

Humidity Control for laboratories and Instrumentation Rooms

All sophisticated scientific instruments require protection against humidity and constant temperature control to maintain accuracy of performance. Many commercial facilities, industrial instrumentation rooms and educational facilities too require humidity control solutions. Temperature control in these facilities is easily achieved through air-conditioning but humidity control is often overlooked. What may seem to be a small amount of variation in humidity may ruin a product, interrupt a process or cause important expensive equipment to malfunction.

**Effects of Uncontrolled Humidity**

Humidity obstructs the smooth functioning of sensors installed for the purpose of measurement in laboratories. This leads to inaccurate results and observations.

Moisture present inside the instrumentation facilities and laboratories is a common hindrance when it comes to getting accurate observations and results. Uncontrolled humidity causes critical damage to electronic machinery which further results in erratic readings and analysis of mission critical processes. At some places even fungal growth is observed if RH is not maintained properly.

Uncontrolled Humidity Results in:

- Corrosion and micro-corrosion
- Reduced life cycle of the expensive equipment
- Frequent replacement and increased maintenance costs
- Recurrent breakdown
- Frequent re-calibration
- Inaccurate readings

Causes of Uncontrolled Humidity

Wet and damp environment conditions with high relative humidity (RH) are major contributor in causing humidity. Occurrence of various reactions in laboratories during experimentation, leading to releasing of moisture also becomes a major source of humidity in the laboratories.

General Recommendation

Temperature control recommendations by various manufacturers of laboratory equipment:

Area	Temp. °C	% RH
Temperature Dry Bulb	20°C to 27°C	40% - 50%

Bry-Air Solution

Laboratories require stable temperature and humidity to enhance the accuracy of test results, carry out quality control analysis, experiments, or for the research of material properties. Bry-Air Dehumidifiers can provide either constant relative humidity or constant dew point temperature depending upon the materials and characteristics. It is capable of maintaining the dew point as low as - 60°C, regardless of ambient conditions.

Bry-Air, the leader in moisture and humidity control gives you the power to:

- Reduce corrosion and micro-corrosion of mission critical equipment
- Increase life cycle of expensive machinery
- Minimize recurrent breakdown
- Get accurate readings and results