

Report of Survey on Refrigerating Machinery & Appliances before loading.

(Received at London Office

17 JUL 19

Date of writing Report June 14 1939 When handed in at Local Office

Port of SHANGHAI

No. in Reg. Book. 75686 Survey held at SHANGHAI

Date: First Survey and Last Survey June 12 1939 (No. of Visits one)

on the Refrigerating Machinery and Appliances of the Twin Screw Steamer "HARUNA MARU"

Gross 10421 Vessel built at Nagasaki By whom Mitsubishi Zosen Kaisha When 1922 2  
Net 6511 Owners Nippon Yusen Kaisha K. Port Tokyo Voyage

Last Survey No. 6672 Port

PARTICULARS AS ENTERED IN REGISTER BOOK.

| REFRIGERATING MACHINES. |                        |                |                    |                          | System of<br>(1) Refrigerating<br>(2) Insulating<br>the Chambers. | POWER.                                   |   | INSULATED CARGO<br>CHAMBERS. |                        | Notation<br>and Date of<br>Last<br>Complete<br>Periodical<br>Survey. |
|-------------------------|------------------------|----------------|--------------------|--------------------------|---|--|---|------------------------------|------------------------|--|
| No. of Units.           | No. of<br>Compressors. | System.        | Makers.            | Date of<br>Construction. |   | Cubic feet of air<br>delivered per hour. | Ice melting<br>capacity per<br>24 hours.<br>Tons. | No.                          | Capacity.<br>Cubic ft. |  |
| 2                       | 2                      | Carb.<br>Anhy. | J. & E. Hall, Ltd. | 1922                     | Brine<br>SlabCork   | -  | 12  | 3                            | 8,320                  | Lloyd's<br>RMC<br>6-39   |

Particulars of Examination and Repairs for Loading Port Survey.

Has the insulation been examined throughout and found to be clean and in good order at this time. Yes  
Has the insulation been tested for fullness and dryness. Yes Have the test holes been efficiently closed. Yes  
If the insulation was not examined now for condition, where was this requirement carried out. -  
Was a certificate produced for that examination. - By whom was it issued. -  
Have the watertight doors been examined and worked. - Have the snow boxes and air trunkways and fastenings been examined. -  
Have the machinery and auxiliaries been examined and tested under working conditions at this time. Yes On the ~~XXXX~~ refrigerator of cargo chambers. Yes  
Have the condenser and refrigerator coil terminals and connections been examined. Yes  
Have the brine pipes, valves and connections been examined. Yes  
Have the thermometer tubes with their connections and fastenings been examined. Yes  
Are sufficient cargo battens supplied and are they in good order. Yes

State the temperatures to which the compartments were reduced before loading.

Port Chamber was reduced to 13°F  
Centre " " 22°F  
Starboard " " 15°F

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

Now Done: Examined the refrigerating machinery under working conditions and Chambers  
Port, Centre & Starboard under conditions mentioned above.  
All found in good condition.

General observations, opinion, and recommendation This vessel, in my opinion, is fit to carry  
refrigerated cargo during the contemplated voyage to Europe.

Fee £ 4 : 4 : 0 Fee applied for, 13th June, 1939.

Travelling Expenses £ 0 : 4 : 0 Received by me, 19

Committee's Minute As now  
Assigned

Surveyor to Lloyd's Register of Shipping.

20/7/39