

## HIGH PRESSURE FOG DUST SUPPRESSION SYSTEM

### KEY BENEFITS

- Enhanced ability to capture dust ✓
- Humidity management ✓
- Air filtration ✓
- Surface wetting ✓
- Reduced explosion hazard ✓
- Environmentally friendly ✓



DUST SUPPRESSION & CONTROL SPECIALISTS

## Introducing High Pressure Fog

Discover the innovative NESCO DustPro HP Series, designed for industrial durability and efficiency. Featuring a 1000-1200 PSI sealless pump and fully automatic operation, this system expertly controls dust with minimal water use. Perfect for harsh environments and customizable for any need.



### High Pressure Fog Theory

**Water Droplet Size:** High pressure fog systems produce very fine water droplets, typically in the range of 10 to 50 microns in diameter.

**Collision and Agglomeration:** As these tiny water droplets are dispersed into the air, they collide with dust particles. This increases the size and mass of the dust particles, making them heavier and more likely to settle out of the air.

**Airborne Dust Capture:** The fog serves as a medium to capture dust particles as it drifts through the air.

**Settling of Dust:** The increased size and weight of the dust particles due to water droplet attachment make them more susceptible to gravity. This results in the dust settling down to the ground or surfaces rather than staying suspended in the air.

**Humidity and Dust Control:** The introduction of water vapor into the air increases its humidity. Higher humidity levels can help weigh down dust particles, further aiding in their settlement.

**Interception and Filtration:** Some of the dust particles may be intercepted directly by the water droplets, effectively filtering the air as the mist passes through it.

**Surface Wetting:** High pressure fog systems can also wet surfaces, preventing dust from becoming airborne.

**Environmentally Friendly:** High pressure fog systems are often more environmentally friendly. They rely on water, which is a natural and renewable resource, and do not introduce harmful chemicals into the environment.

### Applications

- ✓ Mining and Quarrying
- ✓ Construction Sites
- ✓ Mining

- ✓ Roads and Highways
- ✓ Waste Management
- ✓ Industrial Facilities

- ✓ Outdoor Storage and Handling
- ✓ Agriculture
- ✓ Ports and Terminals

