

# Cloud Mister Humidification System

## INTRODUCTION

Cloud Tech systems were among the first used to cool and humidify environments, from outdoor residential, commercial cooling, industrial humidification to indoor greenhouse complexes. Over the last many years, research and development has kept Cloud Tech Humidification systems as a front runner in every industry that requires cooling, humidifying. Cloud Tech Systems (Mechanical Environmental Controls) designs and manufactures environmental control systems that cool, humidify, reduce dust and odours. Cloud Tech trademarked products are used worldwide in many industries and applications, including humidification for wine barrel storage rooms, tea manufacturing units, textile industries, paper industries and greenhouses. Cloud Tech currently has World's best technology for effective Humidification with Cloud Mister Humidification System without wetting.

## TECHNOLOGY

Cloud Tech is one of the original manufacturers of effective Humidification System to cool, humidify, and reduce dust and odors.

### A) TECHNOLOGY

The Cloud Tech system consists of an arrangement of Cloud Misters, whose function is controlled by a central control module which consist of PLC unit signalled by Humidity, temperature controllers with sensors. The control module maintains the RH & Temperature requirements of different zones by controlling the flow of compressed air and water and activates the operation of the different zones Cloud Misters based on signals received from a sensors of these zones, which is specified according to the application.

The Cloud Tech system uses ordinary water, filtered, pumped and compressed air at 3 bar pressure is delivered down through PU pipes to Cloud Misters. Unique Cloud Misters are placed at various distances along the pipe. These misters with 4 nos of atomizing nozzles then creates water into billions of micron (1- 2 microns) sized particles which cool the surrounding air, as well as increasing its relative humidity without wetting.

## B) CONTROL MODULE (CTHC30-100)

The major components of the control module are PLC unit with multiple inputs and outputs with digital controls signalled by Humidity controller, electrical protection.

**Other than control module (CTHC30-100), this system consists of:**

1. PU pipes for water & air flow.
2. Cloud Mistlers.
3. Air Compressors.
4. Starter Panel.
5. Solenoid valves.
6. Pressure regulators.
7. Pressure switch.
8. Filters

## C) WATER SUPPLY

In all atomization systems, one must pay close attention to supply water quality. Cloud Tech misters nozzles designs include very small diameter orifices and very narrow passages. Water with Total Dissolved Solids (TDS) counts exceeding 300 PPM or with high calcium of pH levels should be treated in order to prevent excessive nozzle blockages and/or excessive filter cartridge maintenance. If the water quality is in question, a water analysis report should be obtained.

## CLOUD TECH HUMIDIFICATION SYSTEM:

Thus, air atomization humidity is a revolutionary technology that will give you controlled humidity. It gives you the freedom to maintain your desired RH factor (can range anywhere between 50% - 100%) without any cumbersome ducting. Humidity is automatically controlled; thus, with the guidance of the sensors, the machine will automatically switch on and off to maintain the preferred humidity level.

**This technology has various applications:**

- Textile Industry
- Paper Industry
- Livestock & Poultry
- Scientific research
- Wood Industry
- Food storage
- Agriculture storage

- Germination Unit
- Tea Industries
- Green House



### SALIENT FEATURES OF CLOUD MISTER HUMIDIFICATION SYSTEM

- *Effective Humidification & Cooling without wetting.*
- *Fresh air intake.*
- *Water and air mixed atomization, 100% aerification, no blocking.*
- *Auto control system, keep stable and suitable indoor environment.*
- *Different size nozzles for different areas and applications, multifunction with same machine.*
- *Large spraying volume, long- term use with no clogging, no leakage and maintenance free.*

### **Why to choose Cloud Tech?**

Cloud Tech designs and manufacture its humidification system using carefully selected components. Our technical office with more than 8 years acquired experience, can design personalized system to satisfy any special needs in the Humidification sector.

### **Is there any maintenance required?**

Zero Maintenance.

### **How should the system be designed?**

There are many different variables associated with the proper design and installation of misting system. The exact application, the needed benefits, and the conditions present at the system location will determine what design is required. Our technical support staffs are trained in all aspects and uses of misting systems and can assist in designing a system that fits the needs of any misting application.

*So in a nutshell, if you are looking for a Humidification System, just keep in mind there is a giant difference in quality when comparing quality systems with cheap misters and don't give up hope if those cheap ones didn't work. Cloud Tech Dry Humidification System gives best results with zero maintenance, zero wetting, great Humidification, great cooling.*

### **“Original Equipment Is Always the Best”**

*“So why does it matter what brand of Humidification System you buy?” If you prefer the original, not an imitator, you’ll choose Cloud Tech.*