Injection Moulding Instructions Moulding through a Hot Runner (Comprehensive (M) Version)

Grade Selection

Product	Materials	Instructions
PCP 100	- Polyolefins, TPU's*, TPE's*	- Basic
	- Polyolefins, TPU's*, TPE's*	- Comprehensive (M)
	- POM, PA's*, PBT*, PPO*	- Comprehensive (O)
	- Polyolefins, TPU's*, TPE's*, POM*, PA's*	- Decarbonisation
PCP HMEX	- Antistatic (ESD) Polyolefins, PE100, PE80	- Comprehensive (M)
	- POM, PA's*, low mfi Polyolefins	- Comprehensive (O)
	- Polyolefins, POM, PA's*, PBT*, PPO*	- Decarbonisation
PCP CFT	- ABS, SAN, Polyolefins	- Basic
	- ABS, SAN, Polyolefins	- Comprehensive (M)
PCP CHMEX	- HIPS, GPPS	- Basic
	- HIPS, GPPS	- Comprehensive (M)

***May require re-flushing with commodity polymer due to hydrolysis nature of next material**

Aquapurge products are not intended to be incorporated in finished plastic goods. In the view of the many factors that may affect processing and application, users should make their own independent determination that the products are suitable for their intended use and can be used safely and legally.

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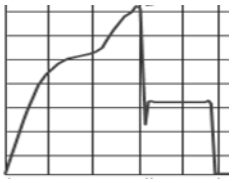
Colour Change Instructions - Moulding through a Hot Runner

Information Gathering (A - B)

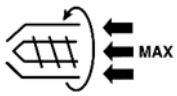


A) Take note of current Peak Injection Pressure (**PIP**)

B) Increase machine **PIP** Limit to maximum

Cleaning Screw and Barrel (C - F)

C) Empty Machine of last material



D) Increase Back Pressure to Maximum and purge until white

E) Dose 1 kg per 100 Tonne of Machine
(i.e. 500 Tonne = 5 kg)

F) Once clear, decrease back pressure to running conditions, stop feeding **PCP** and screw back and inject until completely empty.

STARVE-FEED with the next production material 5 times and empty the screw completely **(fill the hopper throat and empty the hopper throat until the screw is visible, 5 times)** Continue with the next material until all evidence of the PCP is clear from the purge

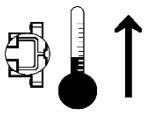
(If cleaning the Hot Runner, Steps G to K then do not carry out the STARVE-FEED until Step L)

Cleaning Hot Runner (G - K)

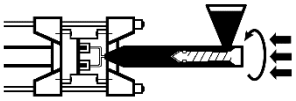
G) Determine if your hot runner is a valve gate or open gate type.

- **Valve Gate:** mix **PCP** at 40% with your next material at 60%
- **Open Gate:** mix the **PCP** between 10% and 40% with the next material, so that when moulding, PIP increases by 30%
- **Sequential Gate:** as per Valve Gate but also set all gates to open all at once

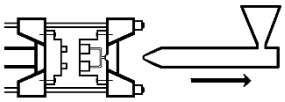
H) Add **PCP** mix to the clean hopper



I) If standard practise, you may enhance cleaning performance by increasing Tip and Manifold heats by up to 50ºC **(max 280ºC)**



J) Continue moulding until all colour has been removed



K) Once clear stop feeding PCP. Retract the injection unit and screw back and inject until completely empty of **PCP**

Clearing Screw & Barrel (L) STARVE-FEED

L) **STARVE-FEED** with the next production material 5 times and empty the screw completely **(fill the hopper throat and empty the hopper throat until the screw is visible, 5 times)** Continue with the next production material until all evidence of the **PCP** is clear from the purge

Clearing Hot Runner (M)

M) Start moulding with next production material, ensuring all **PCP** is removed from the Hot Runner **BEFORE** reducing Tip and Manifold temperatures back to processing settings or splitting tool for tip (cap) removal.

Safety Precautions

Do not use PCP for material with processing temperatures below 160ºC

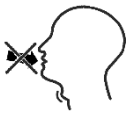
Do not use PCP for material with processing temperatures above 290ºC

PPE

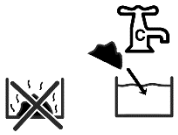
Wear suitable protective clothing when cleaning down equipment, using, handling or viewing the hot or cold **PCP**

If contact with skin occurs, wash with cool water

In case of eye contact, irrigate with plenty of cool water



Do not swallow product



In situations of excessive shear heat place purgings in cool water to eliminate fumes