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| ***Portable_Plant_SOP***  **BLOW MOULDER** | |
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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. | Wearing a suitable protective workshop apron is advised. |
| Foot Protection circleAppropriate protective footwear with substantial uppers must be worn. |  |

### **CAUTION – high air pressure and heated plastics**

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

1. **Ensure this machinery has a suitable, safe work area.**
2. **Ensure all safety guards are serviceable and in place.**
3. **Check the general condition of the blow forming table.**
4. **Ensure that all air connections are secure.**
5. **Ensure that all clamping arrangements are adequate, secure and correctly adjusted.**
6. **Use only low air pressures – 105-140 kPa.**
7. **Have your teacher check all adjustments i.e. heat settings and air pressures, before attempting to blow mould (or blow form) an article.**
8. **Ensure adequate dust and fume ventilation or extraction.**

#### OPERATIONAL SAFETY CHECKS

1. **Take particular care when blow moulding very hot thermoplastic materials. High air pressures are also used in this forming process.**
2. **Familiarise yourself with all machine operations and controls. If in doubt, ask for assistance.**
3. **Pre-heat the blow moulder to be sure the machine has reached the required temperature. Always handle heated plastic material with suitable cotton gloves.**
4. **Moulds and forming jigs must be constructed sturdily enough to withstand high heat and pressure.**
5. **Before applying the air pressure to the heated plastic material, clamp the forming ring, restraining bars and plates securely to the table.**
6. **Ensure that the air pressure is reduced to zero before releasing the clamping arrangements.**
7. **Never apply excessive air pressure to a heated plastic article as it may rupture.**
8. **Never attempt to form plastic material that has not been pre-heated to the correct forming temperature.**
9. **Do not use the compressed air to cool down an article or to clean down the work area.**

#### HOUSEKEEPING

1. **Ensure all switches, guards and surfaces are cleaned.**
2. **Leave the work area in a safe, clean and tidy condition.**

## POTENTIAL HAZARDS

* + **Hot machine parts ◼ Electricity ◼ Eye injuries**
  + **Excessive dust ◼ Pinch and squash ◼ Compressed air**

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