

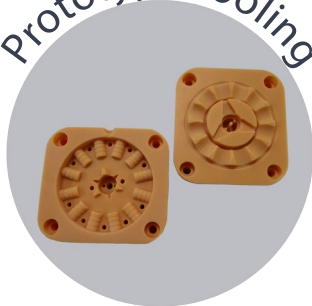


Xtreme 3SP[®] and Xede 3SP[®]
Vector 3SP
ULTRA[®] 3SP[®] and ULTRA[®] 3SP[®] HD
Perfactory[®] 4 Standard and Standard XL
Perfactory 4 Mini and Mini XL
Perfactory 3 Mini Multi Lens
Micro Plus Hi-Res and Advantage
Viridis3D RAM 123
SLCOM 1
Photosensitive Resins

Visual Aids



Prototype Tooling



Direct Manufacturing



Fit and Assembly

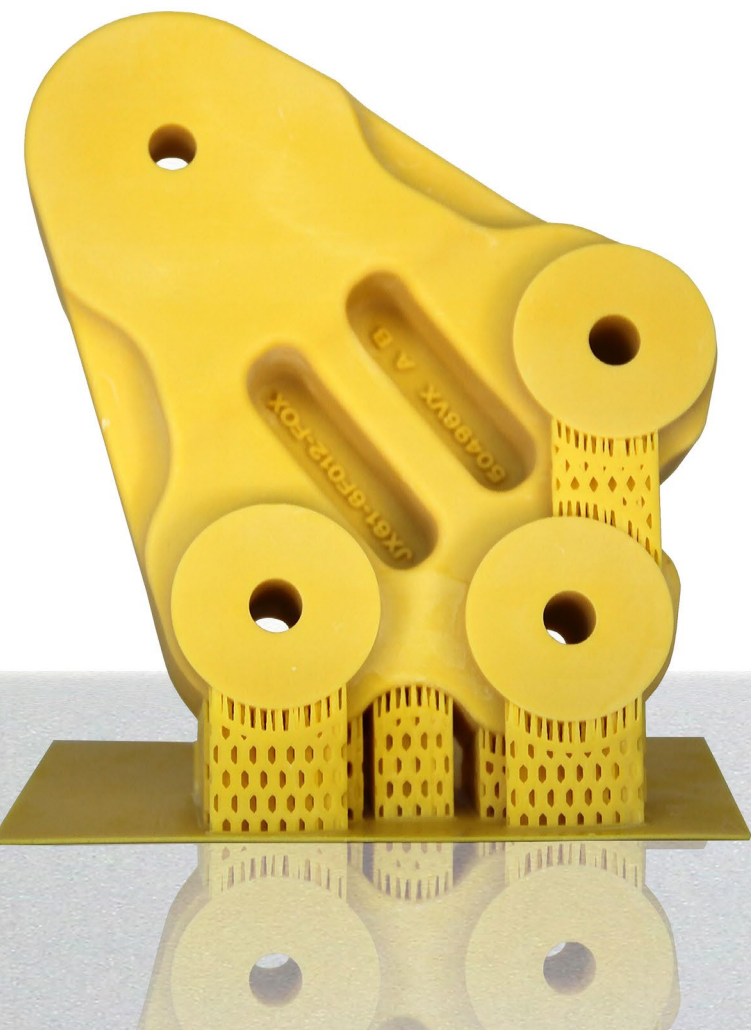


Direct Casting



Toys and Models







Your Partner For Success

Ever since EnvisionTEC patented the Perfactory® DLP® machine in 1999, we have built a reputation for reliable and high quality engineering solutions. These skills have been used to manufacture award winning, high speed, economical additive manufacturing machines.

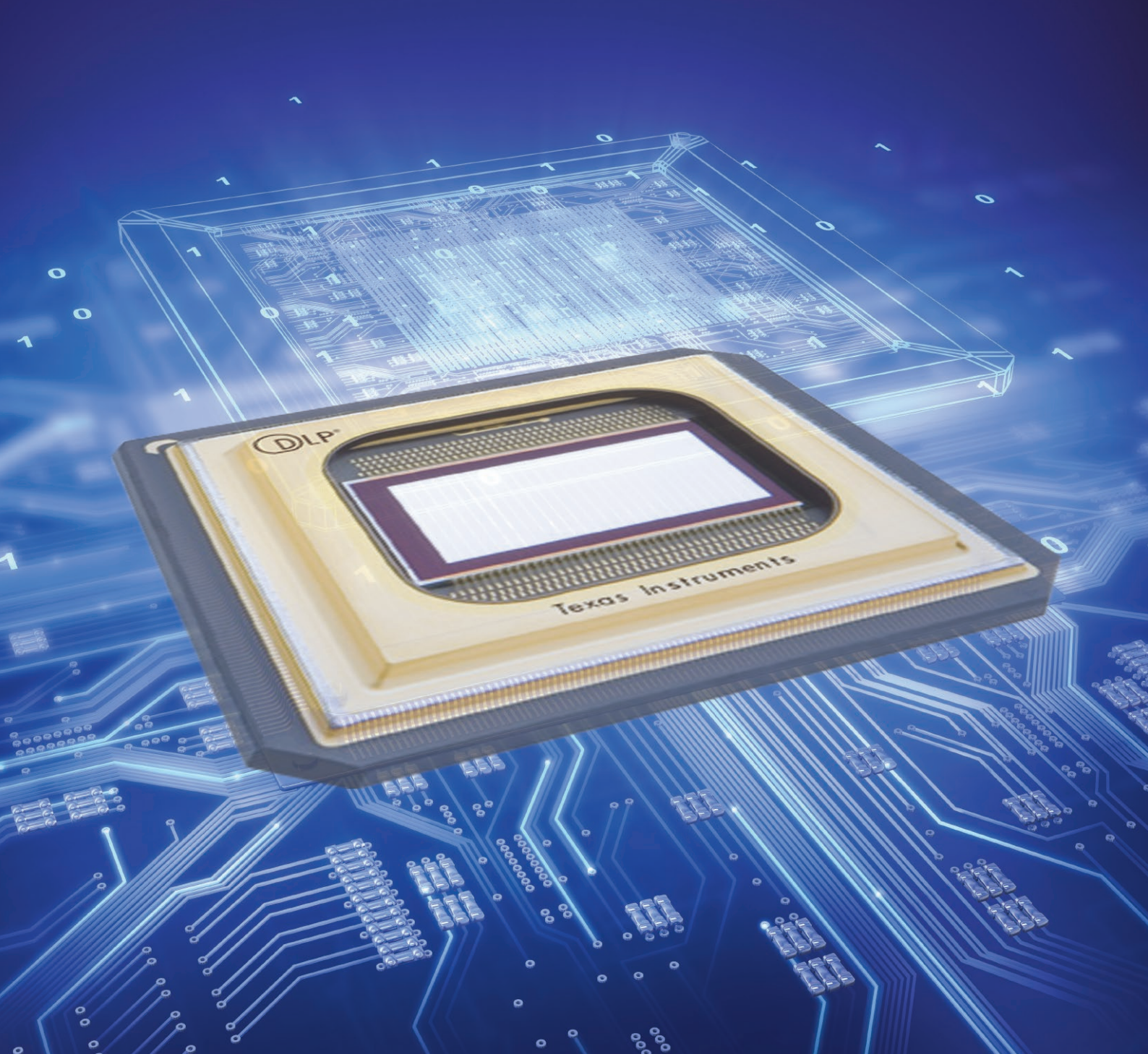
When EnvisionTEC decided to build a rapid prototyping machine, conventional techniques were considered. These were rejected as they were either not capable of achieving the resolution required or the ongoing running costs proved to be uneconomic for the end user. Thus, the Perfactory® DLP® process was born and subsequently commercialized in 2002.

EnvisionTEC has continued to innovate in the 3D printing field, adding bioprinting technology and our newest technology, 3SP® (Scan, Spin, and Selectively Photocure). We strive to deliver solutions, not just 3D printers. We look to deliver a finished product, designed with software that is fully integrated with our software, and printed on an EnvisionTEC 3D printer with a material that meets the exact needs of the end user. We work closely with many industry-specific software developers to ensure a seamless transition between content creation and 3D printing.

We look forward to working with you to deliver the perfect solution for your 3D printing needs.

A handwritten signature in black ink, appearing to read 'Al Siblani', with a stylized flourish at the end.

Al Siblani - CEO EnvisionTEC.





German Precision Technology

Designed to be used with 3D CAD systems, EnvisionTEC's 3D printers translate CAD data into voxels which are projected through a DLP® projection system and focused through a series of precision optics into a photopolymer-based liquid. This hardens into a 3D model voxel by voxel. Curing of the resin is amazingly fast; the complete build area can be cured simultaneously, regardless of the quantity, complexity, or size of the pieces.

EnvisionTEC utilizes the extremely reliable Digital Micromirror Device (DMD) technology from Texas Instruments. Calibration of the machine could not be easier for the operator as it is a semi-automatic process and takes just a few minutes. The machine is so simple to use that it requires no expert technician to operate and maintain. End user costs are therefore minimized.



envisionTEC
XEDE 3SP

envisionTEC
XTREME 3SP

Xtreme 3SP[®] and Xede 3SP[®]



- 3SP (Scan, Spin, and Selectively Photocure) technology quickly prints highly accurate parts from STL files
- Large build area makes it the first choice for automotive and aerospace industries
- Fast build speed is ideal for service bureau or OEM customers
- Constant build speed and quality regardless of geometry or number of parts
- XY resolution of 100 μm and a Z resolution range from 50 to 100 μm (material dependant).

Machine Specification:	Xtreme [®] 3SP [®]	Xede [®] 3SP [®]
Maximum Building Envelope:	254 x 362 x 330 mm*	457 x 457 x 457 mm*
Voxel** Resolution in X & Y:	100 μm	100 μm
Dynamic Voxel Resolution in Z:	50 - 100 μm ***	50 - 100 μm ***
Footprint:	165 x 165 x 165 cm	178 x 190 x 165 cm
Electrical Requirement:	220 V, single phase, 15 A	

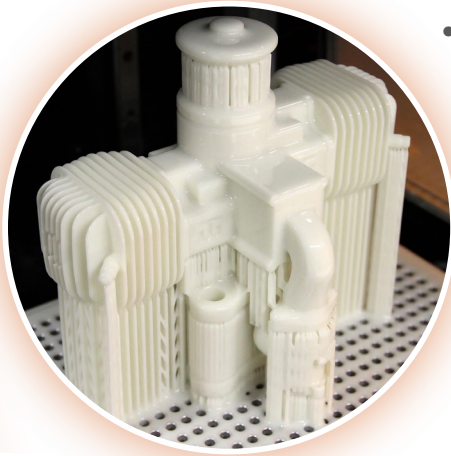
System specifications are subject to change without notice.

*Deviation of +/- 2mm possible. **A voxel is volumetric pixel.

Pre-Adjusted by each material module and material dependent.*



Vector 3SP[®] and Vector Hi-Res 3SP



- A single material is used for both build and easily removable, partially cured perforated supports
- Very few moving parts make the system user-serviceable
- Low part cost due to minimal material waste
- Produce everything from concept models to functional parts
- Can connect directly to a PC workstation or be integrated into a network for processing the job files and for remote monitoring
- The system has a stand-alone PC with a 22" touchscreen monitor

Machine Specification:	Vector 3SP [®]	Vector Hi-Res 3SP
Maximum Building Envelope:	300 x 200 x 275 mm*	300 x 175 x 275 mm*
Voxel** Resolution in X & Y:	100 µm	60 µm
Dynamic Voxel Resolution in Z:	50 - 100 µm***	
Footprint:	91 x 91x 152 cm	
Electrical Requirement:	220 V, single phase, 15 A	

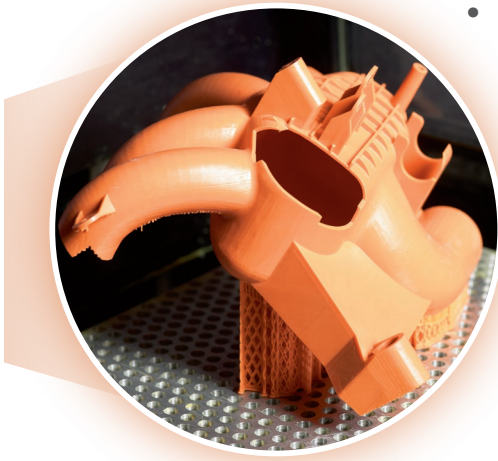
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Pre-Adjusted by each material module and material dependent.*



ULTRA[®] 3SP[®] and ULTRA Hi-Res 3SP



- 3SP[®] (Scan, Spin, and Selectively Photocure) technology quickly prints highly accurate parts from STL files
- Very few moving parts make the systems user-serviceable
- Delivered and installed with all the relevant software to enable automatic generation of supports and perfect model production
- Low part cost due to minimal material waste
- High quality surface finish
- Accuracy and surface finish remains constant over the entire build area

Machine Specification:	ULTRA 3SP	ULTRA Hi-Res 3SP
Maximum Building Envelope:	266 x 175 x 193 mm*	266 x 175 x 193 mm*
Voxel** Resolution in X & Y:	100 µm	50 µm
Dynamic Voxel** Resolution in Z:	50 - 100 µm***	50 - 100 µm***
Footprint:	74 x 76 x 117 cm	
Optional Stand:	74 x 76 x 64 cm	
Electrical Requirement :	100 - 127 VAC, 50/60 Hz, single phase, 8A; 200 - 240 VAC, 50Hz, single phase 4A	

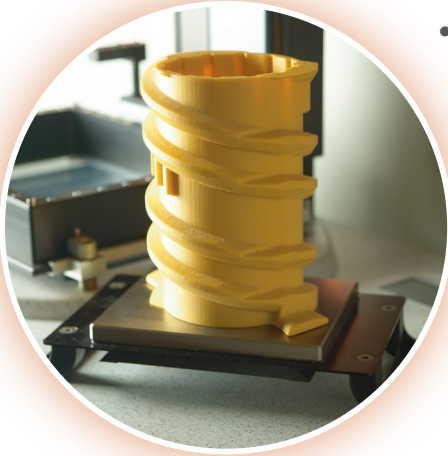
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*** Pre-Adjusted by each material module and material dependent.



Perfactory 4 Standard and Perfactory 4 Standard XL



- Ideal for consumer product models
- Fitted with the Enhanced Resolution Module (ERM) as standard enables 50 μm resolution in the X and Y axis
 - The Perfactory 4 Standard XL with ERM can build up 25mm in height per hour at a voxel*** thickness of 100 μm
 - Constant build speed regardless of quantity or complexity of parts (only the dynamic Z voxel will affect this).

Machine Specification:	P4 Standard	P4 Standard XL
Build Envelope:	160 x 100 x 230* mm	192 x 120 x 230* mm
Voxel**Resolution in X & Y (ERM):	42 μm	50 μm
Dynamic Voxel Resolution in Z:	25 - 150 μm ***	
Projector Resolution:	1920 x 1200 Pixels	
Footprint:	73 x 48 x 135 cm	
Weight Approx:	85 kg	
Electrical Requirement:	100 - 120 V, 5.4 A; 220 - 240 V, 2.4 A	

System specifications are subject to change without notice.

*Deviation of +/- 2mm possible. ** A voxel is volumetric pixel.

*** Pre-Adjusted by each material module and material dependent.



Perfactory[®]4 Mini and Perfactory 4 Mini XL



- Ideal for the manufacture of electronic components for hand held devices
- A wide variety of different resins can be used
- Change over between materials in minutes utilizing the easily interchangeable base
- Produce the finest detail in the shortest time
- Resolution and surface finish remains constant over the entire build area

Machine Specification: P4 Mini

P4 Mini XL

Lens System:	Lens f = 2.36" (60 mm)	Lens f = 2.95" (75 mm)	Lens f = 2.36" (60 mm)	Lens f = 2.95" (75 mm)
Build Envelope (factory adjustable):	64 x 40 x 180/230 mm*	38 x 24 x 180/230 mm*	115 x 72 x 230 mm*	84 x 52.5 x 180/230 mm*
Voxel** resolution in X & Y (ERM):	17 µm	10 µm	30 µm	22 µm
Dynamic Voxel resolution in Z:	15 - 150 µm***			
Projector Resolution:	1920 x 1200 Pixels			
Footprint:	73 x 48 x 135 cm			
Weight Approx:	85 kg			
Electrical Requirement:	100 - 120 V, 5.4 A; 220 - 240 V, 2.4 A			

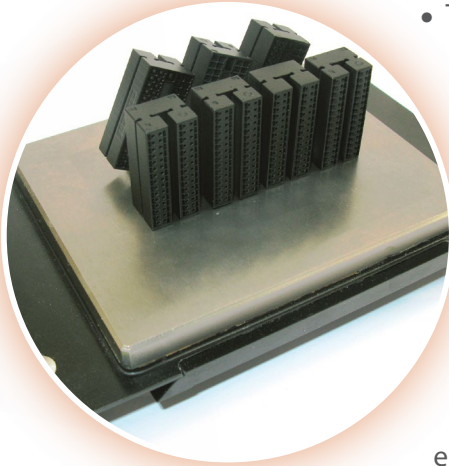
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***Pre-Adjusted by each material module and material dependent.



Perfactory® 3 Mini Multi Lens



- The Perfactory® 3 Mini Multi Lens has the highest precision and 3 lens choices: 60 mm, 75 mm, and 85 mm.
- Fitted with the Enhanced Resolution Module (ERM) enables resolutions down to 16 μm in the X and Y with the 85 mm lens
- The machine is delivered and installed with all relevant software to enable automatic support generation and perfect model production
- Wide range of materials
- Resolution and surface finish remains constant over the entire build area

Machine Specification:

Lens System	Lens f = 2.36" (60 mm)	Lens f = 2.95" (75 mm)	Lens f - 3.35" (85 mm)
Build Envelope	84 x 63 x 230 mm*	44x 33 x 230 mm	44x 33 x 230 mm
ERM Voxel** Size:	16 μm	21 μm	30 μm
Dynamic Voxel** Resolution in Z:	15 - 150 μm ***		
Projector Resolution:	1400 x 1050 Pixels		
Footprint:	73 x 48 x 135 cm		
Weight Approx:	85 kg		
Electrical Requirement:	100 - 120 V, 5.4 A; 220 - 240 V, 2.4 A.		

System specifications are subject to change without notice.

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***Pre-Adjusted by each material module and material dependent.



Perfactory® 4 DUAL Lens and Perfactory 4 DUAL Lens XL



- Ideal for consumer product models
- Fitted with the Enhanced Resolution Module (ERM) as standard enables down to 27 µm resolution in the X and Y axis
 - The Perfactory® DUAL series can build up 25mm in height per hour at a voxel** thickness of 100 µm
 - Constant build speed regardless of quantity or complexity of parts (only the dynamic Z voxel will affect this)
 - Available with either visible light option only or both visible and UV light option

Machine Specifications: P4 DUAL Lens

P4 DUAL Lens XL

Lens System:	Lens f = 43_5mm	Lens f = 60 mm	Lens f = 43_5mm	Lens f = 60 mm
Build Envelope:	160 x 100 x 180 mm*	100 x 62,5 x 180 mm*	192 x 120 x 180 mm*	122x76x180 mm*
Voxel** resolution in X & Y (ERM):	42 µm	27 µm	50 µm	32 µm
Dynamic Voxel** resolution in Z:	25 - 150 µm***			
Projector Resolution:	1920 x 1200 Pixels			
Footprint:	73 x 48 x 135 cm			
Weight Approx:	85 kg			
Electrical Requirement:	100 - 120 V, 5.4 A; 220 - 240 V, 2.4 A			

System specifications are subject to change without notice.

*Deviation of +/- 2mm possible. **A voxel is volumetric pixel.

***Pre-Adjusted by each material module and material dependent.



Perfactory® Desktop XL Plus



- Desktop machine with an enlarged build envelope for an unbeatable price to performance ratio for the small to medium sized company looking for a flexible 3D printing solution
- Build speed is constant through the build up to 45 mm per hour at 50 µm Z-voxel thickness (material dependent)
- The machine is delivered and installed with all relevant software to enable automatic support generation and perfect model production
- Wide range of materials -as wax-filled for casting, clear, flexible and high temperature materials- for a variety of applications
- Resolution and surface finish remains constant over the entire build area

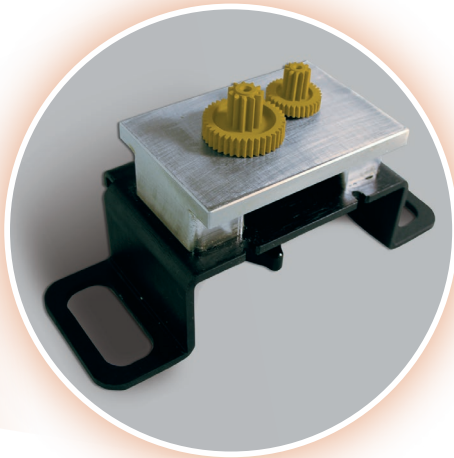
Machine Specification: Perfactory Desktop XL Plus

Build Envelope Range:	100 x 75 x 80 mm*
Native Voxel** Size:	71 micron
Dynamic Voxel** Resolution in Z:	25 - 150 micron***
Projector Resolution:	1400 x 1050 pixels
Footprint:	55 x 45 x 89 cm
Weight Approx:	35kg
Electrical Requirement:	100 - 120V, 2A / 220 - 240V, 1A.

System specifications are subject to change without notice. *Deviation of +/- 2mm possible. **A voxel is volumetric pixel. ***Pre-Adjusted by each material module and material dependent.



Micro Plus Hi-Res, Micro Plus Advantage, Micro Plus XL and Vida



- The smallest personal desktop 3D manufacturing systems
- The Micro series can produce small engineering components requiring high precision
 - Ideal for producing high quality, small engineering components
 - Long life LED DLP® light source with zero maintenance and very low acquisition cost
- Ideal for educators, consumers, and design professionals
- Resolution and surface finish remains constant over the entire build area

Machine Specification:	Micro Plus Hi-Res	Micro Plus Advantage	Micro Plus XL	Vida
Build Envelope:	45 x 28 x 100 mm*	65 x 40 x 100 mm*	120 x 74 x 85 mm	140 x 79 x 100 mm*
Voxel** resolution in X & Y:	30 µm	60 µm	85 µm	73 µm
Dynamic Voxel Resolution in Z***:	25 - 75 µm	25 - 75 µm	25 75 µm	25 - 150 µm
Footprint:	23 x 24 x 63.5 cm	23 x 24 x 63.5 cm	23 x 24 x 63.5 cm	39.5 x 35 x 79 cm
Weight Approx:	16 kg	16 kg	16 kg	34 kg
Electrical Requirement:	100 - 120V, 3A / 220 - 240V, 1,5A			

System specifications are subject to change without notice.

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Viridis3D™



Viridis3D™ RAM 123^{NEW}

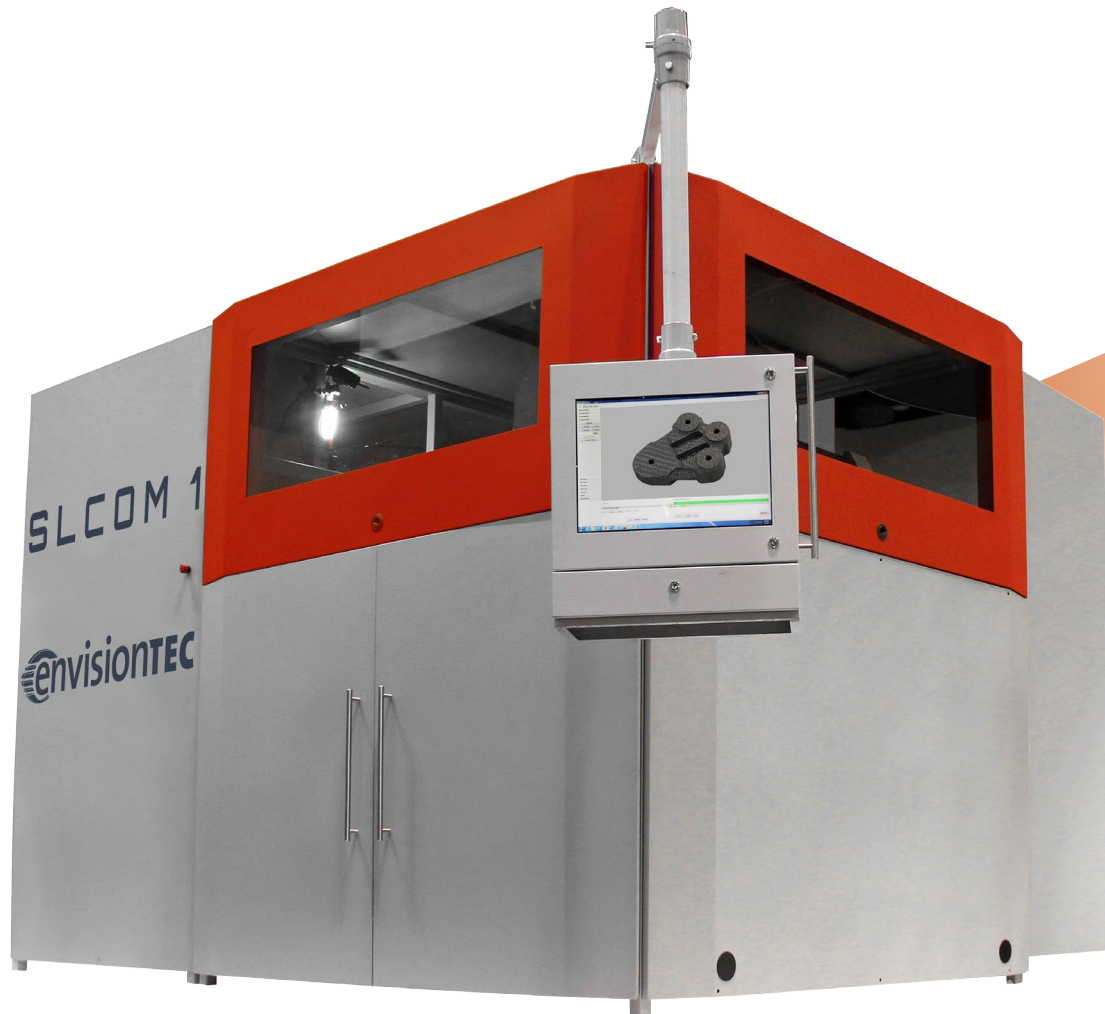


- The first robotic sand based system to take a CAD file to print a mold and core and have a casting in literally a few hours.
- The Viridis3D RAM 123 uses a robotic arm with attached print heads to apply layers of sand and binder selectively
 - The most cost-effective sand casting process available
 - Applications beyond sand casting, including PMMA and ceramics
 - Variable Build Volume™ to optimize speed for every build
 - Fully automated ABB robotics and controls
- Compatible with ferrous and nonferrous sand casting
- Cartesian movement allowing for maximum use of build area

Machine Specification: RAM 123

Build Envelope:	305 mm x 610 mm x 914 mm
Accuracy in X & Y:	+/- 100 microns
Layer thickness:	200-500 µm
Build speed:	75 mm / hour minimum
Material:	Standard Foundry Sands and Resins, PMMA, Ceramics

System specifications are subject to change without notice.



SLCOM 1



- First and only industrial thermoplastic reinforced woven composite 3D printer on the market today
- Automates production of composite parts with amazing surface finish and XY strength
- New patent pending process known as **Selective Lamination Composite Object Manufacturing**
- Builds solid parts using layer-by-layer laminated thermoplastic composite fabric sheets from a roll
- Processes continuous fiber-reinforced thermoplastic pre-pregs for use in lightweight structural applications
- Common polymer matrices like PEEK, PEI, PA 6, PA 12 and many more can be combined with fiber reinforcements in multiple configurations

Machine Specification:

Build Envelope:	762 mm x 610mm x 610 mm
Accuracy in X & Y:	+/- 100 microns
Accuracy in Z:	0.1 mm to 1.0 mm (one layer thickness - prior to lamination)
Build speed:	Post lamination layer thickness dependent
Material:	UNI and Bidirectional Thermoplastic Pre-pregs
Footprint:	318 cm x 396 cm x 236 cm (H x W x D)

System specifications are subject to change without notice.

High Performance Photosensitive Resins

EnvisionTEC offers a range of high performance materials to cope with most applications required by industry, including wax-filled resins used for direct casting applications, high temperature resistant ceramic-filled resins, and highly accurate general purpose resins for functional end results.

Material	Available Formulas			Applications
	Perfactory®	Micro	3SP®	
ABS Hi-Impact	X	X	X	Highly flexible general purpose ABS-like in a choice of colors
ABS Tough	X	X	X	Extremely tough ABS-like
ABS TRU			X	General purpose, superior strength, wide processing latitude
E-Denstone	X	X	X	High temperature molding, high resolution, nonmetal masters
E-Glass 2.0	X	X	X	Clear visual aids
E-Model	X	X	X	Strong, general purpose ABS-like material in a variety of colors
E-Shell 200 Series	X	X		Medical grade, opaque skin tones
E-Shell 300 Series	X	X		Medical grade, transparent for visual aids
E-Tool 2.0	X	X	X	Strong and ideal for molds for thermoplastic injection molding
HTM140	X	X		High temperature molding, high resolution, nonmetal masters
LS600	X	X		General purpose, durable and accurate with fine details
QView	X	X		Quick building for fast design verification
R5/R11 Series	X			Master models, mimics polypropylene for rubber molding
RC70/90 Series	X	X		Nanoparticle-filled high temperature materials for tough, stiff parts
RC25/31 Series	X			High temperature applications, nano filled silica oxide

Curing Box Options

Description	Inner Chamber Dimensions	Additional Details
LED Post Curing Unit	114 x 102 x 57 mm	Front loading
Otoflash Post Curing Light Pulsing Unit	120 x 120 x 50 mm	Top loading
UV Light Curing Box for ULTRA 3SP, Vector 3SP, and Xtreme 3SP	457 x 457 x 355 mm	Top loading with rotating table

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