

## Report on Refrigerating Machinery and Appliances.

Date of writing Report **15th Aug. 19 44** When handed in at Local Office **15th Aug 44** Port of **New York**  
 No. in Reg. Book. Survey held at **Syracuse, N.Y.** Date: First Survey **1st June** Last Survey **14th August 19 44**  
 (Number of Visits **2**)

on the Refrigerating Machinery and Appliances of the **Victualling Ship** Tons (Gross -) (Net -)  
 Vessel built at **Vancouver, B.C.** By whom built **Burrard Dry Dock Co** Yard No. **212** When built **1944**  
 Owners **Wartime Merchant Shipping Ltd.** Port belonging to **1234/5/6** Voyage **-**  
 Refrigerating Machinery made by **Carrier Corporation** Machine No. **1237/8/41** When made **1944**  
 Insulation fitted by **Burrard Dry Dock Co.** When fitted **1944** System of Refrigeration **Freon**  
 Method of cooling Cargo Chambers **Direct Expansion Batteries** Insulating Material used **Palco Wool & Slab Cork**  
 Number of Cargo Chambers insulated **25 & One ice Making & One Ice Storage Chamber** Total refrigerated cargo capacity **111480** cubic feet

DESCRIPTION OF REFRIGERATING MACHINERY. Where placed **Refrigerating Engine Room Constructed in No. 3 Hold**

Refrigerating Units, No. of **Six (6)** No. of machines **Quadruple** Is each machine independent **Yes**  
 Total refrigeration or ice-melting capacity in tons per 24 hours **45** Are all the units connected to all the refrigerated chambers **Yes**

Compressors, driven direct **XXXXXX** Compressors, single or double acting **Single** If multiple effect compression **No**  
 Are relief valves or safety discs fitted **Yes** No. of cylinders to each unit **4** Diameter of cylinders **4 1/2"**

Diameter of piston rod **Trunk Piston** Length of stroke **3"** No. of revolutions per minute **600**  
 Motive Power supplied from **(State number of boilers, oil engines or electric generators supplying the motive power.)**

Steam Engines, **XXXXXX** surface condensing. No. of cylinders **1** Diameter **8"**  
 Length of stroke **4"** Working pressure **100 lbs.** Diameter of crank shaft journals and pins **3-3/16"**

Breadth and thickness of crank web **6 1/2" x 2-3/8"** No. of sections in crank shaft **One** Revolutions of engines per minute **600**  
 Oil Engines, type **-** 2 or 4 stroke cycle **-** Single or double acting **-** B.H.P. **-**

No. of cylinders **-** Diameter **-** Length of stroke **-** Span of bearings as per Rule **-**  
 Maximum pressure in cylinders **-** Diameter of crank shaft journals and pins **-**

Breadth and thickness of crank web **-** No. of sections in crank shaft **-** Revolutions of engine per minute **-**  
 Air Receivers:—Have they been made under survey **-** State No. of Report or Certificate **-**

Is each receiver, which can be isolated, fitted with a safety valve as per Rule **-**  
 Can the internal surfaces of the receivers be examined and cleaned **-** Is a drain fitted at the lowest part of each receiver **-**

No. of Receivers **-** Cubic capacity of each **-** Internal diameter **-** Thickness **-**  
 Seamless, lap welded or riveted longitudinal joint **-** Material **-** Range of tensile strength **-** Working pressure by Rules **-**

Electric Motors, type **-** No. of **-** Rated **-** Kilowatts **-** Volts **-**  
 at **-** revolutions per minute. Diameter of motor shafts at bearings **-**

Reduction Gearing **-** Pitch circle diameter, pinion **-** Main wheel **-** Width of face **-**  
 Distance between centres of pinion and wheel faces and the centre of the adjacent bearings, pinion **-** Main wheel **-**

Pinion shafts, diameter at bearings **-** Main wheel shaft, diameter at bearings **-**  
 Gas Condensers, No. of **6** Cast iron or steel casings **Steel** Cylindrical or rectangular **Cylindrical** Are safety valves fitted to casings **Yes**

No. of coils in each **Shell & Tube** Material **Admiralty** Can each coil be readily shut off or disconnected **Yes**  
 Water Circulating Pumps, No. and size of pumps available **Fitted by Metal** LIQUID RECEIVERS  
 Gas Evaporators, No. of **Shipbuilder** No. of **6**

Cast iron or steel casings **-** Pressure or gravity type **-** If pressure type, are safety valves fitted **-** No. of coils in each casing **-** Material of coils **-** Can each coil be readily shut off or disconnected **-**

Direct Expansion **XXXXXX** Batteries, No. of **25** Are there two separate systems, so that one may be in use while the other is being cleared of snow **No**

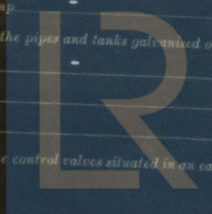
No. of coils in each battery **One** Material of coil **Copper Finned** battery  
 Total cooling surface of battery coils **7080 sq. ft. finned** a watertight tray fitted under each battery **Yes**

Air Circulating Fans, Total No. of **16** each of **3340** cubic feet capacity, at **1510** revolutions per minute  
 Steam or electrically driven **Electrical** Where spare fans are supplied are these fitted in position ready for coupling up **No**

Brine Circulating Pumps, No. and size of, including the additional pump **-** Are the pipes and tanks galvanized on the inside **-**  
 Brine Cooling System, closed or open **-**

No. of brine sections in each chamber **-**  
 Can each section be readily shut off or disconnected **-** Are the control valves situated in an easily accessible position **-**

NOTE—THE WORDS WHICH DO NOT APPLY SHOULD BE DELETED.





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Are thermometers fitted to the outflow and to each return brine pipe. — Where the tanks are closed are they ventilated as per Rule —  
 Where the tanks are not closed is the compartment in which they are situated efficiently ventilated. —  
 Are the number and capacity of the machines and the number of pumps and sea connections in accordance with Section 2, Clause 1 of the Rules. **Yes**  
 Is the exhaust steam led to the main and auxiliary condensers. —

# HYDRAULIC AND OTHER TESTS.

DESCRIPTION.	Date of Test.	Working Pressure.	Hydraulic Test Pressure.	Air Test Pressure.	Stamped.	REMARKS.
Engine Cylinders (if tested) ...						
Gas Compressors ...		93 lbs. at 86° F.		150 lbs.		Not stamped
<del>RECEIVERS</del> RECEIVERS.		400 lbs.		400 lbs.		Lloyd's Test 400 lbs. JSH 12-4-44
Multiple Effect Receivers ...						
Condenser Coils ...				" "		
Evaporator Coils ...				" "		
Condenser Headers and Connections						
Condenser Casings ...				" "		Lloyd's Test 400 lbs. JSH 14-8-44
Evaporator Casings ...				" "		
Condenser, Evaporator and Air Cooler Coils after erection in place						
Brine Piping after erection in place...						

Have important steel castings and forgings been tested in accordance with the Rules —  
**Cooling Test.** Has the refrigerating machinery been examined under full working conditions, and found satisfactory.  
 Dates of test. Density of Brine by hydrometer  
 Temperatures (when the cargo chambers are cooled down to the required test temperatures) of delivery and return air at direct expansion or brine cooled batteries & outflow and return brine &  
 atmosphere cooling water inlet and discharge & gas in condensers and evaporators  
 the average temperature of the refrigerated chambers and the rise of temperature in these chambers upon the expiration of hours  
 time after the machinery and cooling appliances have been shut off.

# SPARE GEAR.

Are the working parts of the machines, pumps and motors respectively, interchangeable. **Yes**  
 Has the spare gear required by the Rules been supplied. **Yes**  
 Additional Spare Gear Supplied:—  
 1 machine (that is, one steam engine with quadruple compressors) is spare.  
 2 Strainer baskets of each size used.  
 2 solenoid coils for Automatic Valves.  
 1 Thermometer of each size.  
 1 Thermostat of each size.

The foregoing is a correct description of the Refrigerating Machinery.

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 International Division



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