



Agricultural Storage Systems
1242 Route 246 South Melville, PE
Phone: (902)658-2550 Fax: (902)658-2608
www.gormancontrols.com

Dew Point: Implications for Potato Storage Management

Dew Point:

The Dew Point is the temperature at which the water vapor in a volume of air at a constant pressure will condense into liquid water at the same rate at which it evaporates.

Condensed water is called dew when it forms on a solid surface.

Dew Point is associated with relative humidity. A high relative humidity indicates that the dew point is close to the current air temperature. At 100% relative humidity the dew point is equal to the current temperature.

Implications in Potato Storage Management:

If air with a dew point higher than the tuber temperature is delivered to a pile, condensation will form on the surface of the tubers.

If air with a dew point lower than than the tuber temperature is delivered to the pile, drying conditions exist.

Dew Point Measurement Integration with the MicroVent System

The integration of a dew point sensor in the MicroVent System will provide an option to have a second criterion for determining if outside air is available. The user will be able to select a maximum dew point temperature at which the air will be considered available. The user will also be able to use this setting in conjunction with the CO₂ purge settings to provide a drying function for potatoes harvested under wet conditions.

Dew Point Measurement Integration with the MicroVent Vision System

The integration of a dew point sensor in the MicroVent Vision System will provide an option to have a second criterion for determining if outside air is available. The user will be able to select a maximum dew point temperature at which the air will be considered available. A Drying Feature will also be available in the MicroVent Vision System that will employ dew point measurement as well as increased tolerances on supply air temperatures to help with drying potatoes that are harvested under wet conditions.