## Job Safety Analysis

Safety Information for the University of California, Berkeley

### Department of Mechanical Engineering

**Operating an Electric Power Shear**

<table>
<thead>
<tr>
<th>Task</th>
<th>Hazards</th>
<th>Controls</th>
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</thead>
<tbody>
<tr>
<td>1. Assess work area; is it clear of obstructions and slip/trip/fall hazards?</td>
<td>• Slip, trip, or fall</td>
<td>• Clear work area of any obstructions or slip/trip/fall hazards</td>
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</table>
| 2. Align material to fence and blade | • Lacerations to fingers/hands on material  
• Pinching hazards for hands/fingers  
• Unintentionally triggering the shear by accidentally stepping on the treadle | • Deburr material before handling, do not slide hand along edges, wear leather gloves if necessary  
• Keep hands and fingers away from pinch points  
• Turn off machine or engage the treadle lock until you’re ready to make the cut |
| 3. Depress foot treadle | • Pinching hazards for leg and foot  
• Muscle strain  
• Pinching hazards for hands/fingers  
• Lacerations to fingers/hands on blade  
• Shattering material may cause damage to eyes  
• Excessive noise levels | • Keep leg and foot free from support arms  
• Position body to maintain balance, maximize use of legs to avoid twisting  
• Keep hands/fingers away from finger guards and material holddowns  
• Keep hands/fingers well behind the cutting blade  
• Always wear safety glasses when operating equipment  
• Wear ear plugs/muffs if necessary |
4. Retrieve material

- Lacerations to fingers/hands from material
- Unintentionally triggering the shear by accidentally stepping on the treadle
- Be aware of fresh sharp edges, deburr material, do not slide hand along edges, wear gloves if necessary
- Turn off machine or engage the treadle lock while retrieving material

**Required Training:**
Student Shop Safety Training Program
Must complete additional training under guidance of a qualified Student Shop Laboratory Mechanic

**Required Personal Protective Equipment (PPE):**
Leather gloves, safety glasses, ear plugs/muffs

Other Information:
Wysong 1048 Shear Manual
Scott G. McCormick; R&D Engineering Manager, Jacob Gallego; Principal Lab. Mech.
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(EH&S will insert number here, if applicable)

For more information about this JSA, contact the Office of Environment, Health and Safety at UC Berkeley, 317 University Hall #1150, Berkeley, CA 94720-1150 (510) 642-3073 • http://www.ehs.berkeley.edu