

Processing Quality Checklist

	RAPID RESPONSE							SLOWER RESPONSE				Possible Causes and/or Solutions
	Back Pressure	Boost Pressure	Injection Rate	Mould Open Speed	Packing Pressure	Screw Decompression	Screw Forward Time	Cycle Time	Melt Temperature	Mould Temperature	Nozzle Temperature	
▲ Increase ▼ Decrease												
Bubbles/Voids		▲			▲	▼	▲		▼	▲		Improve venting, Inc. gate size, Min. thick sections
Burn Marks		▼	▼				▼		▼			Improve venting, Relocate gate
Discoloration	▼		▼					▼	▼		▼	Purge barrel/Clean screw/Barrel/Nozzle
Distortion Upon Ejecton				▼	▼							Check mould surface for smooth release
Erratic Screw Retraction	▲								▲			Check for screw wear
Flash	▼	▼	▼		▼				▼	▼		Mould needs adjustment/Clamp tonnage too low
Flow Lines			▼						▲	▲		Increase gate size, Check venting
KO Pin Penetration				▼	▼			▲				Poor mould cooling
Lamination		▲	▲		▲				▲	▲		Contaminated material, Increase gate size
Nozzle Drool	▼					▲			▼		▼	Use reverse taper nozzle
Part Sticking in Mould		▼	▼		▼		▼	▲	▼	▼	▲	Check for damaged mould surfaces
Poor Weld Lines		▲▼	▼		▲				▲	▲		Improve venting, Relocate gate, Clean vents
Short Shots		▲	▲		▲		▲		▲	▲		Increase gate size, Increase shot size
Shot to Shot Variation			▲		▲		▲					Non-return valve leakage
Sink marks		▲			▲		▲		▲▼			Increase gate size
Splay marks			▼		▲	▼			▼	▲	▼	Wet material
Sprue Sticking					▼		▼				▲	Damaged sprue bushing, Increase taper
Surface Blemish		▲	▲		▲				▲	▲		Wet material
Unmelted Pellets	▲							▲	▲			Check heater bands
Warpage			▲▼		▲		▼	▲	▲▼	▼		Check cooling line location
White Spots	▼	▲	▼			▼				▲		Wet material