HUMIDITY for WOODWORKING

Low Humidity for Finished Wood Products Presents Problems

Low humidity levels resulting from the winter heating season, or shop location in an arid geography, can negatively affect woodworking processes. Dry indoor air can cause multiple issues including: shrinking, checking, cupping, and warping of natural wood, MDF and particle board. Low RH% negatively affects dry times for finishes, self-leveling glues and paints. Sanding dust in the air also removes ambient moisture. In general, wood-based products require a minimum of 35% RH. In cases where RH dips below 35%, the lack of controlled humidity affects production, product quality and consistency for finished wood products.

Static Can Ruin Application of Wood Finishes

Under dry conditions, static can attract dust and fine particles which adhere to wet finishes and negatively affect the final product. In addition, low RH% accelerates the drying rate of finishes resulting in bubbling and other unsightly effects. The resulting need for re-application increases labor costs and slows production.

How Some Humidification Solutions Can Fall Short

In some cases, facilities will utilize a smaller, compressed air or ultrasonic humidifier system attempting to add humidity. However, they quickly find that small systems are unable to provide adequate amounts of controlled humidity. And if systems aren't properly calibrated nor custom engineered for a production space, dripping can occur. These overloaded systems can generate excessive amounts of electricity and water adding undue expense and waste of resources.



The MicroCool solution will keep up with the demand of our large facility where the dry air load is extremely high and must be offset with humidity. It uses a conservative amount of horsepower and considering how much humidity is produced, we have definitely saved money. – *Large Washington State Cabinet Maker*

THE MICROCOOL SOLUTION

MicroCool's robust selection of pumps, patented nozzles and controllers create a total fog solution that adds optimal humidity into large or small scale dry woodworking facilities. In addition to providing humidity, the fog also reduces dust and particulates floating in the air. A MicroCool fog system improves bottom line profits by minimizing labor costs and reducing expenses associated with replacing distorted and damaged wood-based materials.

- Stabilize Dimensional Stability
- Prevent Cupping, Shrinking, Uneven Curing & Drying
- Consistent RH%

The Challenge

Finding a system that controls and provides the optimal amount of controlled humidity while keeping costs down.

A MicroCool Humidity System

- delivers precise humidity output with low energy use
- provides a control system that works in conjunction with a humidity sensor
- is expertly designed and calibrated for a production environment
- saves on labor costs
- reduces product waste and saves on expensive materials

MICROCOOL

A MeeFog Company

World leaders in fog and mist technology for cooling, humidification, air quality control

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