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**WOODCRAFT  
GUILD·ACT**

# Woodcraft Guild ACT Inc.

## Health & Safety Procedures

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**Important Notice:** Printed copies of this document may be out of date. For the current version, see Woodcraft Guild ACT website:

[http://www.woodcraftguild.org.au/?page\\_id=242](http://www.woodcraftguild.org.au/?page_id=242)

Up-to-date hard copies of the document are available on request by members at the Guild from the Secretary.

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## **1 INTRODUCTION**

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, certain hazards present themselves as woodworking machines are being operated.

The Guild's Health and Safety Policy requires that all members achieve an acceptable level of competency for each piece of the Guild's machinery that they wish to use.

Safety equipment such as full face shields, goggles, dust masks and hearing protection will reduce your potential to have an accident. Ensure you provide these or that you use the ones provided by the Guild.

Members can gain accreditation to use machinery without supervision. Non accredited members require supervision by an accredited member when using any machinery. SIG Coordinators can advise new members on how to gain accreditation.

Whilst in the workshop, members are required to take all reasonable care of their own health and safety and that of others who may be affected by their actions or omissions. They must also co-operate with any reasonable instruction given by SIG Coordinators or the Shed Boss. Always use common sense and exercise caution in the workshop and if anything feels at all dangerous, seek assistance immediately from the Convenor on Duty.

Contained in this manual is information in the form of basic safety rules for all machinery, specific safety rules for various items of equipment, together with some general safety rules which, overall, will give members an understanding of the Guild's machinery and equipment, and will assist in promoting a safe and cautionary operation.

## **2 OTHER SAFETY-RELATED DOCUMENTS**

In addition to this Safety Manual, The Guild has three other documents relating to safety issues:

- Health and Safety Policy
- Workshop Code of Conduct; and
- Risk Register

### **2.1 Health and Safety Policy**

- The Guild, through its Committee, actively manages its safety risks by applying a structured approach to the identification, analysis, monitoring and minimisation of hazards and risks in order to ensure a safe working environment for its members and visitors.
- In the Health and Safety Policy, the Committee sets forth the principles that underpin the Policy such as promoting a culture of safety throughout the Guild.
- The Health and Safety Policy is prominently displayed in the Guild Shed, and is published on the Guild Website ([http://www.woodcraftguild.org.au/?page\\_id=242](http://www.woodcraftguild.org.au/?page_id=242))
- The Policy is reviewed by the Committee every 12 months, or more frequently if required. Members are informed of changes at regular meetings and in the Newsletter.

## **2.2 Workshop Code of Conduct**

The Workshop Code of Conduct sets forth the Guild's expectations of members and visitors using the club's workshop facilities at Lions Youth Haven, Kambah ACT. To maximise safety of workshop operations, all members and visitors using the Workshop are expected to familiarise themselves with the Workshop Code of Conduct and to comply with its content.

The Key elements of the Workshop Code of Conduct are:

- Signing in and out by members and visitors in the Attendance Book.
- Checking all machinery prior to use, reporting any defects to the Shed Boss on Duty and entering details in the Incident Register.
- Wearing of appropriate footwear and clothing, and using appropriate personal protective equipment.
- Prohibition of non accredited members operating machinery unless they are overseen by a member accredited on that particular machinery.
- Promptly reporting to the Shed Boss any hazards or dangerous situations detected.
- Recognition that the Shed Boss on Duty has full authority to control all matters in the Workshop. SIG Coordinators act as the Shed Boss during their SIGs.

This Workshop Code of Conduct is prominently displayed at the front entrance to the Shed. It is reviewed every 12 months, or more frequently if required. Members are informed of changes at regular Guild meetings and in the Guild's newsletter.

## **2.3 Risk Register**

The Guild's Committee maintains a risk register, which includes information on the safety risks associated with the use of the Guild's machinery and equipment, including appropriate control measures to minimise those risks. Copies of the Risk Register are available from the Secretary.

## **3 SAFETY INCIDENT REPORTING**

Safety incidents are defined as events that cause actual injury or harm to any person, or could potentially have caused injury or harm ("near misses").

- Members experiencing a safety incident when using Guild machinery or equipment or otherwise participating in Guild events and activities must report it to the Shed Boss on Duty.
- Details of the safety incident must be recorded (including any first aid treatment) in the Guild's Incident Register which is located at the desk adjacent to the front door of the Shed.
- The Shed Boss on Duty must ensure that details are recorded in the Incident Register
- Safety incidents including "near misses" will be a standing Agenda item for discussion at each Committee meeting. The Committee will review each reported incident, and take any necessary follow-up action to prevent similar incidents recurring.
- The Committee will review the Incident Register at least every 12 months, take any necessary action to correct any systemic safety breaches identified during the review, and inform members accordingly.

## **4 GENERAL WORKSHOP SAFETY RULES**

### **4.1 Care when Cutting or Turning Suspect or Dangerous Timbers**

Extra care should be exercised when cutting or turning timbers where there may be any possibility that the wood contains embedded nails, fencing wire or other foreign objects, or when using stock that has cracks or flaws that could make it unstable and likely to break apart while it is being machined.

If it is suspected that metal is present the metal detector should be used to identify and the metal removed prior to work proceeding.

Extra care should also be taken when using timbers that may have irritant, sensitising or other toxic properties.

### **4.2 Lifting Heavy Objects**

To avoid back injury (or worse), members should observe the following safe handling rules when lifting and shifting heavy objects:

- Plan your lift: make sure your path of travel is clear. Think whether the lift should be broken into stages.
- Size up the load (weight, size and shape): consider your physical ability to handle it. If in doubt get a trolley or other mechanical device or assistance. Check if the weight is stable or will move about e.g. liquid. Avoid the single lifting of loads that weigh more than 16 to 20 kg.
- Get a firm footing: place your feet close to the object to be lifted. Adopt a balanced position.
- Bend your knees: bend your knees in a semi squat to a comfortable degree with back relatively straight and get a good handhold (use the palms and fingers, and safety gloves if the object to be grasped is rough, slippery or hard to hold). Lift the load keeping it tight and close to the body. Try to keep the natural curves in your spine when lifting.
- Make use of your body weight: use your stronger leg muscles to lift the load and allow it to rest close to your body in fully extended arms. Lift smoothly and rhythmically. Avoid any sudden jerking action as this can easily cause back injury.
- Move the load: with the load comfortable in your hands and arms and with back straight and upright, move your feet in the direction of travel; don't twist at your hips or shoulders.
- Set down the load: as with lifting, use leg muscles to lower the load by bending your knees in a semi squat to a comfortable degree. Don't let go of the load until it is secure.

### **4.3 Kitchen**

The Guild provides a kitchen area in the back room of the shed for the use of its members and visitors.

Wipe up spills immediately. Keep the floor dry so that no one slips and falls.

Never leave sharp knives in the sink. After use clean them and put them away.

Take care when using the urn that boiling water doesn't splash on you or others.

When heating food in the microwave, be aware that the container used can become very hot.

Use a tea towel as necessary when removing containers.

#### **4.4 Workshop Tidiness and Cleanliness**

Keep the work area clean and tidy – cluttered areas and work benches invite injuries. Ensure there is room to work and move safely.

After using a lathe or other equipment, members are responsible for cleaning the machine and the surrounding area. Dust and shavings must be swept from the machine with the brushes provided. The floor area around the equipment should be swept with the brooms provided, and waste material collected into plastic shopping bag or similar container. Final cleanup is one using the provided vacuum cleaners

#### **4.5 Floor Surfaces**

Precautions must be taken to avoid slippery floor surfaces. In particular, care must be taken when using timber blanks with waxy end-grain sealers. The bulk of the wax should be removed using a chisel or scraper before the piece is mounted on the lathe, taking care that the waste wax is collected and disposed of before turning commences.

If you notice that a floor surface has become slippery or presents other hazards, please report it immediately to the SIG Convenor or Shed Boss.

#### **4.6 Dust Collection**

Airborne dust is a serious potential hazard in the Workshop. The Guild aims to minimise levels of airborne dust by using a combination of ceiling mounted air filters, in situ dust extractors, and ventilation from the front and rear roller doors. It is the responsibility of all members to ensure that airborne dust is minimised during the operation of machinery and equipment.

Before operating any equipment or machinery in the Workshop, members must ensure that appropriate dust removal procedures are activated, e.g. in situ dust extractors are turned on, and air filters are switched on.

Members should use personal protective equipment such as face masks as necessary in addition to dust extractors and air filters. Compressed air should not be used for “sweeping” floor surfaces.

#### **4.7 Shavings and Timber Waste**

Shavings and sawdust should be collected in the rubbish bins provided for this purpose. Similarly, small off-cuts and other timber waste should be placed in the rubbish bins provided.

#### **4.8 Flammable Liquids – Use, Storage and Disposal**

Flammable liquids have a flash point less than 37.8°C and include liquid propane, methylated spirits, mineral turpentine, ethanol, acetone, Danish oil, polyurethane, paint thinners, petrol and aerosol cans.

- Keep flammable liquids away from heat, sparks, excessive temperatures and open flames.
- Keep containers clearly labelled, and closed when not being used.
- Do not use damaged containers.
- Do not cut, heat or weld empty containers, which may contain explosive vapours.
- Do not pour flammable liquids down the drain.

- Dispose of containers (empty or full) in accordance with regulations.
- Oil-soaked rags should be soaked in water before disposal.
- All flammable liquids are to be stored in the metal flammable liquid storage shed and must not be stored in the main Guild Shed or any of the wood storage sheds or the Smithy.

#### **4.9 Flammable Liquids – Work Hygiene Practices**

- Ensure emergency eye wash capability is available.
- Avoid repeated and / or prolonged skin exposure.
- Do not use cleaning solvent or harsh abrasives on skin.
- Promptly remove contaminated clothing and launder before reuse.

#### **4.10 Private Equipment and Tools**

Members may use their own tools and equipment in the Guild Workshop, provided appropriate workshop health and safety procedures are followed. Members' own electrical equipment must adhere to Australian Electrical Safety Standards, and must be approved by the Shed Boss on Duty; equipment with damaged plugs or electrical leads is not permitted. Private electrical equipment used on a regular basis (e.g. more than six times per year) should be tested and tagged, at the owner's expense.

#### **4.11 Drugs, Alcohol, Smoking and Medical Issues**

- All members are responsible for their own health. They also have a duty not knowingly to jeopardise the health of other members in any way (For example, members should not attend an open workshop session or meeting when having a heavy cold or flu). They must also observe any warning or cautionary signs attached to machinery or equipment in Guild premises, e.g. on lathes, bandsaws, hot water boiler.
- SIG Coordinators and Shed Boss on duty will ensure that no member operates Guild machinery or equipment whilst obviously under the influence of medications or alcohol, or if there is a suspicion that this may be the case.
- Smoking is prohibited in the Guild buildings and within 4 metres of entrances to the buildings.
- The Committee will make certain that fully stocked first aid kits are available at all times and that their location is clearly displayed.
- SIG Coordinators and Shed Boss on duty with appropriate training will provide basic first aid in the event of an accident. If required, they will call for ambulance assistance or otherwise arrange for transport of the patient to the nearest hospital emergency department.
- If a member or visitor collapses and stops breathing, SIG Coordinators and Shed Boss on duty will call for an ambulance. Those with appropriate training will administer CPR.
- Any medical incident must be reported as set down in the Guild's Emergency Procedures document.



## 4.12 Emergency Evacuation and Fire Safety

- All members must acquaint themselves with the Guild's Emergency Procedures document and apply its content in the event of a fire or other emergency.

## 4.13 Building Safety and Security

- The Committee will ensure that Guild premises is kept safe at all times by way of ad hoc maintenance.
- The building will be kept secure at all times when not in use.
- The Secretary will establish and maintain the Guild Key Register in which will be recorded the names of all persons authorised by the Committee to hold keys to the building.
- Authorised key holders will be individually responsible for the security of keys in their possession. Any tag or label attached to the key will not identify Guild or the address of Shed.
- Loss or theft of the key will be reported to the Committee as soon as possible.
- Transfer of responsibility for the key to another person must be notified to the Committee and recorded in the key register.
- Keys will be surrendered to the Secretary immediately on demand.
- Duplicate keys may only be cut by Guild's authorised locksmith. Two or more Committee members will be nominated to authorise the cutting of duplicate keys.
- The Committee will regularly review the Key Register (at least every 12 months) to determine the need for new key holders and those persons for which key issue is no longer justified.
- At the conclusion of workshop sessions and other meetings, an authorised key holder will ensure that all windows are closed and locked, the roller doors , front and back are lowered and secured, any lockable cupboards including SIG and library cupboards are locked and their keys have been returned to the key cupboard [located next to the front door of the Shed] which in turn has been secured by its padlock, and that the front door to the Shed and the doors to any of the storage sheds and the Smithy are closed and locked.
- All electrical outlets (except for those on the refrigerator circuit), including lights and fans will be switched off prior to departure from the building.

## 5 BASIC SAFETY RULES FOR ALL MACHINERY

- **Unless you are accredited for a particular machine, you must not use it unless you are supervised by an accredited member.**
- The guild holds instruction manuals for all its machinery in the filing cabinet in the office part of the back room of the Shed and before using a machine for the first time you should read the safety instructions contained in that machine's instruction manual. SIG Coordinators/Shed Boss on duty can provide access to the instruction manuals.
- Consider work environment: do not use power tools in damp or wet conditions or in the presence of flammable liquids or gases.

- Do not operate machinery when mentally or physically tired or while under the influence of drugs or medications of any kind.
- Keep non-members away: all visitors should be kept away from the immediate proximity of work areas when machinery is in operation.
- Do not force a machine - it will do a better and safer job at the manufacturer's design speed.
- Use the right machine – don't force small machines to do the job of a heavy duty machine. This could well lead to machine failure due to over stress and resulting costly repairs.
- Safety equipment – make full use of personal protective equipment including full face shields or goggles for eye and face protection, dust masks to minimise dust inhalation, and ear muffs or plugs for noise reduction.
- Wear appropriate apparel – do not wear loose clothing or jewellery (e.g. ties, bracelets, necklaces) that can be caught in moving machine parts. Roll sleeves above the elbows. Suitable footwear (preferably sturdy boots and steel capped boots for the Smithy) is required at all times. Long hair should be contained.
- Power leads – do not carry power tools by their leads or pull the plug out of the socket by the cord.
- Electrical power tools – all power tools (including privately owned equipment brought to the Guild's premises) must be tested regularly, and comply with Australian Electrical Standards.
- Don't overreach – keep proper footing and balance at all times.
- Secure work piece – use clamps or a vice to secure work piece. It is safer than using hands only and thus frees hands to operate machine.
- Check tools and equipment – inspect all tools and equipment before and after use. Report any defective items.
- Disconnect machines from mains power when not in use, before servicing and when changing accessories such as blades, bits etc.
- Remove adjusting keys and wrenches – form a habit of checking to see that keys and adjusting wrenches are removed from the machine before switching on.
- Avoid unintentional starting: don't carry tools with finger on trigger switch and ensure the switch is off before plugging into the power supply.
- Stay alert – avoid talking to bystanders whilst operating the machine. Concentrate and watch what you are doing.
- Check for damaged parts. Before further use following the discovery of a fault, check carefully to determine the problem, report it to the Convenor of the day and attach an “Out of Order” sign to the machine. Finally, disconnect from power source.
- Observing a machine in operation – don't talk to or distract the operator of a machine; wait until he/she has finished or has turned the machine off.

## 6 SPECIFIC MACHINERY SAFETY RULES

### 6.1 Woodturning Lathes

- Ensure you receive proper training in the use of wood lathes and woodturning tools before you use them.
- Ensure all major parts of the wood lathe are in good working order, including headstock, pulleys, tool rest-assembly, tailstock, motor and switches.
- Read and thoroughly understand any label warnings on the lathe.
- Always wear safety goggles or safety glasses that include side protectors, and preferably a full face shield. Use a dust mask and proper ventilation (switch on dust extractor). Wear hearing protection during extended periods of operation.
- Turn the lathe speed to low before turning on the lathe.
- Use slower lathe speeds for large diameter or rough pieces and increased speed for smaller diameters and pieces that are balanced. If the lathe is shaking or vibrating, lower the speed. If the work piece vibrates, always stop the machine to check the reason.
- Make certain that the belt guard or cover is in place. Check that all clamping devices (locks) such as on the tailstock or tool-rest are tight.
- Rotate work piece by hand to make sure it clears the tool rest and bed of lathe before turning the lathe on. Be sure that the work piece turns freely and is firmly mounted, and that the indexing pin / spindle lock is unlocked.
- Turn lathe off before adjusting the tool-rest.
- Stand to one side of work on lathe when machine is first switched on.
- Exercise caution when using stock with cracks, splits, bark, knots, irregular shapes and protuberances or glue joints, as these may result in the work piece separating or flying apart.
- Don't leave anything in the lathe that shouldn't be there, e.g. knock-out bar in headstock.
- Hold turning tools securely on the tool rest and hold the tool in a controlled but comfortable manner. Always run the lathe at slower speed when making roughing cuts until the work piece is balanced.
- Select a head stock spindle speed suitable to the diameter of the work being turned.
- If running the lathe in reverse for any reason, take necessary steps to ensure chuck or faceplate does not unscrew from lathe spindle.
- When using a faceplate, be certain the work piece is securely mounted.
- Keep an accurate check on the depth of the work piece to avoid the tool coming in contact with the screws.
- When turning between centres, ensure the work piece is secure and avoid 'whip' or 'chatter' in long material. Use steadying/centring ring to provide extra support for a long thin work piece. Utilise the tailstock whenever possible – this provides an added level of safety by preventing the work piece from coming off the lathe during a “dig-in” or other. It also provides extra support when turning large, out of balance blanks.

- Always remove the tool-rest before sanding or polishing operations (just moving it to one side may not be enough to avoid injury). Place tool-rest on floor or someplace where it will not fall off. Use paper towel rather than cloth rags when finishing as cloth rags may become entangled and cause injury;. Properly dispose of finishing materials and unused finishes.
- Guard against electric shock. Inspect electric cords for damage. Avoid the use of extension leads as much as possible. Do not touch the live plugs when disconnecting the lathe from the power point.
- Always isolate the wood lathe from the power supply before carrying out any maintenance tasks on the machine.
- Never leave the lathe running unattended – turn power off. Do not leave the lathe until it comes to a complete stop. Disconnect the lathe from power source when not in use.
- Keep tools sharp, clean and properly ground. Grasp the turning tool firmly with both hands. Don't force a dull tool and don't use a tool for a purpose not intended, e.g. roughing gouge on a bowl blank.
- When using a Jacobs chuck, ensure its shank Morse taper is appropriate for lathe being used. Run lathe at slow speed and use the correct drill bit.
- Consider the work environment. Don't use lathe in damp or wet conditions or in presence of flammable liquids or gases.
- Work areas should be well lit (use additional portable lighting if needed) and kept clean and free of clutter and debris.
- Above all, know your capabilities and limits. Beginner turners, for example, should not attempt advanced techniques and procedures that they may have observed, but which they themselves have yet to master. In such cases, they potentially put themselves and others at risk of injury. Safe and competent woodturning will only result from proper training and education in all aspects of woodturning by those with expertise in this field.

## **6.2 Band Saws**

- A 1-metre perimeter around the saw should be kept clear of people, debris and sawdust that could impair traction or footing to avoid slips and falls.
- Appropriate personal protective equipment must be worn, including safety glasses or face mask, dust mask and ear muffs.
- Remove loose fitting clothing and jewellery, and tie back long hair.
- Check the blade tension and tracking before starting. Make sure that the upper and lower wheel guard doors are closed before starting.
- The blade guard must be adjusted to just clear work (less than a finger thickness clearance).
- Only cut timber that has a flat bottom surface, i.e. the timber must lie flat on the table; irregular shaped timber or round logs must not be cut on the band saw unless an appropriate jig is used (e.g. V-block for circular pieces, or clamp block).
- Small pieces of timber that might get jammed must not be sawn on the band saw.
- If the work is too large for one person to handle, get help holding the stock.

- Keep a balanced stance at the band saw.
- After switching on, move timber slowly onto the blade. Do not force a cut.
- Hold the material firmly using push sticks not fingers. Keep hands, thumbs, fingers and arms away from the blade. As a general rule, fingers and hands should be kept at least 10 cm away from the blade.
- Do not attempt to cut circles less than the minimum diameter recommended for the width of the blade being used. When cutting circles or curves, do not turn the work unless this action is accompanied by feed into the blade, otherwise the blade may be damaged beyond repair.
- Do not trap the blade or go backwards through the cut while the blade is running.
- For complicated patterns use multiple cuts at different angles.
- Never clear small pieces while the blade is moving.
- If the blade jams, switch off before moving the work piece.
- Always disconnect the power before changing the blade or performing any other maintenance operation.
- Turn off the band saw and wait until comes to a complete stop. Never stick an object into the blade to stop the machine more quickly. Let it stop on its own.

### **6.3 Chain Saws**

- Chain saws must only be used outside the workshop, on a flat area. A 2-metre perimeter around the saw should be kept clear of people and debris. The work area should be at least 3 metres from where the saw is fuelled.
- Appropriate personal protective equipment must be worn, including safety glasses or face mask and ear muffs. Safety hat, steel-toed safety boots, heavy-duty non-slip gloves and overalls/leggings are also recommended.
- Bystanders should also wear eye and hearing protection.
- Remove loose fitting clothing and jewellery, and tie back long hair.
- Check the blade brake, blade tension and guide bar before starting. Also check that fuel and oil caps are tightened, and that there are no leaks.
- Lock the chain with the chain brake before starting.
- Ensure that the log is firmly held with suitable jaws, blocks or wedges.
- Take special care to maintain good footing at all times when operating the chain saw. Position the saw so that your body is clear of the cutting attachment.
- Always hold the saw firmly with both hands.
- Make sure the saw blade does not touch any foreign materials, e.g. nails, stones
- Always pull the saw out of the cut with the blade running.

### **6.4 Compound Sliding Mitre Saw**

- A 1-metre perimeter around the saw should be kept clear of people, debris and sawdust that could impair traction or footing to avoid slips and falls.

- Appropriate personal protective equipment must be worn, including safety glasses or face mask, dust mask and ear muffs. Remove loose fitting clothing and jewellery, and tie back long hair.
- Before starting, check that the saw is fixed firmly to prevent tipping, the guard is free of defects and operates freely, back fence is accurately located for particular operation, and sliding arms move freely.
- For angle cuts, ensure that the locking screw is tightened firmly.
- Maintain a balanced stance firmly on both feet.
- Always keep hands at least 10 cm away from blade.
- Always allow the blade to get to speed before cutting.
- During the slide cutting operation, first pull the carriage fully towards you, press the handle fully down, then push the saw slowly towards the guide fence.
- Always make sure blade is not in contact with work piece when starting.
- Do not perform any operation freehand.

## **6.5 Table Saw**

- A 1-metre perimeter around the saw should be kept clear of people, debris and sawdust that could impair traction or footing to avoid slips and falls.
- Appropriate personal protective equipment must be worn, including safety glasses or face mask, dust mask and ear muffs. Remove loose fitting clothing and jewellery, and tie back long hair.
- Before starting, adjust the saw blade height, check that the guard is free of defects and operates freely and that the splitter is in place.
- Visually check timber for any foreign objects such as screw or bits of gravel and remove them prior to working. Run metal detector over any non new timber to identify any metal inclusions and remove from the timber prior to working.
- Use the fence or mitre gauge to guide the stock, never cut free hand and never use the fence and mitre gauge together.
- Maintain a balanced stance firmly on both feet.
- Always keep hands at least 10 cm away from blade.
- Always allow the blade to get to speed before cutting.
- Never reach over the turning blade.
- Always make sure blade is not in contact with work piece when starting.

## **6.6 Scroll Saw**

- Keep your work area clean and uncluttered.
- Wear eye protection at all times when using the scroll saw.
- Select the correct speed and type of blade for the work you are doing. Ensure that the blade is correctly installed, with the teeth pointing downward.

- Make all adjustments only when the machine is turned off and unplugged from the power source. Adjust the blade tension before starting the saw.
- Only cut timber that has a flat bottom surface, i.e. the timber must lie flat on the table. Irregular shaped timber or round pieces must not be cut on the scroll saw unless an appropriate jig is used.
- Never cut timber with nails, staples, or foreign materials.
- The wood must not be in contact with the blade when you turn the machine on.
- Keep your hands, fingers, and body parts well out of the way of the blade. Never have your hand or fingers in the line of cut.
- Give the blade time to do its job. The teeth are small and you must feed your work slowly so you don't break the blade. Don't force your wood into the blade. This is especially true if you are cutting a curve or circle. Don't turn too sharply.
- Move scrap pieces away from the blade with a push stick, not your fingers.
- To back out of a cut, turn off the saw. Slowly and gently move the board to get it off of the blade.

## **6.7 Cut-off Saw**

- A 1-metre perimeter around the saw should be kept clear of people and debris that could impair traction or footing to avoid slips and falls.
- Appropriate personal protective equipment must be worn, including safety glasses or face mask, dust mask and ear muffs. Remove loose fitting clothing and jewellery, and tie back long hair.
- Before starting, check that the saw is fixed firmly to prevent tipping, the guard is free of defects and operates freely, back fence is accurately located for particular operation.
- For angle cuts, ensure that the locking screw is tightened firmly.
- Maintain a balanced stance firmly on both feet.
- Always keep hands at least 10 cm away from blade.
- Always allow the blade to get to speed before cutting.
- Always make sure blade is not in contact with work piece when starting.
- Do not perform any operation freehand.

## **6.8 Bench Grinders – dry and wet-stone**

- Disconnect the power supply before replacing grinding wheel or inspecting the grinder.
- Cracked wheels – advise Convenor of the day of this problem and do not attempt to replace unless authorised.
- Adjust tool rest to ensure that it is no more than 2 mm away from the wheel and readjust as wheel diameter reduces through use.
- Ensure wheels rotate freely before switching the power on.
- Stand to one side of the bench grinder when switching the power on.

- Do not operate the bench grinder with the wheel guard removed.
- Do not use anything to overload the grinding wheel.
- Use a wheel dresser only to remove burrs on the grinding wheel.
- Before using the wet-stone grinders ensure the water reservoir is correctly filled.

## **6.9 Belt and Disc Sander - Linisher, Bobbin Sander**

- Always wear eye protection and dust mask when operating the machine.
- Never leave the machine running whilst unattended and remain at the machine until it has completely stopped.
- Do not attempt to modify the machine or any of its parts contrary to its manufacturer's original specifications.
- Test run the machine before operating to ensure the belt is running true and other functions are safe.
- When sanding, use both hands to hold the work piece. (do not attempt to sand small pieces held in hand – use some form of suitable holding device ).When disc sanding, use the part of disc surface which is moving downwards. Also ensure that the dust extractor is operating.
- Disconnect the machine from the power source before changing belts or cleaning.
- Remember to reposition the work piece to the centre line when the table angle is other than 90 degrees.
- Remove all jigs and return the table to 90 degrees when finished using the machine.

## **6.10 Drill Press**

- Always wear eye protection when operating the machine.
- Never stand, or allow observers to stand, in a position where there is potential for kickback (the grabbing of the work piece by a rotating tool with the work piece then being thrown at high speed in the direction of rotation). If work becomes loose and is seized by drill, step away immediately and switch off power without endangering yourself.
- Never leave the machine running whilst unattended and remain at the machine until it has completely stopped.
- Clamp the work piece securely to the table where possible or ensure the work piece is positioned to the left of the supporting post.
- Buffing and sanding drums must only be in contact with the work piece on the side of the drum moving away from the operator.
- Never move the head or the table whilst the machine is running.
- Before starting, “pulse” the motor switch to ensure the drill bit or cutting tool does not wobble or vibrate. Run at correct speed.
- Use only accessories designed for use in a drill press. Don't use wire wheels, router bits, shaper cutters, circle (fly) cutters or rotary planers.
- Do not use drill bits exceeding 125 mm in length below the chuck



- Strictly follow any safety warnings and / or instructions that appear on the machine.

## **6.11 Electric/Battery Drill**

- When using the electric/battery drill, check that:
  - drill bit and screw heads match
  - lever on the handle is in the correct position for screw travel
  - correct drill speed is selected (by turning button on handle).
- When using the electric/battery drill to fix a face plate to a timber blank, ensure that:
  - the blank is held securely whilst the face plate is being screwed in place.
  - the drill is “pulsed” at low speed whilst fixing screws
  - all screws travel full length into the blank to achieve maximum holding power.

## **6.12 Routers and Router Table**

- Keep your work area clean and uncluttered. A 1-metre perimeter around the router should be kept clear of people, debris and sawdust that could impair traction or footing to avoid slips and falls.
- Wear eye and hearing protection at all times when using the router. Appropriate dust mask or respirator should also be used.
- Remove loose fitting clothing and jewellery, and tie back long hair.
- Select the correct router bit for the work you are doing and ensure that it is sharp and not damaged in any way. Dull bits tend to overload, causing possibility of bit breakage. Never use bits that have a cutting diameter greater than the opening in the router base.
- When changing a bit, make sure that the router is unplugged from the power source.
- Always use the wrenches provided with the machine to make adjustments. Using the correct wrench enables a more secure grip on the tool and may prevent slipping.
- When using a router table, make sure all guards are in place and working properly. Make all adjustments to table and fence before switching on the router.
- Before switching on the router, make sure the collet nut and any other adjustment devices are securely tightened.
- When using hand-held router, ensure that the work piece is securely held in a vice or other clamping device. Hold the machine firmly with both hands.
- After turning on the router, wait until it has reached full speed before starting the cut. Never start the tool when the bit is touching the work piece.
- Always feed the cut against the direction of rotation.
- Never touch the bit during or immediately after use. The bit is too hot to be touched with bare hands.
- Never lay the tool down until the motor and bit have come to a complete standstill.
- When using a router table, keep hands and fingers at least 10 cm from the revolving bit. For small pieces, use a push stick or feather board to ensure hands are kept a safe distance from the revolving bit.

### **6.13 Thicknesser and Jointer**

- Keep your work area clean and uncluttered. A 1-metre perimeter around the thicknesser/jointer should be kept clear of people, debris and sawdust that could impair traction or footing to avoid slips and falls.
- Visually check timber for any foreign objects such as screw or bits of gravel and remove them prior to working. Run metal detector over any non new timber to identify any metal inclusions and remove from the timber prior to working.
- Wear eye and hearing protection at all times when using the machine. Appropriate dust mask or respirator should also be used.
- Before starting the machine, adjust work piece gauges and guides, and ensure guards are in place and not damaged.
- Adjust depth of cut for light pass. Always make small cuts – 0.5-1 mm for surface cuts, and 1-2 mm for thicknessing.
- After turning on the machine, wait until the cutters have reached full speed before starting the cut. Never start the tool when the cutters are touching the work piece.
- Always feed the work against the rotation of the cutter.
- Hold work piece in position against the guides. Use push sticks where required for small work pieces.
- Beware of kick-back. Do not stand behind the work piece.

### **6.14 Compressor**

- Always wear eye protection when using compressed air or operating compressed-air tools.
- Check periodically that all hoses are in good condition, there are no leaks, all fasteners are tight, safety valves and other pressure relief devices are not obstructed with dirt etc, and that air outlet valves, hoses, couplings etc are in good repair and free of wear or abuse.
- Never use frayed, damaged or deteriorated hoses and only use correct type and size of hose end fittings and connections. Ensure that when blowing through a hose or air line the open end is held securely.
- Never play with compressed air. Don't apply it directly to the skin or "shoot" an air stream at people. Do not use compressed air as a "broom" to sweep the floor. When using compressed air to clean down equipment, do so with extreme caution ( use air gun in short bursts, not a continuous air stream ), wear a dust mask and eye protection, and continue operating in situ dust extractors, mobile air filters etc at the same time.

### **6.15 Forge – Coke and Gas, Anvil**

- Keep your work area clean and uncluttered. A 1-metre perimeter around the forge should be kept clear of people and debris that could impair traction or footing to avoid slips and falls.
- The forge (solid fuel or gas) contains fire and the anvil is used in conjunction with one or other of the forges. You must take utmost care that the fire does not get out of hand. There are many flammable substances in and around the work area. The sparks

from the hot metal, the hot slag, the hot piece of metal you just cut from the end of the stock, etc can all start a fire.. You must be careful.

- Wear eye protection at all times when in the forge.
- Wear cotton clothing. If a spark etc makes contact with synthetics they melt and sometimes the melted material can adhere to your skin and continue to burn, causing injury.
- Wear leather footwear and if working with heavy bits of metal, wear steel capped boots.
- Wear a leather apron and leather gloves. Note if using the metalwork lathe in the smithy any gloves must be removed prior to using the lathe.
- If you have long hair, mustache or long beard, take care to keep them out of the way of fire.
- To avoid build up of toxic fumes always ensure good air flow through the Smithy by opening the door and window.
- Use tongs when lifting metal into our out of the forge.
- When hammering on the anvil it is advisable to have one person holding the hot metal using tongs while the other person hammers.
- Let hot metal fall. Gloves will not stop your hand from being burned if you can catch the hot metal. If the hot metal does hit the ground, who cares, pick it up with tongs and continue forging

## **6.16 Metalwork Lathe**

- Always wear eye protection - preferably industrial quality safety glasses with side-shields. The lathe can throw off sharp, hot metal chips at considerable speed as well as spin off spirals of metal that can be quite hazardous. Don't take chances with your eyes.
- Wear short sleeve shirts, if possible, or shirts with snugly fitting cuffs if long sleeve. Loose sleeves can catch on rotating work and quickly pull your hand or arm into harm's way.
- Wear shoes - preferably leather work shoes - to protect your feet from sharp metal chips on the shop floor and from tools and chunks of metal that may get dropped.
- Remove wrist watches, necklaces, chains and other jewelry. It's a good idea even to remove your wedding ring since it can catch on rotating work and severely damage your ring finger and hand.
- Tie back long hair so it can't get caught in the rotating work. Think about what happens to your face if your hair gets entangled.
- Always double check to make sure your work is securely clamped in the chuck or between centers before starting the lathe. Start the lathe at low speed and increase the speed gradually.
- Get in the habit of removing the chuck key immediately after use. Some users recommend never removing your hand from the chuck key when it is in the chuck. The chuck key can be a lethal projectile if the lathe is started with the chuck key in the chuck.

- Keep your fingers clear of the rotating work and cutting tools.
- Avoid reaching over the spinning chuck. For filing operations, hold the tang end of the file in your left hand so that your hand and arm are not above the spinning chuck.
- Never use a file with a bare tang - the tang could be forced back into your wrist or palm. Inexpensive wooden handles are readily available for common file sizes.

### **6.17 Gas Bottle and Blow Torch/welder**

- Wear appropriate protective equipment, including tinted safety glasses or face mask, heavy-duty gloves and apron.
- Ensure that there are no grease or oil stains on your clothing. Consider wearing flame-retardant clothes.
- Ensure work area is well ventilated and that a fire extinguisher is located close by.
- Ensure that blow torch is securely connected to gas bottle and that there are no gas leaks.
- Do not turn on the gas nozzle on the blow torch until you are ready to ignite it. Use a striker rather than a match to light the blow torch.

## **7 DEMONSTRATIONS AND EXHIBITIONS**

### **7.1 In-house Demonstrations**

Guild members presenting a demonstration should adhere to applicable safety procedures and rules described in this Manual during their demonstration. They are also expected to emphasise safety issues during their presentation to increase other members' awareness and understanding of safety procedures.

Lathes or other equipment being used during the demonstration should be fitted with an appropriate safety screen. Members of the audience should be kept at a safe distance from the equipment.

### **7.2 Visiting Demonstrators**

It is expected that visiting demonstrators will be aware of general safety procedures applicable to woodworking, although the Management Committee recognises that they may not necessarily be familiar with specific safety rules described in the Manual. If the Management Committee member hosting the visit is concerned that applicable safety procedures are not being followed (e.g. the demonstrator is not wearing adequate eye protection), he or she should bring the matter to the attention of the demonstrator.

### **7.3 Public Exhibitions**

During public exhibitions, it is the organiser's responsibility to ensure that the appropriate safety procedures are followed, and that safety risks for Guild members and members of the public are identified and managed.

When moving lathes or other heavy equipment between the Shed and an external venue, Members shall apply the procedures for lifting heavy objects (Section 4.2).

Woodworking displays should be arranged to provide easy access for all attendees, including those with disabilities. Access to fire exits should not be impeded.

Demonstrations should be arranged so that members of the public are kept at a safe distance, and safety screens fitted to lathes and other equipment. Demonstrators must adhere to applicable safety procedures, including the use of appropriate personal protective equipment such as eye protection.

Guild members participating in events or woodworking demonstrations not organised by the Management Committee may be covered by Guild’s Public Liability Insurance provided that approval is given by the Management Committee prior to the event.

**8 DOCUMENT REVIEW**

This Health and Safety Procedures Manual will be reviewed by the Management Committee every 12 months, or more frequently if required. Members will be informed of changes at regular meetings and in the Newsletter.

**9 VERSION CONTROL**

Version number	Date	Comments
1.0	Mar-14	New document following annual review.