

Rpt. 17.

No. 10862

Report on Refrigerating Machinery and Appliances.

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No. in Norrköping & Reg. Book. Survey held at Eskilstuna Date: First Survey 4.5 Last Survey 16.11 1956

51614 (Number of Visits 8)

on the Refrigerating Machinery and Appliances of the m/s "ANNIE JOHNSON" Tons (Gross 5017 Net 2879)

Vessel built at Gothenburg By whom built A/B Götaverken Yard No. - When built 1925

Owners Rederi A/B Nordstjernen Port belonging to Stockholm Voyage -

Refrigerating Machinery made by STAL, Finspong Machine Nos 27000-01-02 When made 1956

Insulation fitted by - When fitted - System of Refrigeration F 12

Method of cooling Cargo Chambers - Insulating Material used -

Number of Cargo Chambers insulated - Total refrigerated cargo capacity 47.300 cubic feet

DESCRIPTION OF REFRIGERATING MACHINERY. Where placed.

Refrigerating Units, No. of 3 No. of machines 3 Is each machine independent Yes

Total refrigeration or ice-melting capacity in tons per 24 hours 48 Are all the units connected to all the refrigerated chambers -

Compressors, driven direct ~~by~~ ^{by} V-belt el. motors. Compressors, single or double acting SA If multiple effect compression -

Are relief valves or safety discs fitted Yes No. of cylinders to each unit 3 Diameter of cylinders 148 mm

Diameter of piston rod Trunk type Length of stroke 148 mm No. of revolutions per minute 500

Motive Power supplied from (State number of boilers, oil engines or electric generators supplying the motive power.)

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 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 webs 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 2 Cast iron or steel casings Steel Cylindrical or rectangular Cylindrical Are safety valves fitted

to casings Yes No. of coils in each Tube & shell Material of tubes alum. brass Can each coil be readily shut off or disconnected -

Water Circulating Pumps, No. and size of pumps available - how worked Oil

Freon Receivers Gas Separators, No. of 3

Cast iron or steel casings Steel Pressure or gravity type Pressure If pressure type, are safety

valves fitted Yes 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 2 Are there two separate sections sections

cleared of snow Yes No. of coils in each battery 2 Material of coils Steel Can each coil be readily shut off or

disconnected - Total cooling surface of battery coils 800 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 Are the pipes and tanks galvanised on the inside

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



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Sounding Pipes, No. and position in each chamber situated below the load water line......

Diameter..... Are all sounding pipes in way of insulated chambers fitted in accordance with Section 3, Clause 11.....

Are all wood linings tongued and grooved..... 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. Are the arrangements satisfactory and in accordance with the approved plans.....

Are they permanently fixed or collapsible, or portable.....

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..... **Minimum thickness**..... **Are they galvanised externally**.....

How are they arranged in the chambers.....

Thawing Off, what provision is made for removing the snow from the cooling pipes in the chambers......

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

Builders.

Plans generally approved and Secretary's letters Eng. 28/9 & 30/10 1956.

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

Is the Refrigerating Machinery and Appliances duplicate of a previous case..... 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. The machinery and appliances to be fitted onboard vessel to the satisfaction of the Society's Surveyors.

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

The compressors, condensers, oil separators, freon receiver, filter drier, heat exchangers, air cooling batteries and valve manifold for this installation have been manufactured in accordance with the Rules, approved plans, and the Secretary's letters and have been tested with water and air pressure without mountings fitted with satisfactory results.

The material and workmanship are good.

PARTICULARS TO BE ENTERED IN REGISTER BOOK.

| REFRIGERATING MACHINES. | | | | | System of (1) Refrigerating (2) Insulating the Chambers. | Ice melting capacity per 24 hours. | Is Refrigerating Machinery Electrically Driven? | INSULATED CARGO CHAMBERS. | |
|-------------------------|------------------------|---------|--------------------|--------------------------|---|--|--|------------------------------|--------------------------|
| No. of Units. | No. of Compressors. | System. | Makers. | Date of Construction. | | | | No. | Capacity. |
| 3 | 3 (3x3) cyls | F-12 | STAL Norrköping | 1956 | Direct exp. | Tons 48 | Yes | 2 | abt. 47.300 Cubic ft. |

Stock material. Fee previously charged.

Fee £ : : (Fee applied for, ✓ 19.....)

Travelling Expenses £ : : (Received by me, ✓ 19.....)

Annatinn
Surveyor to Lloyd's Register.

Committee's Minute **THURSDAY 10 JAN 1957**

Assigned *Deferred for completion*

THURSDAY 10 JAN 1957

Certificate to be sent to



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