

REPORT ON REFRIGERATING MACHINERY AND APPLIANCES.

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(No. of Visits 4)

on the Refrigerating Machinery and Appliances of the *1/5 Franconia* Tons { Gross
Net

Vessel built at *Glasgow* By whom built Yard No. When built *1923*

Owners *Cunard S.S. Co. Ltd* Port belonging to *Liverpool* Voyage *Liverpool*

Refrigerating Machinery made by *Liverpool Refrigeration Co* Machine No. When made

Insulation fitted by When fitted System of Refrigeration

Method of cooling Cargo Chambers Insulating Material used *Compressed flat cork*

Number of Cargo Chambers insulated *Deck No 1 + 3 holds* Total refrigerated cargo capacity cubic feet.

DESCRIPTION OF REFRIGERATING MACHINERY. ^{additional} Where placed *To be fitted on Deck 7. side in way of 7th hold*

Refrigerating Units, No. of Single, double, or triple Cubic feet of air delivered per hour

Total refrigeration or ice-melting capacity in tons per 24 hours Are all the units connected to all the refrigerated chambers

Compressors, driven direct or through ^{single} } reduction gearing. Compressors, single or double acting No. of cylinders
_{double}

Diameter of cylinders Diameter of piston rod Length of stroke No. of strokes per minute

Motive Power supplied from

Steam Engines, high pressure, compound, or triple expansion, surface condensing. No. of cylinders Diameter

Length of stroke Working pressure Diameter of crank shaft journals and pins

Breadth and thickness of crank webs No. of sections in crank shaft Revolutions of engines per minute

Oil Engines, type 2 or 4 stroke cycle Single or double acting

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

Electric Motors, type No. of Rated Kilowatts

Volts at revolutions per minute. Diameter of motor shafts at bearings

Reduction Gearing, maximum shaft horse power at 1st pinion Revolutions per minute at full power at 1st pinion

2nd pinion 1st reduction wheel main shaft Pitch circle diameter, 1st pinion 2nd pinion

1st reduction wheel Main wheel Width of face, 1st reduction wheel Main wheel

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings, 1st pinion 2nd pinion

1st reduction wheel Main wheel Flexible pinion shafts, diameter 1st 2nd

Pinion shafts, diameter at bearings, External, 1st 2nd Internal, 1st 2nd

Diameter at bottom of teeth of pinion, 1st 2nd Wheel shafts, diameter at bearings, 1st

Main Diameter at wheel shroud, 1st Main

Gas Condensers, No. of Cast iron or steel casings Cylindrical or rectangular

No. of coils in each Material of coils Can each coil be readily shut off or disconnected

Water Circulating Pumps, No. and size of how worked Gas Separators, No. of

Gas Evaporators, No. of Cast iron or steel casings Pressure or gravity type

No. of coils in each casing Material of coils Can each coil be readily shut off or disconnected

Direct Expansion or Brine Cooled Batteries, No. of Are there two separate systems, so that one may be in use while the other is being

cleared of snow No. of coils in each battery Material of coils Can each coil be readily shut off or

disconnected Total cooling surface of battery coils Is a watertight tray fitted under each battery

Air Circulating Fans, Total No. of each of cubic feet capacity, at revolutions per minute

Steam or electrically driven Where spare fans are supplied are these fitted in position ready for coupling up

Brine Circulating Pumps, No. and size of, including the additional pump how worked

Brine Cooling System, closed or open Are the pipes and tanks galvanised on the inside

No. of brine sections in each chamber

Can each section be readily shut off or disconnected Are the control valves situated in an easily accessible position

NOTE - THE WORDS WHICH DO NOT APPLY SHOULD BE DELETED.

Im. 12.21.1

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, inside dimensions, main _____ and branch _____

Are they permanently fixed or collapsible, or portable _____ State position in chambers _____

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 _____ 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 _____ Is 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 _____

Work commenced in connection with Insulating No 1 + 3 Holds on G. Deck.
Now done. Machinery House on F Deck on star. side abreast No 2 Hold now made
with companion + ladder from E. Deck. Pitch pine beds for machines + evaporators fitted.
Pump room on G. Deck with W.T. trunk + ladder to engine room. Sea Cocks for
circulating fitted to ships side + controlled from Pump room.

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

No 1 Hold on G. Deck. Grounds + Grid bolts fitted for overhauling. Grounds
& distance pieces fitted in way of ships sides + bulkheads. 10% of
under deck Grounds fitted

No 3 Hold G. Deck. Insulation on ships side partly done.
Grounds fitted + 2 slabs of cork each 4" thick fitted covering
slab of 2" partly fitted. Bulkheads insulation partly fitted
& fitting insulation in overhauling. Underside of deck, grounds
fitted.

It is stated that nothing more will be done to this until
the vessel is laid up for permanent repairs.

For the Information of the Committee

PARTICULARS TO BE ENTERED IN REGISTER BOOK.

REFRIGERATING MACHINES.					System of (1) Refrigerating (2) Insulating the Chambers.	POWER.		INSULATED CARGO CHAMBERS.	
No. and whether Single or Duplex.	Makers.	Date of Construction.	System.	Type.		Cubic feet of air delivered per hour.	Ice melting capacity per 24 hours. Tons.	No.	Capacity.

Fee £ : : } Fee applied for, 19 ..
Travelling Expenses £ : : } Received by me, 19 ..

G. A. Dyden Toyne
Surveyor to Lloyd's Register.

Committee's Minute _____

Assigned _____
see Liverpool
no 2488

Certificate to be sent to



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