



## 1 Safety

### 1.1 PPE

- Safety glasses required
- Hearing protection recommended

### 1.2 Entanglement risks

- No loose clothing or cables
- No gloves
- Long hair must be tied back

## 2 Startup checks

### 2.1 Surrounding area cleared of obstacles

### 2.2 Other workshop users alerted to keep clear

### 2.3 Table clear of objects

### 2.4 Blade set up correctly

- Aligned correctly
- All adjustments tightened
- Guard for blade locked into place, set as low as possible
- No damage to blade
- Machine can manually be spun freely
  - Power off the machine before checking this
  - Open the front door, spin the blade by hand to check it runs freely
  - Blade must stay aligned when spinning manually

### 2.5 Speed

- The bandsaw can run at different speeds for different materials
- The speed is changed by adjusting the belt and gearbox position in the rear compartment
- Check the speed and belt/gearbox positions and consult the wiki page for a table of settings for different materials
- Close both doors after changing

## 3 Usage

### 3.1 Starting of the machine

- Tap your tag on the access control
- Release the E-Stop
- Press the green button on the contactor
  - Wait for the VFD to start (a while)
- Press the green button on the bandsaw to start the motor

### 3.2 Stopping of the machine

- Both the foot switch and the red button on the bandsaw will cause a VFD stop, and should be used in most situations
- The E-stop should be pressed in an emergency, this will cut power to the bandsaw

### 3.3 General

- Keep your hands a reasonable distance away from the blade i.e. at least 3-4cm
- Particular care must be taken around the gap where the blade disappears
- Hold workpiece tight, pressing the workpiece firmly into the table, push at a steady rate through the blade
- Only work on pieces you can safely hold by yourself. If it's too large, ask for another member's help to hold the material
- Keep your hands out of the cutline at all times
- Keep work in contact with table or stops. Do not freehand above the surface. Elevated parts will be grabbed by the blade
- Make sure the workpiece is supported e.g. pieces with overhangs or circular pieces
- Don't force the blade to cut a small radius curve. If this is required make it with multiple small cuts
- Never back out of a radius cut while the machine is running
- Do not leave the machine running unattended
- Have a wide/stable stance
- If the workpiece gets stuck in the blade, stop the machine and gently remove the piece

### 3.4 Materials

- Acceptable materials include:
  - Wood
  - Aluminium
  - Mild steel
  - Copper
  - Plastic
- Unacceptable materials include:
  - Stainless steel
  - Hardened steel
- Consult the complete list of materials on the wiki page and ask a maintainer if you are unsure of suitability

### **3.5 Post Cutting**

- Once you have finished your cut, turn off the bandsaw, log out of the access control, and clean up the table

## **4 Maintenance**

### **4.1 General**

- If there are any issues, please contact a maintainer listed on the bandsaw wiki page. Example issues: damaged blade, blade out of alignment or terrible noises from moving parts

## **5 Other**

- The table can tilt but as we do not yet have suitable stops, this table shall stay flat