

Drill Press Safety

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Prior to using a drill press, you must receive basic shop safety training and equipment specific training before using this tool. You must wear appropriate PPE and follow all shop rules. Refer to the manufacturer's operating manual for all operating procedures.

Drill Press Safety

- Ensure all safety shields and guards are in place.
- Know the location of start and stop switches or buttons.
- Use only properly sharpened drill bits, sockets and chucks in good condition. Remove dull drill bits, battered tangs, or sockets from service.
- Use the proper cutting fluid for the materials being drilled. Ask a shop monitor about the appropriate fluid for the material you are machining.
- Plexiglas and other brittle plastics may be difficult to drill. Ask shop Responsible Person/Monitor for advice on drill and coolant selection when drilling these materials.
- If the stock slips in the vise or clamp, the operator **must** not attempt to hold the work with his/her hand or try to tighten the vise/clamp while the machine is in motion. Shutdown the power to the machine prior to re-tightening the loose stock.
- **Never** try to stop the spindle by hand. Let it stop of its own accord after turning power off.
- Always try to support part on parallels or a backing board when drilling through material.

Before Starting the Mill

- Do not place tapered shank tools such as large diameter drills or tapered shank reamers in a drill chuck. Only straight shank tools such as standard drills can be clamped in chucks.
- All stock must be properly secured with a vise or clamps prior to a machining process.

While in Operation

When an operator has finished working on the drill press, and before leaving the drill press for any reason, the power **must** be shut off and the machine **must** come to a complete stop.

The Chuck

Do not insert a drill chuck key into the chuck or loosen the drill chuck until the power is shut off and the machine has come to a complete stop.

Drill and Drill Bits

Use the correct speed and drill for the type of stock being machined.

- Use the correctly ground bit for the stock being machined. Bits with feed screws or extremely long bits should not be used.
- The drill bit should be mounted the full depth and in the center of the chuck.
- Position the table and adjust the feed stroke to eliminate the possibility of the bit striking the table.



- Feed the bit smoothly into the work. If the hole being drilled is deep, withdraw the bit frequently to remove shaving on the bit.
- If the bit binds, stop the machine and turn the spindle backwards by hand to release the bit.
- Ease up on drilling pressure as the drill starts to break through the bottom of the material.
- **Do not** drill with too much pressure.

Housekeeping and Maintenance

When an operator observes an unsafe condition on the drill press, or stock that is being worked on, they **must** report it immediately to the Responsible Person and the press will be taken out of service until the problem has been corrected.

For more information about how to prevent personnel from using an unsafe drill press, refer to the Lockout/Tagout —Control Hazardous Energy Sources Program.

Housekeeping

- Keep the drill press table free of tools and other materials.
- **Do not** remove by hand metal or wood chips from the table or stock. Use brushes or other tools to properly remove chips. **Never clean a machine while it is in motion.**
- Always clean drill shank and/or drill sleeve, and spindle hole before mounting.

Maintenance

- **Do not** attempt to oil the machine or make adjustments to the work while the drill press is in motion.
- All belts and pulleys **must** be guarded; if frayed belts or pulleys are observed, the drill press **must** be taken out of service and the belts or pulleys **must** be replaced.
- Remove taper shank tools from spindle or sleeve with a drill drift and hammer.
- **Never** attempt to remove a broken drill with a center punch or hammer.