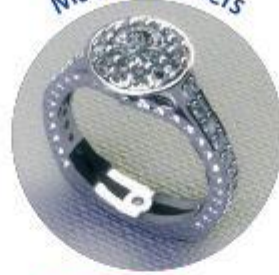


Perfactory®4 Mini XL / Standard / Standard XL
Perfactory®3 Mini Multi Lens
Perfactory® Aureus and Apollo
Micro Plus Hi-Res and Advantage
Photosensitive Resins

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Perfactory®3 Mini Multi Lens
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光敏树脂

主模

Master Models



客制化设计

Custom Design



批量生产

Mass Production



展示模型

Display Models



直接铸造

Direct Casting



Hot/Cold Molding



冷热压模



Your Partner For Success

Ever since EnvisionTEC patented the Perfactory Digital Light Processing (DLP) machine in 1999, we have built a reputation for reliable and high-quality engineering solutions. Our engineering expertise has been leveraged to manufacture award-winning, high-speed, and economical 3D printers that lead the market in multiple industry verticals.

Conventional DLP based projectors were considered when EnvisionTEC decided to build a 3D printer. These were rejected as either 1) incapable of achieving the resolution required or 2) cost-prohibitive in terms of ongoing maintenance for the professional end user or 3) having a short lifecycle rendering them obsolete in less than 3 years. Thus, the Perfactory® DLP process was born and subsequently commercialized in 2002.

助您成功的伙伴

自从EnvisionTEC在1999年申请了DLP专利后，我们在可靠并高质量的工程解决方案树立了口碑。我们的专业经验致力于生产优质的、快速的和经济的3D打印机，已在多个行业中领导市场。

当EnvisionTEC决定制造3D打印机时，曾考虑传统基于DLP技术的投影仪。但在不到短短三年内就舍弃了这些投影仪技术，因为 1) 无法获得所需的精细度、 2)对于专业使用者在持续使用时的高维护成本、以及 3)使用寿命短。Perfactory® DLP从而孕育而生，随后在2002年商品化。

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.

德国高精科技

设计用于3D CAD系统，EnvisionTEC的3D打印机将CAD数据转译成体素信息，随后由DLP投影仪将其透过一系列精密光学装置投影并聚焦在光敏聚合物的液体上。如此层层体素叠加固化为3D模型。树脂的固化过程快得令人惊讶，并且在全部的构造空间同时进行，无视模型的数量、复杂程度和尺寸。

EnvisionTEC使用来自德州仪器(TI)极其可靠的数字微镜装置(DMD)技术。设备标定过程再简单不过了，因为它是半自动操作，而且只需花费几分钟的时间。设备的易操作性无需专业技术人员进行日常使用和维护，由此使用成本也最小化。

Perfactory®4 Mini XL / Standard / Standard XL



- Material changeover achieved in minutes utilizing an easily interchangeable basement
- Constant build speed regardless of quantity or complexity of parts (only the dynamic Z voxel will affect this)
- Choice of over 15 different resins
- Finest detail in the shortest time
- Resolution and surface finish remains constant over the entire build area
- Equipped with the Enhanced Resolution Module (ERM) enabling resolutions down to 10 microns in the X and Y

Machine Specification:	P4 Mini XL	P4 Standard	P4 Standard XL
Build Envelope (factory adjustable)*:	115 x 72 x 220 mm	160 x 100 x 180 mm	192 x 120 x 180 mm
Native Voxel Resolution in X & Y**:	60 μm	84 μm	100 μm
ERM Voxel Resolution in X & Y**:	30 μm	42 μm	50 μm
Dynamic Voxel resolution in Z:	15 - 150 μm***		
Projector Resolution:	1920 x 1200 native pixels		
Footprint:	73 x 48 x 135 cm		
Weight Approx:	85 kg		
Electrical Requirement:	100 - 120V, 5.5A / 220 - 240V, 2.4A		

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

Perfactory®4 Mini XL / Standard / Standard XL

- 使用可互换的基座，更换材料只需几分钟
- 恒定的打印速度，无论模型的数量或复杂程度（只受Z轴动态体素影响）
- 超过15种树脂材料可选用
- 最短时间内的最佳细节表现
- 在整个构建区域内，精细度和表面光洁度保持一致
- 配备加强精细度模块（ERM）使得X和Y轴的分辨率达到10 μm

技术参数	P4 Mini XL	P4 Standard	P4 Standard XL
成型空间（可调）*	115 x 72 x 220 mm	160 x 100 x 180 mm	192 x 120 x 180 mm
XY轴原始体素分辨率**	60 μm	84 μm	100 μm
XY轴EBM体素分辨率**	30 μm	42 μm	50 μm
Z轴动态体素分辨率	15 – 150 μm***		
投影仪分辨率	1920 x 1200 原始像素		
设备尺寸	73 x 48 x 135 cm		
设备重量	85 kg		
电源要求	100 – 120 V, 5.5 A / 220 – 240 V, 2.4A		

若有规格变更，恕不另行通知

* ±2mm偏差

**一个体素是指一个体积像素

***根据材料模块不同需预先调整精度

Perfactory®3 Mini Multi Lens



- Easy maintenance, low cost and user friendly Rapid Prototype Manufacturing System
- The Mini MML has the highest precision which is perfect for precision components
- Produces the finest detail with constant and high build speed regardless of quantity or complexity of parts (only the dynamic Z voxel will affect this)
- Choice of over 15 different resins can be used
- Equipped with the Enhanced Resolution Module (ERM) enabling resolutions down to 16 microns in the X and Y

Machine Specification:	Lens f=60	Lens f=75	Lens f=85
Build Envelope*:	84 x 63 x 230	59 x 44 x 230	44 x 33 x 230
Native Voxel Resolution in X & Y**:	60 μm	42 μm	32 μm
ERM Voxel Resolution in X & Y**:	30 μm	21 μm	16 μm
Dynamic Voxel resolution in Z:	15 - 150 μm ***		
Projector Resolution:	1400 x 1050 native pixels		
Footprint:	73 x 48 x 135 cm		
Weight Approx:	70 kg		
Electrical Requirement:	100 - 120V, 5.4A / 220 - 240V, 2.4A		

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

Perfactory®3 Mini Multi Lens

- 简单维护，低成本，易操作快速成型系统
- Mini MML具有最高的精度，完美制作精密器件
- 恒定高速地打印最佳细节，无论模型的数量或复杂程度（只受Z轴动态体素影响）
- 超过15种树脂材料可选用
- 配备加强精细度模块（ERM）使得X和Y轴的分辨率达到16 μm

技术参数	Lens f=60	Lens f=75	Lens f=85
成型空间*	84 x 63 x 230 mm	59 x 44 x 230 mm	44 x 33 x 230 mm
XY轴原始体素分辨率**	60 μm	42 μm	32 μm
XY轴EBM体素分辨率**	30 μm	21 μm	16 μm
Z轴动态体素分辨率	15 – 150 μm ***		
投影仪分辨率	1400 x 1050 原始像素		
设备尺寸	73 x 48 x 135 cm		
设备重量	70 kg		
电源要求	100 – 120 V, 5.5 A / 220 – 240 V, 2.4A		

若有规格变更，恕不另行通知

* $\pm 2\text{mm}$ 偏差

**一个体素是指一个体积像素

***根据材料模块不同需预先调整精度

Perfactory® Aureus and Apollo



- Perfect choice for the jewellery industry for small to medium companies to enable full production requirements
- Aureus Builds 8-12 pieces within 5 hours
- Apollo features enlarged build envelope for customized jewelry with an unbeatable price to performance ratio
- Choice of materials for direct casting, hot rubber and silicone molding
- Resolution and surface finish remains constant over the entire build area

Machine Specification:	Aureus	Apollo
Build Envelope*	60 x 45 x 100 mm	100 x 75 x 100 mm
Voxel Resolution in X & Y**:	43 µm	71 µm
Dynamic Voxel Resolution in Z:	25-35 µm***	25-150 µm***
Projector Resolution:	1400 x 1050 native pixels	
Footprint:	45 x 55 x 78 cm	55 x 45 x 89 cm
Weight Approx:	35 kg	
Electrical Requirement:	100 - 120V, 2A / 220 - 240, 1A	

System specifications are subject to change without notice.

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

*** Accuracy is pre-adjusted by each material module and therefore material-dependent.

Perfactory® Aureus & Apollo

- 珠宝行业的完美选择，适合全生产需求的中小型公司
- Aureus在5小时内可以打印8-12件模型
- Apollo加大的成行型空间适合定制化的珠宝设计，具有无法比拟的性价比
- 可选用直接铸造、热压模和硅胶模材料
- 在整个构建区域内，精细度和表面光洁度保持一致

技术参数	Aureus	Apollo
成型空间*	60 x 45 x 100 mm	100 x 75 x 100 mm
XY轴体素分辨率**	43 µm	71 µm
Z轴动态体素分辨率	25 – 35 µm***	25 – 150 µm***
投影仪分辨率	1400 x 1050 原始像素	
设备尺寸	45 x 55 x 78 cm	55 x 45 x 89 cm
设备重量	35 kg	
电源要求	100 – 120 V, 2 A / 220 – 240 V, 1A	

若有规格变更，恕不另行通知

* ±2mm偏差

**一个体素是指一个体积像素

***根据材料模块不同需预先调整精度

Micro Plus Hi-Res and Advantage

- Smallest personal desktop 3D printer
 - Can produce small components requiring a high level of precision
 - Perfect for small to medium-sized businesses in the jewellery industry to enable full production capability
 - Ideal for producing high quality, small jewelry components
 - Long Life LED DLP light source with zero maintenance and very low acquisition cost
 - Micro Plus Hi-Res builds 5-6 average ring sizes in a single build
 - Micro Plus Advantage builds 10-12 average ring sizes in a single build



Machine Specification:

	Micro Plus Hi-Res	Micro Plus Advantage
Build Envelope*:	45 x 28 x 100 mm	60 x 45 x 100 mm
ERM Voxel Resolution in X & Y**:	30 µm	60 µm
Projector Resolution:	1024 x 768 native pixel	
Dynamic Voxel Resolution in Z***:	25µm - 75 µm	
Footprint:	23 x 24 x 64 cm	
Weight Approx:	16 kg	
Electrical Requirement:	110VAC @ 3A	

System specifications are subject to change without notice.

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

*** Accuracy is pre-adjusted by each material module and therefore material-dependent.

Micro Plus Hi-Res & Advantage

- 个人桌面级中最小的3D打印机
- 可以制作高精度要求的小器件
- 珠宝行业的完美选择，适合全生产能力的中小型公司
- 完美适合高质量、小尺寸的珠宝器件
- LED光源使用寿命长，几乎零维护，购置成本低
- Micro Plus Hi-Res每次可打印5-6枚平均尺寸的戒指
- Micro Plus Advantage每次可打印10-12枚平均尺寸的戒指

技术参数	Micro Plus Hi-Res	Micro Plus Advantage
成型空间*	45 x 28 x 100 mm	60 x 45 x 100 mm
XY轴EBM体素分辨率**	30 µm	60 µm
投影仪分辨率	1024 x 768 原始像素	
Z轴动态体素分辨率***	25 - 75 µm	
设备尺寸	23 x 24 x 64 cm	
设备重量	16 kg	
电源要求	100 V, 3A	

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* ±2mm偏差

**一个体素是指一个体积像素

***根据材料模块不同需预先调整精度

High Performance Photosensitive Resins

EnvisionTEC offers a range of high-performance materials to facilitate jewelry industry requirements.

- Wax filled resins are used for direct casting applications.
- Ceramic filled resins have a high temperature resistance and produce an extremely smooth surface finish, making them ideal for vulcanized rubber molding and silicone molding.
- General purpose resins are highly accurate resins that can be used for functional assembly, filming, silicone molding and concept molding.

Material	Applications
PIC100 Series	Direct casting, thermo plastic filled
EC500	Direct casting, wax filled
EPIC	Direct casting, wax filled
WIC100G	Direct casting, wax filled
EC3000	Direct casting, wax based
QView	Quick building for fast design verification
RC70	High temperature materials for tough, stiff parts
RC90	High temperature materials for tough, stiff parts
HTM140	High temperature molding, high resolution, non-metal masters
Photosilver	High detail for molding

高性能的光敏树脂

EnvisionTEC提供高性能的材料满足珠宝行业的需求

- 蜡填充树脂用于直接铸造
- 陶瓷材料具有高耐温性，并且可以呈现极其光滑的表面，特别适合硫化橡胶模和硅胶模
- 通用目的树脂十分精确，被应用于功能性装配测试、拍摄、硅胶模和概念模型

材料	应用
PIC100 Series	直接铸造，热塑性塑料填充
EC500	直接铸造，蜡填充
EPIC	直接铸造，蜡填充
WIC100G	直接铸造，蜡填充
EC3000	直接铸造，蜡基
Qview	快速成型用于即时设计验证
RC70	高温材料用于硬质零部件
RC90	高温材料用于硬质零部件
HTM140	高温模具，高精细度，非金属主模
Photosilver	高细节表现的模具