

Chapter 2.7

Psychrometric chart

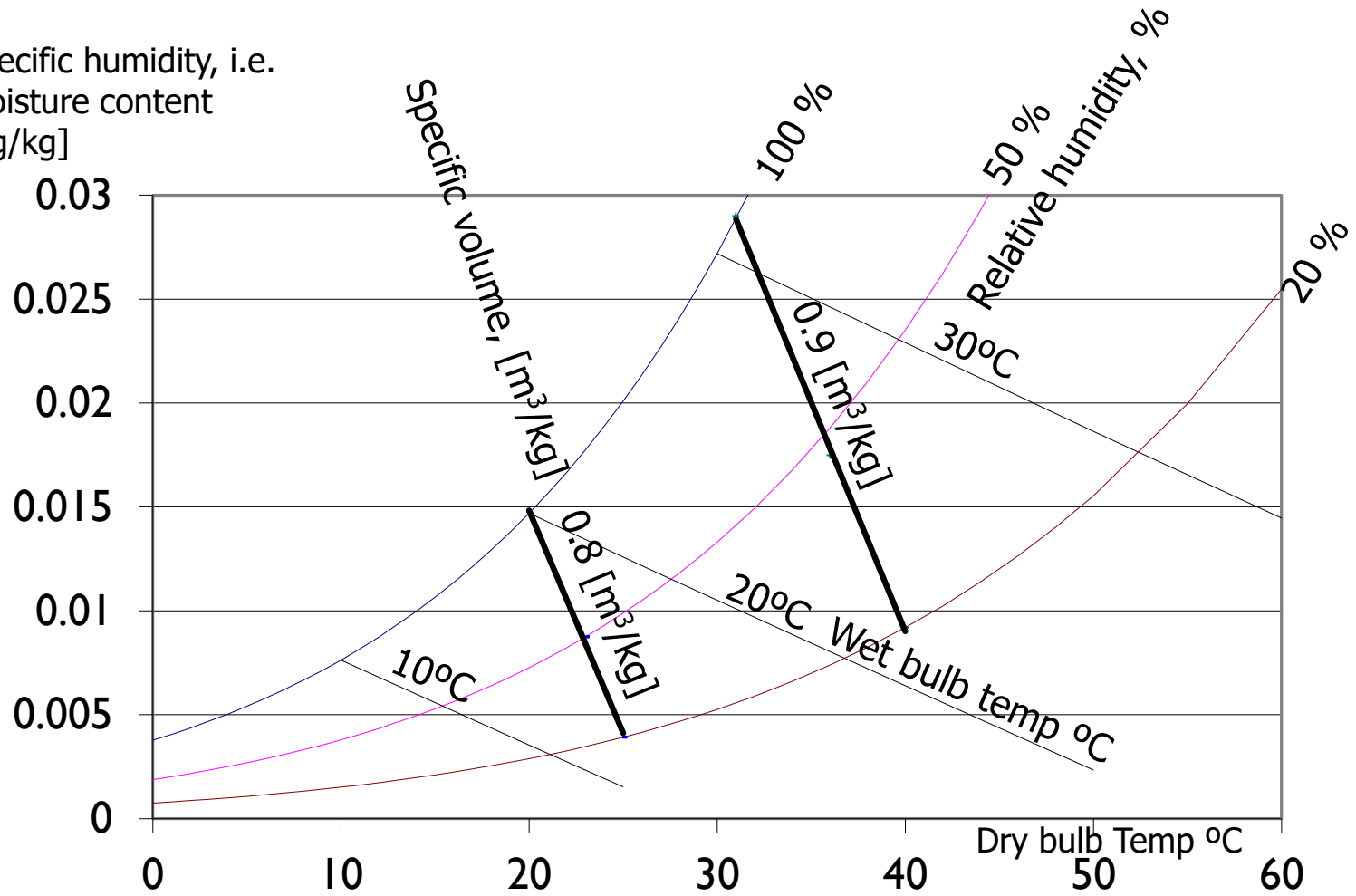
Psychrometric chart use

-see the spreadsheet-

- Chart starts as a plot of absolute humidity vs. saturation temperature
- Then the % relative humidity curves are drawn on
- Then the wet bulb temperature is calculated using a formula in the spreadsheet for interest
- Then the lines of constant enthalpy are added
- And finally the lines of constant specific volume

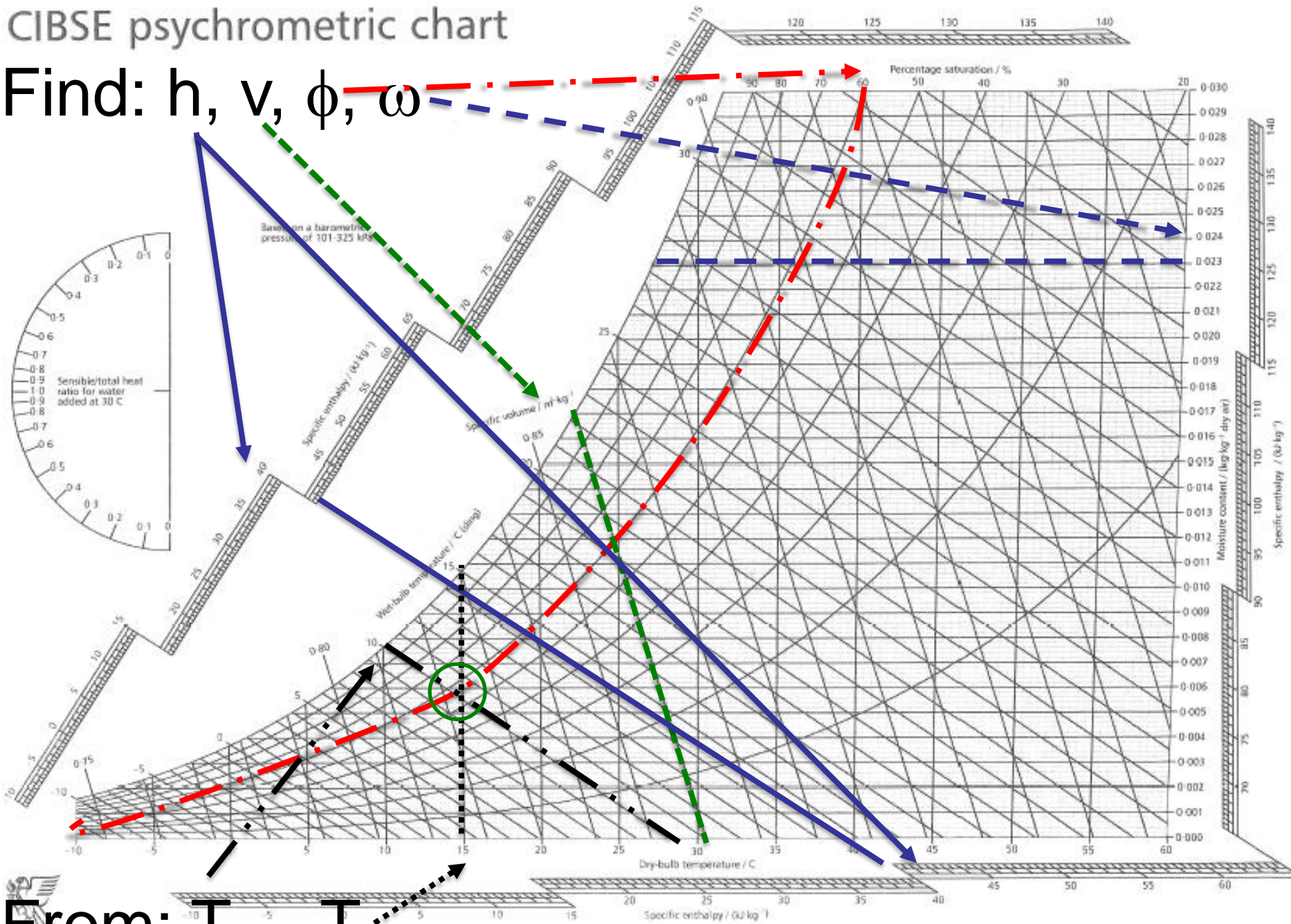
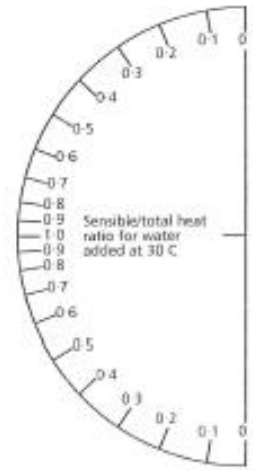
Psychrometric chart

Specific humidity, i.e. moisture content [kg/kg]



CIBSE psychrometric chart

Find: h , v , ϕ , ω



From: T_{wb} , T_{db}

Use of chart

- In practice, wet bulb/dry bulb temperatures are taken at points in a system
- The points on the chart then produce the other data:
 - Enthalpy
 - Relative humidity
 - Absolute humidity
 - Specific volume
- See the video on how to plot the chart