

## SAFE WORK PRACTICE – BUFFING

### PURPOSE

To provide a sense of the hazards involved in the buffing process and to ensure that it is done in a manner that minimizes risk of worker injury or damage to equipment and the environment.

### PREREQUISITES

- Only authorized personnel - adequately qualified, trained and with sufficient experience – will be permitted to operate grinding and buffing tools.
- Acknowledge that, although grinders are widely used in construction, users should not become complacent in their operation. Serious injuries, fires and explosions can result if used incorrectly or poorly maintained.

POTENTIAL HAZARD	PRECAUTION
Fire or explosion	<ul style="list-style-type: none"> <li>• Obtain a hot work permit, atmospheric testing and or a fire watch when required in the area.</li> <li>• Do not expose fumes, vapors or dust laden atmosphere to an ignition.</li> <li>• Remove/protect all flammable materials.</li> <li>• Shut torch off when not used for pre-heating operation.</li> <li>• Keep fire extinguisher close at hand.</li> </ul>
Burning or damaging skin or eyes, respiratory or auditory damage.	<ul style="list-style-type: none"> <li>• If polishes are used, ensure area is well-ventilated.</li> <li>• All required PPE must be worn for job task.</li> <li>• Ensure hearing protection is rated for noise levels</li> <li>• Ensure respirator filter is rated for the contaminants</li> <li>• Always use PPE appropriate to the task (i.e. leather gloves, safety boots, aprons, hardhat, respiratory protection, as applicable).</li> <li>• Inspect face shield and safety glasses or goggles (buffing with a high-speed disc can produce a fine particle spray as the wheel’s surface slowly wears away)</li> <li>• A barrier cream is recommended to prevent skin absorption of metals and chemicals.</li> <li>• Cover exposed areas of skin.</li> <li>• Cover or tie long hair to prevent entanglement</li> <li>• Fasten loose cuffs and loose clothing. Remove long necklaces to prevent entanglement</li> <li>• Never remove oil, grease, or buffing compound from the skin with solvents, mineral spirits, gasoline, kerosene, alcohol or similar chemicals. If soap and perhaps a little pumice won’t work, stay dirty – it will wear off! The alternative potential results are all negative.</li> <li>• If any polish or particles get into the eye, seek first aid attention; flush eyes well with water. DO NOT RUB.</li> </ul>

### BEFORE USE:

- Complete a SSRA (form 2C) and review the Emergency Response Plan including the location of emergency equipment. Review MSDS guidelines for materials such as paints and buffing compounds.
- As per manufacturer’s specifications, ensure that safety mechanisms are in place and operable and that grinder is free of any defects. If defective, remove from service, repair (authorized and trained service personnel only) or replace.
- Test grinder to ensure it is running properly.

- Ensure buffing wheel is rated for grinder size as per manufacturer’s specifications, that it is not damaged, and that wheel flanges are neither smaller nor larger than the outer tips of the teeth in the clinch ring.
- Check that buffing wheel is mounted correctly, tails trail the direction of rotation and attached securely. Retighten occasionally as necessary.
- Note: if buffer spins on the hub or spacer (if used), fires or clinch ring breakage may occur.
- Excessive or unusual vibration is an indication that something is wrong. Shut down grinder immediately and determine cause and required corrective action.
- Ensure extension cord and ends are free of any damage.
- Test the Ground Fault Interrupter at a known power source to confirm that it is working correctly.

**DIRECTIVES:**

- If congestion due to construction activity is a concern, work area must be secured from any unauthorized entry.
- Ensure extension cords do not pose a tripping hazard in walkways.
- Set up screens to contain fly particles.
- Ensure pipe or material to be buffed is secured in place.
- Keep all body parts clear of pinch points and stay out of line of fire.
- Note direction of wheel spin, when a wheel grabs an item, it will throw it in the direction the wheel is spinning.
- Use handle for grinder to control it, do not use excessive pressure as this may cause overheating, fire or buff collapse.
- Take appropriate measure for the specific task to ensure contact is in “safe area” of buff.
- Contain dust levels, clean up regularly, dispose of waste correctly (i.e., do not mix solvents, various metal buffings, shavings and other waste chemicals/materials in the same bin as this creates a fire hazard).
- Clean up when changing metals. Use a different bag for vacuuming buffing dust from different metals. Combinations of dusts from various metals can be explosive.
- Do not mix different liquid polishes, use only use one type of compound on each buffing wheel. Some combinations can give off poisonous and/or volatile gases.
- All metals are hazardous to the body in large quantities, take seriously personal protection guidelines.
- Fatigue impairs ability to concentrate and control work leading to flings and damage. Stay alert and take breaks as needed
- If “marking” of buffed area is a concern, try not to touch freshly buffed areas with fingers as these areas will be warm and “soft” and may mark.
- Never leave a grinder running unattended.
- Use proper lifting practices.
- Inspect tools before returning them to storage location, removing damaged tools from service.
- Clean up all dust (wet mop /dust bane). Do not remove respirator until dust has been cleaned up and dust on clothing and PPE has been removed or damp wiped.