

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