



Document Process Data for Injection Moulding
Description PC
Application Injection Moulding

Structure	Amorphous
Density	1.17 g/cm ³ (unfilled)
General Properties	Hard, high resilience, transparent. High thermal and dimensional stability.
Barell Temperature	(decrease 15°C for flame retardant grades)
	Feed Zone 70 – 90 °C
	Zone 1 230 – 270 °C
	Zone 2 260 – 300 °C
	Zone 3 290 – 310 °C
	Zone 4 290 – 310 °C
	Zone 5 290 – 310 °C
	Nozzle 290 – 310 °C
Melt temperature	280 – 310 °C
Mould temperature	60 – 110 °C
Injection pressure	1300 – 1800 bar
Post-pressure	Between 40 and 60% of injection pressure, low post-pressure time
Counterpressure	100 – 150 bar
Injection speed	High
Screw speed	Equal to peripheric speed of 0.6 m/s
Metering	0.5 – 3.5 diameters
Cushion	2 – 6 mm, depends on metering and screw diameter
Drying	Dehumidification for 3 hours at 120°C
Recycle	10% of regrinded material. This percentage decreases for technical and aesthetic parts.
Shrinkage	0.5 – 0.8% (for unfilled PC)
Barrel equipment	Three-sections screw, non-return valve, free-flow nozzle
Quenching	Turn off barrel heating and purge with PEHD down to 200°C. Purge recommended after flame retardant processing.