

<u>SECONDARY</u>	<u>REFRIGERATION</u>	<u>SYSTEM</u>	<u>LIMITING</u>	<u>PARAMETER</u>
<u>Primary</u>	<u>Refrigeration using</u>	(VCM)(+5+25 deg.C.)	(VAM)(+0-30 deg.C.)	<u>Machine(Temp</u>
	<u>Refrigerant-</u>	FreonGas-22/11	DM. Water.	<u>Range deg.C.)</u>
	<u>Absorbant-</u>	Ammonia	LiBr.	
	<u>TR.-</u>	150-200-300	30-50	
<u>PARAMETER</u>	<u>UNITS</u>	<u>NITRITE BASE</u>	<u>PropeleneGLYC</u>	<u>REMARKS</u>
		<u>+(15%NaCl or</u>	<u>OL(>20%).</u>	
		<u>20%CaCl2)</u>	<u>BASED</u>	
pH		9.0-9.5	9.0-10.2	
TDS	ppm	<1000	<2000	
Sp.Cond.	(us/cm)	<1500	<3000	
P-Alkalinity	Ppm as CaCO3	<80	<100	
M-Alkalinity	Ppm as CaCO3	<500	<600	
Total Hardness	Ppm as CaCO3	<50	<50	
Ca.Hardness	Ppm as CaCO3	-	-	
Mg.hardness	Ppm as CaCO3	-	-	
Chloride	Ppm as Chloride	<0.5	<0.5	
Sulphate	Ppm as Sulphate	<250	<350	
Fe.	Ppm as Iron	<0.5	<0.5	
Turbidity	NTU	<15	<15	
Sus.Solids	ppm	<5	<5	
Cu.	Ppm as Copper	<0.2	<0.2	
Ammonia.	Ppm as Ammonia	<5	<5	
Nitrite.	Ppm as Nitrite	1000-1500	700-1000	For fresh system start with 3000 ppm
Nitrate	Ppm as Nitrate	10	10	
Make Up Water		DMW>Soft>R.O	DMW>Soft>R.O	Ultra Filtration
<u>MICROBIOLOGICAL</u>			<u>LIMITS.</u>	
Anaerobic	Organisms/ml.	<1000	<1000	
Aerobic Particles	Org./ml	<100	<100	
Fe.bacteria.	Org./ml or Counts/ml	nil	nil	
SRB.	Org./ml. Or Counts/100ml.	nil	nil	
Corrosion Rate by Coupon Test.	Mpy-Cu/Alloy. MS	<0.2 <<0.5	<0.2 <0.5	