



Instructions for hot manifolds

At the end of the production run, the following procedure applies for most materials, but not for temperature sensitive materials like PVC, acetal, ABS, etc. (See reverse side).

1. **Raise** mould heat and probe heats to the maximum allowable temperature for the mould. Intense heat is needed to melt the buildup of insulating polymer that has accumulated in the probe wells. Cap any barrel vents. While the mould is heating, continue with the following steps.
2. **Empty** the screw and barrel. Raise nozzle and front zone heats about 10°C. Remove the hopper or feed system and make sure all production material is cleaned out of the feed area.
3. **Shoot** 5 to 10 parts using natural PE. This will remove most of the residual production material from the system.
4. **Empty** the screw and barrel.
5. **Retract** the screw and barrel from the mould. This is very important -- the screw and barrel must be pre-purged before the mould can be cleaned.
6. **Pre-purge** the screw and barrel with Supernova, using steps 3 through 5 of the Basic Instructions. Then move the screw and barrel forward to the mould once again. Verify that mould temperatures have lined out at their maximum.
7. **Load** the machine with Supernova. Mould shots with Supernova until all parts contain fresh Supernova material (4 to 6 shots ought to suffice).
8. **Soak** the mould for 10 minutes with Supernova in all cavities. The mould should be full and clamped, the screw stopped, and the nozzle forward against the mould. Keep mould temperatures at maximum.
9. **Empty** the machine by making shots. Check the appearance of the parts for the presence of contamination that would indicate another purge is needed.
10. **Repeat** steps 7 through 9 a second time (in rare cases a third time may be needed).
11. **Reduce** nozzle and front zone heats to operating temperature; clean feed area of all residual Supernova. Uncap barrel vents. These actions can be started during the final mould heat soak but keep mould heats up.
12. **Run** parts with the next production material. When new parts are clear of Supernova, reset mould heats to operating temperature and restore cooling water flow.



Instructions for temperature sensitive materials in hot manifolds

For temperature sensitive materials such as PVC, acetal (Delrin, Celcon, etc.), ABS, TPR's, etc. in hot manifold systems, proceed as follows:

1. Cap any barrel vents and perform steps 2 through 6 without raising mould heats or cutting water flow. Raise nozzle and front zone heats only about 5°C (if heavy barrel contamination remains, a second pre-purge (step 6) may be run at higher temperature, but operating temperature should be restored before proceeding).
2. Shut off the flow of mould cooling water. Perform steps 7 through 9 with the mould heats set at operating temperature. This will remove the temperature sensitive material from the system.
3. **Raise** mould heat and probe heats to the maximum allowable temperature for the mould. Intense heat is needed to melt the buildup of insulating polymer that has accumulated in the probe wells.
4. **Repeat** steps 7 through 11 after mould temperatures line out at maximum.
5. **Reset** temperature controllers to operating temperature. When mould temperatures are down to the safe processing range of the production material, perform step 12.