



## Jackhammer Safety

If safety precautions are not taken seriously, jackhammers and handheld powered chipping tools can be dangerous. Jackhammer operators on the job site must be trained and authorized.

The major safety risks to be aware of when operating a jackhammer include:

- Flying debris
- Fatigue
- Sprains and strains
- Abrasions and lacerations
- Harmful vibrations
- Respiratory hazards
- Hazardous noise exposure
- Electrocution

Jackhammer operators, and those working in the area, need to be wearing appropriate personal protective equipment (PPE), including hearing protection, safety glasses, and steel-toed boots. Jackhammer operators need to also be wearing gloves and metatarsal guards.

Jackhammers can be very heavy so always get help with loading and unloading. When the jackhammer is still on the job, but not currently in use, lay the jackhammer down, instead of propping it up. This will prevent the tool from falling over, which can cause an injury.

Check that air hose couplings are secure before each use. Stretch out the air hose and place it where it will not cause a tripping hazard.

Always make sure to use the right bit for the job.

Operators should use their upper body strength and their legs to lift on the jackhammer, not their back.

Feet should be planted shoulder-width apart with the body square to the jackhammer. If the jackhammer is to be used for periods of greater than 15 minutes, workers should rotate the task to minimize chances of injury.

Using a jackhammer or handheld power chipping tool to break or demolish concrete, stone, masonry, or other silica-containing materials can generate respirable crystalline silica dust. When inhaled over time, the small particles of silica can irreversibly damage the lungs.

Two methods for controlling dust when using jackhammers or powered chipping tools are:

**1. Wet Methods.** Use a manual sprayer or water-spray system that provides a continuous stream or spray of water at the point where the jackhammer's tip strikes the surface material.

**2. Vacuum Dust Collection System (VDCS).**

A shroud around the jackhammer connects to a vacuum that provides enough suction at the cutting point to effectively capture the dust.

Where water is used to control dust, electrical safety is a concern. Use ground-fault circuit interrupters (GFCIs) and watertight, sealable electrical connectors for electric tools and equipment.

In addition to using wet methods or a Vacuum Dust Collection System, the use of respiratory protection with a minimum Assigned Protection Factor (APF) of 10 is required whenever jackhammers or handheld powered chipping tools are used indoors or in an enclosed area. Assigned Protection Factor 10 respirators are also required when jackhammers or handheld powered chipping tools are used outdoors for more than four hours per shift.

QUANDEL IS COMMITTED TO OUR NUMBER ONE CORE VALUE:

**SAFETY: FIRST. LAST. ALWAYS!**

When jackhammers or chipping tools are used indoors or in an enclosed area, wet methods or a Vacuum Dust Collection System may not reliably keep exposure low. Extra ventilation may be needed to reduce visible airborne dust. Extra ventilation can be supplied by using exhaust trunks, portable exhaust fans, air ducts, or other means of mechanical ventilation.

Position the ventilation to move contaminated air away from the workers' breathing zones. Ensure that air flow is not impeded by the movements of workers, or by the opening or closing of doors and windows.

Unless there is a ventilation system that effectively captures the dust cloud, **do not use compressed air or blowers to clean surfaces, clothing, or filters** because it can increase exposure to silica. Instead, clean with a HEPA filter-equipped vacuum or by wet methods.

"Safety for Jackhammers and Handheld Powered Chipping Tools." Weeklysafety.com: Safety Meetings and Toolbox Talks, <https://weeklysafety.com/blog/construction-safety-jackhammers>.



## OUR PURPOSE

Lead. Make a difference. Build a better future!

## OUR VALUES

**Safety:** First. Last. Always!

**Steadfast Integrity:** Be honest. Treat other with respect.

**Exceptional Service:** Align goals. Add value. Develop lasting relationships.

**Commitment to Excellence:** Take ownership. Constantly improve.

**Focus on Team:** Listen. Collaborate. Communicate. Execute.

