

FabPro[™] 1000 Entry-Level Industrial 3D Printer



FabPro 1000

Build Volume (xyz)	125 x 70 x 120 mm (4.92 x 2.76 x 4.72 in)*
Pixel Pitch	65 microns (.0025 in) (390.8 effective DPI)
Wavelength	405 nm
Build Materials	FabPro Tough BLK, FabPro Proto GRY, FabPro JewelCast GRN, FabPro Elastic BLK
Operating Environment Temperature Humidity (RH)	18 - 28 °C (64-82 °F) 30 - 70 %
Electrical Input Output	100-240v, AC, 50/60Hz 24V DC, 3.75 A; with power supply
Dimensions (WxDxH) 3D Printer with packaging 3D Printer without packaging	62 x 62 x 101 cm (24.5 x 24.5 x 39.75 in) 43 x 43 x 61.2 cm (16.9 x 16.9 x 24.1 in)
Weight 3D Printer with packaging 3D Printer without packaging	55 kg (121 lbs) 37.5 kg (82.67 lbs)
3D Sprint[®] Software	Easy build job set-up, submission and job queue management; Automatic part placement and build optimization tools; Part nesting capability; part editing tools; Automatic support generation; Job statistics
Connectivity	Network ready with 10/100/1000 BaseT Ethernet interface USB (direct printing)
Client Operating Systems	Windows [®] 7, Windows 8 or Windows 8.1 (Service Pack), Windows 10 (64-bit OS supported)
Input Data File Formats Supported	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, X_T
Post-Processing	Includes part finishing tools accessory kit; requires optional 3D Systems LC-3DPrint Box UV post-curing unit or other UV-curing unit
Certifications	FCC, CE, EMC
Accessories	LC-3DPrint Box UV post-curing unit, LC-3DMixer

* Maximum part size is dependent on geometry, among other factors.

Note: Not all products and materials are available in all countries – please consult your local sales representative for availability

FabPro™ Materials

For prototyping, engineering and jewelry applications



	FabPro Tough BLK	FabPro Proto GRY	FabPro JewelCast GRN	FabPro Elastic BLK
Description	Tough production plastic	Fast, general purpose	Master patterns for gypsum investment casting	Design elastomer
Color	Black	Gray	Green	Black
Bottle Volume	1 kg	1 kg	1 kg	1 kg
Layer Thickness	0.050 mm 0.002 in	0.050 mm 0.002 in	0.030 mm 0.001 in	0.100 mm 0.004 in
Vertical Build Speed	14 mm/hr 0.55 in/hr	21 mm/hr 0.83 in/hr	5.3 mm/hr 0.21 in/hr	14 mm/hr 0.55 in/hr
Liquid Density	1.05 g/cm³	1.04 g/cm³	1.10 g/cm³	1.06 g/cm³

Cured Part Properties*		FabPro Tough BLK		FabPro Proto GRY		FabPro JewelCast GRN		FabPro Elastic BLK	
		Metric	U.S.	Metric	U.S.	Metric	U.S.	Metric	U.S.
Solid Density	ASTM D792	1.12 g/cm³	0.040 lb/in³	1.13 g/cm³	0.041 lb/in³	1.18 g/cm³	0.043 lb/in³	1.13 g/cm³	0.041 lb/in³
Tensile Strength	ASTM D638	44 MPa	6400 psi	67 MPa	9700 psi	14 MPa	2000 psi	3.9 MPa	570 psi
Tensile Modulus	ASTM D638	1860 MPa	270 ksi	2800 MPa	410 ksi	355 MPa	51.5 ksi	3.7 MPa	540 psi
Elongation at Break	ASTM D638	44 %	44 %	7 %	7 %	10 %	10 %	81 %	81 %
Flexural Modulus	ASTM D790	2020 MPa	290 ksi	2840 MPa	410 ksi	577 MPa	84 ksi		
Flexural Strength	ASTM D790	64 MPa	9300 psi	100 MPa	14500 psi	14 MPa	2030 psi		
Izod Notched Impact	ASTM D256	36 J/m	0.7 ft-lb/in	23 J/m	0.4 ft-lb/in				
Izod Unnotched Impact	ASTM D256	568 J/m	11 ft-lb/in	123 J/m	2.3 ft-lb/in				
Water Absorption (24 hours)	ASTM D570	0.3 %	0.3 %	0.25 %	0.25 %			1.30 %	1.30 %
Tg	DMA, E"	57 °C	134 °F	82 °C	180 °F	-1 °C	31 °F	-24 °C	-11 °F
Heat Deflection Temperature @0.46 MPa 66 psi @1.82 MPa 264 psi	ASTM D648	48 °C	119 °F	79 °C	175 °F				
		42 °C	107 °F	66 °C	151 °F				
CTE >Tg CTE <Tg	ASTM E831	130 ppm/°C	72 ppm/°F	107 ppm/°C	59 ppm/°F	185 ppm/°C	102 ppm/°F	226 ppm/°C	126 ppm/°F
		161 ppm/°C	89 ppm/°F	111 ppm/°C	62 ppm/°F	169 ppm/°C	94 ppm/°F		
Compression Set	ASTM D395							Not Detectable	
Tear Strength	ASTM D624							7.3 kN/m	41.7 lbf/in
Shore Hardness	ASTM D2240	79 D	79 D	83 D	83 D	68 D	68 D	65 A	65 A

* All properties measured on new material processed according to 3D Systems standard user recommendations

DISCLAIMER: It is the responsibility of each customer to determine that its use of any FabPro material is safe, lawful and technically suitable to the customer's intended applications. The values presented here are for reference only and may vary. Customers should conduct their own testing to ensure suitability for their intended application.

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