

PURGING PROCEDURE 101

Injection Molding: Hot Runner System with Valve Gates Open Mold



Note:

Use this procedure when:

1. Purgex is being used on a regular basis.
2. The problem area is believed to be in the mold or manifold.

Preparation Before Purging

(When 5 minutes remain in production run.)

1. Turn off colorant.
2. Maintain temperature settings.
3. Empty resin from the machine.
4. Clean hopper and colorant entry point.
5. Retract carriage.
6. Clean nozzle and sprue bushing.
7. Load PURGEX into hopper.



Note:

When purging the barrel, screw, and hot runner system for the first time with PURGEX, use 2-1/2 times the injection capacity*. When routinely purging the barrel, screw, and hot runner system with PURGEX, use 2 times the injection capacity.






* **Injection Capacity** – If the total volume (weight) of the barrel of the injection molding machine could be molded into a part, it would be defined as the injection capacity.

Purging The Machine

1. Fill barrel with PURGEX (begin timing).
2. Manually make one shot at 25% of injection capacity.
3. Soak 5 minutes.
4. Increase the manifold and tip temperature by 10°C (50°F) for enhanced flow distribution.
5. Move carriage forward and seat nozzle into sprue bushing.

6. Feed Purgex into open mold with all valve gates open.
7. Purge hot runner system, purging each gate thoroughly, ***including any unused gates.***
8. Turn off all gates that appear to be clean and focus on purging any gate where contamination or color is still observed.
9. Turn on next production resin and colorant.
10. Continue purging gates with remaining PURGEX, followed with the next production resin to thoroughly rinse out PURGEX.
11. Ready machine for production.
12. Begin molding parts.

Comments & Recommendations

-  It is not necessary to increase the back pressure.
-  To retract the screw, lower the back pressure.
-  Highly contaminated machines or the use of liquid colorants may require additional purging.
-  To improve purging efficiency, purge with PURGEX 457 Plus or PURGEX 3057 Plus, which contain 3% glass fiber.
-  Avoid the 5 minute soak for resins processed over 316°C (600°F).

Questions? Call our Technical Support team at (888) 843-0788.