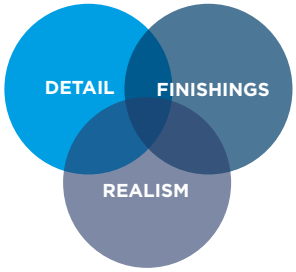
POLYJET



DETAILS MAKE PERFECTION, AND PERFECTION IS NOT A DETAIL.

PolyJet technology uses a printing process similar to that of 2D printer. However, a 3D-Polyjet printer doesn't work with ink drops but it deposits on a tray thin layers of liquid photopolymer and then it polymerizes them with UV rays.

To realize a 3D model or a prototype the printer deposits layers one by one. And as the curing process is finished, models are ready to be used, without further treatment.

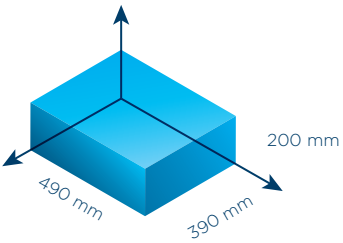
When it comes to rapid prototyping the main benefits of PolyJet technology are: quality, speed, high accuracy and a wide range of available materials.

PolyJet technology is able to combine different materials in the same printing process, to realize parts, prototypes and equipment, mixing over 360.000 colors or using realistic textures.

These very thin layers bring life to complex shapes, very fine details and smoother surfaces than those realized with other technologies.

MAX PRINT SIZE:

490 x 390 x 200 mm



BENEFITS:

- MULTI-MATERIAL
- ULTRA-REALISTIC TEXTURES
- OVER 360.000 AVAILABLE COLORS
- TRANSPARENT AND RUBBER-LIKE COMPONENTS
- AESTHETIC ASSESSMENTS

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GENERAL DATA SHEET POLYJET

		Vero Family			Simulated Polypropylene (Semi-rigid)		Rubber-like			Digital ABS	High temperature
MATERIALS		RGD720	Vero Clear RGD810	Vero PureWhite™ VeroGray RGD850 VeroBlackPlus RGD875 VeroWhitePlus RGD835 Vero Blue RGD840 VeroYellow RGD836 VeroCyan RGD841 VeroMagenta RGD851 VeroMagentaV VeroYellowV VeroCyanV™	Durus White RGD430	MED610	Agilus30 White,Black, Clear	Tango Gray FLX950	Tango BlackPlus FLX980 Tango Plus FLX930 FLX973	Digital ABS Plus	RGD525
TRACTION RESISTANCE		50-65 MPa	50-65 MPa	50-65 MPa	20-30 MPa	50-65 MPa	2.4-3.1 MPa	3.0-5.0 MPa	0.8-1.5 MPa	55-60 MPa	70-80 MPa
TRACTION ELONGATION		15-25%	10-25%	10-25%	40-50%	10-25%	220-240%	45-55%	170-220%	25-40%	10-15%
MODULUS OF ELASTICITY		2000-3000 MPa	2000-3000 MPa	2000-3000 MPa	1000-1200 MPa	2000-3000 MPa	N.A.	N.A.	N.A.	2600-3000 MPa	3200-3500 MPa
BEND RESISTANCE		80-110 MPa	75-110 MPa	75-110 MPa	30-40 MPa	75-110 MPa	N.A.	N.A.	N.A.	65-75 MPa	110-130 MPa
BEND MODULUS		2700-3300 MPa	2200-3200 MPa	2200-3200 MPa	1200-1600 MPa	2200-3200 MPa	N.A.	N.A.	N.A.	1700-2200 MPa	3100-3500 MPa
COLOR		Straw	Transparent	CMYK + White				Grey	Black	Green / White	White
HDT, °C @ 1.82 MPA		45-50 °C	45-50 °C	45-50 °C	32-34 °C	40-50 °C	N.A.	N.A.	N.A.	51-55/95* °C	55-57/80* °C
IZOD IMPACT RESISTANCE		20-30 J/m	20-30 J/m	20-30 J/m	40-50 J/m	20-30 J/m	N.A.	N.A.	N.A.	90-110 J/m	14-16 J/m
WATER ABSORPTION, %		1.5-2.2%	1.1-1.5%	1.1-1.5%	1.5-1.9%	1.1-1.5 %	N.A.	N.A.	N.A.	N.A.	1.2-1.4 %
TG		48-50 °C	52-54 °C	52-54 °C	35-37 °C	52-54 °C	N.A.	N.A.	N.A.	47-53 °C	62-65 °C
SHORE	Scale D	83-86	83-86	83-86	74-78	83-86	N.A.	N.A.	N.A.	85-87	87-88
	Scale A	N.A.	N.A.	N.A.	N.A.	N.A.	30-35**	73-77	26-62	N.A.	N.A.
HARDNESS	Scale M	73-76	73-76	73-76	N.A.	73-76	N.A.	N.A.	N.A.	67-69	78-83
DENSITY	ASTM D792	1.18-1.19 g/cm3	1.18-1.19 g/cm3	1.17-1.18 g/cm3	1.15-1.17 g/cm3	1.17-1.18 g/cm3	1.14-1.15 g/cm3	1.16-1.17 g/cm3	1.12-1.13 g/cm3	1.17-1.18 g/cm3	1.17-1.18 g/cm3
MAIN FEATURES		Rigid material. Brilliant color options for unprecedented design freedom. Ideal for fit and form testing, moving and assembled parts, sales, marketing, exhibition models and end-use parts.			Simulates the appearance and functionality of polypropylene. Ideal for prototyping containers and packaging, flexible snap-fit applications and living hinges, toys, battery cases, laboratory equipment, loudspeakers and automotive components. MED610 medical certification.		Rubber-like material. Offers various levels of elastomer characteristics. Combine with rigid materials for a variety of Shore A values, from Shore A 27 to Shore A 95. Ideal for rubber surrounds and overmolding, soft-touch coatings and nonslip surfaces, knobs, grips, pulls, handles, gaskets, seals, hoses, footwear, and exhibition and communication models.			Simulates ABS plastics by combining strength with high temperature resistance. Ideal for functional prototypes, snap-fit parts for high or low temperature usage, electrical parts, castings, mobile telephone casings and engine parts and covers.	Exceptional dimensional stability for thermal functional testing . Ideal for form, fit and thermal functional testing, high-definition models requiring excellent surface quality, exhibition models that endure strong lighting conditions, taps, pipes and household appliances, hot air and hot water testing.

KEY: *With post-printing treatment
**From 30 to 95 in digital mode
N.A. Not applicable.

NOTES: The data presented are only for informative purpose, they aren't official.
For further information and for test data please check the data sheets of the specific materials.
Polyjet technology enables to realize multi-material components and it enables to combine over 360.000 colors.

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