

TROUBLESHOOTING GUIDELINES FOR POLYPROPYLENE

<u>Problem</u>	<u>Possible Causes</u>	<u>Possible Solution</u>
Pinholes	Not cured long enough Slow heating Heat sinks on mold	Increase internal air temperature IAT by increasing oven temperature – remove sinks
Narrow sections not filled	IAT too low Limited powder flow due to rotation ratio or poor design	Increase oven temperature. Change ratio – use non integer Redesign mold.
Flashing (blow holes)	Contamination in parting line Unevenly clamped mold Poor venting	Ensure good cleaning practices. Check clamping mechanism. Clean vent, ensure size is OK. Use “Smart/Supa” vents
Odor, shiny yellowish internal surface	Over cooked	Reduce IAT and / or cycle time
Parts stick in mold	No taper on deep drawer sections Mold damage or poor finish	Modify mold Redesign the part Inspect mold / repair
Part releases from mold wall	Mold release used	Do not use mold release Clean mold
Poor impact properties	Undercure – small voids are present in wall sections Overcure – internal surface is shiny	Cook to a higher PIAT Cook to a lower PIAT
Wall thickness variation	Rotation not optimum Variable heating of the mold walls	Alter rotation ratio – use non-integer ratio Check for thickness variation of the mold wall. Check for shielding effects (heat sinks)
Warpage	Uneven cooling due to large thickness variations	Alter rotation ratio. Review design. Ensure mold surface is free from mold release