

Metal 3D Printing Tech & Material



Technology	Material	Best Applications	Key Benefits
Powder Bed Fusion (PBF)	Stainless Steel, Titanium Alloys, Inconel, Tool Steel, Aluminium Alloys	Aerospace, automotive, medical implants, tooling	High strength, heat resistance, durable, complex geometries
Binder Jetting	Stainless Steel (316L, 17-4PH), Tool Steel (H13), Copper	Complex parts, heat exchangers, decorative and functional metal parts	High production speed, lower material waste, good for mass production
Directed Energy Deposition (DED)	Stainless Steel, Titanium Alloys, Inconel, Tool Steel, Aluminium Alloys	Large metal structures, repair and maintenance, aerospace and defence	Ability to add material to existing parts, efficient for repairs, high strength
Metal Extrusion (BMD)	Stainless Steel (316L, 17-4PH), Tool Steel (H13), Copper	Small-to-medium production parts, tooling, medical implants	Cost-effective metal printing, complex geometries possible, high material efficiency
Cold Spray	Aluminium, Copper, Nickel Alloys, Titanium	Coatings, corrosion-resistant parts, aerospace components	High-speed material deposition, no heat distortion, repair capabilities