

DRILL PRESS SOP

ACRONYMS

- LOTO - Lockout/Tagout.
 PPE - Personal Protective Equipment.
 SOP - Safe Operating Procedure.

HAZARDS - What can cause harm?

- ▲ Noise
- ▲ Electricity
- ▲ Moving parts
- ▲ Projectiles/debris
- ▲ Dust
- ▲ Manual Handling
- ▲ Poor housekeeping

PRECAUTIONS

- All operators are to be trained and competent to operate a Drill Press safely. Operator training should include:
 - Workplace induction
 - Safe operating procedures
 - Manufacturer's instructions
 - Nature of hazards
 - Fitting of PPE
 - Manual handling
 - Housekeeping
 - First Aid



MAINTENANCE

- Follow LOTO procedures record service/repairs information in Maintenance Log. Maintenance is conducted per manufacturers' instructions and by qualified persons only
- When the machine is taken out of service for maintenance:
 - Shut off and isolate the power supply
 - The power supply is clearly labelled/tagged "do not use."



PPE



PRE-OPERATIONAL INSPECTION

- Follow the pre-operational checklist in the manufacturer's operational manual, ensure:
 - The Emergency Stop/s fitted and functional
 - To verify all Guards are secure and function correctly
 - To check for integrity of Column Safety Collar
 - To check that table adjustment can be operated freely
 - To check the condition and availability of twist drills, spade bits, hole saws
 - To lubricate column if required
 - To check drill bits for sharpness, notches, cracks, or bends - replace if necessary.



DRILL PRESS SOP

OPERATION

1. Operate in accordance with manufacturers' instructions
2. Wear prescribed PPE - **DO NOT wear gloves**
3. Select drill speed
4. Adjust V belt:
 - a. Lift the pulley cover. A safety switch should operate when the cover is lifted, ensuring that the power is off to the motor
 - b. Loosen the attachment screw, which will usually loosen the motor and attached pulley
 - c. Adjust V belt to the required speed by selecting the correct pulley combination
 - d. Move the motor back and tighten the locking screw. The V belt should have an amount of free play when it is correctly adjusted
 - e. Close the pulley cover
 - f. For drills fitted with a gearbox - select the correct speed
5. Fit drill bit:
 - a. Select the correct size drill bit and ensure it is sharp
 - b. Insert the drill bit into the chuck and tighten it with the chuck key. Remember to tighten at all points in the chuck.
 - c. Remove the chuck key
 - d. For more tapered drills - securely fit and home into the drill spindle
6. Secure the workpiece:
 - a. Hold small items in the drill vice
 - b. Clamp large items to the drill table
 - c. Adjust the vice table to the required working height
 - d. Ensure column and table clamps are tight



WARNING

**Moving parts can
crush and cut
keep hands clear
DO NOT operate
with guard removed**

7. Drilling:
 - a. Switch on the drill
 - b. Apply steady pressure to hand feed lever - maintain pressure until the drill is about to break through the other side of the material
 - c. Reduce pressure when the drill bit is about to break through to prevent grabbing
 - d. Keep shavings to a minimum length by regularly clearing the drill bit
 - e. Use brushes or other tools to properly remove chips
 - f. Use the appropriate cutting device for different material types and thickness
 - g. When drilling metal, be aware of hot swarf
 - h. Feed the bit smoothly into the work. If the hole being drilled is deep, withdraw the bit frequently to remove shaving on the bit
8. On Completion:
 - a. Switch off drill
 - b. Clear the work area
 - c. Use a brush to remove drill waste.