

3D-Printing

Technical Specifications

3D-PRINTING ■ SMALL SERIES PRODUCTION ■ RAPID PROTOTYPING
 PLASTIC AND METAL ■ ARCHITECTURAL MODELS ■ ART OBJECTS
 MOCK-UPS ■ ASSEMBLED PRODUCTS ■ FUNCTIONAL PROTOTYPES
 LOST WAX CASTING ■ SILICON PARTS ■ SPRAY-PAINT ■ MODEL SHOP



3D-Print Process	Stereolithography (SLA)		Polyjet 3D-Printing					MJF	SLS
Max. build size (mm)	750x650x550	250x250x250	490x390x200					380x284x380	200x250x330
Material	SL-E2000	SL-E3000	PJ-E2900	PJ-E2500	PJ-E2200	PJ-SH27	PJ-SH61	MJF-PA12	SLS-PA12
Key property	Versatile	High Temp	Accurate and fine details			Rubber-like	Rubber-like	Strong/durable	Strong/durable
Color	Clear	Amber translucent		White	Black	Black	Black	Grey/Black	White
Layerthickness (mm)	0,1 / 0,15	0,1 / 0,15	0,016 / 0,03		0,03	0,03	0,08	0,1	
Accuracy Min. tolerance (mm)	+/- 0,15% +/- 0,1	+/- 0,2% +/- 0,2	+/- 0,1% +/- 0,1			+/- 0,3% +/- 0,3	+/- 0,3% +/- 0,3		
Tensile Strength (MPa), ASTM D638	46-53	64-67	60	50-65	50-65	2	2	48	50 (ISO 527)
Tensile Modulus (MPa), ASTM D638	2270-2640	2800-3980	2870	2495	2192			1700	1700 (ISO 527)
Elongation at Break, ASTM D638	3-15%	4-7%	20%	20%	18%	170-220%	45-55%	20	20 (ISO 527)
Flexural Strength (MPa), ASTM D790	72-84	105-118	76	75-110	75-110				
Flexural Modulus (MPa), ASTM D790	1980-2310	2760-3400	1718	2137	2276				1500 (ISO 178)
Impact Strength (J/m), ASTM D256	40-58	22-29	20-30	20-30	20-30				5,3 J/m ² (ISO 179)
Hardness (Shore D)	80 (D)	86 (D)	83 (D)	83 (D)	83 (D)	27 (A)	61 (A)		75
Density (g/cm ³)	1,17	1,23	1,18	1,18	1,18	1,12	1,15	1,01	0,93
HDt (°C) @0,45 MPa, ASTM D648 HDt (°C) after postcure	51	65 130	48,4	47,6	47			175	86
Actual values may vary with build conditions. Please note: SLS properties according to ISO standards so not 1:1 comparable with SLA and Polyjet									

3D-Printing at RP²

Please ask for advice to make the right choice for material or 3D-Print process. If you want to receive a quotation, please send us your 3D files (e.g. STL, STEP or IGES) by e-mail: rp2@rp2.nl or upload: www.rp2.nl. If you have any questions do not hesitate to contact us!