

# REPORT OF SURVEY ON REFRIGERATING MACHINERY & APPLIANCES.

(Received at London Office)

4 JAN 1944

Date of writing Report 31<sup>st</sup> Dec. 1943 When handed in at Local Office 3<sup>rd</sup> Jan. 1944 Port of Cardiff

No. in Reg. Book. 31477 Survey held at Cardiff Date: First Survey Nov. 30 Last Survey 31<sup>st</sup> Dec. 1943  
on the Refrigerating Machinery and Appliances of the SS. "Port Melbourne" (No. of Visits 6)

Tons { Gross 9142 Vessel built at Belfast By whom Workman Clark & Co. Ltd. When 1914 Imo.  
Net 5792 Owners Port Line, Ltd. Port London Voyage —  
Last Survey No. 15862 Port — Barb.

## PARTICULARS AS ENTERED IN REGISTER BOOK.

REFRIGERATING MACHINES.					System of (1) Refrigerating (2) Insulating the Chambers.	POWER.		INSULATED CARGO CHAMBERS.		Notation and Date of Last Complete Periodical Survey.
No. of Units.	No. of Compressors.	System.	Makers.	Date of Construction.		Cubic feet of air delivered per hour.	Ice melting capacity per 24 hours.	No.	Capacity.	
<u>2</u>	<u>2</u>	<u>Carb. Amby.</u>	<u>G. &amp; S. Hull, Ltd.</u>	<u>1914</u>	<u>Brine</u> <u>Boil and</u> <u>Silicate bottom</u>	<u>—</u>	<u>89 1/2</u>	<u>11</u>	<u>409667</u>	<u>Lloyd's</u> <u>RMC</u>

## Particulars of Examination and Repairs for Complete Periodical Survey Reclassification ~~Modified Survey~~.

Has the machinery been examined under working conditions Yes before or after the refrigerated cargo was discharged before

Density of brine 48° by Twaddell hydrometer. TEMPERATURES of the return air — & —

or, delivery and return air at direct expansion or brine cooled batteries — & —, outflow and return brine -5°F & 3°F

atmosphere 51°F, cooling water inlet and discharge 53°F & 60°F, gas in condensers and evaporators 70°F & -5°F

AVERAGE TEMPERATURE in each refrigerated chamber, as per log, before discharging commenced  
Nos. 1, 2 & 4 Tweendecks 14°F. No. 5 Tween deck 13°F Nos. 1, 2, 3, 4 & 5 Holds 14°F.

Condenser Coils, date of last test — If machinery is electrically driven, date of last examination of a generator —

Have all the working parts of the refrigerating machines and of the auxiliary machinery been examined Yes Is the spare gear in accordance with the Rules Yes

Have the gas condenser and evaporator coils, or only the coil terminals, been examined only coil terminal Have the direct expansion or brine cooled battery coils been examined —

Have the refrigerating liquid pipes, separators and receivers, and the gas return pipes been examined externally as far as practicable Yes

Has the insulation been examined throughout the cargo chambers Yes Where charcoal, silicate cotton, granulated cork or similar media are employed for insulating purposes, has such insulation been examined for fullness and dryness Yes Have the test holes been efficiently closed Yes

Have all bilge hatches and manhole plugs been removed, the bilges cleared, and the suction pipes, suction roses, sounding pipes and manhole door fastenings been examined Yes

Have the hatches, air trunkways and thermometer tubes with their connections and fastenings been examined Yes Have the watertight doors been examined and worked —

Have the brine pipes or direct expansion pipes been examined Yes, under what conditions under pressure Have the sea injection valves been opened and examined Yes

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete

The refrigerating installation of this vessel was fitted in 1914 in accordance with the Rules & under the supervision of the Society's Surveyors and a notation of + Lloyd's RMC 1, 14 was assigned. The Society's class was subsequently allowed to lapse, and periodical surveys, approximating to those required by the Society were carried out by Messrs. William Esplen, Son & Swainston. During this period No. 3 Hold was insulated, particulars of the insulation & appliances of this space are given on the attached sheet.

This installation has now been surveyed for reclassification with the Society.

Now done:- Ascertained from the refrigerating machinery logs that the plant has been operating efficiently during voyages with refrigerated cargo. Machinery examined under working conditions before discharge of cargo. Refrigerating machinery examined complete, viz:- steam & compressor cylinders.

General observations, opinion, and recommendation The refrigerating installation of this vessel is in good condition & eligible in our opinion for the notation + Lloyd's RMC 12.43.

The particulars of the installation as given in the Register Book should be amended as indicated above

Fee R.M.C. Re-class. £ 27 : 0 : 0 Fee applied for 31<sup>st</sup> Dec. 1943 R. Manton & Esplen

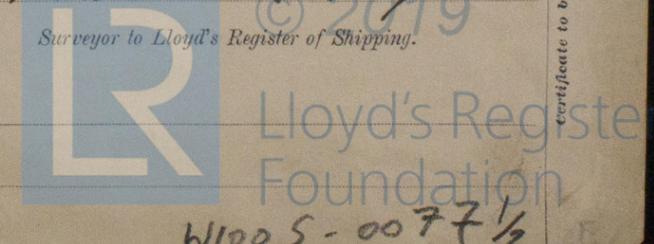
Travelling Expenses £ 4 : 18 : 3 Received by me 19

Committee's Minute FRI. 21 JAN 1944

Assigned + Lloyd's RMC 12.43



RETAIN



W1005-0077 1/2

Certificate to be sent to (already sent to Cardiff Office)

1944 JAN 1944

Refrigerating Machinery & Appliances of the S.S. Port Melbourne  
 pistons, rods, valves & crankshafts; condensers & evaporators as far as practicable; working parts of air, brine & circulating pumps; separators pipes & connections.

Spare gear examined & checked.

Brine pipes examined & tested to  $1\frac{1}{2}$  times working pressure, Hatch grids not tested.

Insulation throughout cargo chambers examined & tested for fullness & dryness.

Bilge & manhole plugs removed & examined.

Insulated hatches, chamber doors, thermometer tubes & connections examined.

Repairs:- A number of insulated manhole plugs renewed or repaired.  
 a number of insulated bilge timber plugs repaired.

Minor insulation repairs effected throughout lower holds, particularly in way side stringers in Nos. 1 & 2 holds, aft bulkhead stiffener brackets in No. 2. hold, and tank top forward in No. 2. hold.

Particulars of Refrigerating Installation.

For particulars of original spaces, refrigerating machinery & spare gear, see RMC First Entry Report No. 6950.

Freezing capacity of machinery 89 $\frac{1}{2}$  tons.

No. 3 Hold. Insulation, Sides 10 $\frac{1}{2}$ " granulated cork 1 $\frac{1}{4}$ " T. & G. lining.  
 Overhead 10" granulated cork 3 $\frac{1}{4}$ " + 1" T. & G. lining.  
 Fwd. Bld. 4" granulated cork 1 $\frac{1}{4}$ " T. & G. lining.  
 aft. Bld. 12" silicate cotton 1 $\frac{1}{4}$ " T. & G. lining.  
 Tank Top. 7" granulated cork 1" + 1 $\frac{1}{4}$ " T. & G. lining with

elm sheathing in way of hatch.  
 Cooling system, Roof, side & bulkhead grids in 7 sections.

Drainage. Non-return liquid sealed Bilge traps fitted.  
 Sounding pipes fitted as required by the Rules.

Thermometer tubes. Three fitted at each side of hold, midway between ship's side & hatch coaming.

R. M.

It is submitted that  
the best is eligible for  
THE RECORD

Always MR 1243

And R.D. particulars

as shown in and in the report,

DA

19/1/44

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Foundation