

Industrial Duct Cleaning To Prevent Dust Explosions

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Here at Hughes Environmental one of our major concerns is cleaning combustible dust in our customer's facilities to prevent an explosion. Often, people will contact us when they can actually see buildup of these explosive dusts on exposed surfaces such as rafters, beams, ceilings, or the outside of pipes and ductwork. The inside of ductwork and HVAC equipment can have a buildup of dust, and since it is enclosed and typically not easily accessible it goes unnoticed.

Why does it matter if there is dust in the ductwork? One reason is that a necessary component of the explosion pentagon is confinement, and the inside of industrial ductwork creates the perfect environment for this. When industrial duct cleaning services are not regularly performed the inside of the HVAC system can quickly accumulate dust. All it takes is one section that has some grease or grime that dust can stick to, and then as dirty air flows through the ductwork more and more dust accumulates.

In February 1999 a Massachusetts foundry suffered from a fatal dust explosion powerful enough to lift the roof off the building. The explosion was caused when a build-up of dust within the ductwork combusted, creating shock waves that created a secondary dust cloud and explosion. Proper industrial duct cleaning procedures could have prevented this from happening.

This is why it's important to check inside commercial HVAC ducts when combustible dust is an issue in other areas of a facility. It's also not enough to just glance inside a vent either; often the buildups of dust can occur in areas where there are bends or folds in the air ducts that are out of immediate sight. It's important to have a properly trained commercial duct cleaning specialist inspect the ductwork when combustible dust is present.

Hughes Environmental is proud to be an award winning member of the [National Air Duct Cleaners' Association](#) and a member of the [National Fire Protection Association](#). These memberships, as well as the OSHA training our technicians go through, ensures that we are able to keep up to date on current safety practices and techniques, all while providing our customers with quality work.