

Revision Responsibility: Vice President for Business Affairs

Responsible Executive Officer: Vice President for Business Affairs

Source/Reference: Health & Safety Manual

HAND AND PORTABLE POWERED TOOLS AND OTHER HAND-HELD EQUIPMENT

GENERAL REQUIREMENTS

All hand and portable powered tools and equipment whether furnished by the employee or the college will be maintained in a safe condition free of worn or defective parts. Each supervisor will be responsible for the safe condition of tools and equipment used by employees, including tools and equipment which may be furnished by employees. Unsafe tools and equipment will not be issued or permitted to be use.

POINT OF OPERATION GUARDS

All portable powered tools capable of receiving guards and/or designed to accommodate guards will be equipped with such guards so as to prevent the operator from having any part of his/her body in the danger zone when the tool is operating.

POWER SAWS

All portable power-driven saws will be equipped with guards above and below the base plate shoe. The upper guard will cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for bevel cuts. The lower guard will cover the saw to the depth of the teeth, except for the minimum arc required to allow proper retraction and contact with the work. When the tool is withdrawn from the work, the lower guards will automatically and instantly return to the covering position.

POWER GRINDERS

Safety guards used on right angle or vertical portable grinders will have a minimum exposure angle of 180 degrees, and be located so as to be between the operator and wheel during use. The top half of the wheel will be enclosed at all times.

PNEUMATIC POWERED TOOLS

All pneumatic powered portable tools will be equipped with an automatic shut-off valve so arranged as to close the air inlet valve when the pressure of the operator's hand is removed. Each tool will be equipped with a tool retainer which will prevent accidental ejection of the tool.

GROUNDING

All electrical powered portable tools with exposed non-current-carrying metal part of cord and plug connected equipment which are liable to become energized will be grounded.

POWER CUT-OFF AND PRESSURE CONTROL DEVICES

Safety procedures and features for power cut-off and pressure control devices are as follows:

- Electrical Tools-General - Portable electric tools which are held in the hand will be equipped with switches of a type which must be manually held in closed position.
- Woodworking Tools - Hand-held, power-driven woodworking tools will be provided with a “deadman” control, such as a spring- actuated switch, valve, or equivalent device, so that the power will be automatically shut off whenever the operator releases the control.
- Sandblasting Nozzles - A deadman control or an effective signal device will be provided at the nozzle end of the blasting hose. A deadman control will provide direct cut-off at the nozzle. The signal device will be such that it will immediately signal the pot tender by means of visual and audible signals to cut off the flow in the event the blaster loses control of the hose. The pot tender will be available at all times to respond immediately to the signal.
- Use of Compressed Air - Compressed air will not be used for cleaning purposes except where reduced to less than 30 psi and then only with effective chip guarding and personal protective equipment.

EXPLOSIVE-ACTUATED FASTENING TOOLS

Safety procedures and features for explosive-actuated fastening tools are as follows:

- Muzzle Shields - All explosive-actuated fastening tools muzzle ends will have a protective shield or guard at least 3-1/2 inches in diameter, mounted perpendicular to and concentric with the barrel, and designed to confine any flying fragments or particles that

might otherwise create a hazard at the time of firing. Where a standard shield or guard cannot be used or where it does not cover all apparent avenues through which flying particles might escape, a special shield or guard, fixture or jig will be used as a substitute.

The tool will be so designed that it cannot be fired unless it is equipped with a standard protective shield or guard, fixture, or jig.

- Firing Mechanism - The explosive-actuated fastening tool's firing mechanism will be so designed that the tool cannot fire during loading or preparation to fire, or if the tool will be dependent upon at least two separate and distinct operations of the operator, with the final firing movement being separate from the operation of bringing the tool into the firing position.

OTHER HANDTOOLS AND EQUIPMENT

Safety procedures and features for other handtools and equipment are as follows:

- Lifelines and Belts - Every lifeline and safety belt will be of sufficient strength to support, before breaking, weight of 5,400 pounds. Only the best grade manila rope, or equivalent, will be used for lifelines. Lifelines, when in use, will be safely secured to strong, stable supports. Every lifeline and safety belt will be inspected before it is used.
- Jacks - The operator will make sure the jack used has a rating sufficient to lift and sustain the load. The rated load will be legible and permanently marked in a prominent location on the jack by casting, stamping, or other suitable means.
- Block and Tackle Equipment - All blocks will fit the size of rope they carry, and will be so constructed as not to chafe the rope running through them. Where ropes are subjected to chafing suitable padding will be provided.
- Handtools - Wrenches, including crescent, pipe, end and socket wrenches, will not be used when jaws are sprung to the point that slippage occurs. Impact tools, such as drift pins, wedges, and chisels, will be kept free of mushroomed heads. The wooden handles of tools will be kept free of splinters or cracks and will be kept tight in the tool.