



Document Process Data for Injection Moulding

Description rPP (unfilled recycled polypropylene)

Application Injection Moulding

Structure		Semi-crystalline
General Properties		Hard, good resilience. Low hygroscopicity and good thermal stability.
Barrel Temperature		
	Feed Zone	30 – 50 °C
	Zone 1	170 – 190 °C
	Zone 2	180 – 200 °C
	Zone 3	190 – 220 °C
	Zone 4	200 – 220 °C
	Zone 5	200 – 220 °C
	Nozzle	200 – 220 °C
Melt temperature		
Melt temperature		200 – 220 °C
Mould temperature		
Mould temperature		20 – 40 °C
Post-pressure		
Post-pressure		30 – 60% of injection pressure
Counterpressure		
Counterpressure		50 – 150 bar
Injection speed		
Injection speed		Medium
Screw speed		
Screw speed		< 150 mm/s
Metering		
Metering		2.5 – 4.0 diameters
Cushion		
Cushion		2 – 8 mm, depending on metering and screw diameter
Drying		
Drying		2 – 4 hours at 80 °C (suggested)
Recycle		
Recycle		100% of re-ground material
Shrinkage		
Shrinkage		1.0 – 2.0%, complete after 40 hours.
Barrel equipment		
Barrel equipment		Standard screw, non-return valve, free-flow nozzle.
Quenching		
Quenching		Suggested barrel volume/shot ratio: 1.5 – 3. Excessive residence time inside the barrel should be avoided, to decrease material degradation and odor.
Other recommendations		
Other recommendations		Type of injection: not suitable for capillary injection; injection gate suggested to be as large as possible.

Group Headquarter:

Viale dell'Artigianato, 42
35013 Cittadella (PD) – Italy
Tel. +39 049 9441111 – Fax +39 049 9441112