## **Drill Press** Safety and Operation

\*NOTICE\* Rules and guidelines listed on this page are only reminders. Persons must read lab safety manual, machine manual, and be trained by WRL Manager.



## **Safety Rules**

- Safety glasses are required.
- Don't wear loose clothing or gloves, keep long hair tied back. These items will get caught in bit or spindle.
- Never adjust the drill press or setup while it is running.
- Never leave chuck key in press. It should only be on the chuck when power is off and you are changing a bit.
- Always follow 4 inch rule.
- Never force the bit. Let it cut at is own rate.
- Work must be clamped or secured to table by some means other than holding it. Do not hold pieces to drill them.
- Never remove guard unless authorized by Technician or WRL Manager.
- Setups requiring anything other than the standard drill press equipment must be approved by supervisor.
- If machine is malfunctioning stop immediately and report to supervisor.

## **Operation**

- Put on your safety glasses and hearing protection.
- Drill presses have variable speeds. Consult your supervisor for the appropriate speed for a cut.
- Select bit for the job at hand. If you don't <u>know</u> the difference between bit types consult your supervisor.
- Tighten the bit evenly into the chuck on all three sides as tight as possible with the key alone. Never use anything other than the key to tighten chuck.
- Clamp or secure piece onto table with means other than your hands.
- If the hole goes all the way through stock make sure that the bit has clearance on the bottom side of the piece. If bit has potential to come in contact with table, vise, clamp, or anything other than a sacrificial block, place scrap underneath the piece.
- Move table to a height at which the bit is just above the work piece. Minimizing this distance reduces risk of injury.
- Turn drill press on.
- Ease into the piece. Cut only as fast as the bit can on its own.
- Ease up as bit comes through the bottom side.
- Back the bit out as soon as the hole is drilled.
- Use the lock nut on side of spindle for boring to depth.
- For deep holes or dense material back bit out occasionally to remove waste and cool bit.
- Stop the drill press before removing any work.
- If piece is seized by bit and comes loose from clamp, stop press.
- If it is necessary to remove scrap away from the bit bring it to a complete stop and use a stick or brush to remove it. Don't use your hands. Metal shavings may be present at bit.
- Tear down all setups made. Setups may be left with approval of supervisor.
- Clean off all shaving on and around press. Do not remove metal shavings with vacuum, dust collection, or hands.