

Rpt. 17.

GLASGOW REPORT No. 73548

Rme No. 2214

Report on Refrigerating Machinery and Appliances.

Date of writing Report 12 Nov 1948 When handed in at Local Office 12 Nov 1948 Port of London
 No. in Reg. Book. Survey held at London Date: First Survey 7 July 1948 Last Survey 5 November 1948
 (Number of Visits 14+2=16)

on the Refrigerating Machinery and Appliances of the S.S. CITY OF EDINBURGH Tons (Gross. Net.)

Vessel built at _____ By whom built _____ Yard No. _____ When built _____

Owners _____ Port belonging to _____ Voyage _____

Refrigerating Machinery made by J. E. Hall, Ltd Machine Nos. 13410 When made 1948Insulation fitted by _____ When fitted _____ System of Refrigeration CO₂

Method of cooling Cargo Chambers _____ Insulating Material used _____

Number of Cargo Chambers insulated _____ Total refrigerated cargo capacity 122,400 cubic feet

DESCRIPTION OF REFRIGERATING MACHINERY. Where placed _____

Refrigerating Units, No. of 12 No. of machines 1 Is each machine independent yesTotal refrigeration or ice-melting capacity in tons per 24 hours 115 Are all the units connected to all the refrigerated chambers.Compressors, driven direct or through single reduction gearing. Compressors, single or double acting double multiple effect compression noAre relief valves or safety discs fitted yes No. of cylinders to each unit 2 Diameter of cylinders 6 1/8"Diameter of piston rod 2 3/4" Length of stroke 21" No. of revolutions per minute 85Motive Power supplied from direct coupled steam engine
(State number of boilers, oil engines or electric generators supplying the motive power.)Steam Engines, high pressure, compound, triple expansion, surface condensing. No. of cylinders 2 Diameter 16" and 29"Length of stroke 21 Working pressure 120 lb sq in Diameter of crank shaft journals and pins 10 journals, 9 pinsBreadth and thickness of crank webs 10 1/2" x 4 3/16" No. of sections in crank shaft 2 Revolutions of engines per minute 85Oil 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 _____

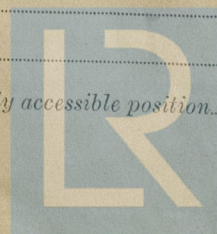
Electric Motors, type _____ No. of _____ Rated _____ Kilowatts _____ Volts _____

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 each of 10 casings Cast iron or steel casings copper Cylindrical or rectangular cylindrical Are safety valves fittedto casings yes No. of coils in each casing 1 Material of coils alum. brass Can each coil be readily shut off or disconnected yesWater Circulating Pumps, No. and size of pumps available _____ how worked _____ Gas Separators, No. of 4Gas Evaporators, No. of 2 Cast iron or steel casings steel Pressure or gravity type pressure If pressure type, are safetyvalves fitted yes No. of coils in each casing 13 Material of coils S.D. steel tube Can each coil be readily shut off or disconnected yesDirect Expansion or Brine Cooled Batteries, No. of 10 Are there two separate systems, so that one may be in use while the other is beingcleared of snow no No. of coils in each battery see list Material of coils steel Can each coil be readily shut off ordisconnected yes Total cooling surface of battery coils 15,660 sq ft Is a watertight tray fitted under each battery yesAir Circulating Fans, Total No. of 10 each of see list cubic feet capacity, at see list revolutions per minuteSteam or electrically driven electrically Where spare fans are supplied are these fitted in position ready for coupling up noBrine Circulating Pumps, No. and size of, including the additional pump 3 out cent how worked electricallyBrine Cooling System, closed or open closed Are the pipes and tanks galvanised on the inside noNo. of brine sections in each chamber see listCan each section be readily shut off or disconnected yes Are the control valves situated in an easily accessible position yes

© 2020

Lloyd's Register Foundation

002838-002845-0079 1/2

Is the exhaust steam led to the main and auxiliary condensers.

DESCRIPTION.	Date of Test.	Working Pressure.	Hydraulic Test Pressure	Air Test Pressure.	Stamped.	REMARKS.
Engine Cylinders (if tested)	H.P. 13-8-48		350 lbs sq in	—	End	
Steam Condenser	H.P. 7-7-48		250 do	—	End	
	9-7-48		25 do		End	
Gas Compressors	17-9-48	1000 lbs sq in	3000 lbs sq in	1500 lbs sq in	End	
	1-11-48					
„ Separators	5-11-48	1000 "	3000 "	1500 "	End	
„ Multiple Effect Receivers	not fitted					
	Stock					
„ Condenser Coils	18-8-48 20-8-48	1000 "	3000 "	1500 "	End	
„ Evaporator Coils	25-8-48 1-9-48	1000 "	3000 "	1500 "	End	
„ Condenser Headers and Connections	20-8-48	1000	3000 "	1500 "	End	
„ Condenser Casings	10-9-48	15/20 "	30 "	—	End	
	30-8-48					
„ Evaporator Casings	3-9-48	15/20	40 "	—	End	
NH ₃ Condenser, Evaporator and Air Cooler Coils after erection in place						
Brine Piping after erection in place...						

time after the machinery and cooling appliances have been shut off.

Additional Spare Gear Supplied:— *See attached list*

J. & E. HALL, LTD.

.....Manufacturer

IN 'TWEEN DECK CHAMBERS.

[illegible]

Are all air spaces behind insulation arranged to drain to the bilges, bulge wells, or gutterways of the respective chambers.....

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. 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.....

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

The Refrigerating machinery and appliances of this vessel as now reported have been constructed under special survey in conformity with the Society's Rules, regulations and the Secretary's letters.

The scantlings and arrangements are in accordance with, or equivalent to, those shown on the approved plans. The materials and workmanship are good.

In my opinion the Refrigerating machinery and appliances of this vessel will be eligible for the notation +LLOYDS RMC (with date) when the installation and listing have been satisfactorily carried out.

PARTICULARS TO BE ENTERED IN REGISTER BOOK.

REFRIGERATING MACHINES.					System of (1) Refrigerating (2) Insulating the Chambers.	Ice melting capacity per 24 hours. Tons.	Is Refrigerating Machinery Electrically Driven?	INSULATED CARGO CHAMBERS.	
No. of Units.	No. of Compressors.	System.	Makers.	Date of Construction.				No.	Capacity. Cubic ft.
2	2	carb amhy	J & E Hall Ltd	1948		115			

LONG 120.7
F&S 120.7
See Jls. 73548
£600-0-0
F&S applied 19.....

Travelling Expenses £ : : Received by me, 19.....

Ph. Sully

Surveyor to Lloyd's Register.

Committee's Minute.....GLASGOW 25 JAN 1949

Assigned.....See Minute on Jls. Rpt. No. 73548



© 2020

Lloyd's Register
Foundation