

H.O.
No. 2298

Kincaids 663.
Harland & Wolff 8729

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. 2288 No. in Register Book 3643

T.S.S. "LOCHNESS" N/W VALMARINA.

Makers of Engines JOHN G. KINCAID & CO LTD

Works No. 663

Makers of Main Boilers JOHN G. KINCAID & CO LTD

Works No. 663

Makers of Donkey Boiler —

Works No. —

MACHINERY.



© 2021

Lloyd's Register
Foundation

3-10 14 28

01196-01196-0230

No. 2298

THE BRITISH CORPORATION FOR THE SURVEY
AND
REGISTRY OF SHIPPING.

Report No. No. in Register Book

T.S.S. "LOCHNESS"

Makers of Engines JOHN G. KINCAID & CO LTD

Works No. 663

Makers of Main Boilers JOHN G. KINCAID & CO LTD

Works No. 663

Makers of Donkey Boiler

Works No.

MACHINERY.



© 2021

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

18th September 1929

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

Official No.

Port of Registry GLASGOW.

Registered Owners DAVID M^C BRAYNE (1928) LTD

Engines Built by JOHN G. KINCAID & CO LTD

at GREENOCK.

Main Boilers Built by JOHN G. KINCAID & CO LTD

at GREENOCK.

Donkey

at

Date of Completion

9-7-29

First Visit

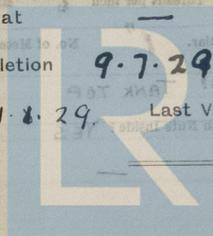
31-8-29

Last Visit

9-7-29

Total Visits

45



© 2021

Lloyd's Register
Foundation

RECIPROCATING ENGINES.

Works No. **663** No. of Sets **2.** Description **TRIPLE EXPANSION****SURFACE CONDENSING, DIRECT ACTING, INVERTED, RECIPROCATING
STEAM ENGINES.**

No. of Cylinders each Engine **3** No. of Cranks **3**
 Diars of Cylinders **14" 23" 38"** Stroke **27"**
 Cubic feet in each L.P. Cylinder **17.72**
 Are Spring-loaded Relief Valves fitted to Top and Bottom of each Cylr.? **YES.**
 " " each Receiver? **YES**
 Type of H.P. Valves, **PISTON VALVES**
 " L.P. " **ANDREWS & CAMERON TYPE**
 " " **DOUBLE PORTED SLIDE VALVES.**
 " Valve Gear **STEPHENSON LINK MOTION.**
 " Condensers **BUILT CYLINDRICAL** Cooling Surface **850** sq. ft. EACH
 Diameter of Piston Rods (plain part) **3 $\frac{3}{4}$ "** Screwed part (bottom of thread) **3" DIA. 6 THDS.**
 Material " **STEEL**
 Diar. of Connecting Rods (smallest part) **3 $\frac{1}{2}$ "** Material **STEEL**
 " Crosshead Gudgeons **4 $\frac{3}{4}$ " DIA.** Length of Bearing **6 $\frac{1}{2}$ "** Material **STEEL**
 No. of Crosshead Bolts (each) **2** Diar. over Thrd. **2 $\frac{1}{4}$ "** Thrds. per inch **6** Material **STEEL**
 " Crank Pin " " **2** " **2 $\frac{1}{4}$ "** " **6** " **STEEL**
 " Main Bearings **SIX** Lengths **8 $\frac{1}{2}$ "**
 " Bolts in each **2** Diar. over Thread **2** Threads per inch **6** Material **STEEL**
 " Holding Down Bolts, each Engine **76** Diar. **1"** No. of Metal Chocks **76**
 Are the Engines bolted to the Tank Top or to a Built Seat? **TANK TOP**
 Are the Bolts tapped through the Tank Top and fitted with Nuts Inside? **YES**
 If not, how are they fitted? **—**

Connecting Rods, Forged by **JOHN G. KINCAID & CO LTD**

Piston " " " " " " } @
 Crossheads, " " " " " " }
 Connecting Rods, Finished by " " " " " "
 Piston " " " " " " }
 Crossheads, " " " " " " }
 Date of Harbour Trial **3. 7. 29.**
 " Trial Trip **9. 7. 29**

Trials run at **FIRTH OF CLYDE.**Were the Engines tested to full power under Sea-going conditions? **YES.**If so, what was the I.H.P.? **1514** Revols. per min. **148.**Pressure in 1st L.P. Receiver, **50** lbs., 2nd L.P., — lbs., L.P., **7** lbs., Vacuum, **27 $\frac{1}{4}$ "** ins.Speed on Trial **13.953.**

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

Builders' estimated I.H.P. **1450** Revols per min. **135.**

Estimated Speed



© 2021

Lloyd's Register
Foundation

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.

No. of Turbine-Generators per —

Type of Turbines employed —

Description of Generators —

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 —

Date of 1st Reduction Pinion —

" " " " —

Estimated Pressure per lineal inch —

Date of 2nd Reduction Pinion —

" " " " —

Estimated Pressure per lineal inch —

Total Shaft Horse Power —

Date of Harbour Trial —

" Trial Trip —

Trials run at —

Speed on Trial — Knots. Propeller Revs. per min. — S.H.P. —



© 2021
 Lloyd's Register
 Foundation

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 —

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 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.

MICHELL

ONE

No. of Turbine Shafts at bottom of Column —

At 1st Coupling —

No. of Intermediate Shafts of Line —

At Mid Length —

No. of Bolts each Coupling —

At Couplings —

Diar. of Propeller Shafts by Bolt —

At Propeller Shafts with Couplings from Line —

Diar. over Lines —

Of main shafts are the after heating compound —

Are they provided with the after heating compound —

At present, the wheels contain the same material —

It is not possible to determine the exact material —

© 2021
 Lloyd's Register
 Foundation

No. of Blades each Propeller

4

Fitted or Solid?

SOLID

Material of Blades

BRONZE

Boss

BRONZE

Diar. of Propellers

8'-0"

Pitch

12'-6"

Surface (each

20

S. ft.)

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

Crank Shafts Forged by	Material
WM BEARDMORE & CO LTD	INGOT STEEL.
" Pins	"
" Webs	"
Thrust Shafts	"
Intermed. "	"
Propeller "	"
Crank " Finished by	JOHN G. KINCAID & CO LTD
Thrust "	"
Intermed. "	"
Propeller "	"

STAMP MARKS ON SHAFTS.

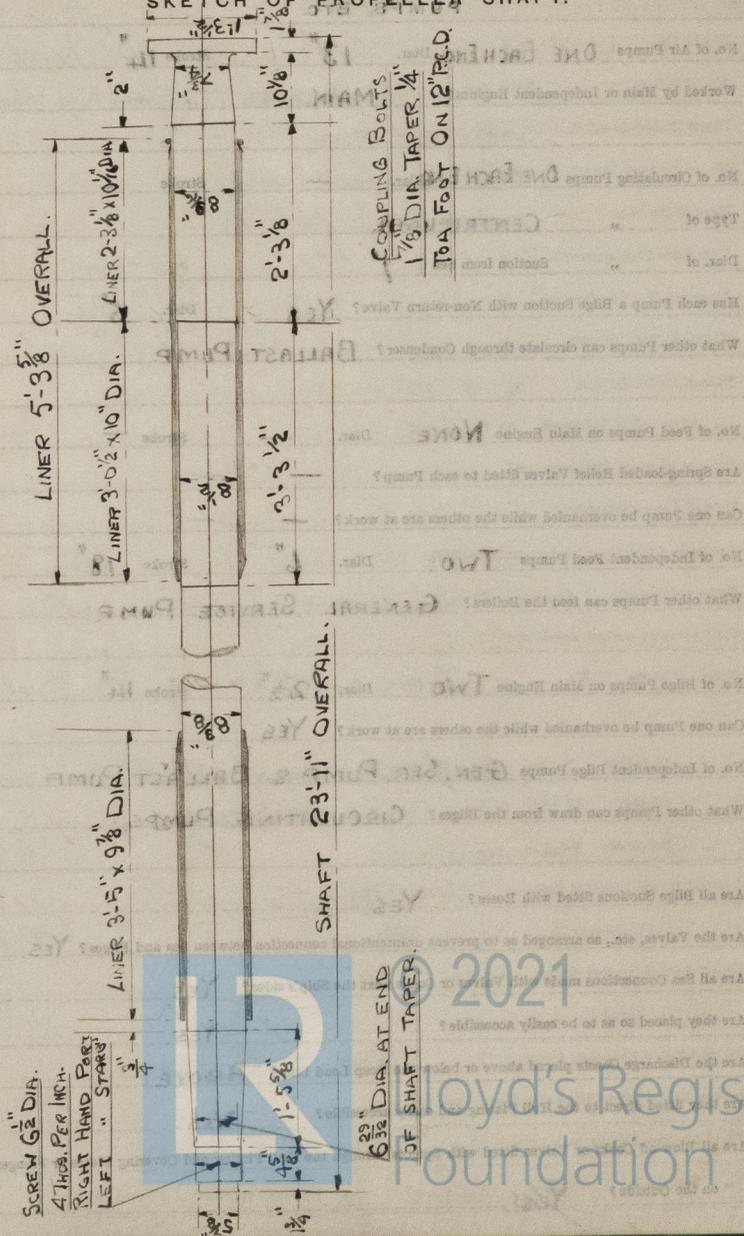
PORT SHAFTING.

BC
NO10976
R.L.G.
3.6.29.

STAR SHAFTING.

BC
NO10976
R.L.G.
3.6.29.

SKETCH OF PROPELLER SHAFT.



PUMPS, ETC.

No. of Air Pumps **ONE EACH ENG.** Diar. **13"** Stroke **14"**
 Worked by Main or Independent Engines? **MAIN.**

No. of Circulating Pumps **ONE EACH ENG.** Diar. **—** Stroke **—**
 Type of **" CENTRIFUGAL**
 Diar. of **" Suction from Sea 7"**

Has each Pump a Bilge Suction with Non-return Valve? **YES** Diar. **5"**
 What other Pumps can circulate through Condenser? **BALLAST PUMP.**

No. of Feed Pumps on Main Engine **NONE** Diar. **—** Stroke **—**
 Are Spring-loaded Relief Valves fitted to each Pump? **—**
 Can one Pump be overhauled while the others are at work? **—**

No. of Independent Feed Pumps **TWO** Diar. **6"** Stroke **18"**
 What other Pumps can feed the Boilers? **GENERAL SERVICE PUMP.**

No. of Bilge Pumps on Main Engine **TWO** Diar. **2½"** Stroke **14"**
 Can one Pump be overhauled while the others are at work? **YES**

No. of Independent Bilge Pumps **GEN. SER. PUMP & BALLAST PUMP**
 What other Pumps can draw from the Bilges? **CIRCULATING PUMPS.**

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

No. of Boilers **TWO** Type **WATER TUBE** Diar. **48"** Stroke **48"**
 Made in **SCOTLAND**
 No. of Tubes in each **THREE**
 Type of Tubes **DELTA**
 Date when first employed **1852**
 Approved Working Pressure **300 lbs**
 Hydraulic Test Pressure **300 lbs**
 Date of Hydraulic Test **11 8 50**
 when each Valve set **2 7 54**
 Pressure at which Valves were set **300 lbs**
 Date of Accumulation Test **2 7 54**
 Maximum Pressure under Accumulation Test **300 lbs**
 Name of Manufacturer **FORBES & CO. DUNDEE**
 Can Boilers be worked separately? **YES**
 Name of Plates **D. COLVILLE & SONS LTD**
 Name of Rivets **N.W. RIVET GOLT & BUT FACTORY**
 Name of Rivets **SCOTTISH IRON & STEEL CO LTD**
 Name of Rivets **MARSHALL & CO**
 Greatest Internal Dia. of Boilers **48"**
 Length **11 3/4'**
 Name of Lifting Gear **3000**
 Date **1852**
 No. of Safety Valves each Boiler **2**
 Name of Safety Valves **Y**
 No. of Pressure Gauges each Boiler **ONE**
 Name of Pressure Gauges **ONE**
 Name of Blow-off Cocks **ONE**



© 2021

Lloyd's Register
Foundation

BOILERS

Works No. **663**

No. of Boilers **TWO** Type **CYLINDRICAL, MULTITUBULAR, RETURN TUBE, MARINE**

Single or Double-ended **SINGLE END FIRED**

No. of Furnaces in each **THREE**

Type of Furnaces **DEIGHTON.**

Date when Plan approved **18. 2. 29.**

Approved Working Pressure **200 lbs.**

Hydraulic Test Pressure **350 lbs.**

Date of Hydraulic Test **14. 5. 29.**

" when Safety Valves set **2. 7. 29.**

Pressure at which Valves were set **200 lbs.**

Date of Accumulation Test **2. 7. 29.**

Maximum Pressure under Accumulation Test **207 lbs.**

System of Draught **FORCED DRAUGHT.**

Can Boilers be worked separately? **YES**

Makers of Plates **D. COLVILLE & SONS. LTD.**

" Stay Bars **SCOTTISH IRON & STEEL CO LTD**

" Rivets - **N.W. RIVET BOLT & NUT FACTORY.**

" Furnaces **MARSHALL & CO**

Greatest Internal Diar. of Boilers **12'-10²⁷/₃₂"**

" " Length " **11'-5⁵/₃₂"**

Square Feet of Heating Surface each Boiler **1809**

" " Grate " "

No. of Safety Valves each Boiler **2** Rule Diar. **2.85"** Actual **3"**

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.**

B.C. TEST
 No 5149
 T.P. 350 lbs.
 W.P. 200 lbs.
 RLG
 14. 5. 29.



© 2021

Lloyd's Register
Foundation

Are the Water Gauges fitted direct to the Boiler Shells or mounted on Pillars? **ON PILLARS.**

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

Are these Pipes connected to Boilers by Cocks or Valves? **COCKS.**

Are Blow-off Cocks or Valves fitted on Boiler Shells? **VALVES ON BOILER ENDS**

No. of Strakes of Shell Plating in each Boiler **ONE.**

Plates in each Strake **TWO.**

Thickness of Shell Plates Approved **$1\frac{5}{32}$ "**

in Boilers **"**

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? **EQUAL.**

Thickness of outside Butt Straps **$7\frac{7}{8}$ "**

inside **1"**

Are Longitudinal Seams Hand or Machine Riveted? **MACHINE.**

Are they Single, Double, or Treble Riveted? **TREBLE.**

No. of Rivets in a Pitch **FIVE.**

Diar. of Rivet Holes **$1\frac{5}{32}$ "** Pitch **$7\frac{7}{8}$ "**

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 **TWO**

Are these Seams Hand or Machine riveted? **MACHINE**

Diar. of Rivet Holes **$1\frac{3}{16}$ "** Pitch **$3\frac{1}{2}$ "**

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

Are these Seams Hand or Machine Riveted? **MACHINE**

Diar. of Rivet Holes **$1\frac{3}{16}$ "** Pitch **$3\frac{1}{2}$ "**

Size of Manholes in Shell **$16\frac{1}{2}$ " x $20\frac{1}{2}$ "**

Dimensions of Compensating Rings **$2\frac{1}{11}$ " x $2\frac{1}{7}$ " x $1\frac{9}{32}$ "** **38 RIVETS $1\frac{5}{16}$ " HOLES.**



© 2021

Lloyd's Register
Foundation

Thickness of End Plates in Steam Space Approved $1\frac{1}{4}$ "

" " " " " in Boilers $1\frac{1}{4}$ "

Pitch of Steam Space Stays $19" \times 18\frac{1}{2}"$

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

" " " " " in Boilers " " "

Material of " " " STEEL

How are Stays Secured? THRO PLATES NUT INSIDE & OUTSIDE

Diar. and Thickness of Loose Washers on End Plates $1\frac{1}{4}" \times 7\frac{3}{4}"$

" " Riveted " " —

Width " " Doubling Strips " —

Thickness of Middle Back End Plates Approved $27/32"$

" " " " " in Boilers "

Thickness of Doublings in Wide Spaces between Fireboxes —

Pitch of Stays at " " " " $14" \times 9"$

Diar. of Stays Approved $17/8"$ Threads per Inch 9

" " " in Boilers " " "

Material " STEEL

Are Stays fitted with Nuts outside? YES.

Thickness of Back End Plates at Bottom Approved $27/32"$

" " " " " in Boilers "

Pitch of Stays at Wide Spaces between Fireboxes —

Thickness of Doublings in " " —

Thickness of Front End Plates at Bottom Approved $7/8"$

" " " " " in Boilers "

No. of Longitudinal Stays in Spaces between Furnaces —

Thickness of End Plates Approved

" " " " " in Boilers

Pitch of Steam Space Stays

Diar. of Stays Approved

" " " " " in Boilers

Material of

How are Stays Secured?

Diar. and Thickness of Loose Washers on End Plates

" " Riveted

Width " " Doubling Strips

Thickness of Middle Back End Plates Approved

" " " " " in Boilers

Thickness of Doublings in Wide Spaces between Fireboxes

Pitch of Stays at

Diar. of Stays Approved

" " " in Boilers

Material

Are Stays fitted with Nuts outside?

Thickness of Back End Plates at Bottom Approved

" " " " " in Boilers

Pitch of Stays at Wide Spaces between Fireboxes

Thickness of Doublings in

Thickness of Front End Plates at Bottom Approved

" " " " " in Boilers

No. of Longitudinal Stays in Spaces between Furnaces



© 2021

Lloyd's Register
Foundation

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 —

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 Easing Gear? —
 Date of Hydraulic Test — Test Pressure —
 Date when Safety Valves set — Pressure on Valves —

MAIN STEAM PIPES

No. of Pipes	Material	Internal Dia.	Thickness	How are Pipes secured?	Date of Hydraulic Test	Test Pressure
2	STEEL	2"	1/4"	SCREWED WITH WASHERS	1888	100 lbs
4	STEEL	2"	1/4"	SCREWED WITH WASHERS	1888	100 lbs
2	STEEL	2"	1/4"	SCREWED WITH WASHERS	1888	100 lbs

No. of Pipes	Material	Internal Dia.	Thickness	How are Pipes secured?	Date of Hydraulic Test	Test Pressure
2	STEEL	2"	1/4"	SCREWED WITH WASHERS	1888	100 lbs
2	STEEL	2"	1/4"	SCREWED WITH WASHERS	1888	100 lbs



© 2021

Lloyd's Register
Foundation

EVAPORATORS.

No.	Type	Tons per Day
Makers		
Working Pressure	Test Pressure	Date of Test
Date of Test of Safety Valves under Steam		

FEED WATER HEATERS.

No.	ONE	Type	MULTIFLOW SURFACE FEED HEATER.
Makers	G & J WEIR LTD.		60 G.H.S.
Working Pressure	200 lbs	Test Pressure	500 lbs.
		Date of Test	5-6-29 11-6-29.

FEED WATER FILTERS.

No.	ONE	Type	SUCTION FILTER.	Size	3" BORE
Makers	JOHN G. KINCAID & CO LTD				
Working Pressure	ATMOS.	Test Pressure		Date of Test	

LIST OF DONKEY PUMPS.

PURPOSE	MAKERS	N ^o	SIZE
CENT. CIR. PUMPS (2)	DRYSDALE	20817-8	7"
SUCTIONS	SEA & BILGE INJECTIONS,	DISCHARGES	CONDENSERS.
ENGINE (DYNAMO)	MATHEW PAUL.		

BALLAST PUMP.	T. LAMONT	14826.	7" x 8" x 8"
SUCTIONS :-	TANKS, DIRECT BILGE, SEA, BILGE MAIN.		
DISCHARGES :-	TANKS, OVERBOARD, CONDENSER.		

GENERAL SERVICE	T. LAMONT	14819.	8" x 6" x 8"
SUCTIONS :-	BOILERS, CONDENSER, FLOAT TANK, HOTWELL, SEA, BILGES, FILTER.		
DISCHARGES :-	OVERBOARD, BOILERS DECK & SANITARY.		

MAIN FEED INDEP (2)	G. & J. WEIR LTD.	91758-9	6" x 8½" x 18"
SUCTIONS :-	FRESHWATER TANKS, CONDENSER, FLOAT TANK, HOTWELL, SEA, BOILERS.		
DISCHARGES :-	AUX & MAIN FEED, FEED HEATER, DECK, SANITARY.		

FRESH WATER	(2) CARRUTHERS.	4½" x 3" x 4"
SUCTIONS :-	FW. TANKS.	
DISCHARGE	BOILERS, & FILTER.	

OIL FUEL UNIT	CLYDE OIL FUEL CO	N ^o 381
---------------	-------------------	--------------------

FORCED DRAUGHT FAN.

HOWDEN'S.



© 2021

Lloyd's Register
Foundation

REFRIGERATORS.

No. of Machines — Capacity of each —
 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 —

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.
Makers of Machinery				
Capacity				
Character of Machinery or Conditions				
Kind of Double Valve System				
Position of Machinery				
No. of Cranks to which Valves are connected on the Double Valve				
Particulars of Steam Cylinders				
Speed				
Water Temp. 30°	65	23	7/32	
Room Deck	77	30	1/2	
Water in Bilges	111	17.5	7/32	
Atmosphere	24	9	7/32	
Atmosphere			7/32	

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



© 2021

Lloyd's Register
 Foundation

Positions of Auxiliary Switch Boards, with No. of Switches on each **NONE**

Labelled fitted by **HARLAND & WOLFE LTD**
 No. and Description of Dynamos **ONE**
 Make of Dynamos **CARRISBELL & LANEWOOD**
 Capacity " **10 KVA**
 Ampere " **NO**
 Voltage per Min. **225**
 Current Alternating or Continuous **CONTINUOUS**
 Single or Double Wire System **DOUBLE WIRE SYSTEM**
 Position of Dynamos **LOWER PLATFORM BETWEEN SHIFTS**
 Main Switch Board " "
 No. of Circuits to which Switches are provided on Main Switch Board **FIVE**
 Particulars of these Circuits—

Insulation	Control of	Current	Size	Current	Length	Number	Circuit
Material	of	Carried	of	Carried	of	of	
for	Con-	by	Con-	by	Con-	of	
the	duct-	by	duct-	by	duct-	of	
Wires	ions	the	ions	the	ions	of	
							NAVIGATION SHIFTS
							MAIN DECK
							ENGINE & BOILER
							RECOMMENDATION
							ADDRESS
Are Cut-outs fitted as follows?—							
On Main Switch Board, to Cables of Main Circuits							YES
On Aux. " " each Auxiliary 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 Cut-outs constructed of Non-inflammable Material?							YES
Are they placed so as to be always and easily accessible?							YES
Smallest Single Wire used, No. 3/02g S.W.G., Largest, No. 19/072 S.W.G.							
How are Conductors in Engine and Boiler Spaces protected?							HR CLASS CABLE ON PLATING.
" " 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							WT GLANDS BY BRUSH HOLES

Are all Joints in Cables properly soldered and thoroughly Insulated so that the efficiency of the Cables is unimpaired? —

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? **2,00000 Ohms.**

Is the Installation supplied with a Voltmeter? **YES**

" " " an Amperes Meter **YES**

Date of Trial of complete Installation **9.7.29** Duration of Trial **6 HOURS**

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

Robert H. Craig



© 2021

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.

Have Tests been made to prove that the condition has been satisfactorily fulfilled? **YES**

Has the insulation Resistance over the whole system been tested? **YES**

What does the resistance amount to? **50,000 Ohms**

Is the insulation supplied with a Voltmeter? **YES**

in Ampere Meter? **YES**

Date of Trial of complete Installation **1-7-22**

Have all the requirements of Section 43 been satisfactorily carried out? **YES**

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. **"LOCHNESS"**

as ascertained by ^{me} from personal examination

Robert H. Greig,

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

Fees—

MAIN BOILERS.

	Sq. ft.	£	s.	d.
H.S.		:	:	
G.S.		:	:	

DONKEY BOILERS.

	Sq. ft.	£	s.	d.
H.S.		:	:	
G.S.		:	:	
		£	:	:

ENGINES.

	Cub. ft.	£	s.	d.
L.P.O.		:	:	
		£	:	:
Testing, &c. ...		:	:	
		£	:	:
Expenses ...		:	:	
Total ...		£	:	:

It is submitted that this Report be approved,

Gas Barr for Chief Surveyor.

Approved by the Committee for the Class of M.B.S.* on the **18th September 1929**



© 2021

Fees advised
Fees paid

Lloyd's Register
Foundation
Secretary.



© 2021

Lloyd's Register
Foundation



© 2021

Lloyd's Register
Foundation