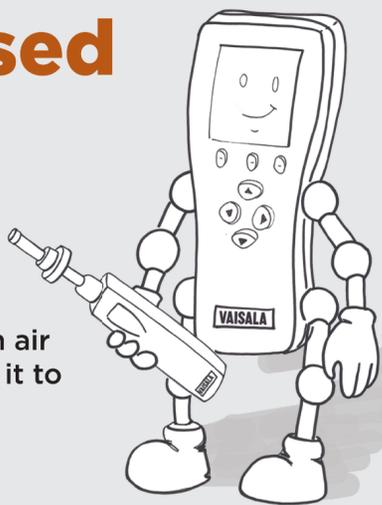


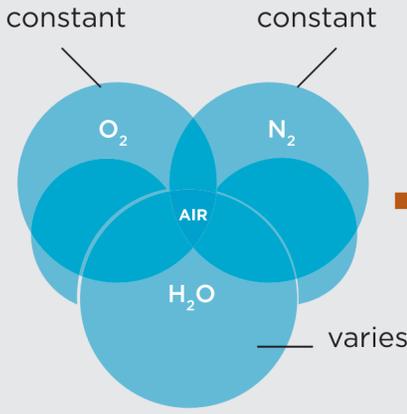
FAQ

Dew Point in Compressed Air



What is dew point?

Dew point is the temperature to which air must be cooled for the water vapor in it to condense into dew or frost.



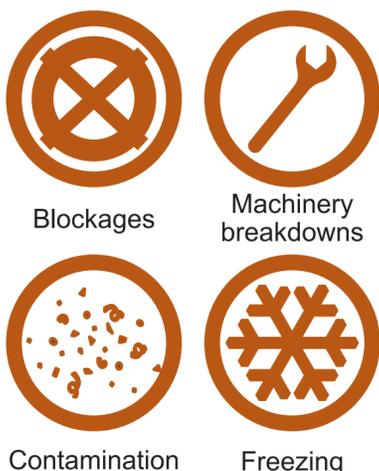
Air is made up of Nitrogen (N₂), Oxygen (O₂), Water Vapor (H₂O) and other gases.

At any temperature there is a maximum amount of water vapor that air can hold.

This maximum amount is called **SATURATION** pressure.

Why is moisture problematic?

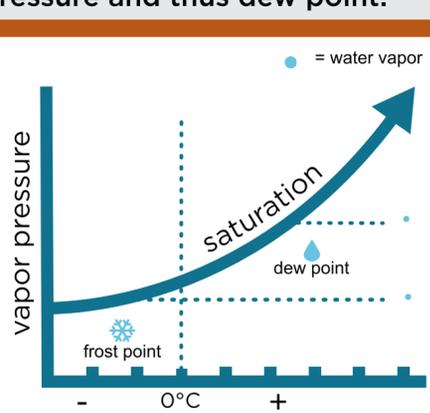
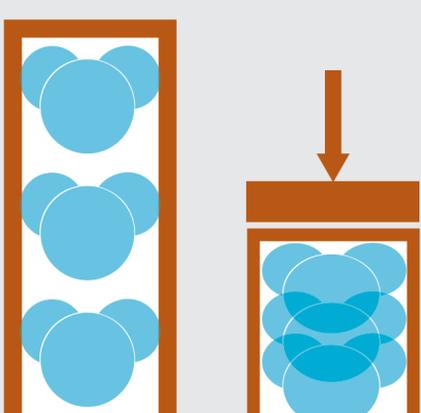
CONDENSATION in pressurized air is **BAD** because it causes:



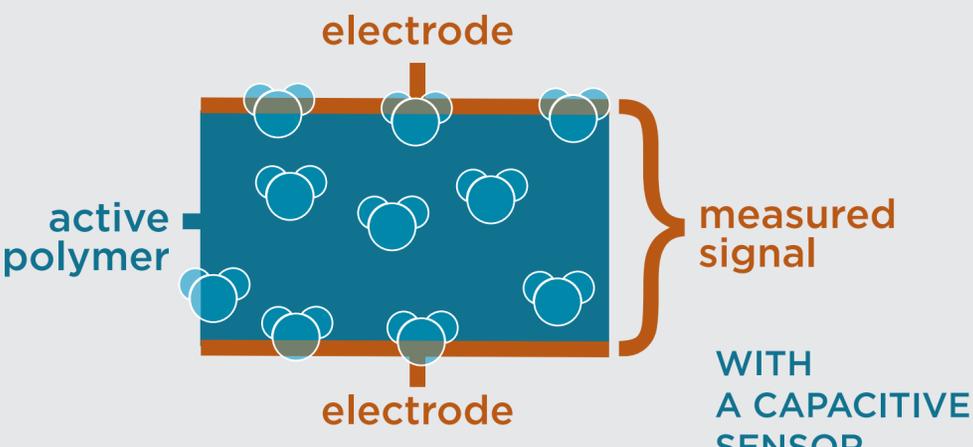
Addition of more water vapor results in **CONDENSATION**

What is the effect of pressure on dew point?

Air compression increases vapor pressure and thus dew point.



So how do we measure dew point?



What is the typical range of dew point?

How is dew point reliably measured?

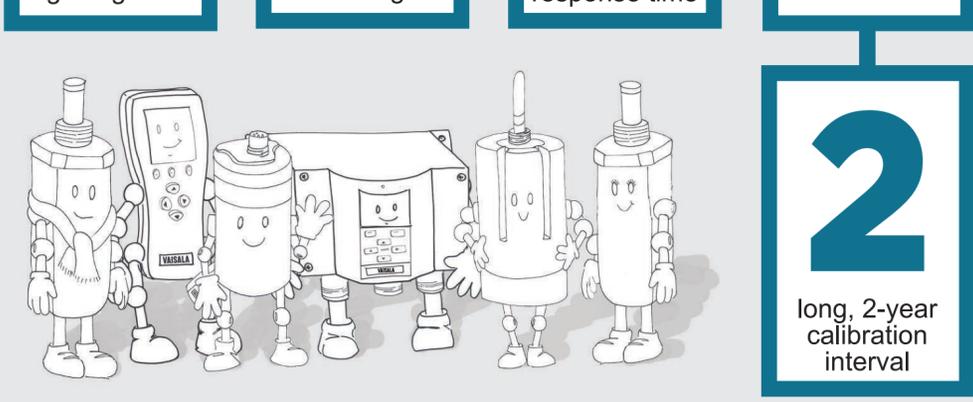
Compressed air standard: ISO 8573-1:2010

quality class	Pressure dew point
1	≤ -70°C
2	≤ -40°C
3	≤ -20°C
4	≤ +3°C
5	≤ +7°C
6	≤ +10°C

- Select an instrument with the correct measuring range.
- Understand the pressure characteristics of dew point.
- Install the sensor correctly.

What defines a high quality sensor?

- tolerates getting wet
- minimal drifting
- fast response time
- immune to contamination



Vaisala manufactures instruments that are ideal for measuring dew point in compressed air and meet the qualifications of a high-quality sensor.



We have taken the stress out of ensuring dry compressed air. Learn more at: www.vaisala.com/compressedair