

# JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

## DEPARTMENT OF MECHANICAL ENGINEERING

### OPERATING A COLD SAW

TASK	HAZARDS	CONTROLS
1. Assess work area; is it clear of obstructions and slip/trip/fall hazards?	<ul style="list-style-type: none"><li>Slip, trip, or fall</li></ul>	<ul style="list-style-type: none"><li>Clear work area of any obstructions or slip/trip/fall hazards</li></ul>
2. Adjust saw to desired miter angle and adjust vise jaws so that the blade clears the vise	<ul style="list-style-type: none"><li>Saw turning on while adjusting blade angle</li><li>Pinching hazards for hands/fingers</li></ul>	<ul style="list-style-type: none"><li>Remove power cord prior to and during angle adjustment</li><li>Keep hands and fingers clear of pinch points</li></ul>
3. Load material into the machine	<ul style="list-style-type: none"><li>Pinching hazards for hands/fingers</li><li>Muscle strain</li><li>Lacerations to hands/fingers from material</li></ul>	<ul style="list-style-type: none"><li>Keep hands and fingers clear from pinch points</li><li>Ask for assistance in placement of material if it is more than 25lbs or an awkward shape</li><li>Deburr material before handling, don't run hands along edges of material</li></ul>
4. Use vise to secure work in machine	<ul style="list-style-type: none"><li>Work coming loose or falling out</li><li>Pinching hazards for hands/fingers</li></ul>	<ul style="list-style-type: none"><li>Tug on work and check if secure prior to starting cut</li><li>Keep hands and fingers away from vise jaws when in motion</li></ul>
5. Prepare for drop pieces	<ul style="list-style-type: none"><li>Drop piece falls on operators leg or foot one the material has been cut and unclamped from the vise</li></ul>	<ul style="list-style-type: none"><li>Support drop pieces with a roller stand prior to cut, do not stand directly under material drop area</li></ul>

	6. Check coolant level in reservoir tank and refill if necessary	<ul style="list-style-type: none"> <li>• Work piece getting hot, causing burns</li> <li>• Coolant spills can create slipping hazards</li> </ul>	<ul style="list-style-type: none"> <li>• Observe coolant level and verify coolant flow. Direct coolant flow onto material - blade interface</li> <li>• Immediately wipe up and clean coolant spills. Place “wet floor” signs if necessary</li> </ul>
	7. Start and operate saw	<ul style="list-style-type: none"> <li>• Lacerations to hands/fingers</li> <li>• Eye injury from flying debris</li> <li>• Excessive noise levels</li> </ul>	<ul style="list-style-type: none"> <li>• Keep hands and fingers well away from moving blade</li> <li>• Always wear safety glasses when operating equipment</li> <li>• Wear ear plugs if necessary</li> </ul>
	8. Unclamp vise and remove work	<ul style="list-style-type: none"> <li>• Pinching hazards for hands/fingers</li> <li>• Lacerations to hands and fingers from material</li> <li>• Muscle strain</li> </ul>	<ul style="list-style-type: none"> <li>• Keep hands free from pinch points</li> <li>• Be aware of fresh sharp edges produced from the cut; deburr parts before handling, never run hands along edges of material</li> <li>• Ask for assistance in placement of material if it is more than 25lbs or an awkward shape</li> </ul>
	<p><b>Required Training:</b>  Student Shop Safety Training Program  Must complete additional training under guidance of a qualified Student Shop Laboratory Mechanician</p>	<p><b>Required Personal Protective Equipment (PPE)</b>  Safety glasses, ear plugs/muffs</p>	
<p><b>Other Information:</b> <a href="#">Scotchman CPO275 Cold Saw Manual</a>  <b>Contributors:</b> Scott G. McCormick; R&amp;D Engineering Manager, Jacob Gallego; Principal Lab. Mech.  <b>Created:</b> July 2020  <b>JSA Library Number:</b> (EH&amp;S will insert number here, if applicable)</p> <p>For more information about this JSA, contact the <i>Office of Environment, Health and Safety</i> at UC Berkeley, 317 University Hall #1150, Berkeley, CA 94720-1150 (510) 642-3073 • <a href="http://www.ehs.berkeley.edu">http://www.ehs.berkeley.edu</a></p>			