STANDARD OPERATING PROCEDURE

Table Saw



PURPOSE / SCOPE

This procedure applies to all stationary table saws. While table saws may differ slightly, the basic information about operation and safety requirements are the same.

RESPONSIBILITIES

1. **Table Saw Operator** -- Responsible to operate the table saw in a safe manner and to ensure that other employees are not exposed to the hazards of the equipment.
2. **Supervisor** -- The immediate supervisor shall determine who is qualified to operate a table saw, and designate a competent person to provide training for the table saw. The supervisor will also deem an employee as a qualified operator when combined experience and training provides evidence that the employee can effectively and safely operate this equipment.

DEFINITIONS

1. **Cross Cut** – Cutting perpendicular of the grain on the workpiece.
2. **Kick Back** – Occurs when the workpiece binds between the saw blade and a ripping operation. It results in the workpiece being ejected from the saw and thrown back towards the operator.
3. **Point of Operation** – Area on the machine where the work is actually performed upon the material being processed.
4. **Pushstick –** A device used to guide stock into the saw.
5. **Qualified Operator** – An employee who has reviewed this SOP, has been mentored, and is deemed authorized to operate this equipment.
6. **Rip Cut** – Cutting with the grain direction of the workpiece.

SAFETY AND OPERATION

- Only qualified operators may operate this machine.
- Keep fingers and hands out of the line of fire of the blade.
- Never leave the machine running unattended.
- Avoid wearing loose clothing or jewelry and tie long hair out of the way.
- Wear appropriate gloves during set-up for the material being cut. Do not wear gloves when working near the point of operation.
- If lead, silica (from masonry products) is suspected, or chemically treated lumber is being sawed, respirators may be required. Contact EHSRM for further requirements.
- Assess the weight of the stock, and ask for help when it is heavy.
- Ensure that all guards are in place prior to operation.
- Make all adjustments with the power OFF.
- Use a push stick to guide materials through the saw.
- The stationary table saw shall be securely anchored to prevent “walking” or moving.
- Secure the work whenever possible by using a clamp or a vise.
- Verify that all employees and other tools or objects are out of the line of fire in the front, back, and sides of the machine.
- When conducting maintenance, the machine shall be isolated and locked out. The plug is the energy isolation point.
- Select the correct type of blade for the workpiece, and ensure the blade is sharp.
- Start the saw prior to feeding the stock to get it up to speed, and stop the saw before removing the workpiece.
- Always operate the saw at the correct speed for the type of material and the type of blade.
- If blade gets caught on the material, unplug/turn off the machine to remove the workpiece.
- Never reach under or around stock when sawing.

BLADE SELECTION AND SPEED

Blade selection is determined by type of material to be cut (wood, metal) and also by the density of the material. Aluminum, lead, and rubber require a blade that has larger teeth, and hard materials like steel use a blade with smaller teeth. Thick material requires larger teeth, and soft material is cut more effectively with a blade that has smaller teeth.

The blade speed is dependent on the material to be cut. Ensure that the blade has completely stopped running, and the saw blade is not engaged in the workpiece when changing blade speed.

INSTALLING OR CHANGING A BLADE

A stationary table saw is considered a permanent piece of equipment; therefore, it should be connected directly to a permanently wired outlet instead of using an extension cord. Disconnect the power from the outlet to change the saw blade and inspect the blade prior to use.

A. Unplug the table saw.

B. Ensure that the upper and lower blade guides are adjusted away from the blade.

C. Ensure the quick release tension lever is released.

D. With the blade teeth pointing downward, slide the blade through the table slot.

E. Slide the blade through the upper and lower blade guides, and mount it over the upper and lower wheels.

F. Tighten the quick release tension lever.

G. Close the wheel covers and replace the table insert and table pin.

H. Keep the upper and lower blade guides adjusted away from the blade until the blade tracking and tension has been adjusted. The Mentor is responsible to train how to adjust the blade tracking, and table/fence adjustment.

2. **Blade Breakage**

Blade breakage can be a result of peculiar stresses placed on the blade, or poor judgment on the part of the operator. Some of the causes of blade breakage include:

- Faulty alignment or adjustment of the guides
- Using a blade with an improperly finished braze or weld
- Feeding the workpiece too fast
- Tooth dullness or absence of sufficient set
- Excessive or too little blade tension
- Not releasing blade tension after use

LOCKOUT/TAGOUT

No special lockout devices are needed to work on this machine as the plug will be in full view of the operator at all times when servicing. Unplug the machine while servicing.

PPE REQUIREMENTS

- Safety glasses, and potentially a face shield
- Hearing protection
- Gloves to handle work piece only (do not glove a hand where it can be pulled in to the equipment)
- Sturdy leather boots
- Potentially respirator (contact EHSRM)

REFERENCES

- National Center for Construction Education and Research (NCCER). Tools of the Trade, Module 04102-01. Columbus, OH: 2001.
- United States. Code of Federal Regulations. *General Industry Standards-Machinery and Machine Guarding.* Washington DC: 2004. [29 CFR 1910 Subpart O)].
- Stanwich Industries. Table saw Operating Instructions. McMinnville, TN: May, 1979.

Document Tracking	Revision Number	Revision Date	Effective Date	Competency
SOP – Table saw #1	0		05/15/2024	

COMPETENCY

1. User's department: _____

2. User's job title: _____

3. Indicate the type of equipment qualified to operate and the competencies completed:

Stationary table saw

- ❑ Set up the work area
- ❑ List the safety requirements when using the Table Saw
- ❑ List the PPE required for this equipment
- ❑ Demonstrate how to change a blade
- ❑ Demonstrate how to adjust the table, guides, and guide post
- ❑ Identify guards
- ❑ Identify safety precautions when the table saw is in operation
- ❑ Use the equipment

EMPLOYEE ACKNOWLEDGEMENT FORM – Table Saw

I have read and understand the Table Saw SOP. I am knowledgeable with regards to inspection, use, and safe procedures with a table saw, and have completed the competency evaluation. I will follow this procedure throughout my employment with UAF. I also understand that at any time my supervisor may determine that I require additional training due to failure to follow this established procedure.

_____	_____	_____
Employee Print Name	**Employee Sign Name**	**Date**
_____	_____	_____
Trainer Print Name	**Trainer Sign Name**	**Date**

Place this document in the employee's file.