

REAL GAS PROPERTIES FOR HUMID AIR. DEW-POINT, WET-BULB AND TRANSPORT PROPERTIES

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ABSTRACT

The modeling of the components that are used in modeling of HVAC equipment and plant require the knowledge transport properties of humid air, and methods to get important points like, wet-bulb temperature or bubble point. Because the humid air or water are used in open process, with mixing, drying or humidifying stages, the transport properties are required for the liquid, the vapour phase, and also for two-phase liquid-vapor region. This paper describes the equations necessary for the calculation of the transport properties of humid air considered as a mixture of real gases, and also calculations for dew-point and wet-bulb temperature.

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