

DUST COLLECTION

WOOD DUST. Dealing with it is a fact of life. Some operators let the dust pile up. Some operators try to keep it in check with brooms and shovels. We recommend the installation of a dust collection system.

There are numerous advantages to the various dust collectors available. The following are excerpts from an article in *FDM Furniture Design & Manufacturing* "10 Reasons for Dust Collection:"

1. Health

Why buy dust collection? In a word: Lungs.

Numerous medical studies have deemed dust a major respiratory hazard. Aside from the ever-looming possibility of lung cancer, many woodworkers are haunted by nagging side effects such as continuous coughing and sneezing attacks, throat phlegm, asthma and eye irritation. The health dangers from dust don't cease when the saw is stopped and the chips stop flying. Fine wood dust can stay suspended in the air for hours.

2. Legal Obligations

Beyond workers compensation, other legal ramifications exist as well... A host of local and national agencies all flex their muscle to some degree regarding keeping dust free. "OSHA will come after you, the fire marshal will come after you, and the Department of the Environment will come after you.

3. Insurance Rates

When insurance companies rate a shop they are concerned with maintaining safety and preventing fires. Shops that are clean are less susceptible to such hazards, which can lower insurance premiums.

4. Fire Hazards

"Fine dusts are a fire safety concern. Controlling this dust will reduce the risk of fire." Although, the risks don't end with fire. Dust suspended in the air also is combustible. While a fire will severely damage a plant, an explosion can destroy it. Research conducted by Factory Mutual shows that a particle size of 0.02 inches (500 microns) or less is all it takes for an explosion.

5. Finishing Quality

An abundance of dust in the shop also can create problems in the finishing department ... that either results in rework, lost production time, or lower product quality.

6. Positive Image

Plain and simple, customers like to visit the shop and they feel your products are better made if you have a clean shop. However, if they come in and see a sloppy operation, it reflects on the product's image.

7. Employee Morale

Beyond the impression a dirty shop gives to customers, it also sends a message to the workers. If the area is clean and there are better working conditions, people are happier and more productive.

8. Increased Production

... A clean working atmosphere does increase worker productivity. With vision impaired by clouds of sawdust, making accurate cuts, measurements, or assemblies is difficult and dangerous. Uncontrolled dust settles onto workers' safety glasses. With effective dust control, workers stop to clean their safety glasses and work areas less often. By reducing the amount of dust in the working environment, workers are free to spend more of their time producing more high-quality parts.

9. Equipment Maintenance

A key to improved production, beyond the workers themselves, are the machines they are working on. A machine's performance and longevity are hindered by dust. Minimizing wood dust through the use of dust collection devices reduces maintenance expenses bearings and other parts that wear due to the presence of dust must be replaced more often. To maintain product quality, the equipment must be cleaned often.

10. Custodial Cost

Even if a dust collection system isn't in effect, something still has to be done about the sawdust that piles up... a prime selling point for dust collection ... anytime there's waste generated that you don't have to handle, there's a payback of labor savings.

For an effective dust collection system, the machinery producing the dust must be capable of efficiently ducting the dust to the collection system. All of Norfield's door machines are designed with dust collection in mind. When you connect our machinery to a properly sized dust collection system (either with an individual point of use collection unit or a shop-wide central dust collection system) dust is nearly eliminated. Norfield recommends prioritizing dust collection when you purchase new machinery or upgrade your existing machine.

COPYRIGHT POLICY

The material contained in this document is the property of Norfield Industries. It is intended for the use of our customers and copies can be made for their internal use. Any commercial distribution of this material is prohibited without the written approval of Norfield Industries.