A red sign with white text

Description automatically generated with medium confidence**MINI CNC CHECKLIST**

**Before Use:**

* **Power on CNC machine** from power socket switch
* **Power on LinuxCNC PC** using front power button on the PC case
* **Login** to Linux with username: *cnc* password: *cnc*
* Start LinuxCNC from desktop shortcut ‘**CPM2018’**
* Touch your keyfob to enable **tool control** (right side of CNC machine)
* Release the **Emergency-Stop(E-Stop) switch** on the front panel of the machine (turn clockwise)
* **Power on the machine** with the green POWER button next to the E-Stop switch
* **Copy your GCode** onto the Linux PC (Desktop/User Files) from a USB stick
* **Open your GCode** from within LinuxCNC
* **Connect** to the CNC by clicking this soft power button: (do so every time you open the lid)
* **Home** All the axes
* Insert **cutting tool** and appropriate collet for the desired operation and finger-tighten
* Check the spindle speed on the orange speed dial (RPM depends on the tool setting)
* Firmly **mount your stock** to the mill bed using appropriate work holding devices
* **Touch off** on X, Y, Z
* Move the tool to opposite corners and **make sure all operations fall within your stock**
* **Verify the z depth isn’t thicker than your board by checking the negative z distance**
* Turn vacuum (**Henry** Hoover) ON, **after verifying that the hose is attached**

**During Use**

* **Run** your GCode and monitor closely (be ready to hit the E-Stop at all times)
* For multiple-bit operations, do not turn the machine off or E-Stop it, just wait for the cycle to conclude on your current cut, and then:
  + Raise the spindle (not manually, use the computer!)
  + Open the door
  + Put a piece of waste wood down to protect your piece
  + Change the tool
  + Ensure your stock is still secure and the clamps are still tight
  + Load your *next* GCode file (from within LinuxCNC)
  + Touch off the Z axis *only***!**
  + Press the start button and run the next job

**After Use**

* Turn vacuum (**Henry** Hoover) OFF
* Raise the **spindle**
* Press in the **E-Stop** switch
* **Remove cutting tool and collet** and place back in their appropriate locations
* **Close LinuxCNC** application
* Safely **shutdown** the PC by clicking on the top right hand where it says “cnc” and finding “shutdown”
* **Clean the machine carefully** in this order: remove chips, clean viewing windows with provided cloth (to prevent scratching), and then clean the machine from top to bottom. The axes can be moved by hand when the machine is powered off to get underneath the axes
* Touch your **keyfob** on the tool control box to end your CNC session
* **Power off the Isel CNC** from the power socket switch
* Ensure the **cover** to the machine is left closed