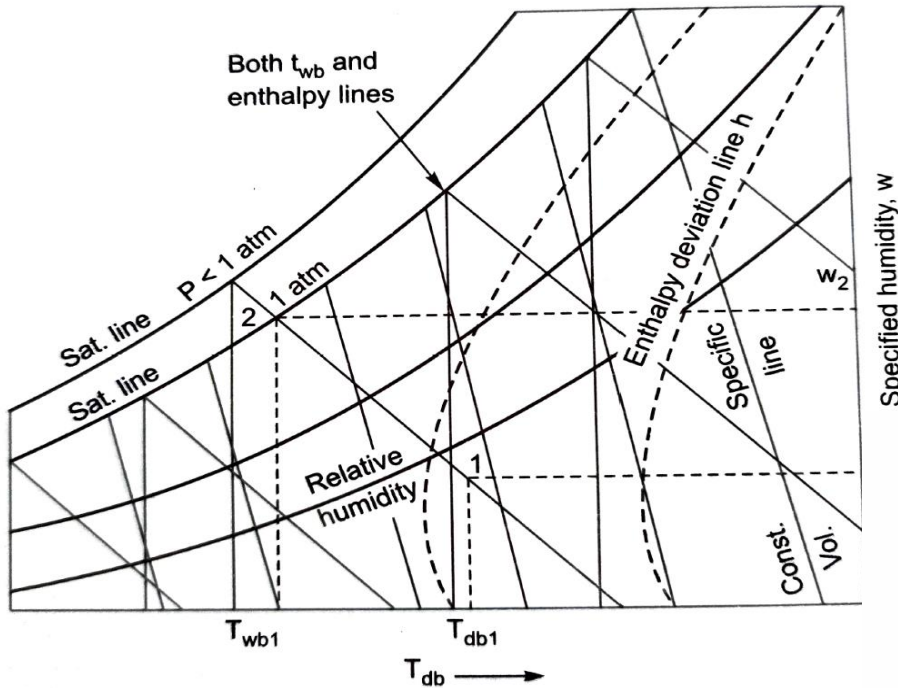


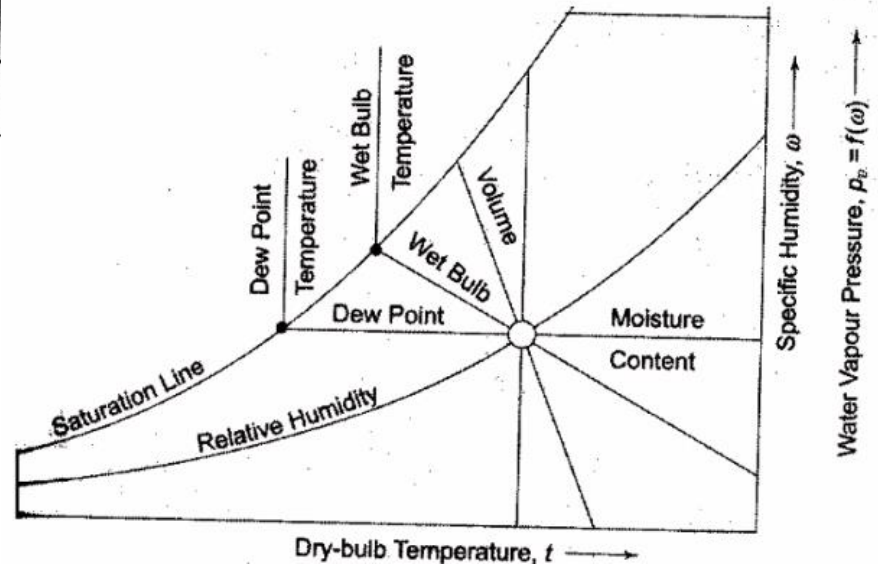
# AIR CONDITIONING



# Psychrometric Chart

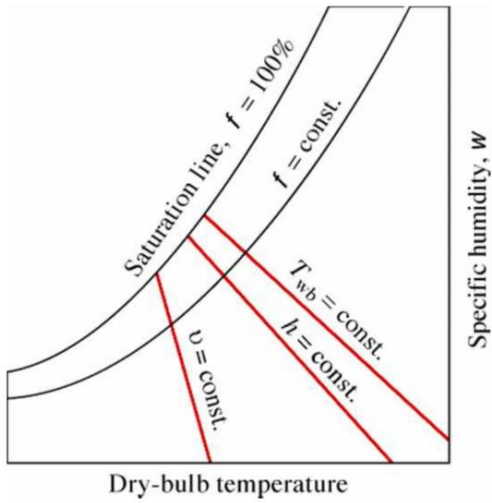


The psychrometric charts are plotted with dry-bulb and specific humidity. The lines of constant wet-bulb temperature, relative humidity, specific volume, etc., are plotted

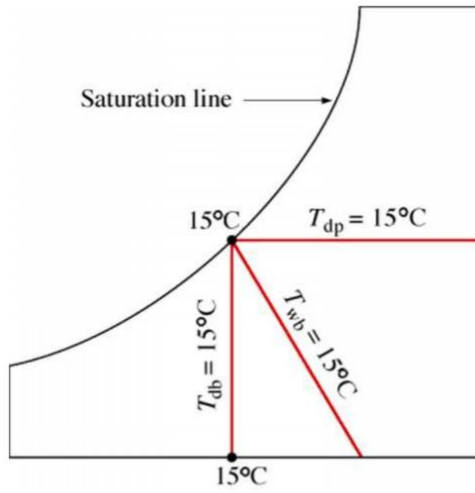


# Psychrometric Properties

1. Dry bulb temperature
2. Wet bulb temperature
3. Dew point temperature
4. Relative humidity
5. Humidity ratio
6. Specific volume
7. Enthalpy

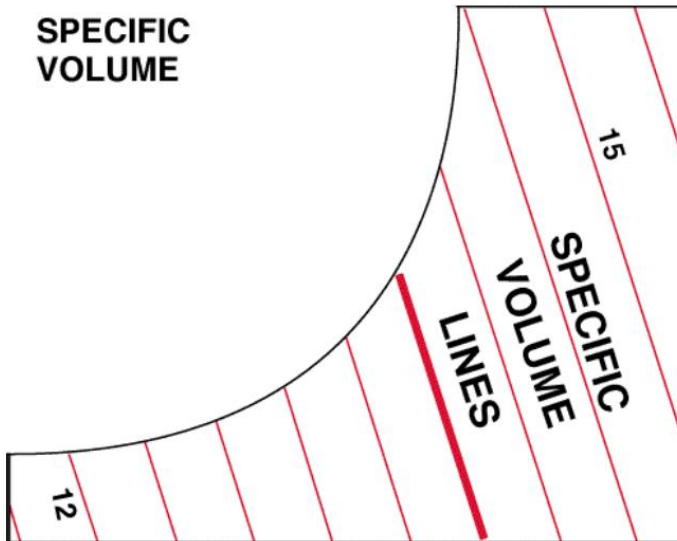


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## SPECIFIC VOLUME



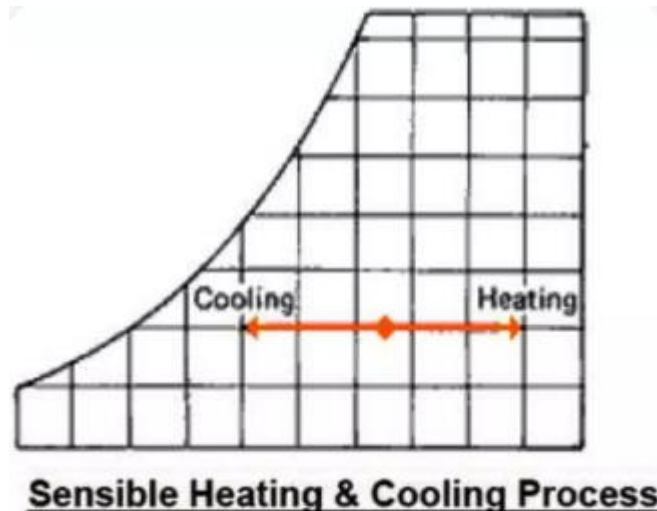
# Sensible Heating or Cooling

- The increase or decrease in the temperature of air without changing its humidity ratio.

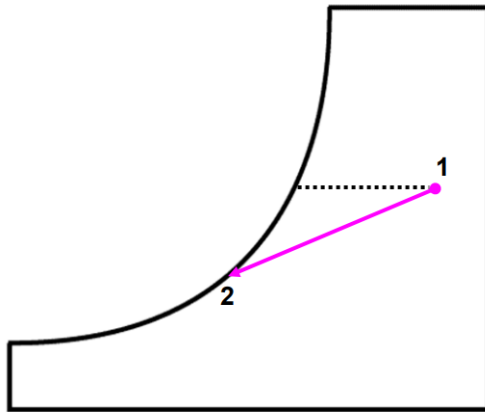
**Sensible cooling** : The moisture content of air remains constant but its temperature decreases as it flows over a cooling coil. For moisture content to remain constant, the surface of the cooling coil should be dry and its surface temperature should be greater than the dew point temperature of air.

**Sensible heating:**

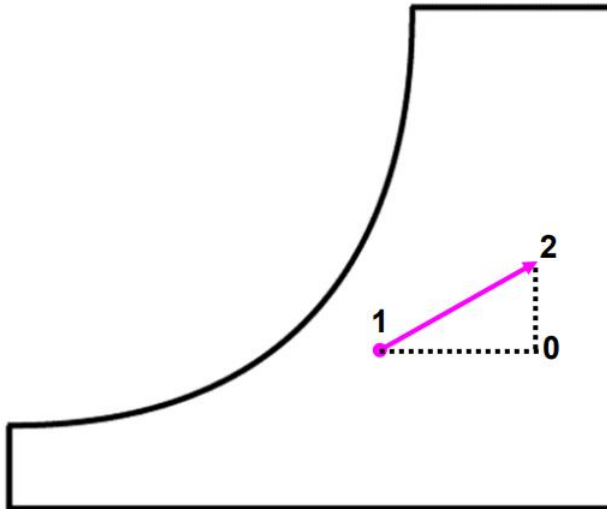
During this process, the moisture content of air remains constant and its temperature increases as it flows over a heating coil.



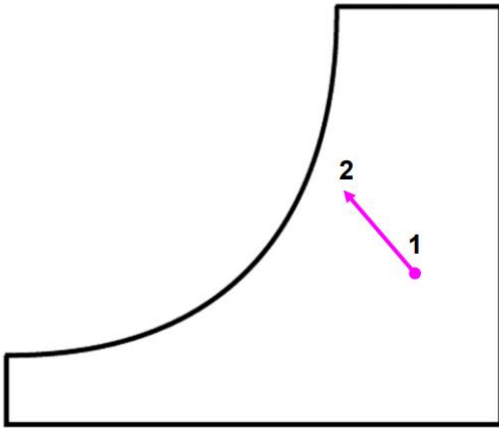
- Cooling and dehumidification process



- Heating and humidification process:



# Adiabatic or chemical humidification



## Apparatus dew point (ADP)

It is the point obtained by the intersection of cooling and dehumidification with saturation curve