

Milling Machine Operation

Facility:	Written By:	Approved By:	Date Created:	Date of Last Revision
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Hazards Present:	PPE or Devices Required:	Additional Training Required:
Injury from flying debris	Close fitting protective clothing	Certification/Training in house
Dust inhalation	Safety glasses/face shield	By individuals, experienced
Entanglement	Dust mask if dusty	And knowledgeable with the tool
Awkward Postures MSI Risk	Safety barriers to protect from debris	Operators Manual

Safe Work Procedure:

- 1) Inspect the condition of the cutting tool before use including:
 - a) Cutting edges/blades
 - b) Insert pockets
 - c) Threads- clamping and draw bar
 - d) All contact areas – tapers, threads, etc.
 - e) Electrical cords, switches, guards, and adjustment locks
- 2) Inspect the condition of the work holding device.
 - a) All fastening hardware – clean or replace if necessary
 - b) Clean mounting surfaces – mill table, base of vise, fixture, etc.
- 3) Never put hands near rotating cutter
- 4) Be aware of sharp edges on the cutting tool and work piece
- 5) When cutting, direct chips away from you. Be aware of other operators in the area
- 6) Make sure all components are secure before cutting. This includes:
 - a) Tooling inserts
 - b) Draw bars
 - c) Work piece and fixture
- 7) Make sure speeds (SFPM) feeds and depths of cut are set according to the tooling, work piece and jog requirement. *Note: be sure to dial the head in on the mill at regular intervals, especially after a crash!*
- 8) Where required make sure adequate type and amount of coolant is applied
- 9) Make sure when you are ready for operation all table locks, locking mechanisms for over arm hardware is secured, draw bar. Free table locks before operating feeds.
- 10) Clearance – make sure there is adequate clearance where required
- 11) Use table stops as required
- 12) De-bur all sharp edges on work piece
- 13) Listen to your machine for changes in sound during operation – changes could indicate:
 - a) Worn or damaged tooling
 - b) Loose setup
 - c) Loose machine components
 - d) Improper direction of travel
- 14) Be aware of Climb milling vs. Conventional milling
- 15) Disengage crank handles after use (failure to do this can cause the handle to spin very fast when rapid traversing).
- 16) Never rapid traverse table to end of stroke, this will jam the lead screw
- 17) Practice good housekeeping at all times
- 18) Remove vice handle

After Operation

1. Clean all components on mill and wipe off all tooling fixtures, fastening devices, etc.
2. Before putting things away:
 - a) Inspect the condition of the fixture
 - b) Inspect the condition of the tooling – worn inserts, burrs on mounting surfaces, etc.
 - c) Inspect all hardware for wear, damage, etc.

The above step will make your next setup easier if you get in the habit of taking care of your machine tooling etc.

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

REPORT ANY HAZARDOUS SITUATIONS TO YOUR SUPERVISOR

<p>Guidance Documents/Standards:</p> <p>MB Workplace Safety & Health Act & Regulations: Part 2.1 Safe Work Procedures Section 5 Duties of Workers Part 6.2 PPE Part 8 Musculoskeletal Injuries Part 12 Hearing Conservation</p>	<p>This Safe Work Procedure will be reviewed any time the task, equipment or materials change and at a minimum of every three years</p> <p>Reviewed By WSH Committee: Date:</p>
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