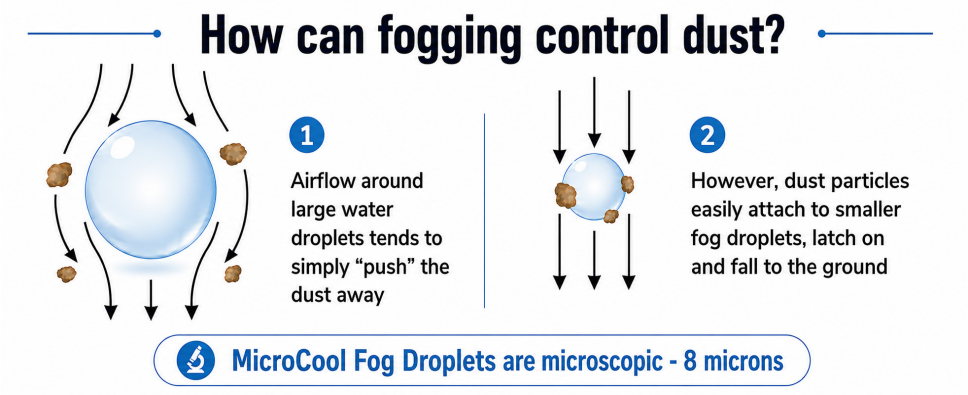
DUST SUPPRESSION USING FOG

MicroCool dust suppression systems are designed to concentrate on the origin point of the dust, capturing it as it escapes rather than when it becomes airborne. The system is particularly effective on PM10 and smaller particles, which form an ionic bond with the fog droplets. The resultant heavier density droplet falls to the ground for collection and disposal. Other systems with larger water droplets tend to simply "push" the dust away.



How MicroCool's Fog + Misting Systems Reduce Dust

1. A grid of patented nozzles is positioned throughout the ceiling space to allow fog droplets to "drift" down and suppress fugitive dust.
2. Varying nozzle concentrations are determined to allow for a lower / higher number of nozzles at strategic points in the facility.
3. An integrated pump system is specified to meet fogging output requirements (producing from 0.5 to 11 US gallons per minute).
4. Precision controllers linked with sensors can operate with temperature and humidity overrides to ensure that no wetting occurs and that fogging takes place only within set parameters.
5. When fogging is initiated, the dust particles attach to the microscopic fog droplets, latch on and fall to the ground for easy collection.



Custom designed for your site

Our design team will create a solution tailored to your application, working closely with your building operators to fine-tune your system. Fog is carefully controlled, concentrated where it is needed most, without wetting the surrounding areas and avoiding unwanted dampness on work surfaces and floors.

By monitoring temperature and humidity levels, the optimum conditions can be generated to capture and contain fugitive dust throughout the building. Special options can include frost protection, auto purge, motion sensors and ambient temperature monitors.

MicroCool dust suppression systems are at their most effective when wind or air speeds are below 200 fpm, to allow the fog droplets time to capture the dust. They are most effective in semi-enclosed areas. They are NOT effective in mining operations or material movement where winds and containment are an issue.

- Removes PM10 Dust Particulates
- Increases Worker Productivity
- Improves Air Quality

VALUE ADDED FEATURES

- **Remove dust from the air** — Ultra-fine (8 microns or smaller) fog droplets attract and trap dust particles as they fall to the ground.
- **Lower initial cost** — Unlike ventilation systems, the MicroCool fog system requires no costly air compressors. And it's significantly less costly to install than bag filter systems.
- **Lower operating cost** — Built-in controls limit operation to only when required. Systems utilize a fraction of the energy consumed by conventional bag systems.
- **Higher productivity** — The added benefit of adiabatic cooling enhances employee comfort and helps keep machinery from over heating.
- **Avoid costly environmental citations and fines** — Protect worker safety and meet regulatory requirements.

MICROCOOL

A MeeFog Company

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

800-322-4FOG
+1 760-322-1111