

HAND AND POWER TOOL SAFETY

June 2009

Policy Statement

On the Use of Hand and Portable Power Tools

It is the goal of Youngtown State University to provide a safe and healthful environment to all employees. It is, therefore, the University's intention to do all that it can to eliminate the potential for injuries due to unsafe use of, or faulty hand and portable power tools by providing an ongoing inspection program. In its efforts to accomplish this goal, the University has established this policy to protect employees from accidental injuries resulting from unsafe use of, or faulty hand and power tools. A copy of this standard is included for reference and can be found in the Department of Environmental and Occupational Health and Safety and in departmental offices of employees impacted by this standard. Anyone having questions about this policy or suggestions for improving it should address them to the Director of Environmental and Occupational Health and Safety.

Hand and Portable Power Tool Policy

General Requirements

All use, storage and handling of hand and portable power tools will be consistent with the requirements outlined in 29 CFR §1910.241-244. All employees engaged in the use of hand or portable power tools should be familiar with the requirements as outlined in that section.

All manufacturer safety practices must be employed while using tools. This means all employees must read, know and understand all safeguards prior to using equipment. If an individual does not understand the safe operation of a piece of equipment, he/she should notify the Safety Officer to obtain clarification. All required personal protective equipment must be worn at all times when using equipment.

All tools should be inspected prior to each use by the operator. Inspections should include, but are not limited to, the following items.

Hand Tools and Equipment

1. All hand tools such as chisels, punches, etc. which develop "mushroomed" heads must be taken out of service and reconditioned.
2. Handles on hammers, axes and similar equipment that are cracked or fractured should be replaced prior to use. Care should be taken to assure the head is properly and securely attached.
3. Wrenches whose handles are bent or whose gripping surfaces are worn should be replaced.

4. Screwdrivers that are bent or whose ends are chipped should be replaced.
5. Tools should be stored in a secure, dry location where they won't tampered with.
6. Tools should be stored in such a way that sharp edges do not present a danger when reaching into tool cribs and storage areas.
7. Tool cutting edges should be sharp so the tool will move smoothly and not bind.
8. All handles should be free of burs and splinters and should be firmly attached to the working head of the tool.

Portable Power Operated Tools and Equipment

1. All grinders, saws and similar equipment must be fitted with appropriate machine guarding as specified by the manufacturer.
2. The adjustable tongue on the top side of the grinder must be properly guarded to prevent physical contact by the operator.
3. All corded electrically operated tools and equipment must be effectively grounded by either a grounding prong or an approved double-insulated case. Inspect all prongs to ensure they are not bent or otherwise damaged and all cases to ensure they are not cracked or damaged.
4. All electric cords must be in good condition; free of frays or other physical defects.
5. Pneumatic hoses must be free of damage or deterioration.

Abrasive Wheel Equipment

1. The work rest shall be within an inch of the wheel.
2. The adjustable tongue on the top side of grinder must be within $\frac{1}{4}$ inch of the wheel.
3. The grinder is mounted in such a way that it is secure and will not shift or tip.
4. On-off control switches are clearly marked in red and readily accessible to the operator for easy deactivation of equipment in case of emergency.
5. The maximum RPM rating of the grinder is clearly posted and the maximum rating of the wheel does not exceed the grinder rating.
6. Grinding wheels are not cracked or otherwise damaged.
7. Grinders that use a coolant must be equipped with splash guards to prevent coolant from coming into contact with the operator.

Powder Actuated Tools

1. Powder-actuated tools are stored in their own locked container when not being used.
2. All powder-actuated tools will be left unloaded until they are actually used.
3. Only trained and authorized employees will use powder-actuated tools.

Machine Guarding

1. Machine guards will be clean, secure and so arranged so they do not offer a hazard in their use.
2. All moving chains, gears, pulleys, etc. will be properly guarded.
3. All emergency STOP buttons will be colored red and easily accessible to the operator in an emergency.
4. All non-current-carrying metal parts of electric equipment will be properly grounded.
5. Sufficient clearance must be maintained around equipment to ensure safe operation, maintenance and waste removal.

In addition to the above requirement, all employees must adhere to the requirements outlined in 29 CFR §1920.241-244.