

# REPORT OF SURVEY ON REFRIGERATING MACHINERY & APPLIANCES.

(Received at London Office DEC - 9 1940)

Date of writing Report 21st Oct. 1940. When handed in at Local Office 21st Oct. 1940. Port of **YOKOHAMA**

No. in Reg. Book. Survey held at **YOKOHAMA** Date: First Survey 20th Sept. Last Survey 12th Oct. 1940. (No. of Visits Two)

in the Refrigerating Machinery and Appliances of the T/S **Sc. Sr "HARUNA MARU"**

Gross 10421 Vessel built at **Nagasaki** By whom **Mitsubishi Zosen K. Id.** When 1922-2  
Net 6311 Owners **Nippon Yusen K.K.** Port **Tokyo** Voyage **X**

Last Survey No. 4657 Port **Shi**

## 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.	
2	2	Carb Anhy	J & E Hall Id.	1922	Brine Slab Cork	X	Tons. 12	3	Cubic ft. 8,320	Lloyd's RMC 10-39

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

as the machinery been examined under working conditions **Yes** before or after the refrigerated cargo was discharged **X**

density of brine **45** by **Tw.** hydrometer. **TEMPERATURES** of air at the snow box and of the return air **X** & **X**

delivery and return air at direct expansion or brine cooled batteries **X** & **X**, outflow and return brine **60°F** & **10°F**

atmosphere **75°F**, cooling water inlet and discharge **70°F** & **74°F**, gas in condensers and evaporators **85°F** & **-4°F**

**AVERAGE TEMPERATURE** in each refrigerated chamber, as per log, before discharging commenced

Provision chambers frosted P **13°F**  
C **14°F**  
S **14°F**

Condenser Coils, date of last test **P 8-39 S. 1-39** If machinery is electrically driven, date of last examination of a generator **X**

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**

the gas condenser and evaporator coils, or only the coil terminals, been examined **Yes** Have the direct expansion or brine cooled battery coils been examined **X**

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

the insulation been examined throughout the cargo chambers Where checked **YES, MUCKS CORK,**

insulated 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**

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 **X**

the hatches, ~~XX~~ and thermometer tubes with their connections and fastenings been examined **Yes** Have the watertight doors been examined and worked **X**

the brine pipes ~~XX~~ been examined **Yes**, under what conditions **unfrosted** Have the sea injection valves been opened and examined **Yes**

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

done:- **Port refrigerating machine and auxiliaries opened up completely examined and found in order.**

**Starboard machine compressor, cylinder, cover and valves examined.**

**The insulation, brine piping, thermometer tubes and connection, throughout examined and found or now placed in good order.**

**The refrigerating machinery and appliances examined under working conditions and found in order.**

Work done:- **Thermometer tubes in Port, centre and starboard chambers renewed by steel tubes of 3 inches dia and that of centre chamber shifted to port side where the tube will not pass through the provision chamber on upper tween deck.**

**Starboard compressor cylinder bored and piston and packing rings renewed.**

**Guide shoe centre line adjusted.**

General observations, opinion, and recommendation **The Refrigerating machinery and Appliances of vessel are in good condition and eligible in my opinion to remain as classed with fresh record Lloyd's R M C 10-40.**

—A new Date of Survey should only be recommended in the case of a Complete Periodical Survey.

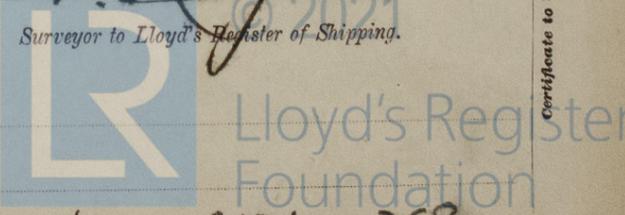
Fee ..... £ 60.00 : { Fee applied for, 19th October, 1940.

Travelling Expenses £ 2.00 : { Received by me, 29th Oct. 1940.

Committee's Minute **FRI 6 DEC 1940**

Assigned **+ Lloyd's Rmb. 10.40**

*R. M. G. M. G. M.*  
Surveyor to Lloyd's Register of Shipping.



009116 - 009121 - 0258



CERTIFICATE

the Re...

accordance

complete

of the

that all

been

recommended

in the

bound

This Certificate is issued

the

While the

is to be

to the

of the

of the

of the

of the

of the

of the

Certificates to be sent to

It is submitted that  
this vessel is eligible for  
THE RECORD. *Thames Plate 1840*

*Part Survey*

*GA*  
*4/10/40*



© 2021

Lloyd's Register  
Foundation