



Document Process Data for Injection Moulding
Description POM
Application Injection Moulding

Structure	Semicrystalline
Density	1.41 g/cm ³ (unfilled)
General Properties	Hard, stiff, high thermal stability, antifriction and abrasion resistant. High gloss.
Barell Temperature	(decrease 15°C for flame retardant grades)
	Feed Zone 30 – 70 °C
	Zone 1 160 – 190 °C
	Zone 2 180 – 200 °C
	Zone 3 180 – 210 °C
	Zone 4 180 – 210 °C
	Zone 5 180 – 210 °C
	Nozzle 180 – 210 °C
Melt temperature	180 – 210 °C
Mould temperature	70 – 100 °C
Injection pressure	800 – 1200 bar
Post-pressure	Between 30 and 60% of injection pressure, high post-pressure time
Counterpressure	50 – 150 bar
Injection speed	Medium
Screw speed	Equal to peripheric speed of 0.4 m/s
Metering	0.5 – 4 diameters
Cushion	2 – 5 mm, depends on metering and screw diameter
Drying	3-4 hours at 80°C
Recycle	Maximum 20% of regrinded material. This percentage decreases for technical and aesthetic parts.
Shrinkage	1.7 – 2.2% (for unfilled product)
Barrel equipment	Standard screw, non-return valve, free-flow nozzle
Quenching	Purge with PP or PEHD. Do not leave POM inside the barrel when the moulding machine is turned off.