



Safe Operating Procedures

SOPs are designed to help employees identify hazards, limitations, PPE, & safety training for specific equipment/tasks.
Environmental Health and Safety, 414 J.M. Smith Hall

|  | Equipment/ Task Name | Operating a Lap Wheel |
|---|---------------------------------|---|
| | Departments Impacted | Art & Architecture Department |
| | Purpose | A lap wheel is a machine that operates by using a motor and pulley system. The pulley system spins a steel disk that has an attached diamond pad secured to the disk using magnets. The lap wheel contains a coolant reservoir, which holds water, that prevents heat buildup while grinding and it also removes dust particles to minimize inhalation hazards. Lap wheels are used to grind, shape and polish glass. |
| TASK | HAZARDS | CONTROLS |
| 1. Inspect equipment and work area. | Slip, trip, and fall hazard. | Make sure the floor of the work area is free from any obstructions and trip hazards. |
| | Electric shock hazard. | Visually inspect the cord to make sure it is in good condition. |
| | Pinch point hazard. | Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty. |
| | Projectile hazard. | <ul style="list-style-type: none"> Ensure the wheels do not touch the work rest and that the gap between wheel and rest is no greater than 1.5mm. To minimize projectile hazards, confirm wheels are not cracked or broken. |
| 2. Prepare for use. | Electrocution. | <ul style="list-style-type: none"> Connect saw to a Ground Fault Circuit Interrupter (GFCI) outlet. Do not use extension cords without a grounding wire |
| | Entanglement hazard. | <ul style="list-style-type: none"> Do not wear bagging clothing and remove jewelry when operating wheel. Pull hair back and secure. |
| | Kick back hazard. | Soak the wheel and ensure water is flowing over grinding area. |
| 3. Start lap wheel. | Hearing hazard. | Wear hearing protection to prevent hearing damage. |
| | Entanglement hazard. | Stand to the side of the wheel when starting up. |
| | Projectile hazard. | Ensure glass is not resting on lap wheel when starting wheel. |
| 4. Grind object. | Eye injury hazard. | Wear safety glasses or a face shield to protect the eyes from projectile. |
| | Pinch point hazards. | Keep hands clear of vibrating wheel. |



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| | Projectile hazards. | <ul style="list-style-type: none"> • Allow wheel to reach full power before grinding. • Maintain a secure grip on items that are being ground. • Move glass across entire surface. Never continuously grind objects it in one place. • Never force a grinding. | | | |
| 5. Ending operations. | Entanglement hazard. | <ul style="list-style-type: none"> • Switch off the machine when work is completed. • Do not stop the rotation of the wheel or any rotating or moving machinery parts by hand. • Never reach into the working area prior to the wheel coming to a complete stop. | | | |
| 6. Clean up lap wheel and work area. | Abrasion hazard. | Wait until wheel has come to a complete stop before cleaning. | | | |
| | Slip and trip hazards. | <ul style="list-style-type: none"> • Clean up spills immediately. • Sweep floor to remove debris and dust. • Remove any obstruction located on the floor. | | | |
| Required Training: | | Required Personal Protective Equipment (PPE) | | | |
| 1. Operating a lap wheel. | | <ol style="list-style-type: none"> 1. Safety glasses and face shield (if appropriate) 2. Hearing protection 3. Apron (if necessary) | | | |
| SOP ID | A015 | Related Documents | Art Shop Manual | Creation/Revision Date | 11/2018 |

Suggestions, questions, or comments? Please contact EH&S