Processing Setup Sheet for Injection Molding Process

Injection Molding Parameter	Units	Typical Setting
Melt Temperature	°F	450 - 460
Nozzle	°F	440 - 450
Adapter	°F	450 - 460
Front	°F	450 - 470
Middle	°F	440 - 460
Rear	°F	430 - 450
Hot Runner/Manifold Temperature	°F	380-420
First or Boost Stage Injection:		
Time	sec	5-10 (less for smaller parts)
Pressure	psi	1,200-2,000 (max)
Fill Speed:		
First 10% of Shot	in/sec	1.5
Next 70% of Shot	in/sec	2.3
Last 20% of Shot	in/sec	1.2
Packing Stage Time	sec	4-8
Second or Hold Stage Injection:		
Time (with a packing stage)	sec	6-11
Time (without a packing stage)	sec	9-15
Pressure	psi	60% of max. inj. Pressure
Cushion	in	0.25 – 0.50 (dependent on shot size)
Screw Speed	rpm	60-100
Back Pressure	psi	50-200
Mold Temperature	°F	70-120 (actual surface pyrometer reading)
Clamp Pressure	tons/in^2	2.2(a)
Drying Conditions		usually not required
Purging		Polyethylene (PE), polypropylene (PP) or standard purging compound

(a) 2.2 tons/in^2 of projected mold area. This is dependent on wall thickness, flow distance and flow direction changes.

12/15/2009 MW 001.V1