

Electric Cooling

Vapour Compression Cycle :-

- * Refrigeration process is done by using Vapour Compression Cycle.
- * Refrigeration is the Method of bringing Down the temp. of a system Lower than Surrounding temp.
- * The boiling point of liquid is depends on pressure or Pressure & boiling point
- * boiling point = the temp. in which liquid changes to Vapour

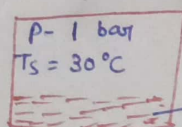
Ammonia

P (Bar)	T_s °C
1	-30°
5	6
6	16
20	50

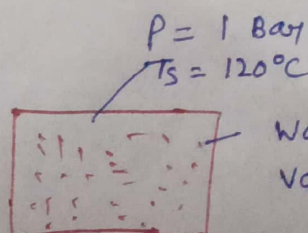
Water

P (Bar)	T_s °C
1	100°
2	120
3	133
5	151

It means if Pressure is 1 Bar then water will be vapourised after 100° temp.



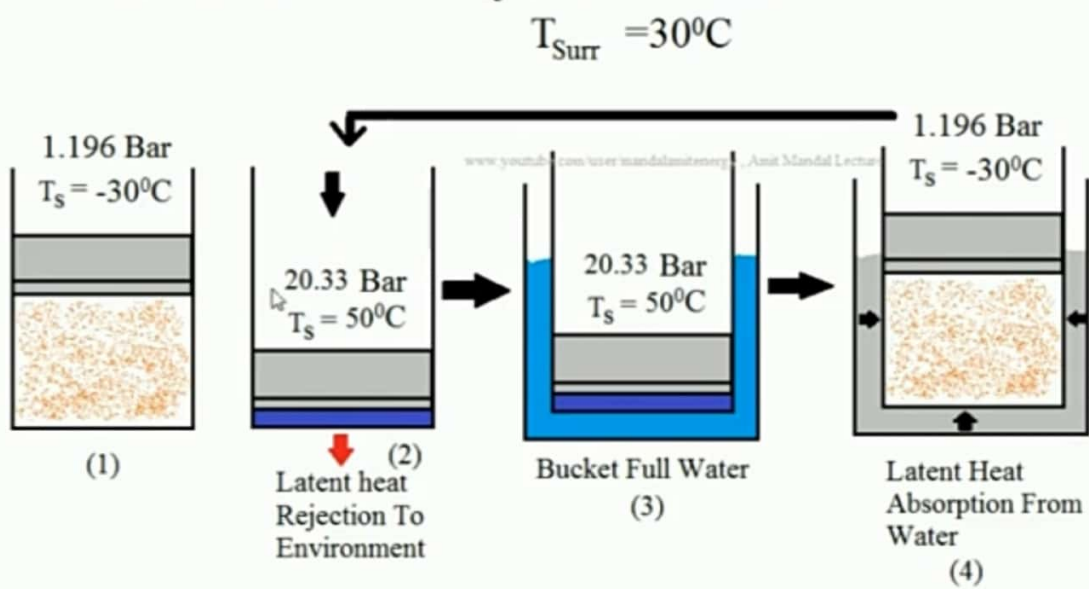
Water in liquid state



Water in vapour state

When Liquid $\xrightarrow[\text{Latent heat}]{\text{absorbs}}$ Vapour (Vapourisation)

When Vapour $\xrightarrow[\text{Latent heat}]{\text{Reject}}$ Liquid (Condensation)



Ammonia

P (Bar)	T_s $^{\circ}\text{C}$
1.196	-30
5.34	6
6.14	10
13.89	36
20.33	50

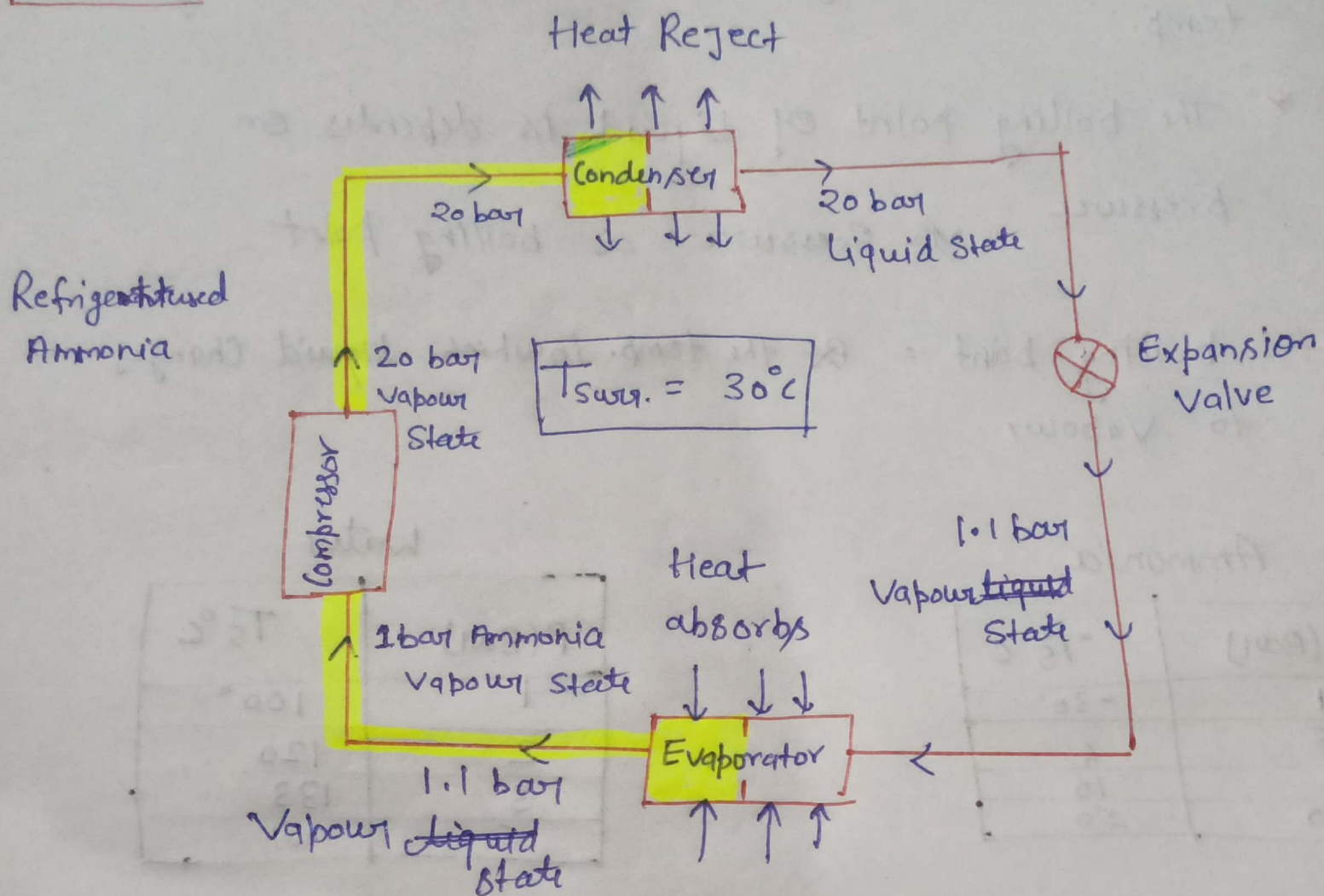


Fig- Vapour Compression Cycle