## Polymer 3D Printing Tech & Material



Material	Polymer Technology	Best Applications	Key Benefits
M / FFF	ASA, PLA, ABS, PETG, TPU, PC, PEEK	Prototyping, jigs & fixtures, low-volume production	Cost-effective, easy to use, wide material availability
SLA / DLP	Standard Resins, Tough & Durable Resins, Castable Resins, Dental Resins, High-Temperature Resins	High-detail prototypes, dental models, jewellery casting, functional parts	High precision, smooth surface finish, ideal for fine-detail applications
SLS	Nylon 12 (PA12), Nylon 11 (PA11), Glass-Filled Nylon, TPU, Carbon-Fibre-Filled Nylon	Functional prototypes, durable end-use parts, automotive and aerospace components	High durability, impact resistance, no support structures needed
MJF	Nylon 12 (PA12), Nylon 11 (PA11), TPU, Glass-Filled Nylon	Functional production parts, batch manufacturing, customized consumer products	High strength, fast printing speeds, excellent mechanical properties
PolyJet	Rigid Photopolymers, Flexible Photopolymers, Transparent Photopolymers, Digital Composites	Medical models, consumer electronics, multi- material parts, concept models	High-resolution, full-colour capabilities, flexible material options
Other Technologies	PVA (Polyvinyl Alcohol), HIPS (High Impact Polystyrene), PEI (Polyetherimide, e.g., ULTEM)	Support materials, high-performance applications (e.g., aerospace, electronics)	Water-soluble supports, high strength, excellent heat resistance