

# JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

## DEPARTMENT OF MECHANICAL ENGINEERING

### OPERATING A WATER JET

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>• Remove any obstructions or slip/trip/fall hazards. Maintain a dry floor.</li></ul>
2. Load material into machine	<ul style="list-style-type: none"><li>• Lacerations to hands from material and or support slats</li><li>• Pinching/crushing hazards between material and machine</li><li>• Muscle strain</li></ul>	<ul style="list-style-type: none"><li>• Wear leather gloves when loading material</li><li>• Keep hands free from pinch points</li><li>• Ask for assistance in placement of the material if it is heavier than 25 pounds or is an awkward shape.</li></ul>
3. Secure material using clamping system	<ul style="list-style-type: none"><li>• Pinching hazards</li></ul>	<ul style="list-style-type: none"><li>• Keep hands free from pinch points</li></ul>
4. Operate machine	<ul style="list-style-type: none"><li>• Lacerations to hands/fingers from the jet</li><li>• Pinching/crushing hazard to user by machine</li><li>• Excessive noise levels</li><li>• Flying water and abrasive debris in eyes</li></ul>	<ul style="list-style-type: none"><li>• Keep hands away from the nozzle when in operation</li><li>• Avoid machine operation area when machine is in motion</li><li>• Wear hearing protection and ensure the nozzle is submerged under water when operating</li><li>• Always wear safety glasses when operating the machine</li></ul>
5. Remove parts and leftover material from machine	<ul style="list-style-type: none"><li>• Lacerations to hands/fingers from the support slats</li><li>• Pinching/crushing hazards</li><li>• Muscle strain</li><li>• Slipping on water that has been discharged from the machine</li></ul>	<ul style="list-style-type: none"><li>• Wear gloves when removing parts</li><li>• Keep hands free from pinch points</li><li>• Ask for assistance in placement of the material if it is heavier than 25 pounds or is an awkward shape.</li><li>• Always dry up the areas where water has landed on the floor.</li></ul>

<p><b>Other Information:</b></p> <p><b>Contributors:</b></p> <p><b>Created:</b></p> <p><b>JSA Library Number:</b></p>	<p><b>Required Training:</b></p> <p>Student Shop Safety Training Program</p> <p>Must complete additional training under guidance of a qualified Student Shop Laboratory Mechanician</p>	<p><b>Required Personal Protective Equipment (PPE)</b></p> <p>Leather gloves, safety glasses</p>
	<p><a href="#">Omax Operating Guide</a></p> <p>Scott G. McCormick; R&amp;D Engineering Manager, Jacob Gallego; Principal Lab. Mech.</p> <p>7/2020</p> <p>(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>	