GROW it™
RAPID PROTOTYPING & MANUFACTURING

Tango+/TangoBlack+

Objet's FullCure® acrylic-based photopolymer materials enables users to create highly accurate, finely detailed 3D models and parts for a wide range of Rapid Prototyping and Rapid Manufacturing applications. Based on Objet PolyJet™ Technology, FullCure materials produce fully cured models than can be handled immediately after being built. The wide variety of materials within the FullCure materials family, including transparent, colored, opaque, flexible and rigid properties, enables models that meet a wide range of fit, form, and functional requirements. Based on PolyJet Technology, that is utilized on Connex family multi material 3D printers, FullCure materials are used in specific concentrations and structures to generate composite Digital Materials™ with improved mechanical and thermal properties. This wide flexibility of the equipment allows us to create digital single and/or multi-material parts, resulting in parts with up to 11 different material properties at the same time.

Tango+ Family

Rubber like flexible materials with various levels of elasticity: Elongation at break of 47% and 218%, Hardness Shore scale A values of 27 and 75.

TangoPlus - FullCure930 / TangoBlackPlus - FullCure980					
Property	**ASTM**	**Metric**		**Imperial**	
Tensile Strength at Break	D-412	Mpa	1.5	psi	211
Modulus of Elasticity at 20% Strain	D-413	Mpa	0.1	psi	21
Modulus of Elasticity at 30% Strain	D-414	Mpa	0.2	psi	27
Modulus of Elasticity at 50% Strain	D-415	Mpa	0.3	psi	38
Elongation at Break	D-412	%	218	%	218.0
Compressive Set	D-395	%	4	%	4.4
Shore A Hardness	D-2240	Scale A	27	Scale A	27
Ross Flex	D-1052		Above 150,000		Above 150,000
Tensile Tear Resistance	D-624	Kg/cm	3	Lb/in	20
Tg	DSC (-80˚C + 100˚C)	˚C	-10	˚F	15
Typical achievable tolerance	-	First cm: +/- .127mm; Every cm after: +/- .025 mm		First Inch: +/- .005; Each Inch after+/- 001 in	

At the core:
Advanced Polyjet Technology

Connex500™ is the first 3D printing system that offers the ability to print parts and assemblies made of multiple model materials, with different mechanical or physical properties, all in a single build. By printing with Digital Materials, the Connex500™ allows you to print parts with specific Shore A values to match the values of the intended production materials. This capability opens up new opportunities, bringing you much closer to realizing the final product at an early stage, including feasibility testing and over-molding process simulation.

Real Accuracy

PolyJet technology uses a jetting head that slides back and forth along the X-axis to accurately build each layer at 16 microns (0.0006 inches) thick. 32 microns in digital mode.

Get your benchmark on the future of manufacturing

Fine details. Smooth surface finishes. Accuracy. Strength. The best way to see the advantages of a Connex machine is to have your own part built on this system today! Get your parts at www.growit3d.com.

About GROWit

GROWit™ is a privately held additive manufacturing company located in Irvine, California, dedicated to improving design through engineering and rapid prototyping. We strive to be at the cutting edge, bringing both knowledge and resources directly to customers. With our team of engineers, we help guide customers to the process that best suits their specific application, without holding a bias to a specific platform or technology.

Why do we call ourselves GROWit? Due to the layer-by-layer nature of rapid prototyping, a part often looks like it is growing within the machine – just like a plant grows from the ground. Rather than using the terms “building” or “fabricating”, the term “growing” is commonly used within the industry; thus the origin of our name, GROWit.

GROWit
20918 Bake Parkway
Suite 106
Lake Forest, CA
92630

(p) 949 305 4004
(f) 949 305 4915
www.growit3d.com
sales@growit3d.com

GROWit™
RAPID PROTOTYPING & MANUFACTURING