

# REPORT OF SURVEY ON REFRIGERATING MACHINERY & APPLIANCES.

No. 6982

Date of writing Report 4th Oct. 1940. When handed in at Local Office 4th Oct. 1940. Port of YOKOHAMA

(Received at London Office)

DEC -3 1940

No. in Reg. Book. 25536 Survey held at YOKOHAMA Date: First Survey 2nd Sept. Last Survey 14th Sept 1940. (No. of Visits Three)

on the Refrigerating Machinery and Appliances of the T.S.S. "HAKUSAN MARU" Owners Nippon Yusen K.K. By whom Mitsubishi Zosen K.K. When 1923-9  
Tons { Gross 10380 Vessel built at Nagasaki Net 6271  
Last Survey No. 4646 Port Shi Voyage x

### PARTICULARS AS ENTERED IN REGISTER BOOK.

#### REFRIGERATING MACHINES.

No. of Units.	No. of Compressors.	System.	Makers.	Date of Construction.	System of (1) Refrigerating (2) Insulating the Chambers.	POWER.		INSULATED CARGO CHAMBERS.		Notation and Date of Last Complete Periodical Survey.
						Cubic feet of air delivered per hour.	Ice melting capacity per 24 hours.	No.	Capacity.	
2	2	Carb Anhy	J & E Hall, Id.	1923	Brine Slab Cork	x	12 Tons.	3	8,360	Lloyd's RMC 3-40

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

Has the machinery been examined under working conditions Yes before or after the refrigerated cargo was discharged x  
 Density of brine 40 by T.W. hydrometer. TEMPERATURES of air at the snow box and of the return air x & x  
 or, delivery and return air at direct expansion or brine cooled batteries x & x, outflow and return brine -3°F & 1°F  
 atmosphere 80°F, cooling water inlet and discharge 74°F & 76°F, gas in condensers and evaporators 88°F & -13°F

AVERAGE TEMPERATURE in each refrigerated chamber, as per log, before discharging commenced  
 Provision chamber frosted 9°F

Condenser Coils, date of last test Port (No. 2) May, 1939. Starb. (No. 1) Sept. 39 If machinery is electrically driven, date of last examination of a generator x  
 Have 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  
 Have 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  
 Have the refrigerating liquid pipes, separators and receivers, and the gas return pipes been examined externally as far as practicable Yes  
 Has the insulation been examined throughout the cargo chambers Yes Where not examined  
 granulated 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  
 Have 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  
 Have the hatches, ~~air trunkways~~ and thermometer tubes with their connections and fastenings been examined Yes Have the watertight doors been examined and worked x  
 Have the brine pipes ~~and direct expansion pipes~~ been examined Yes, under what conditions unfrosted Have the sea injection valves been opened and examined Yes

If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete.  
Done:- Port (No. 2) refrigerating machinery and appliances throughout examined and found in order.  
 Starboard (No. 1) machine compressor cylinder, cover and valves examined and found in order.  
 The insulation, brine piping, cargo battens, thermometer tubes, and connections examined and found in order.  
 The refrigerating machines and auxiliaries examined under working conditions and found to be satisfactory.

General observations, opinion, and recommendation The Refrigerating machinery and Appliances of this vessel are in good condition and eligible in my opinion to remain as classed with fresh record of Lloyd's RMC 9-40.

NOTE:—A new Date of Survey should only be recommended in the case of a Complete Periodical Survey.)  
 Fee ..... ¥160.00 : Fee applied for 16th September, 1940.  
 Travelling Expenses £ 4.00 : Received by me, 27th September, 1940.

FRI. 6 - DEC 1940

*M. Chigasaki*  
 Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation

009021-009029-0093

Certificates to be sent to

2m. 12.35. -T.

