 1389



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

Installation fitted by
No. and Description of Dynamos
Makers of Dynamos
Capacity
Current Alterations or Connections
Gauge or Double Wire System
Position of Dynamos
Main Switch Board
No. of Circuits to which Switches are provided on Main Switch Board

Are Out-outs fitted as follows?—	Yes	No
On Main Switch Board, to Cables of Main Circuits	yes.	
On Aux. " " each Auxilliary Circuit	yes.	
Wherever a Cable is reduced in size	yes.	
To each Lamp Circuit	yes.	
To both Flow and Return Wires of all Circuits when the Double-Wire System is adopted	yes.	
Are the Fuses of Standard Sizes?	yes.	
Are all Switches and Out-outs constructed of Non-inflammable Material?	yes.	
Are they placed so as to be always and easily accessible?	yes.	
Smallest Single Wire used, No. 1/044 S.W.G., Largest, No. 7/064 S.W.G.		
How are Conductors in Engine and Boiler Spaces protected?	had covered / armoured.	
" " Saloons, State Rooms, &c., " ?	"	
What special protection is provided in the following cases?—	had covered / armoured.	
(1) Conductors exposed to Heat or Damp		
(2) " " passing through Bunkers or Cargo Spaces		
(3) " " Deck Beams or Bulkheads		

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

is unimpaired? *none.*

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? *yes.*

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? *300,000 Ohms.*

Is the Installation supplied with a Voltmeter? *yes.*

" " " an Ampere Meter? *yes.*

Date of Trial of complete Installation *24-8-26* Duration of Trial *6 hours.*

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



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GENERAL CONSTRUCTION.

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

Approved Plans? *Yes. Yes.*

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

Surveyor.

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?

an Amperes Meter?

Date of Trial or complete installation

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

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

trustworthy? *Yes. Yes.*

Is the Workmanship throughout thoroughly satisfactory? *Yes. Yes.*

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

" SPOSA "

as ascertained by ^{me} from personal examination

J.D. Stephenson R.S.

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

Fees—

MAIN BOILERS.		£	s.	d.
H.S.	2890 Sq. ft.	:	:	:
G.S.	61 "	:	:	:
DONKEY BOILERS.				
H.S.	Sq. ft.	:	:	:
G.S.	"	:	:	:
		£	:	:
ENGINES.				
L.P.C.	21.8 Cub. ft.	:	:	:
		£	:	:
Testing, &c.	...	:	:	:
		£	:	:
Expenses	...	:	:	:
		£	:	:
Total	...	£	:	:

It is submitted that this Report be approved,

Horatia King
Chief Surveyor.

Approved by the Committee for the Class of M.B.S.* on the 6th October 1926

Fees advised

Fees paid



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Secretary.



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