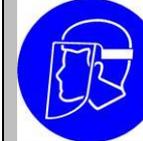


Standard Operating Procedure SOP-009	Revision 1
HAND TOOLS, PORTABLE TOOLS (POWER OPERATED), AND EQUIPMENT	

1. Activity	Hand Tools, Portable Tools (Power Operated), and Equipment	
2. Associated Risk and Environmental Impact Assessment	RA-009 Hand Tools, Portable Tools and Equipment	
3. Control measures		
1) Ensure you have <u>ALL PPE in proper working condition</u>	4) All emergency response equipment to be on site	
2) Ensure all workers are competent, are physically fit and have received adequate training	5) Establish a maintenance program with relevant tags for all tools.	
3) Use of low voltage battery tools where possible	6) Sufficient distance will be kept from power tools' users	
	7) Use of spark proof tools where necessary	

4. PPE							
							
√		√	√		√		
Helmet, EN 397, EN50365	[specify type]	Safety Goggles EN 166	Welding or Hot Particles face shield, EN 169, 175, 379	[specify type]	Selection of filters depends on the particles and vapors/smoke	[specify type]	[specify type]
							<i>other</i>
√	√		√	√			
Ear plugs EN 352	Long sleeves coverall EN 340	[specify type]	Protection Gloves EN 420	Safety leather boots, EN ISO 20345 S5, S3	[specify type]	[specify type]	[specify type]

5. Forms & Attachments
None

6. Pre-job checks	
1) Check the power tool has an inspection tag. 2) Check for any defect or excess wear / safety guards working properly.	3) Equipment should be earthed to prevent electrocution. 4) Check Emergency arrangements.

7. Execution

1) Check the working area and identify hazards (including for other personnel, potential explosive atmospheres, etc.)

2) Be familiar with the tools to use, their designated jobs and operating manuals.

3) Stabilize the object(s) to be worked with the tools firmly using clamps, braces etc.

4) Disconnect the tools during short breaks or during changing parts / components

5) Use extension objects to push forward powered equipment.

6) Avoid dry sweeping of dusts. Use a vacuum system or wet method.
Do not use compressed air to clean dusty surfaces.

7) ALWAYS:

- Keep body parts away from the power tool moving elements
- Firmly hold the tool with both hands
- Make sure long hair is prevented from getting caught
- Maintain proper body posture and balance

8) NEVER:

- Use a power tool in water or under rain
- Use an untagged tool
- Use the power tool for other than designed purpose
- Point the power tool at yourself or others
- Wear gloves, neckties, jewelry or loose clothing as



- they could caught or torn during works
- Modify a tool
 - Carry a tool by holding through the cable

9) Compressors:

- Only trained personnel should use an air compressor.
- Before each use, check the compressed air system and electrical components for signs of damage, deterioration, weakness and leaks. Repair or replace and defective parts.
- Never weld or drill holes in the air tank.
- Release air slowly when draining moisture or depressurizing the compressor system.
- Keep fingers away from a running compressor, fast moving and hot part could cause injury.
- Ensure all belt and pulley systems are operating properly and properly guarded.
- Never use an air compressor for the purpose of supplying breathing air.
- Never operate or repair in or near flammable gas or vapor.
- Never stand on or use the unit as a handhold.
- Disconnect power and release all pressure from the system before performing any maintenance work on the machine.
- Do not use extension cords with an air compressor.
- Do not exceed pressure limits for any component in the system



10) Table saw:

- Always keep the blade guard and driving knife in place and in working order. Keep tools and cords in good repair and clean for better and safe performance.
- Keep work area clean and well lit.
- Disconnect tools when not in use and before performing any maintenance work.
- Avoid accidental starting; be sure switch is "OFF" when plugging in.
- Keep hands away from cutting area. Never touch the blade or other moving parts during use.
- Never leave tool running unattended.
- Avoid cutting nails and screws.
- Never start a tool when its rotating parts are in contact with the piece being worked on.
- Always secure work.
- Never stand or have any part of your body in line with the path of the saw blade. Do not reach over any moving parts.
- Never attempt to free a stalled saw blade without first turning the saw off and disconnecting from the power source.



11) Chain saw:

- Only trained and authorized personnel should be permitted to operate the designated equipment
- Keep bystanders and animals out of work area
- Do not operate the unit when you are fatigued, ill or if you are under the influence of alcohol, drugs or medication.
- Do not operate a chain saw that is damaged, improperly adjusted or not completely and securely assembled.
- Do not start cutting until you have a clear work area, secure footing and a planned escape route.
- Prior to starting the engine, ensure that the nose of the saw is free of contact with other objects.
- Keep the handles dry, clean and free of oil.
- Operate the chain saw only in well-ventilated areas.
- Keep all parts of your body away from the saw chain when the engine is running.
- Carry the chain saw with the engine stopped, the guide bar and chain to the rear with the muffler away from your body. Use the appropriate guide bar safety cover.
- Shut off the engine before setting the chain saw down.
- Use caution when cutting small size brush- smaller material may catch the chain and pull you off balance.
- When cutting a limb that is under tension, be alert for spring back.
- Do not operate a chain saw in a tree unless you have been specifically trained to do so.
- All chain saw service should be performed by a professional.
- Avoid making cuts with the saw between your feet and legs- always cut with the saw to the outside of your legs.
- Never position yourself or others in line with the chain. A broken chain will fly forward in the direction the guide bar is pointing.
- Keep the chains clean to prolong life and to reduce the hazard of debris being thrown



12) Drill press:

- Use the drill press in a well-lit area and on a level, clean, smooth surface to reduce the risk of trips and falls around running equipment.
- Always support the work piece so it doesn't shift or bind on the tool.
- Always position backup material underneath the work piece.
- Use a drill press vise, do not do any "free hand" work, always fasten your stock to the table. Use fixtures to adequately hold, guide and position the work piece.
- Never move the head or table support while the tool is running.
- Before starting operation, jog the motor switch to make sure the drill bit or other cutting tools do not wobble or cause vibration.
- Use the bit and speed recommended of the job and work piece material.
- When drilling wood or metal, raise the drill bit frequently to clean chips from the hole.



- Prior to start, center punches the areas to be drilled for an easier and less chance of slippage.

8. After work checks

- 1) Clean, inspect and place the tools back into storage positions.
- 2) Gather cleaning waste and dispose properly.
- 3) Report any damage or problems during use.
- 4) The energy sources will be blocked (lockout/tagout, SOP-010) before and during maintenance of machinery and equipment.
- 5) Upon completion of the maintenance of machinery or equipment, guards and safety devices must be replaced and in working order.

Issued	Checked	Approved
<p style="text-align: center;"><i>Signature</i></p> <p style="text-align: right;"><i>Date 27/11/2016</i></p>	<p style="text-align: center;"><i>Signature</i></p> <p style="text-align: right;"><i>Date 27/11/2016</i></p>	<p style="text-align: center;"><i>Signature</i></p> <p style="text-align: right;"><i>Date 27/11/2016</i></p>