

REPORT OF SURVEY ON REFRIGERATING MACHINERY & APPLIANCES.

(Received at London Office.

14 APR 1951

Date of writing Report 6-4-1951 When handed in at Local Office 6-4-1951 Port of SINGAPORE.

No. in Reg. Book. 51988 Survey held at SINGAPORE. Date: First Survey 16-3-51 Last Survey 28-3-1951
 on the Refrigerating Machinery and Appliances of the STEEL SH. S.S. "ASPHALION" (No. of Visits 4.)
 Tons Gross 6274 Vessel built at GREENOCK. By whom SCOTT'S S. B. & ENG. CO. LD. When 1924
 Net 3826 Owners CHINA MUTUAL STEAM NAV. CO. LD. Port LIVERPOOL. Voyage —
 Last Survey No. 31954

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. Tons.	No.	Capacity. Cubic ft.	
2	2	C.O.D.	LIVERPOOL REFRIG. CO.	1924	(1) SPRING-AIR (2) CORK.		25	5	88,640 87,121	Lloyd's RMC

Particulars of Examination and Repairs for SPECIAL SURVEY (CLASSIFICATION OF REFRIGERATING PLANT)
Complete Periodical Survey or Modified Survey.

Has the machinery been examined under working conditions No. before or after the refrigerated cargo was discharged —
 Density of brine — by — hydrometer. TEMPERATURES of the return air — & —
 or, delivery and return air at direct expansion or brine cooled batteries — & —, outflow and return brine — & —
 atmosphere —, cooling water inlet and discharge — & —, gas in condensers and evaporators — & —
 Do the log entries show that the plant was efficient during the last voyage with Refrigerated Cargo —
 Condenser Coils, date of last test LP 21.3.51; HP 24.3.51 If machinery is electrically driven, date of last examination of a generator engine and generator (See Report)
 Have all the working parts of the refrigerating machines and of the auxiliary machinery been examined PART. Is the spare gear in accordance with the Rules —
 Have the gas condenser and evaporator coils, or only the coil terminals, been examined PART (YES) Have the direct expansion or brine cooled battery coils been examined No.
 Have the refrigerating liquid pipes, separators and receivers, and the gas return pipes been examined externally as far as practicable No.
 Has the insulation been examined throughout the cargo chambers No. Has it been tested for dryness No. Where charcoal, silicate cotton,
 granulated cork or similar media are employed for insulating purposes, has such insulation been examined for fullness No. Have the test holes been efficiently closed No.
 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 No.
 Have the hatches, air trunkways and thermometer tubes with their connections and fastenings been examined No. Have the watertight doors been examined and worked No.
 Have the brine pipes or direct expansion pipes been examined YES, under what conditions WORKING. 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 (See below)

Please refer to correspondence Reference Classon (S) and (H) dated 26th February, 1951 and 8th March, 1951 respectively.
To complete the Special Survey (Classification) All insulated spaces to be examined as required for a
 Special Survey, together with the bilges, bilge suction, and sounding pipes. (Scupper in insulated
 lockers and chambers examined) All air trunks, ducts, hatches etc. requires to be examined.
 The steam driven and electric motor driven fans requires to be examined. The electrical installation
 the motor starter and switches and the cables of the fan motor requires to be examined and tested.
 [Note: The electric motor of the fan is the only refrigerating unit which is electrically driven and it is
 submitted for your consideration whether the main dynamo will be required to be opened up for
 examination]

The HP unit gas evaporator requires to be examined and the coils hydraulically tested. (The Owners
 Superintendent stated that the coils of the HP and LP unit gas evaporators and condensers were hydraulically
 tested to 2,500 lbs/sq. in. at Birkenhead during July, 1950. The tests were witnessed by the Owners
 Representative at that time and found satisfactory. The coils of the HP and LP unit gas condensers
 and the LP unit gas evaporator have now been hydraulically tested to 2,500 lbs/sq. in. and found
 satisfactory.)
 [Please see Continuation Sheet]

General observations, opinion, and recommendation

(NOTE:—A few Date of Survey should only be recommended in the case of a Complete Periodical Survey.)

The refrigerating machinery and appliances of this vessel, so far as seen, are in good condition
 and eligible in my opinion to have the record of R.M.C. (with date) when the survey
 has been completed.

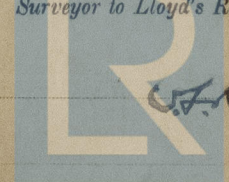
Fee \$150-00 { Fee applied for, 9th April, 1951.
 Travelling Expenses \$10-00 { Received by me, 19

Committee's Minute FRI. 27 APR 1951

Assigned Arnold Eng.

Submission Approved

W.R. Watson
 Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
 Foundation

002498-002505-0132

S.S. "ASPHANION"

Refrigerating Machinery Special Survey (Continued). The Owners Superintendent desires to know whether the Committee will be prepared to waive the testing of the coils of the remaining gas evaporator in this instance.

The refrigerating machinery circulating pumps requires to be examined.

The thermometers to be checked for accuracy.

The spare gear to be checked.

The brine pipes of the battery coils requires to be examined and the pipes tested.

The Owners Superintendent stated that arrangements will be made for the survey of the Refrigerating Machinery and Plant to be advanced when the vessel returns to this port from her present voyage in about three or four months time.

Now done for Special Survey. The HP and LP unit steam cylinders, pistons, valves, crank shaft, connecting rods and bearings together with the compressor cylinders, covers, valves, and the pistons and rods opened up and examined and found in satisfactory condition.

The three steam vertical duplex brine pumps opened up and examined and afterwards tried under working conditions and found satisfactory.

The brine pipes to tween deck lockers and compartments and lower hold examined and tested to 50 lbs/sq. in. and found satisfactory (Brine cooled battery coils to be examined and tested)

The HP & LP unit gas condensers opened up, the LP unit gas evaporator opened up, examined, and found satisfactory, the coils of all three units hydraulically tested to 2,500 lbs/sq. in. and found satisfactory.

The sea injection valves opened up and examined and found satisfactory.

The scuppers in the tween deck insulated lockers and chambers examined.

It was ascertained at this time that no scuppers were fitted to the port and starboard No 4 tween deck spaces and it is recommended that this item be noted and recorded as a deferred repair. The Owners Superintendent stated that scuppers will be fitted at the first convenient opportunity.

The particulars and dimensions of the parts of the Refrigerating Machinery and Appliances which have been opened up were taken and recorded on the Report 17. The completed form will be forwarded when the Special Survey has been carried out.

W.P. Watson.