



## Processing Setup Sheet for Injection Molding Process

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

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

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