

**Title: Milling Machine**


**Issue Date: May 2016**

**Last Reviewed: May 2016**

**Next Review Date: May 2018**

**Page Number: 1 of 2**

**THIS MACHINE CAN KILL YOU -DO NOT use this machine unless you have been trained in its safe use and operation and never operate without someone else present.**

<b>Description of Work:</b>	Using a Milling Machine
	<p><b>Potential Hazards:</b> High power rotating spindle with exposed moving parts can cause entanglement, impact, flying debris and electrical hazard with the potential to cause serious harm and/or even death. Exposure to heat, noise, projectiles and sharp objects.</p> <p><b>Important Notice:</b> This SOP is intended as a reference guide to compliment Western Engineering's Shop Safety Training. This document by its self does not constitute shop/equipment training. Please visit OWL site: "Western Engineering Shop Training"</p>

**Personal Protective Equipment (PPE) Required** (Check the box for required PPE):

 Eye Protection	 Employ Entanglement Precautions	 Cutting Hazard	 CSA Approved Footwear	 Hearing Protection may be required	 Close fitting protective Clothing
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**Potential Risks and Hazards:**

- Protect from Entanglement – Powerful machine with fast moving parts
- Hot projectiles – chips – burn hazard
- Burns from hot material after/during cutting
- Cuts from work or chips after/during cutting

**Safe Work Procedure Checklist:**

1. PRE-Operation:

- Ensure no slip/trip hazards are present in workspaces and walkways.
- Locate and ensure you are familiar with the operation of the ON/OFF starter and E-Stop (if fitted).
- Do not leave equipment on top of the machine.
- Check that machine guards are in position where applicable/suitable.
- Ensure cutter is in good condition and securely mounted.
- Check coolant delivery system to allow for sufficient flow of coolant.
- Faulty equipment must not be used. Immediately report suspect machinery.

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**2. Operation:**

- Keep clear of moving machine parts.
- Never leave the machine running unattended.
- Follow correct clamping procedures- keep overhangs as small as possible and check work piece is secure.
- Set the correct speed to suit the cutter diameter, the depth of cut and the material.
- Before making adjustments and measurements or before cleaning swarf accumulations switch off and bring the machine to a complete standstill.
- Do not clean debris from cut area when machine is running

**3. POST-Operation:**

- Switch off the machine.
- Remove milling cutters and store them safely.
- Leave the machine and work area in a safe, clean and tidy state.
- Do not use air gun to clean machines

**4. Other Potential Hazards:**

- Sharp cutters
- Moving components - hair/clothing entanglement
- Eye injury
- Skin irritation
- Metal splinters and burrs – assume all materials and edges are sharp until deburred
- Flying debris

**Competent Persons** (The following persons are authorised to operate, supervise and test students on the equipment/process).

<b>Name:</b>	<b>Title:</b>	<b>Contact Details:</b>
Chris Vandelaar	Student Shop Manager	CMLP 1301 x 80281
UMS Technicians	UMS Technicians	TEB Rm. 50 x 88836

This SOP does not necessarily cover all possible hazards associated with the machine and should be used in conjunction with other references It is designed to be used as an adjunct to teaching Safety Procedures and to act as a reminder to users prior to machine use

**Date of last review:**

**Signature:**