

Process: HP-MJF - HP Multi Jet Fusion

PA12 is an engineering-grade thermoplastic which is optimized for HP Multi Jet Fusion 3D printing. PA12 parts are nylon-like parts that have exceptional strength and are chemically resistant to oils, greases, aliphatic hydrocarbons and alkalies. PA12 parts are strong thermoplastic parts that can be used for functional prototyping and final direct manufactured parts.

MECHANICAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Tensile Strength, Max Load ⁴ - XY	ASTM D638	48 Mpa	6960 psi
Tensile Strength, Max Load ⁴ - Z	ASTM D638	48 Mpa	6960 psi
Tensile Modulus ⁴ - XY	ASTM D638	1700 Mpa	245 ksi
Elongation at Break ⁴ - XY	ASTM D638	20%	20%
Elongation at Yield ⁴ - Z	ASTM D638	15%	15%
THERMAL & GENERAL PROPERTIES	TEST METHOD	METRIC	IMPERIAL
Heat Deflection Temperature @ 0.45 MPa	ASTM D648	175 deg. C	350 deg. F
Heat Deflection Temperature @ 01.82 MPa	ASTM D648	95 deg. C	205 deg. F
Powder Melting Point (DSC)	ASTM D3418	48 Mpa	6960 psi
Particle Size	ASTM 03451	48 Mpa	6960 psi
Bulk Density of Powder	ASTM D1895	1700 Mpa	245 ksi
Density of parts	ASTM D792	1800 Mpa	245 ksi

Note: Materials specified are stocked materials, other materials may be available upon request. The information on the material properties are obtained from the material manufacturer and SICAM expressly disclaims any product warranties and cannot guarantee the accuracy of the information presented.