

Manufacturing Technology Selection Guide

		Subtractive		3D Printing					Tooled	
		CNC Machining	Sheet Metal	FDM Fused Deposition Modeling	HP MJF HP Multijet Fusion	SLA Stereolithography	SLS Selective Laser Sintering	Carbon DLS™ Carbon Digital Light Synthesis	DMLS Direct Metal Laser Sintering	Injection Moulding
1. Applications	Prototyping	★★	★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★
	Jigs, fixtures, & tooling	★★★★	★	★★★★	★★	★★★★	★★	★★	★★★★	-
	End-use products	★★★★	★★★★	★★	★★★★	★★	★★★★	★★★★	★★★★	★★★★
2.	Quantity range	1-10,000	1-10,000	1-1,000	1-1,000	1-100	1-1,000	1-1,000	1-100	500-250,000+
3.	Express manufacturing (days)	3	3	3	3	3	3	3	3	10-20
4. Materials	Selection of metals	★★★★	★★	-	-	-	-	-	★	-
	Selection of plastics	★★★★	-	★★	★	★★★★	★	★★	-	★★★★
5. Manufacturing considerations	Complex geometry	★★	★	★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
	Quantity discount	★★★★	★★	★	★★★★	★★	★★	★★★★	★★	★★★★
	Easily scalable	★★★★	★★	★	★★★★	★★★★	★★★★	★★★★	★★	★★★★
	Precision tolerance	★★★★	★★	★★	★★	★★★★	★★	★★★★	★★★★	★★★★
	Good for fine details	★★	★★	★	★★	★★★★	★★	★★★★	★★★★	★★★★
	Good for large parts	★★★★	★★★★	★★★★	★★	★★	★★	-	★★	★★★★

★ - Good ★★ - Better ★★★★ - Best