Edinburgh Hacklab Training Syllabus: Table Saw

1 Safety

1.1 PPE

- · Safety glasses required
- Hearing protection required
- Respirator recommended

1.2 Entanglement risks

- No loose clothing or cables
- No gloves
- Long hair must be tied back
- · No jewellery/watches

1.3 Kickback risks

- Ensure riving knife is properly installed:
 - The radial clearance between saw blade and riving knife may not exceed 5 mm (max.).
 - The thickness of the riving knife must be smaller than the cutting width and greater than the blade thickness.
 - The riving knife must always be in a line to the saw blade.
- Stand with torso away from the cut line.
- Ensure the full length of the workpiece is in contact with the parallel guide while cutting.
- · Always use an angle guide when cross-cutting.
- Never back stock off blade.
- If the saw blade should become jammed, switch the machine off and hold the workpiece until the saw blade comes to a complete stop. To prevent kickback, the workpiece may not be moved until after the machine has come to a complete stop.

2 Startup checks

- 2.1 Surrounding area cleared of obstacles
- 2.2 Other workshop users alerted to keep clear, and to use appropriate PPE
- 2.3 Table clear of objects
- 2.4 The insert-plate in place and undamaged

2.5 Blade, blade guard, and riving knife set up correctly

- Power off when performing checks
- Aligned correctly
- All adjustments tightened

- Pay particular attention to the position of the locking lever for locking the saw blade and for adjusting the bevel angle.
- Always adjust the blade guard in such a manner that it faces loosely against the workpiece when sawing.
- · Blade guard does not interfere with the workpiece
- · No damage to blade
- Blade can be spun freely
- Adjust blade height by turning the crank until upper saw teeth are 5mm above the workpiece.

2.6 Workpiece free of any metals (nails, screws), glass etc.

2.7 Workpiece has a straight factory edge aligned to the parallel guide

• Do not saw warped/bent workpieces.

2.8 Wide workpieces must be underlaid or supported at their free end.

• Check manual on how to pull out the saw-table extension.

2.9 For very long pieces, use an extra support roller or someone to bear the stock.

• The "off bearer" is only there to support stock and should not pull stock through stock.

3 Usage

3.1 Starting of the machine

- Turn on the extractor wall fan.
- Turn on the dust extraction unit under the table saw.
- Tap your tag on the access control
- Open the yellow switch cover, and press the green button.

3.2 Stopping of the machine

• Open the switch cover, and press the red button.

3.3 Sawing straight cuts

- Set the parallel guide at desired distance and lock it in place.
- Use push sticks and auxiliary guide when cutting narrow pieces (10cm rule of thumb)
 - Have push sticks ready before starting the cut.
 - Check manual on how to install auxiliary guide.
- · Saw by feeding the workpiece at a uniform rate
- Ensure that the flat edge of the workpiece must always be touching the parallel guide.
- Push stock completely past the back side of the blade.

3.4 Sawing Mitre Angles

- Adjust the requested mitre angle
- Place the workpiece against profile rail. * The profile may not be on the cutting line. If so, loosen knurled nut and move the profile.
- With one hand, press the workpiece against the profile rail and with the other hand, slowly move the angle stop via locking knob toward the front in guide groove.

3.5 General

- Never saw freehand
- · Never clear small pieces while blade is moving
- Never adjust blade height, angle, or any other parts while blade is moving
- Keep hands away from blade (never reach across the blade, or over-reach)
- Use of push sticks is a must if hand will come closer than 10 cm to the blade.
- To ensure the workpiece is in contact with the parallel guide, the force exerted on the workpiece should be at a slight angle toward the fence (as opposed to purely parallel to the blade). * One tip is to focus where the workpiece is with respect to the parallel guide, rather than the blade (while keeping awareness of the blade!).

3.6 Intended Use (a.k.a Materials)

- The power tool is intended as a stationary machine for making straight lengthways and crossways cuts in hard and softwood, as well as in particle and fibre board.
- In this, mitre angles from -60° to $+60^{\circ}$ as well as bevel angles from -2° to 47° are possible.
- When using appropriate saw blades, sawing aluminium profiles and plastic is also possible.
- Maximum Workpiece Dimensions: 79mm at 0° bevel angle 56mm at 45° bevel angle

3.7 Post Cutting

- Once you have finished your cut, turn off the table saw, log out of the access control, and clean up the table saw and the surrounding area.
- Place the angle guide back in its place.
- Place the push-sticks back in their place.
- Fully lower the blade
- Turn off the dust extraction unit.

4 Maintenance

4.1 General

- If there are any issues, please contact a maintainer listed on the table saw wiki page. Example issues: damaged blade, terrible noises from moving parts.
- Do not attempt to change the blade without a maintainer present, and notify the other members if the blade is intended for specific materials only.