

Rpt. 17.

NOTE FOR PORTING  
Date July 1934

R. M. C. No. 50413.

# REPORT ON REFRIGERATING MACHINERY AND APPLIANCES.

No. 19462.

(Received at London Office -2 JUN 1934)

Date of writing Report 30<sup>th</sup> MAY 1934 When handed in at Local Office 1<sup>st</sup> JUNE 1934. Port of GREENOCK.  
No. in Reg. Book. Survey held at PORT-GLASGOW Date: First Survey 19<sup>th</sup> FEBRUARY 1934 Last Survey 1<sup>st</sup> JUNE 1934  
40162 (No. of Visits 23.)

on the Refrigerating Machinery and Appliances of the S.S. "JAMAICA PRODUCER" Tons {Gross 5325.20  
Net 2935.36

Vessel built at PORT-GLASGOW By whom built LITHGOWS LIMITED. Yard No. 868 When built 1934.

Owners JAMAICA BANANA PRODUCERS STEAMSHIP CO. LD Port belonging to KINGSTON JAMAICA. Voyage JAMAICA

Refrigerating Machinery made by Liverpool Refrigerating Co. Ltd Machine No. 1539 When made 1934.

Insulation fitted by Liverpool Refrigerating Co. Ltd When fitted 1934 System of Refrigeration Ammonia

Method of cooling Cargo Chambers Air & Brine Insulating Material used Cork.

Number of Cargo Chambers insulated 6 Total refrigerated cargo capacity cubic feet.

## DESCRIPTION OF REFRIGERATING MACHINERY. Where placed on stowing decks.

Refrigerating Units, No. of 2 Single, double, or triple Single Cubic feet of air delivered per hour 13,920,000.

Total refrigeration or ice-melting capacity in tons per 24 hours 150. Are all the units connected to all the refrigerated chambers Yes.

Compressors, driven direct or through <sup>single</sup>/<sub>double</sub> reduction gearing. Compressors, single or double acting double acting No. of cylinders 2.

Diameter of cylinders ✓ Diameter of piston rod ✓ Length of stroke ✓ No. of strokes per minute 200.

Motive Power supplied from Main Boilers.

Steam Engines, high pressure, compound, or triple expansion, surface condensing. No. of cylinders 2 Diameter ✓

Length of stroke ✓ Working pressure 150 lbs. " Diameter of crank shaft journals and pins ✓

Breadth and thickness of crank webs ✓ No. of sections in crank shaft ✓ Revolutions of engines per minute 100

Oil Engines, type 2 or 4 stroke cycle Single or double acting

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 webs No. of sections in crank shaft Revolutions of engine per minute

Electric Motors, type No. of Rated Kilowatts

Volts at revolutions per minute. Diameter of motor shafts at bearings

Reduction Gearing, maximum shaft horse power at 1st pinion Revolutions per minute at full power at 1st pinion

2nd pinion 1st reduction wheel main shaft Pitch circle diameter, 1st pinion 2nd pinion

1st reduction wheel Main wheel Width of face, 1st reduction wheel Main wheel

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings, 1st pinion 2nd pinion

1st reduction wheel Main wheel Flexible pinion shafts, diameter 1st 2nd

Pinion shafts, diameter at bearings, External, 1st 2nd Internal, 1st 2nd

Diameter at bottom of teeth of pinion, 1st 2nd Wheel shafts, diameter at bearings, 1st

Main Diameter at wheel shroud, 1st Main

Gas Condensers, No. of 2 Cast iron or steel casings Steel Cylindrical or rectangular Rectangular

No. of coils in each 4 Material of coils ✓ Can each coil be readily shut off or disconnected Yes.

Water Circulating Pumps, No. and size of 2 - 9" x 10" x 24" how worked steam Gas Separators, No. of 2

Gas Evaporators, No. of 2 Cast iron or steel casings Steel Pressure or gravity type Gravity

No. of coils in each casing 4 Material of coils ✓ Can each coil be readily shut off or disconnected Yes.

Direct Expansion or Brine Cooled Batteries, No. of 8 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 4 of 5 Material of coils S.S. Steel Can each coil be readily shut off or

disconnected Yes Total cooling surface of battery coils 13,350 sq ft Is a watertight tray fitted under each battery Yes.

Air Circulating Fans, Total No. of 8 each of 29,000 cubic feet capacity, at 2" W.G. revolutions per minute 400/600.

Steam or electrically driven Electrically Where spare fans are supplied are these fitted in position ready for coupling up ✓

Brine Circulating Pumps, No. and size of, including the additional pump 3 - 10" x 12" x 12" how worked Steam Duplex

Brine Cooling System, closed or open closed Are the pipes and tanks galvanised on the inside No.

No. of brine sections in each chamber 2 Cargo chambers fitted with grids on roof, sides & ends with

4 sections in each chamber

Can each section be readily shut off or disconnected Yes Are the control valves situated in an easily accessible position Yes.

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



**Sounding Pipes, No. and position in each chamber situated below the load water line** *1 P & S TO EACH HOLD, UNDER SIDE INSULATION.*

Diameter *2 1/2"* Are all sounding pipes in way of insulated chambers fitted in accordance with Section 3, Clause 11 *YES.*

Are all wood linings tongued and grooved *YES* Are cement facings reinforced with expanded steel lattice *✓*

How is the expanded metal secured in place *✓*

How are the cork slabs secured to the steel structure of the vessel *✓*

**Air Trunkways in Chambers, inside dimensions, main** *1' 2" BY DECK HEIGHT.* and branch *✓*

Are they permanently fixed or collapsible, or portable *PERMANENT.* State position in chambers *ACROSS BULKHEADS.*

Where air trunkways pass through watertight bulkheads, are they fitted with watertight doors *✓* Are the door frames efficiently insulated *✓*

Are insulated plugs supplied for the doorways *✓* Where are the doors worked from *✓*

**Cooling Pipes in Chambers, diameter** *1 1/2" bore.* Are they galvanised externally *yes.*

How are they arranged in the chambers *Grids on roof, sides & ends of 2 small cargo chambers.*

**Thawing Off, what provision is made for removing the snow from the cooling pipes in the chambers** *Brine heater in Refrigerating engine room.*

**The foregoing is a correct description of the Insulation and Appliances.**

*Builders.*

**Plans.** Are approved Plans or Specifications forwarded herewith for the Refrigerating Machinery *Yes* and Insulation *yes*  
(If not, state date of approval)

Is the Refrigerating Machinery and Appliances duplicate of a previous case *No* If so, state name of vessel *✓*

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

**General Remarks** (State quality of workmanship, opinions as to class, &c.)

*The materials & workmanship are good.*

*This installation has been fitted on board the vessel, tried under working conditions & found satisfactory.*

*All the insulated spaces were cooled down. Temperatures taken before & after pump test & found as stated*

*The machinery is eligible in my opinion to be classed in the Register Book, & to have record of R M C 6.34. (in red).*

*A diagrammatic sketch of air circulation in holds & tween decks will be forwarded together with Total refrigerated cargo capacity when received from the makers.*

*It is submitted that this vessel is eligible for THE RECORD. + Lloyd's RMB 6.34*

*4/6/34*

**PARTICULARS TO BE ENTERED IN REGISTER BOOK.**

REFRIGERATING MACHINES.					System of (1) Refrigerating (2) Insulating the Chambers.	POWER.		INSULATED CARGO CHAMBERS.	
No. and whether Single or Duplex.	Makers.	Date of Construction.	System.	Type.		Cubic feet of air delivered per hour.	Ice melting capacity per 24 hours. Tons.	No.	Capacity.
<i>2 UNITS</i>	<i>Liverpool Refrigerating Co. Ltd</i>	<i>1934</i>	<i>Ammonia</i>	<i>Horizontal</i>	<i>Air &amp; Brine Cork.</i>	<i>13,920,000</i>	<i>150</i>	<i>6</i>	<i>20,3690</i>

Fee *Already charged.* (Fee applied for, 19...  
Travelling Expenses £ : : (Received by me, 19...)

*R. Donohue & J. Doney*  
Surveyors to Lloyd's Register.

**TUE 5 JUN 1934**

Committee's Minute

Assigned

*+ Lloyd's RMB 6.34*

*Write for Dis  
in York (incl)*

*MM*



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Certificate to be sent to Greenock.