

# Safe Work Procedure Drill Press

Department and Program: Physical Plant Maintenance

Date First Approved: October 2018

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This Safe Work Procedure must be reviewed any time the task, equipment, or materials change and at a minimum every three years.

# DO NOT perform this procedure until you have been appropriately trained and authorized to do so.

### **Required Training**

- Must be trained by experienced competent person
- Lock-out tag-out
- WHMIS

## **Required Personal Protective Equipment and Devices**



CSA Approved Safety Footwear Required



Gloves must not be worn when operating this equipment



Eye Protection Required



Hearing Protection Required



Long or loose hair must be tied back or contained



No jewelry, watches, rings, necklaces etc.



No loose fitting clothing

#### **Potential Hazards**

- Flying metal chips
- Hot material
- Sharp edges
- Flying parts/falling parts (loose parts/drills or tools)
- Entanglement hazard (chips and tooling)
- Moving parts while in operation (feed)
- · Oil, coolants for slipping hazards, splash, and inhalation hazards
- Pinch or crush hazards

### **Pre-Operational Safety Checks**

- Check for electrical cord damage or fraying
- Ensure that there are no slip or trip hazards in the area (clean work area. No oils, steel chips, or tools)
- Ensure chuck key is removed
- Check speeds are correct for the material being drilled
- Ensure work is secured using a vice, stop block, or clamp
- Make sure that the tools are installed properly (falling hazard)

- Know the safety requirements for the material that you are using (flammable/carcinogenic)
- Adjust work (table) height approximately 1" above work surface

#### **Prohibited Activities**

- Do not leave this equipment unattended while running
- Do not drill unsecured materials
- Do not stop chuck with hand
- Do not eat or drink near machine
- Do not adjust or clean machine while running (chip removal)
- Do not use compressed air for chip clean up (use brush)
- Check finish and measure sizes only when machine is stopped
- Match tools to the job
- Do not remove or modify/disable safety equipment or features
- Do not change tools in spindle while powered up
- · Do not hold material by hand
- Do not bypass deadman switch

#### Safe Work Procedure

- 1. Inspect required personal protective equipment and replace if required.
- 2. Put on all required personal protective equipment.
- 3. Put on hearing protection if required
- 4. Inspect work area for safety hazards
- 5. Clean area if required
- 6. Ensure that the machine is off while installing tools
- 7. Perform pre-operational safety checks to ensure tools/machine are in safe working condition
- 8. Do not overreach- meaning position yourself properly to operate the machine comfortably and safely
- 9. Drill press head and table should be locked before operating
- 10. Install work piece securely on the table with the proper tools (clamps, vice, etc.)
- 11. Securely install cutting tool into machine spindle
- 12. Adjust speed and feed as required for tools and the material used
- Start machine with cutting tool above work surface
- 14. Complete process as required for the job (job specific)
- 15. Stop machine. Do not remove work until the machine has stopped
- 16. Remove part safely

If an emergency situation occurs while conducting this task, or there is an equipment malfunction, shut the equipment off immediately and follow the lock out procedure.

## REPORT ANY HAZARDOUS SITUATION TO YOUR INSTRUCTOR/SUPERVISOR IMMEDIATELY

#### Housekeeping

- Ensure equipment is off.
- Place all materials in their proper storage areas.
- Place cuttings in proper disposal bins.
- Place dirty wipes in proper fireproof containers.

- Ensure the equipment/work space is safe, clean, and tidy before you leave it.
- Report any machine faults

## Guidance Documents/ Standards/ Applicable Legislation/ Other:

**Guidance Documents:** 

- Operator's Manual
- **CSA Standards:**

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Manitoba Regulation 217/06:

- 2.1 Safe Work Procedures
- 6.1 Personal Protective Equipment
- 12.3 Hearing Protection
- 16 Machines and Tools Safety

Date Written: 2017/08/10

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Date Revised:

Approved By: Michael McCormick, Director of Physical Plant

Signature:

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