

PROCESSING INSTRUCTIONS FOR INJECTION MOULDING

- predrying sufficiently at 70 – 80 °C (4-8 h), residual moisture max. 0,2 %
- heating zones of 200 °C decreasing to 170 °C
- mass temperature short-term peak of 210 °C
- tool temperature 20 – 50 °C
- if processing thin-walled moulding parts with long flow paths increase temperature step by step until moulding part will be filled up completely
- friction heat and shearing heat should be avoided
- ensure excellent ventilation of the tool
- low holding pressure, approx. 20 – 30% of injection pressure
- low impact to avoid shearing
- Lifting cylinder unit to avoid a cold slug or nozzle freezing
- optimal mould gating will be achieved with tunnel gate
- Exposure time in cylinder or hot runner max. 30 min. to avoid thermal damage of the material

Parameter	Machine setting	Potential disturbance
Predrying	4 h at 80°C residual moisture < 0,2 %	moisture streaks, silver streaks, diesel effect
Tool temperature	20-50°C	moulded part may not completely infilled, solidification of melt flow front, distorsion
Cylinder temperature	155-195°C	thermal damaging, color change
Impact pressure	low	shearing strain
Post pressure	20-30% of injection pressure	shrink marks, moulded part may not get infilled completely
Cavity ventilation	essential	diesel effect
Dosing speed	low - medium	high dosing speed may cause spotted moulded parts, shearing strain
Cylinder nozzle	lifting after dosing	cold slug, nozzle freezing
Exposure time at cylinder/hot runner	max.30 min.	screw may be pushed back from emerging gas
Colour batch	use dosing unit	defective shade of colour, spotted

The values and processing notes featured here are intended solely as a guide. Users must carry out their own checks and make adjustments according to the application.