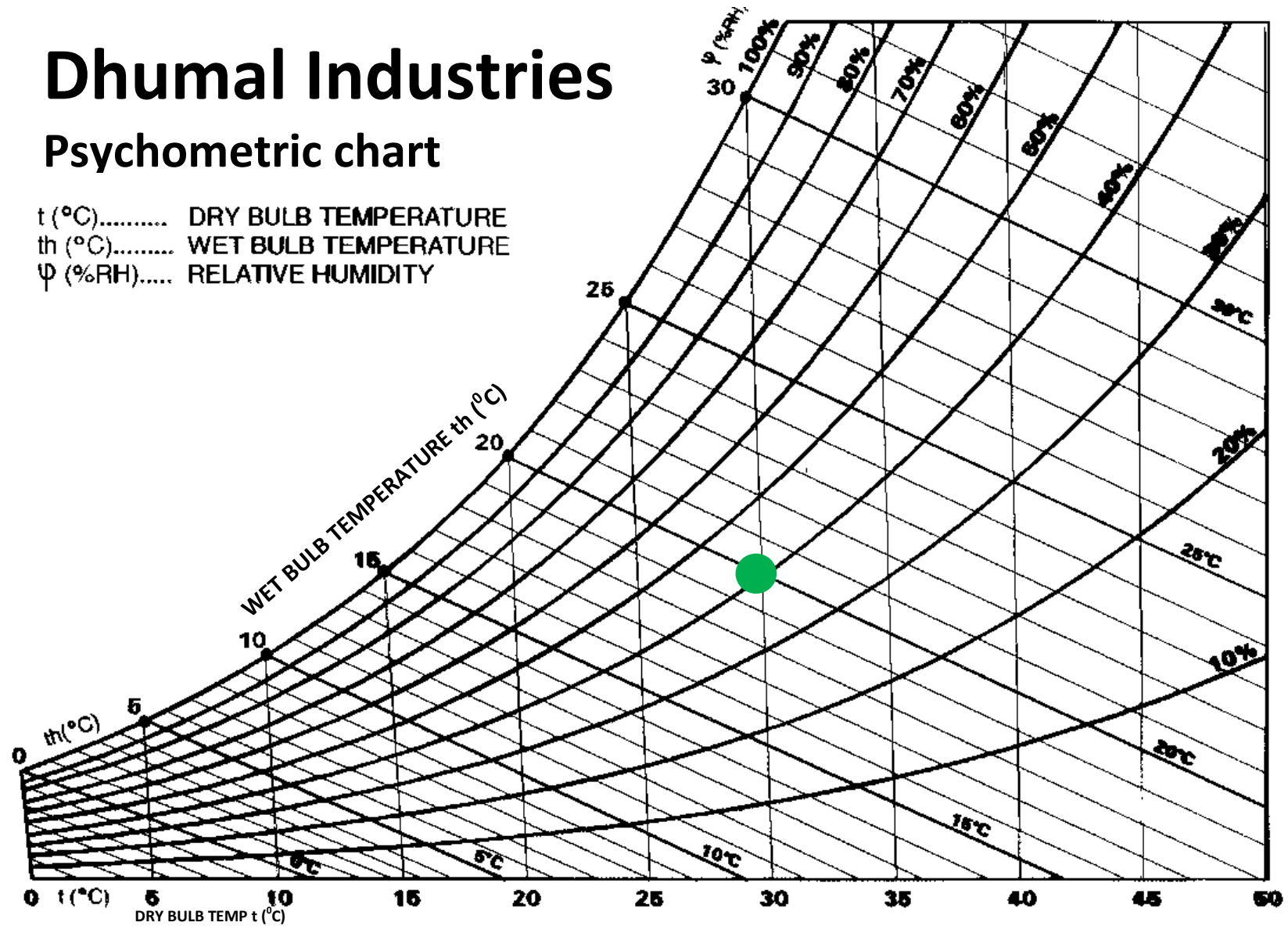


Dhumal Industries

Psychometric chart

t (°C)..... DRY BULB TEMPERATURE
 t_h (°C)..... WET BULB TEMPERATURE
 ψ (%RH)..... RELATIVE HUMIDITY



Example of Dry Bulb Temp. = 30°C, Wet Bulb Temp = 20°C, Relative Humidity = 40%

Reduction inside shed temp.

Depending on humidity and dry bulb temp. find out wet bulb temp. Consider system efficiency as 75% then

$\Delta t = \text{Dry bulb temp.} - \text{Wet bulb temp.}$

75% of this can be reduction possible.

Inside temp. = Dry bulb temp. - 0.75 X (Dry bulb temp. – Wet bulb temp.)

- **In the above example:** Δt is 10 so maximum 7.5 degree can be reduced. Hence inside temp. Can be **22.5⁰ C.**
- **Example 2:** Outside temp. 45 Degree RH 20% then Wet bulb 25 hence Δt is 20 hence maximum reduction is possible is 15 so inside temp. Can be 30⁰C.