

5.0 DEVELOPING FORMING PROCESS PARAMETERS

1. The settings provided on the set up sheet reflect the process used at PlasticWeld Systems to produce acceptable parts. In many cases, these parameters must be changed due to local variations in the environment, electrical power and pneumatic supply conditions. Please follow the steps below to protect the forming dies from damage.
2. To establish a known starting point, make sure that all parameters on the machine are the same as the values on the set up sheet provided by PlasticWeld Systems.
3. Reduce the power level to $\frac{3}{4}$ of the original setting provided by PWS. All other settings should remain as specified by PWS.
4. Cycle the machine to produce a part and inspect the results.
5. If the part is not fully formed, go to step 6.
6. Increase the power an additional 5% and run a new trial, then inspect the part.
7. Keep repeating step 6 until a fully formed part is produced.
8. If the part sticks in the die, or has excessive flash, make sure the die is clean of all residue, reduce the power by 5%, run a new trial and inspect the results.
9. If the part still sticks in the die, or still has excessive flash, repeat step 8 until the problem is fixed.
10. In all cases, once you have produced a fully formed part, small adjustments to time, pressure and power settings may give needed improvements to fix small defects.

Part Forming Process Instructions

1. Check to make sure the chiller is full of room temperature steam distilled water. **CAUTION: You do not want condensation forming on the inside of the machine. If condensation is forming on the coils it is forming on the inside of the machine.** Turn the main power switch on the front panel of the machine clockwise. This will energize the machine, the Operator Interface will light up and the coolant system will start. The HPS- system will perform an initial system check to detect any faults. If a fault exists, the HPS-10 screen will flash which fault is occurring. If any fault indications occur, turn the machine off and on again to determine if the fault condition has cleared itself. If not, refer to the troubleshooting section for corrective action.
2. Follow the start up instructions on the Interface Screen. Check to make sure the correct Program # is selected and the process settings are correct for the parts to be run.
3. Dry cycle or cycle the machine without any tubing in the tooling by pressing the Green Start Button or Footswitch to warm up the tooling.
4. Load tubes into tooling, use a release agent on the tubes prior to loading if needed (per your company policy).
5. Cycle the machine by pushing the Start Button or Footswitch.
6. After the cycle is completed, remove the parts and load new tubes repeat process (Step#4 and 5).