

Shop Supervisor: _____

Date Approved: _____

Wood Dust

Though it is as common in woodshops as wood itself, **wood dust** is a particularly dangerous byproduct of woodworking. Excess dust creates the potential for fires and explosions that are not as uncommon as one may expect. In fact, when wood dust is present, a fire can easily and quickly ignite due to cigarette smoking, hot work, open flames, or faulty electrical equipment, among a variety of other triggers. Properly removing dust is a critical practice, which involves thorough housekeeping practices and properly managed dust collection systems.



Personal Protective Equipment				
 Tie Back Hair & Secure Loose Items	 Closed Toe Shoes	 Eye/Face Protection	 Hearing Protection	 Respiratory Protection
Tie back long hair and secure loose clothing that could get caught in rotating parts. Remove rings and other jewelry.	Appropriate enclosed footwear should be worn.	Wear ANSI Z87.1 compliant safety goggles to protect eyes. Face shields may be necessary to protect from dust, shards, and debris.	Hearing protection should be worn when noise levels are excessive.	Respiratory protection (e.g. dust masks) may be desired or required. Contact EH&S for guidance.

Potential Hazards

Be aware of the following potential hazards when working with wood dust:

- **Operational:** heat, dust/chips/shards, noise
- **Electrical/Energy Sources:** exposed wiring, malfunctioning equipment, unexpected start up/shut down
- **Fire/Explosion:** accumulation of dust, airborne dust clouds, dust in confined spaces

Common Dust Accumulation Sites

- Vertical surfaces with adhered dust
- Horizontal surfaces, including floors, tables, beams, joists, and tops of equipment
- Concealed spaces, such as behind equipment
- Electrical panels and motor control boxes
- Motors, particularly in the area of the dust collection system

Dust Collection Equipment

- Dust collection equipment should be equipped to reduce the chance of fire and/or explosion per applicable NFPA codes.
- Ensure that dust collection equipment is fully functioning and turned on before any cutting/sanding operations begin to collect the maximum amount of dust possible.
- Dust collection equipment should be inspected and maintained regularly to empty accumulated dust and ensure proper functioning.
- If dust collection equipment is found to be malfunctioning or damaged, alert your supervisor and do not proceed with cutting/sanding operations until it is repaired.

Housekeeping

- Ensure that the woodshop area is cleaned regularly to prevent or limit dust accumulation.
- Work stations and equipment surfaces should be cleaned at least once per day that they are in use to remove as much wood dust as possible.
- Shop vacuums (or similar) should be used to collect larger pieces of wood and larger piles of dust. If necessary, compressed air can be used after a first pass of vacuuming to release dust from closed off or difficult to reach areas, followed by a second pass with the vacuum.
- Prior to vacuuming, reduce sparking hazards by powering down and de-energizing equipment.
- For each day that cutting/sanding operations take place, check the dust collection system's bins or other collection devices to ensure that they are not too full. If they are approaching their collection limits, empty the bins, dispose of the dust properly, and replace the bins for the next use.
- At least annually, all horizontal surfaces in the area (including beams, joists, and tops of equipment) should be inspected to ensure that the level of accumulated dust is not greater than one-sixteenth inches (1/16"), about the width of a quarter. If the accumulated dust is greater than this level, the dust should be removed via vacuum or other means.
- Store stock materials in a neat and secured manner; do not accumulate excess combustibles. Keep aisles and exits clear.
- Wash hands and exposed skin thoroughly after completing work and before leaving the shop area.

Emergency Equipment and Procedures

- Report all incidents to the shop supervisor, including injuries, equipment damage, and near misses.
- Know the location of the nearest emergency equipment and items, such as the emergency stop/shut-off for the specific machine, eye wash, first aid kit, fire extinguishers, fire alarm pull stations, and emergency exits.



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