

# STANDARD OPERATING PROCEDURES

## Milling Machine

**DO NOT use this machine unless you have received authorization from the Shop Coordinator**



Safety glasses must be worn at all times in work areas.



Long and loose hair must be contained.



Sturdy, closed-toe footwear must be worn at all times in work areas.



Close fitting/protective clothing must be worn. Roll up long sleeves.



Gloves must not be worn when using this machine



Rings and jewelry must not be worn.

### Potential Hazards and Injuries

- Hair /clothing / gloves getting caught in moving spindle (entanglement or amputation possible).
- Flying swarf and chips (eye injury).
- Sharp edges and burrs (cuts).
- Struck by ejected objects e.g. chuck key (blunt trauma).
- Exposure to cutting coolants (skin irritation).

### Pre-Operational Safety Checks

- Locate and ensure you are familiar with all machine operations and controls.
- Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty.
- Check workspaces and walkways to ensure no slip/trip hazards are present.
- Follow correct clamping procedures to ensure work is secured to table.
- Remove all tools from the bed and slides of the machine.
- De-energize and lock-out machine before attempting any maintenance or when adjusting spindle speeds.

### Safe Practices During Operation

- Before making adjustments or before cleaning swarf accumulations, switch off and bring the machine to a complete standstill.
- Feed cutting tool at a moderate rate to prevent overheating or binding.
- Avoid letting swarf build up on the tool or job. Stop the machine and remove it.
- If power fails, turn machine off and retract drill bit from workpiece.

### Ending Operations and Cleaning Up

- Switch off the machine and wait until spindle comes to a complete stop.
- Leave the machine in a safe, clean and tidy state.

### DON'T

- Do not use faulty equipment. Immediately report suspect equipment.
- Do not attempt deep cuts or excessive feed rates as it can cause the cutter to break.
- Never leave the machine running unattended.
- Do not attempt to slow or stop the spindle or revolving work by hand.
- Do not leave equipment on top of the machine.

**SOP must be used in conjunction with an effective training program**