

SWP Purpose

The purpose of this SWP is to establish written guidelines for using hand and power tools, including air tools/compressed air. Use of fixed bench grinders is also covered, as these are used to sharpen and maintain hand tools. The standards are intended to protect workers from potential hazards associated with hand and power tools.

Scope

All GDTA workers will comply with the guidelines in this SWP and manufacturers' instructions.

Responsibilities

Responsibilities apply to the Trip Manager/Volunteer Lead, all workers, and the Health and Safety Committee.

It is the responsibility of the Trip Manager/Volunteer Lead to

- Maintain and use applicable tools in compliance with the SWP and manufacturers' instructions
- Reinforce to workers that any recommended controls must be applied consistently
- Require that this SWP be implemented
- **Verify maintenance is complete by Equipment Manager and confirm with visual inspection before trip to ensure good working condition**

It is the responsibility of the Workers to

- Comply with this SWP and follow manufacturers' instructions
- Ensure recommended controls are implemented and used appropriately.
- Immediately report any concerns or incidents to the Crew Lead
- Remove damaged tool from use and mark it "out of service".

It is the responsibility of the Safety Committee to

- Maintain this Safe Work Practice
- Perform periodic audits to assess that these requirements/SWP are being acted upon.
- Reinforce that recommended controls are to be implemented and used appropriately.

Hazards

Hand and power tools can be hazardous. They have the potential to cause severe injuries when used improperly or poorly maintained. Sharpening tools is a part of maintenance; using bench grinders for this purpose must also be done safely.

Hazards due to worker behavior include drowsiness/fatigue, psychological factors such as stress, or lack of familiarity with the tool or the task. Environmental hazards may be caused by poor weather, extreme heat or cold working conditions, and poor lighting.

Controls

Controls may include elimination/substitution, engineering, warnings, administrative, and/or PPE.

Guidelines are presented below. Additional SWP examples are included, following.

Tools - General

- Use hand tools only for the purpose for which they were intended.
- Inspect tools for defects prior to use. Look out for –
 - Loose heads on hand tools (e.g. mattocks, Pulaskis, McLeod and other rakes, axes, and shovels)
 - Cracked tool blade
 - Chisels and wedges with mushroomed heads
 - Split or cracked handles
 - Chipped or broken drill bits
 - Wrenches with worn-out jaws
 - Files with no handles
 - Broken, jammed or inoperative safety guards
 - Damaged grounding on double-insulated tools
 - Absence of ground wire on cords and plugs
 - Inconsistent or inoperative on/off switch
 - Presence of incorrect grinder wheel
- Remove any defective tools from service and tag “Out of Service”.
- All damaged or worn parts should be promptly repaired or replaced.
- Do not use the tool if you are not trained.
- Ensure safety glasses and face shields are used for abrasive work such as grinding and chipping.
- Make sure you use the right tool for the job.
- Do not remove or operate tools without the proper manufacturer’s safety guards.

Electrical Tools

- Do not operate tools that are missing ground plugs or have frayed cords.
- Do not operate electrical tools in wet areas
- If any tingling is felt when the tool is touched, unplug the tool at the source and remove from service.
- All electrical tools should be grounded or double insulated.

Fixed Bench Grinders

- When using the grinder, wear gloves, eye protection (safety glasses, face shield), safe footwear, and hearing protection.
- Secure loose items such as clothing, draw strings, long hair, etc. to prevent tangling in the grinder
- Follow operator’s instructions and familiarize yourself with the grinder prior to use

- Inspect the grinder to ensure that switches, cords, grinding stone/brush are in good working order; if this is in doubt, do not use the grinder, but tag it for repair
- Ensure that the guards are in place
- Ensure that the tool rest is not below the horizontal center line and no more than 3mm from the face of the wheel
- Communicate with any workers in the area, to ensure that they are safely out of the way
- Hold the part firmly but do not apply excessive force on the tool against the grinder
- Do not try to hold small parts with your fingers against the wheel; attach the small piece to another tool/extender such as vice grips
- Do not grind against the side of the wheel
- Maintain grinder wheel shape and wear, following manufacturer's specifications
- Take breaks during the task, to reduce stress on specific muscle groups
- Always turn off the grinder and unplug it before performing any adjustments, maintenance, or repairs

SAFE Work Procedure Job Title or task: Using Hand Tools (non power)

Department / Area: Maintenance	Approved By: J. President	Date Created:	Review / Revised date:
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<p align="center">Potential Hazards: Fill in those that apply</p> <p>H M L risk for injury</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Awkward / sustained postures – varies with task</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Forceful exertions – pushing, gripping, twisting,</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Repetitive movements</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Vibration</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Compression</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Sharp points / edges – knives, pliers</p> <p><input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Pinch points – in tools or against materials</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Materials falling</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Surfaces causing falls</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Moving machinery</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Chemicals</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Biological pathogens</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Electrical</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Extreme heat / cold</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Noise</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Combustibles / flammables</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other _____</p>	<p align="center">Personal protective equipment / devices required / other safety considerations</p> <p>-Gloves if using knives -Safety footwear</p> <hr/> <p align="center">Training / Reference information</p> <p>-Injury prevention orientation -In house training -Tool manuals / instructions</p>
<p>Note: Signs and symptoms of a musculoskeletal injury (MSI) can include pain, burning, swelling, stiffness, numbness/tingling, and/or loss of movement or strength in a body part. Report these to your supervisor.</p>	
<p align="center">Employers must ensure that workers are trained and follow this SAFE Work Procedure Steps to perform this task safely:</p>	
<p>Note: The instructions below are relevant for non powered hand tools including but not limited to screwdrivers, hammers, hand saws, utility knives, cutters, pliers, etc</p> <ul style="list-style-type: none"> -Do not use broken tools or tools that have cracks or splits in handles -Only use tools in a manner that they have been designed -Carry sharp tools in their sheath or holster -Keep cutting tools sharp so less effort is required for them to be effective -When using knives, sheaths or shears, keep your other hand or body parts out of the cut line, ensure that there is a barrier between the knife and your body or cut in a direction away from your body -Try to work in neutral positions as often as possible (wrists and back straight, elbows in, reduce back twisting by instead taking small steps to reposition, etc) and try to avoid overreaching -Take micro breaks or change tasks periodically to reduce repetitive or physically demanding tasks -Keep work areas free of loose tools which could be tripped over and after use, return tools to designated areas 	

Training

Workers must be adequately trained. On the job/scenario or demo-based training is useful. Always read the manufacturer's/operator's manual prior to use. If a worker is involved in an accident, training should be reviewed.

Resources, References, Definitions

Revision History

<u>Revision</u>	<u>Date</u>	<u>Description of Change</u>	<u>Personnel Involved</u>
REV 0	Feb -2020	New SWP	D Yanchula
REV 1	Apr 2020	Visual inspection by Trip Manager, Volunteer to mark damaged tools "out of service".	D Hockey, D Borthwick, D Yanchula, J Gruttz, J Bateson
Rev 2	Feb 2023	Changes in BOLD	D Yanchula