

NOTED FOR PENDING

E. M. C. No. 51912

No. 13308

REPORT ON REFRIGERATING MACHINERY AND APPLIANCES.

(Received at London Office - 6 NOV 1934)

Date of writing Report 31 Oct 1934 When handed in at Local Office Port of Amsterdam

No. in Reg. Book. 72653 Survey held at Amsterdam Date: First Survey 24 April Last Survey 23 Oct 1934 (No. of Visits 14)

on the Refrigerating Machinery and Appliances of the *Tran Sea N.V. "BLOEMFONTEIN"* Tons Gross 10075 Net 6755

Vessel built at Amsterdam By whom built *N.V. Ned. Scheepb. M⁴* Yard No. 220 When built 1934

Owners *Keren Ned. Scheepb. M⁴* Port belonging to *Gravenhage* Voyage

Refrigerating Machinery made by *A. Boring Maschinenbau G* Machine No. 2745/0 When made 1934

Insulation fitted by *N.V. Ned. Scheepb. M⁴* When fitted 1934 System of Refrigeration *Ammonia*

Method of cooling Cargo Chambers *Wet air* Insulating Material used *Cork*

Number of Cargo Chambers insulated 2 Total refrigerated cargo capacity 40460 cubic feet.

DESCRIPTION OF REFRIGERATING MACHINERY. Where placed

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

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

Compressors, driven direct or through ^{single}/_{double} reduction gearing. Compressors, single or double acting No. of cylinders

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

Motive Power supplied from

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

Length of stroke Working pressure Diameter of crank shaft journals and pins

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

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 Cast iron or steel casings Cylindrical or rectangular

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

Water Circulating Pumps, No. and size of how worked Gas Separators, No. of

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

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

Direct Expansion or Brine Cooled Batteries, No. of Are there two separate systems, so that one may be in use while the other is being

cleared of snow No. of coils in each battery Material of coils Can each coil be readily shut off or

disconnected Total cooling surface of battery coils Is a watertight tray fitted under each battery

Air Circulating Fans, Total No. of each of cubic feet capacity, at revolutions per minute

Steam or electrically driven 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 how worked

Brine Cooling System, closed or open *See plans* Are the pipes and tanks galvanised on the inside

No. of brine sections in each chamber *how air cooling*

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



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Sounding Pipes, No. and position in each chamber situated below the load water line *four - 2 fore. 2 aft*
 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 *no cork slabs*
Air Trunkways in Chambers, inside dimensions, main *✓* and branch *✓*
 Are they permanently fixed or collapsible, or portable *✓* State position in chambers *✓*

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 *bone pipe with holes, diam 4 3/4"* Are they galvanised externally *yes*
 How are they arranged in the chambers *row of bone pipes with holes where the air is forced through*

Thawing Off, what provision is made for removing the snow from the cooling pipes in the chambers *no snow farming*

The foregoing is a correct description of the Insulation and Appliances. **N.V. NEDERLANDSCHE SCHEEPSBOUW-MAATSCHAPPIJ**
H. J. van der Meer Builders.

Plans. Are approved Plans or Specifications forwarded herewith for the Refrigerating Machinery *✓* and Insulation *5-12-33*
 (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.)
This vessel's refrigerating Machinery have been placed aboard in a good & efficient manner
Insulation fitted in accordance with the approved plans & Secretary's letters.
Cooling down test held as per report & good Machinery working satisfactorily
*She is eligible in my opinion for the approval of the Committee to have the record of * Lloyd's RMC 10-34 for temp 30°F*
Please attach to Letter report 1060.

It is submitted that this vessel is eligible for THE RECORD. *Lloyd's RMC 1034*
25/1/35

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>One Unit 4 Comps</i>								<i>8</i>	<i>40460</i>

Fee *100-* { Fee applied for, *✓*
 Travelling Expenses *£* : { Received by me, *23-11-34* *AD*
3/12

Burndorff
 Surveyor to Lloyd's Register.

Committee's Minute **TUE. 5 FEB 1935**

Assigned *+ Lloyd's Rmb. 10,34*
Write up
Make up
CERTIFICATE WRITTEN.
my

Certificate to be sent to Surveyor