

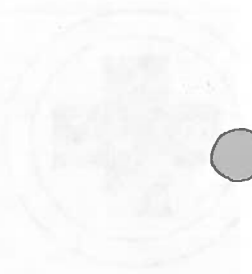
SAFETY FIRST

PLEASE POST THESE SAFETY RULES
NEAR YOUR MACHINE FOR REFERENCE

SAFETY RULES for DELTA

DRILL PRESSES

1. **READ AND UNDERSTAND INSTRUCTION MANUAL BEFORE OPERATING DRILL PRESS.**
2. **IF YOU ARE NOT thoroughly familiar with the operation of Drill Presses, obtain advice from your supervisor, instructor or other qualified person.**
3. **MAKE SURE wiring codes and recommended electrical connections are followed and that machine is properly grounded.**
4. **DO NOT operate while under the influence of drugs, alcohol or medication.**
5. **ALWAYS wear eye protection (safety glasses or a face shield).**
6. **DO NOT wear gloves, tie or loose clothing. REMOVE rings, watch and other jewelry, and roll up sleeves.**
7. **GUARDS should be in place and used at all times.**
8. **CLAMP work to table if it is too short to contact the column. HOLD the material securely with a vise or clamps.**
9. **CLAMP work when using hole saw or cutting tools larger than 1/2" dia.**
10. **DO NOT exceed recommended speed for the drill, accessory, and workpiece material.**
11. **BE SURE chuck key is removed from the chuck before starting drill press.**
12. **MAKE all adjustments with the power off.**
13. **ADJUST the table or depth stop to avoid drilling into the table.**
14. **BE SURE drill bit or cutting tool is securely locked in the chuck.**
15. **DISCONNECT drill from the power source when making repairs.**
16. **SHUT OFF the power, remove the drill bit or cutting tool, and clean the table before leaving the machine.**



PLEASE READ THESE SAFETY RULES
NEAR YOUR MACHINE FOR A REFERENCE

SAFETY RULES FOR DELTA

DRILL PRESSES

- 1. DO NOT STAND IN FRONT OF THE MACHINE WHEN THE DRILL IS RUNNING.
- 2. DO NOT REACH INTO THE MACHINE TO REMOVE A CHIP OR TO CLEAN THE DRILL BIT WHILE IT IS RUNNING.
- 3. ALWAYS WEAR SAFETY GLASSES OR A FACE SHIELD WHEN OPERATING THE MACHINE.
- 4. ALWAYS WEAR HEAVY GLOVES WHEN HANDLING DRILL BITS AND OTHER ACCESSORIES.
- 5. ALWAYS HOLD THE WORK FIRMLY IN PLACE BEFORE STARTING THE DRILL.
- 6. ALWAYS USE THE APPROPRIATE DRILL BIT FOR THE MATERIAL YOU ARE DRILLING.
- 7. ALWAYS STOP THE DRILL BEFORE REMOVING THE WORK OR THE DRILL BIT.
- 8. ALWAYS LOCK THE DRILL PRESS BEFORE LEAVING IT UNATTENDED.
- 9. ALWAYS REPORT ANY DAMAGE TO THE MACHINE TO YOUR SUPERVISOR.
- 10. ALWAYS FOLLOW THE INSTRUCTIONS ON THE MACHINE'S MANUAL.

- 11. ALWAYS KEEP YOUR FEET AND HANDS AWAY FROM THE DRILL PRESS.
- 12. ALWAYS USE THE PROPER GRIPPING TECHNIQUE TO HOLD THE WORK.
- 13. ALWAYS BE SURE THE DRILL BIT IS FULLY ENGAGED WITH THE WORK BEFORE STARTING TO DRILL.
- 14. ALWAYS STOP THE DRILL IMMEDIATELY IF YOU HEAR A NOISE OR SEE SPARKS.
- 15. ALWAYS WEAR A HEAVY COAT OF ARMOUR (HCA) WHEN DRILLING STEEL OR OTHER HARD MATERIALS.
- 16. ALWAYS USE THE DRILL PRESS IN A WELL-VENTILATED AREA.
- 17. ALWAYS MAKE SURE THE DRILL PRESS IS PROPERLY MAINTAINED AND CALIBRATED.
- 18. ALWAYS USE THE DRILL PRESS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 19. ALWAYS REPORT ANY PROBLEMS TO YOUR SUPERVISOR.
- 20. ALWAYS FOLLOW THE SAFETY RULES AND PROCEDURES FOR THE DRILL PRESS.

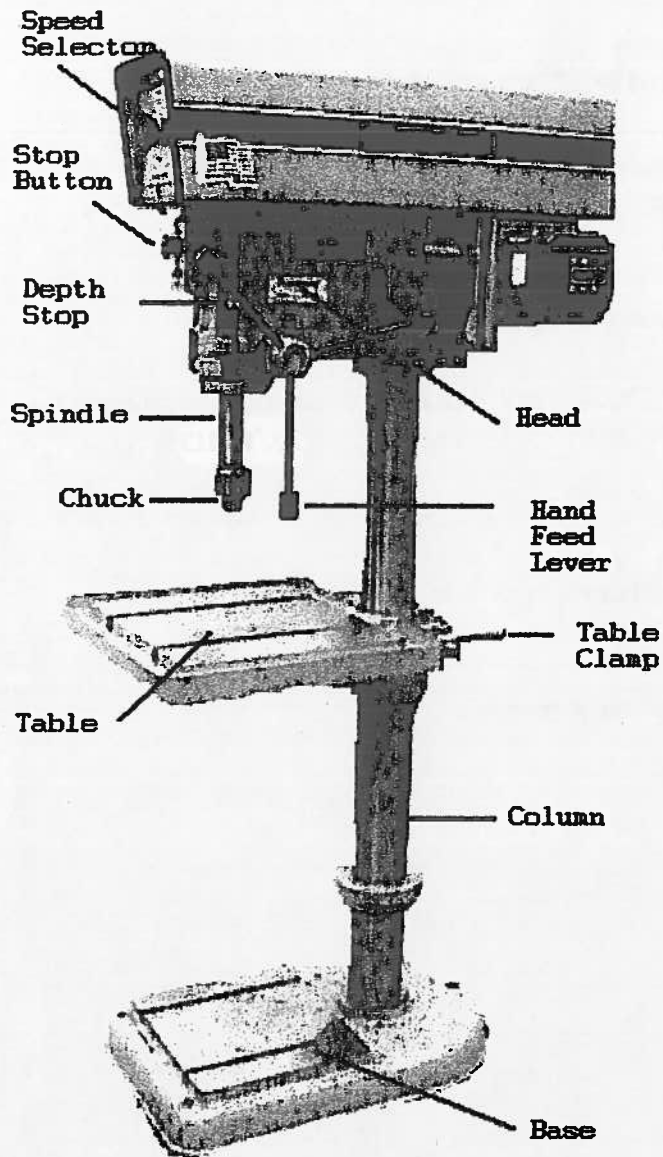
DRILL PRESS

DRILL PRESS COMPETENCIES:

GIVEN A PROPERLY ADJUSTED AND SET-UP DRILL PRESS, INSTRUCTION AND DEMONSTRATION OF USE, EACH STUDENT WILL BE ABLE TO:

- 1. IDENTIFY THE MAIN PARTS OF A DRILL PRESS**
- 2. PASS A WRITTEN TEST ON THE SAFETY AND OPERATION PROCEDURES OF THE DRILL PRESS WITH AN 80 % ON THE TEST.**
- 3. DEMONSTRATE THE ABILITY TO USE THE DRILL PRESS WHILE OBSERVING ALL SAFETY RULES.**
- 4. ALWAYS WEAR SAFETY GLASSES.**

IDENTIFICATION OF DRILL PRESS



DRILL PRESS SAFETY:

1. ALWAYS WEAR SAFETY GLASSES
2. DO NOT RUN THE DRILL PRESS IF YOU HAVE NOT RECEIVED A FORMAL LESSON FROM THE TEACHER.

3. DO NOT WEAR GLOVES, TIES OR LOOSE CLOTHING. REMOVE RINGS, WATCH AND OTHER JEWELRY AND ROLL UP YOUR SLEEVES.
4. CLAMP WORK TO THE TABLE IF NEEDED. GET HELP FROM A HOLDER IF NEEDED.
5. USE A CLAMP AND OR A VISE WHEN USING CUTTING BITS AND TOOLS LARGER THAN $\frac{1}{2}$ ".
6. THE LONG END OF YOUR WORK PIECE SHOULD ALWAYS BE TO THE LEFT OF THE MACHINE.
7. DO NOT ALLOW YOUR FINGER, HANDS AND OR ARMS TO COME IN CONTACT WITH THE DRILL BIT.
8. BE SURE CHUCK KEY IS REMOVED FROM THE CHUCK BEFORE STARTING THE DRILL PRESS.
9. THE TEACHER WILL MAKE ALL NEEDED ADJUSTMENTS.
10. ADJUST THE TABLE HEIGHT OR DEPTH STOP TO AVOID DRILLING INTO THE TABLE.
11. DO NOT SWEEP SCRAPS AWAY WITH YOUR HANDS. USE A HAND BROOM.
12. WHEN YOU ARE DONE DRILLING, TURN THE MACHINE OFF AND ALLOW THE DRILL BIT TO COME TO A COMPLETE STOP BEFORE REMOVING YOUR MATERIAL.

SAFETY IS #1 IN THE TECHNOLOGY LAB.



Drill Press

Major use: To drill holes of various sizes at various angles in wood, metal, and/or plastic.

Operation:

1. Having placed a bit in the chuck adjust the worktable so the stock is just below the point of the drill bit.
2. Set the depth gauge.
3. Center the stock with the point of the drill bit.
4. Clamp down stock with clamps
5. Turn on drill press and feed the bit into the stock at a steady pace.
6. Slowly release the feed handle, allowing it to come to rest in the raised position before switching off the machine.

Notes: On deep cuts back the bit out of the hole to clear the wood chips, don't attempt to drill a deep hole all at once.

When drilling all the way through the stock place another board between the table and your stock.

Never drill a hole larger than $3/8''$ in diameter without first drilling a pilot hole.

Safety:

1. Always remove the chuck key from the chuck after tightening the chuck.
2. Always clamp work piece to the table before drilling.
3. Never use hand auger bits in the drill press.
4. When drilling round stock use a V-block.