

## Miter/Chop Saw

### •Review dress code

- Remind students that long hair must be tied back, loose clothing and/or jewelry must be removed

### •Intro

#### -Discuss what this saw does/Strengths

- Accurate CROSS cuts
- Accurate angled or MITERED cuts
- Discuss what a compound cut is
- Discuss how to divide the desired overall angle in half ie: to make a 90 degree corner set the saw to 45 degrees
- Make sure dust collection is on and the gate is open

### •Show controls and Adjustments

- Show how to “unlock” the saw
- Demonstrate how to change the angle and show the gauge/pointer
- Demonstrate how to tilt the saw to create a compound cut
- Show the ON/Off trigger, discuss always starting the saw at the top
- Discuss and show the maximum material dimensions

### •Discuss and Demonstrate Importance of:

- Body Position
- Hand/Arm position
  - Remind students to NEVER cross arms
  - Show the “No Hands” zone
- Material should always be supported by the fence and held firmly to the table
- Show when possible an angle/miter cut should go “away” from the user

### •Briefly Discuss Hazards (No Horror Stories)

- User condition ie; lack of sleep, in a hurry etc.
- Never hold small pieces
- Remind students that very small pieces can be cut from a larger/safe to hold piece
- No freehand angles, always keep the material flat against the fence and table
- Round stock can be cut but tends to spin, maintain a firm grip and cut slow

### •Making Cuts

- Demonstrate and discuss layout and marking with a square and tape measure, emphasize marking the waste side of the cut line with an x, the saw kerf does not need to be drawn on the material
- Show how to lower the saw (without finger on the trigger) to align the blade to the mark, using the x as a reference to determine if the left or right side of the blade needs to be lined up with the mark

- Make a straight/square cut
  - Start the saw at the top of the stroke, feed to the bottom of the stroke and release the trigger waiting for blade to stop before raising the saw
  - Emphasize feed rate and “listening” to the tool, also letting the blade come to a complete stop before raising the saw
- Angle the saw and demonstrate a miter cut
- Discuss and demonstrate angling saw AWAY from the hand holding the material whenever possible
- Discuss and demonstrate stop block and positive physical stops, remind students that dust can build up in front of the stop causing errors, also the block can move if bumped to hard even when clamped

•Field questions then have students cut

- Have each student make **both a 90 degree cross cut and a miter cut**
- Make sure blade comes to a complete stop after each cut
- Have students return the saw to 90 degrees and lock the saw when complete

#### •Sliding Compound Saw

- Discuss differences
  - Larger Blade
  - Sliding feature to allow for wider materials
  - Explain the DOWN and OUT cutting motion for the saw
  - Briefly discuss danger/hazards
    - Demonstrate blade “jump/torque” at start-up
    - Blade “running” or coming toward user while in the outward motion
  - Demonstrate a 90 degree cross cut
  - Have students make a cut, **set up a stop block at around an inch to help conserve material**
  - While students are at the saw show them the on/off buttons for the dust collectors

#### •Remind students to clean-up after themselves immediately after using a tool or area.

- Never leave scraps behind the saw
- Show them where the brooms, vacuum, etc. are located and what our expectations for clean-up are.
- Remind them particle board, OSB, MDF, Melamine, and finished material goes in the **TRASH**. Wood and Plywood can be recycled.
- Have the students clean up

Ask students the following questions:

- What is the Miter/Chop Saw designed to do?

**Accurately cross cut materials at various angles**

- If you need to cut small pieces on the Miter/Chop Saw you should **Make sure you are cutting them from the end of a long piece**

-When making cross cuts on the Sliding Compound Miter Saw the saw action should be:

**Down and out**

Remind students **NEVER** put their hands inside the “No Hands Zone”, if the piece is too small to be held **DON'T** use the saw

**REMEMBER-** We are here to help. **If you have any questions, ask!**