

A Method for Calculating Dew Point Temperature in the Humidity Test

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Abstract : Currently in humidity tests having not put the Dew point temperature as a control parameter, this paper selects wet and dry bulb thermometer to measure the vapor pressure, and introduces several the saturation vapor pressure formulas easily calculated on the controller. Then establish the Dew point temperature calculation model to obtain the relationship between the Dew point temperature and vapor pressure. Finally check through the 100 groups of sample in the range of 0-100 °C from "Psychrometric handbook", find that the average error is small. This formula can be applied to calculate the Dew point temperature in the humidity test.

Keywords : dew point temperature, psychrometric handbook, saturation vapor pressure, wet and dry bulb thermometer

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