SAFETY SERVICES COMPANY

Tailgate/Toolbox Safety Training

Safety Services Company-Safety Meeting Division, PO Box 6408 Yuma, AZ 85366-6408 Toll Free (866) 204-4786

Company Name: _____ Job Site Location: _____

Date: _____ Start Time: _____ Finish Time: _____ Foreman/Supervisor: _____

Topic 108: Powder-Actuated Tools

Introduction: Powder-Actuated tools are used to propel fastening devices into hard surfaces, usually concrete, by means of an explosive power-load. These tools are often the most rapid time saving method to get the job done, but the hazards associated with these tools makes them potentially deadly weapons. Following are the general requirements for safe Powder-Actuated tool use:

Operators and assistants using tools must use eye, head, and face protection as required by working conditions.

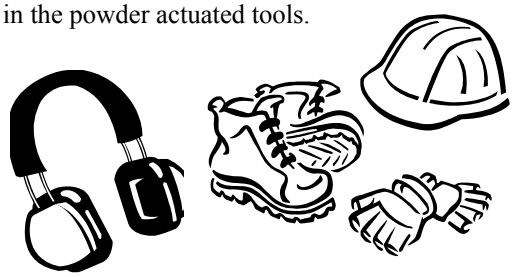
High velocity tools, Low velocity piston tools, and hammer operated piston tools must have the characteristics outlined below:

- ***The muzzle end*** of the tool must have a guard at least 3 ½" in diameter to confine any flying fragments that might create a hazard.
- ***Where a standard shield*** may not prevent hazards, a special shield, designed by the manufacturer must be used as a substitute.
- ***The tool must*** be designed so that it cannot be fired unless it is equipped with one of the above devices.
- ***The firing mechanism*** must be designed so that it cannot fire during loading or preparation to fire, or if the tool is dropped.
- ***Firing of the tool*** must depend on two separate operations, with the final movement being separate from the first operation of bringing the tool into firing position.
- ***The tool must*** be designed so that it will not fire unless it is positioned against a work surface with a force of at least 5 pounds greater than the total weight of the tool.

- ***The tool must*** be designed so that it will not operate if the tool is tilted more than 8 degrees in relation to the work surface.
- ***The tool must*** be designed so that the power level is adjustable by the operator, so that it may be used without excessive force.
- ***The tool must*** be designed so that the breech will be reasonably visible to check for foreign matter or debris.

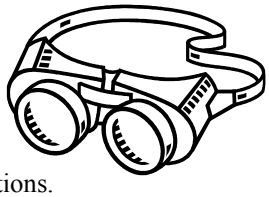
Requirements for loads and fasteners:

- ***There must be*** a standard means of identifying the power level of loads being used in the powder actuated tools.
- ***No load may*** be used in excess of design specifications for a low velocity tool.
- ***Fasteners used*** in tools must be only those designed to be used in such tools.



Operating Requirements:

- ***Inspect the tool*** before use to ensure that it is clean, that all moving parts are free, and that the barrel is free of debris or obstructions.
- ***If a tool is*** defective, it must be taken out of use until it is properly repaired.
- ***Tools are*** to remain unloaded until they are to be used.
- ***Never point*** a tool loaded, or unloaded at anyone.
- ***In case of a misfire,*** the tool must be held in the operating position for at least 30 seconds, tried a second time, then wait another 30 seconds before unloading in strict accordance with manufacturer's instructions.
- ***Never leave a tool*** unattended where it would be available to unauthorized personnel.
- ***Fasteners must not*** be driven into exceptionally hard materials such as cast iron, glazed tile, hardened steel, glass block, or rock.
- ***A backing must*** be used on soft materials to prevent fastener from passing completely through and becoming a flying hazard.
- ***Fasteners must not*** be driven through an existing hole unless means of positive alignment is available.
- ***Fasteners may not*** be driven into a cracked or fractured area caused by a previous fastener.
- ***Tools must not*** be used in an explosive or flammable atmosphere.



Conclusion: A Powder-Actuated tool has similar characteristics to a firearm and must be handled with caution in order to avoid serious injury. Many states now require a permit, license, training, or a combination of these requirements prior to operating one of these tools. Follow these guidelines for safe Powder-Actuated tool operations.

Work Site Review

Work-Site Hazards and Safety Suggestions: _____

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Personnel Safety Violations: _____

Employee Signatures: ***(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)***

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Foreman/Supervisor's Signature: _____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.