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| ***Portable_Plant_SOP***  **HOT WIRE POKER (pyrograph)** | |
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| **DO NOT** use this machine unless a teacher has instructed you in its safe use and operation and has given permission | |
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| Approved safety glasses must be worn at all times in work areas. | **Prohibition circle**Prohibition circleA suitable P2 or P3 filter mask *must* be worn whenever potentially toxic smoke and fumes are created. |
| Foot Protection circleAppropriate protective footwear with substantial uppers must be worn. | A suitable protective workshop apron and leather gloves are advisable. |

### **Plastics and MDF smoke fumes can be toxic**

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### **PRE-OPERATIONAL SAFETY CHECKS**

1. **Examine the power lead and machine for obvious damage.**
2. **Check condition of the burning tip. Replace if damaged.**
3. **Ensure that the cord does not create a slip/trip hazard.**
4. **Ensure that the workplace is well ventilated.**
5. **Avoid burning on acrylics, painted and pigmented surfaces, or toxic timbers such as Western Red Cedar.**
6. **Never burn on MDF. These fumes are VERY toxic.**
7. **Children often show curiosity towards a hot, burning type apparatus. Never leave the machine unattended when turned on or still hot. Leave unplugged when not in use.**

#### OPERATIONAL SAFETY CHECKS

1. **Do not plug in and turn on until the tip element has been checked, replaced and tightened.**
2. **Keep fingers clear of the hot tip element.**
3. **Always wear safety glasses. Smoke and hot embers can occur.**
4. **Many species of exotic timbers create fumes that can be toxic when burnt – always wear a suitable dust mask (minimum standard P2 – for dusts, smoke and fumes).**
5. **Avoid prolonged use. This could overheat the tip element causing it to fail or oxidise.**
6. **Do not apply excess pressure to the tip.**
7. **For the ‘hot wire’ type machines, always maintain the correct shape to the tip element. Bent or distorted wire tips are often the cause of inefficient operation.**
8. **If the element tip does not heat up efficiently, turn the machine off, repair the fault or report it to your teacher.**
9. **Never leave the machine unattended when still switched ON or when switched OFF but still hot.**
10. **Turn off and wait until the tip element has completely cooled before storing the machine away correctly.**

#### HOUSEKEEPING

1. **Switch off, unplug and allow to cool down before storing.**
2. **Leave the work area in a safe, clean and tidy condition.**

## POTENTIAL HAZARDS

* + **Hot element and surfaces ◼ Burns ◼ Eye injuries**
  + **Electricity ◼ Toxic fumes ◼ Trip and slip**

**Date of last review:**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Signature:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_