

Powder-Actuated Tools

Week Number 5 (January 29—February 4)

Overview

Powder-actuated tools operate much like a loaded gun and should be treated with the same respect and precautions. In fact, they are so dangerous that they may be operated only by specially trained employees.

For Discussion

Failure to take safety precautions while using a powder-actuated tool can be deadly. In one incident, two workers were building a wall. One worker was using a powder-actuated nailer and fired the tool to anchor plywood to a two-by-four inch stud. The nail penetrated the stud and the plywood partition and struck the other worker, killing him. The accident could have been avoided if employees took precautions to prevent the nail from passing through the wall.

OSHA has several regulations for the use of powder-actuated tools. The following list is a summary of these:

Before using a powder-actuated tool:

- Store the tool in a locked tool case.
- Inspect the tool for cleanliness, freely operating parts, damage, and barrel obstruction.
- Do not load the tool until just before firing.
- Test a tool before loading according to the manufacturer's recommendations to make sure safety devices are functioning correctly.
- Make sure the correct shield, guard, or attachment recommended by the manufacturer is used.

When using a powder-actuated tool:

- Treat the tool carefully, as if it were a loaded gun. Do not point the tool at anyone. Keep hands clear of the barrel end. Do not leave the tool unattended.
- Do not use a tool in explosive or flammable areas.
- Wear ear, eye, face, and foot protection.
- Do not use defective tools.
- Only authorized persons may use tools.

OSHA requires that all operators have a certificate of training in order to operate a powder-actuated tool.

- Post a warning sign that reads: “POWDER-ACTUATED TOOL IN USE” when using a tool.
- If a misfire occurs, keep the tool against the working surface for 30 seconds, then fire again. If, after another 30 seconds the tool does not fire, remove the charge according to manufacturer instructions.
- Do not fire fasteners into material that would allow them to pass through to the other side. On the other hand, don’t drive fasteners into very hard or brittle materials which might chip or splatter, or make the fastener ricochet.

When maintaining a powder-actuated tool:

- If a defect develops during use, tag the tool and take it out of service immediately until it is properly repaired.

Questions

1. What should you do before using a powder-actuated tool?
2. How should you handle a misfire when using a powder-actuated tool?
3. When should you not use a powder-actuated tool?