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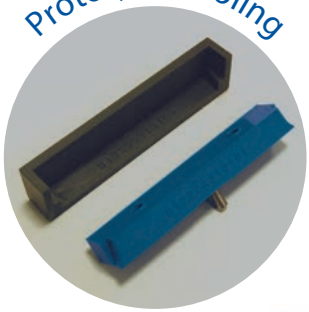
Xtreme® 3SP™ & Xede® 3SP™
ULTRA® 3SP™ & ULTRA® 3SP™ High Definition
Perfactory®4 Standard & Standard XL
Perfactory®4 Mini & Mini XL
Perfactory®3 Mini Multi Lens
Perfactory® Micro Desktop Size System
Photosensitive Resins

Visual Aids

Prototype Tooling



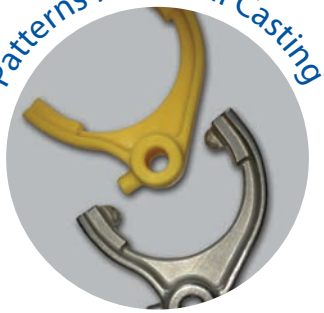
Presentation Models

Functional Models

Toy/Animation

Direct Manufacturing

Patterns for Metal Casting



Fit & Assembly

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Your Partner For Success.

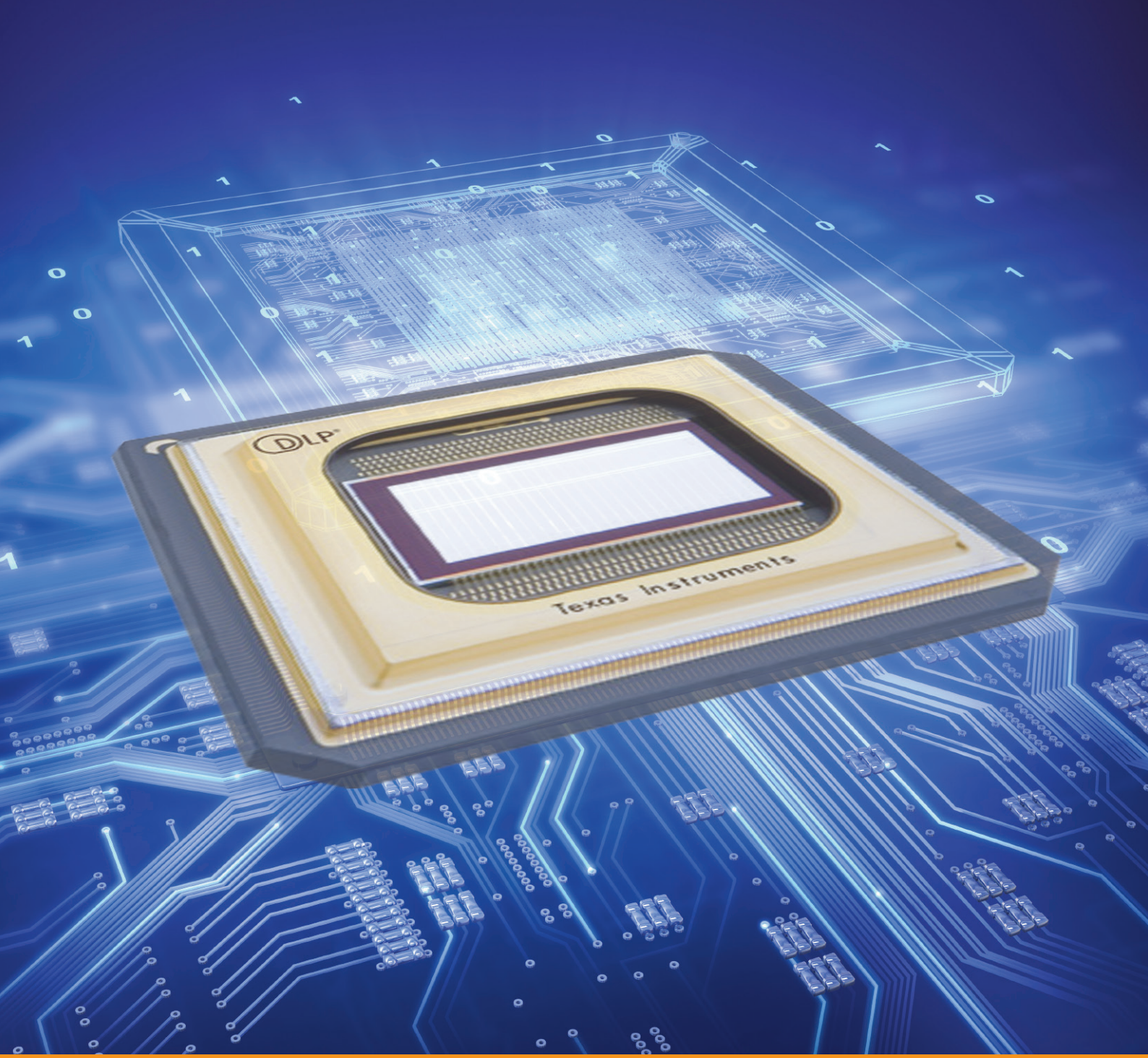
Ever since EnvisionTEC GmbH patented the Perfactory DLP machine in 1999, we have built a reputation for reliable and high quality engineering solutions. These skills have been used to manufacture award winning, high speed, economical additive manufacturing machines.

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.

Al Siblani - CEO EnvisionTEC.


DLP
Texas Instruments

German Precision Technology.

Designed to be used with 3D CAD systems, EnvisionTEC's Perfactory® 3D printers will translate the 3D CAD data into voxels which are projected through a DLP projection system and focused through a series of precision optics into a photo polymer 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 uses the extremely reliable DMD technology from Texas Instruments. Not only is the machine economical to buy, but it has the added benefit of a very low operating cost. 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.


XEDE® 3SP™
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Xtreme® 3SP™ & Xede® 3SP™

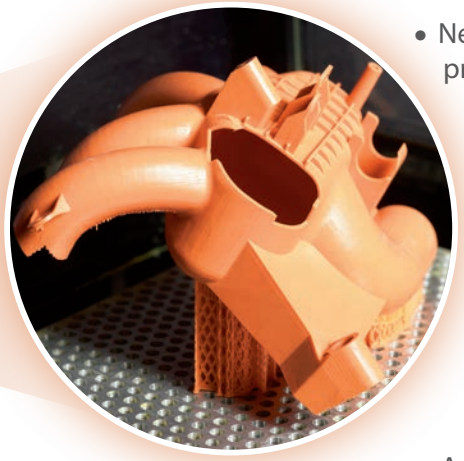
- New 3SP™ (Scan, Spin, and Selectively Photocure) technology quickly prints highly accurate parts from STL files
- Large build area makes it the first choice for automotive and aerospace industries
- Fast build speed is ideal for service bureaux or OEM customers
- Constant build speed and quality regardless of geometry or number of parts
- X Y resolution of 100 micron and Z down from 150 to 50 micron (material dependant)

Machine Specification:	Xtreme® 3SP™	Xede® 3SP™
Maximum Building envelope:	254 x 381 x 330mm*	457 x 457 x 457mm*
Voxel** resolution in X & Y:	100 micron	100 micron
Dynamic Voxel Resolution in Z:	50 - 100 microns***	50 - 100 microns***
Footprint:	163 x 140 x 183 cm	163 x 140 x 183 cm
Electrical Requirement:	220 Volt, Single Phase, 15 Amps	220 Volt, Single Phase, 15 Amps

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.****


ULTRA 3SP
SCAN SPIN AND SELECTIVELY PHOTOCURE

ULTRA® 3SP™ & 3SP™ High Definition



- New 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® 3SP High Definition
Maximum Building envelope:	266 x 177 x 193 mm*	266 x 177 x 193 mm*
Voxel** Resolution in X & Y:	100 micron	50 micron
Dynamic Voxel** Resolution in Z:	25 - 100 microns***	25 - 100 micron***
Footprint:	74 x 76 x 117 cm with option stand measuring 74 x 76 x 64 cm	
Electrical Requirement:	100 - 127 VAC, 50/60 Hz, single phase, 8A	
	200 - 240 VAC, 50Hz, Single phase 4A	

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.


2200W
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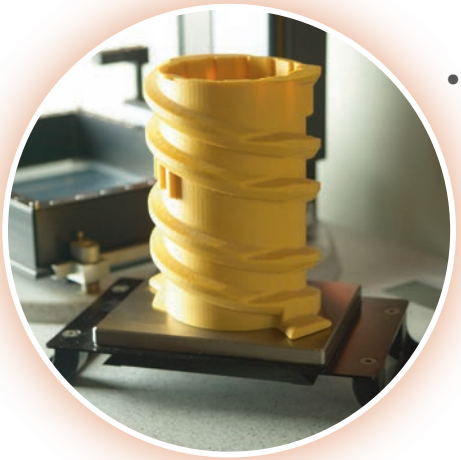
Cool
Temperature
°C

Perfactory®4 Standard with ERM and Standard XL with ERM



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

Machine Specification:	Standard with ERM	Standard XL with ERM
Build Envelope:	160 x 100 x 230mm*	192 x 120 x 230mm*
Voxel** resolution in X & Y (ERM):	42 micron	50 micron
Dynamic Voxel** resolution in Z:	25 - 150 micron***	
Projector Resolution:	1920 x 1200 native	
Footprint:	73 x 48 x 135cm	
Weight Approx:	85kg	
Electrical Requirement:	100 - 120V, 5.5A / 220 - 240V, 2.4A	100 - 120V, 5.4A / 220 - 240V, 2.4A

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.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Perfactory®4 Mini with ERM and Mini XL with ERM

- Ideal for the manufacture of electronic components for hand held devices
- A choice of 15 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:	Mini with ERM	Mini XL with ERM
Build Envelope (factory adjustable):	64x40x230mm to 38x24x230mm*	115 x 72 x 230mm*
Voxel** resolution in X & Y (ERM):	10 - 17micron	30 micron
Dynamic Voxel resolution in Z:	25 - 150 micron***	
Projector Resolution:	1920 x 1200 native	
Footprint:	73 x 48 x 135cm	
Weight Approx:	85kg	
Electrical Requirement:	100 - 120V, 5.4A / 220 - 240V, 2.4A	

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.


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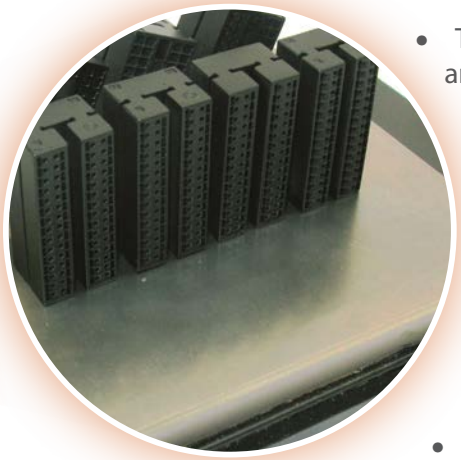
Perfactory®3 Mini Multi Lens with ERM



- 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 microns 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

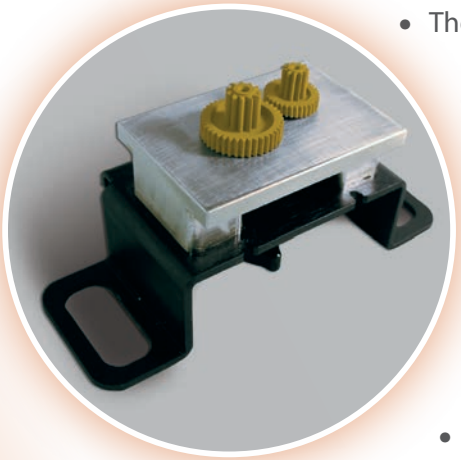
Machine Specification:

Build Envelope Range:	44 x 33 x 230 mm to 90 x 67.5 x 230 mm*
ERM Voxel** Size:	16 - 30 micron
Dynamic Voxel** Resolution in Z:	25 - 100 micron***
Projector Resolution:	1400 x 1050
Footprint:	73 x 48 x 135 cm
Weight Approx:	70kg
Electrical Requirement:	100 - 120V, 5.4A / 220 - 240V, 2.4A.

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® µIcro
envisionTEC

Perfactory® Micro EDU
Desktop Size System



- The smallest personal desktop 3-dimensional manufacturing system
- The Micro EDU 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

Machine Specification:

Build Envelope:	100 x 75 x 100 mm*
Voxel** resolution in X & Y:	150 µm
Linear Z Axis Resolution:	1 µm
Dynamic Voxel** Resolution in Z (material dependent):	50µm - 100µm
Footprint:	11" x 10" x 24" (28 x 25 x 61 cm)
Weight Approx:	24 lb (11 kg)
Electrical Requirement:	100-120V, 3 Amps/220-240V, 2 Amps

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.

High Performance Photosensitive Resins

EnvisionTEC offers a range of high performance materials to cope with most applications required by industry.

Wax Filled Resins - These are used for direct casting applications

Ceramic Filled Resins - These have a high temperature resistance and extremely smooth surface finishing making them ideal for high temperature vulcanized rubber molding and silicone molding.

General Purpose Resins - These are highly accurate resins that can be used for functional assembly, filming, silicone molding and concept molding.

Material	Technology	Application	Characteristic
ABS 3SP White	3SP	General purpose	Superior strength, wide processing latitude
E-Denstone 3SP Ivory	3SP	High temperature molding	High resolution, non-metal masters
E-Denstone 3SP Peach	3SP	High temperature molding	High resolution, non-metal masters
E-Glass 3SP	3SP	Clear visual aids	Water clear
Clear Guide M	Micro	Clear visual aids	Water clear
D3 White M	Micro	General purpose	Superior strength, wide processing latitude
E-Denstone M Ivory	Micro	High temperature molding	High resolution, non-metal masters
E-Denstone M Peach	Micro	High temperature molding	High resolution, non-metal masters
EC500 M	Micro	Casting	Fast building time, crisp details
Eshell 200 M Series	Micro	Medical grade	Opaque skin tones
Eshell 300 M Series	Micro	Medical grade	Transparent for visual aids
HTM140M	Micro	High temperature molding	High resolution, non-metal masters
LS600M	Micro	General purpose	Durable and accurate with fine details
ABS Materials	Perfactory	General purpose	High grade prototypes with structural representation of ABS
E-Denstone	Perfactory	High temperature molding	High resolution, non-metal masters
EC500	Perfactory	Casting	Fast building time, crisp details
Eshell 200 Series	Perfactory	Medical grade	Opaque skin tones
Eshell 300 Series	Perfactory	Medical grade	Transparent for visual aids
HTM140	Perfactory	High temperature molding	High resolution, non-metal masters
LS600	Perfactory	General purpose	Durable and accurate with fine details
Photosilver	Perfactory	High temperature applications	High detail straight from machine - no finishing required
R5 Gray	Perfactory	General purpose	Good strength, wide processing latitude
R5/R11	Perfactory	Master models	Mimics polypropylene for rubber molding
RC31	Perfactory	High temperature applications	Nano filled silica oxide

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