Envisiontec

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Hearing Aids

Perfactory[®] 4 DSP XL Perfactory[®] 4 DSP Perfactory[®] 3 DSP Perfactory[®] DDSP and Mini DDSP Perfactory[®] Micro Plus Hi-Res and Plus Advantage Photosensitive Resins







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.

Al Siblani - CEO EnvisionTEC



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Perfactory[®] 4 DSP and DSP XL

- Designed for large scale production with high precision
 - Fitted with the Enchanced Resolution Module (ERM) which enables resolutions down to 50 Microns in X and Y
 - One of the highest resolution systems in the industry as the micro mechanics can achieve as little as 25 microns in Z (material dependent)
 - Capable of producing 65 shells/47 ear moulds in just 60-90 minutes as the DLP process cures all the parts simultaneously
 - No limits to geometric complexity when all build files are converted to an STL file from an open scanning system
 - A wide choice of high performance materials available including soft materials
 - Changeover between materials can be achieved in just a few minutes

Machine Specification:

Build Envelope:	160 x 100 x 230 mm	192 x 120 x 230 mm**
Voxel Resolution in X & Y:	83 µm***	100 µm***
Voxel Resolution in X & Y (ERM):	42 µm***	50 μm***
Dynamic Voxel Resolution in Z:	25 - 150 μm****	
Footprint:	73 x 48 x 135 cm	
Weight (Approx):	85 kg	
Electrical Requirement:	100-120V, 5.4 A; 220-240V, 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.



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Perfactory[®] 3 DSP



- Due to the large build area and high precision, this machine is ideal for large scale production
 - Capable of building upto 35 shells/28 ear molds in 1-2 hours as the DLP process cures all parts simultaneously
 - Constant build speed regardless of quantity or complexity of parts (only the dynamic Z voxel will affect this)
 - Highest quality surface finishes achievable by any rapid manufacturing process
- No limits to geometric complexity when all build files are converted to an STL file from an open scanning system
- A wide choice of high performance materials available

Machine Specification:

Build Envelope:	140 x 105 x 230 mm**
Voxel Resolution in X & Y:	100 μm***
Voxel Resolution in X & Y (ERM):	50 μm***
Dynamic Voxel Resolution in Z:	25 - 150 μm****
Footprint:	73 x 48 x 135 cm
Weight (Approx):	70 kg
Electrical Requirement:	100-120V, 5.4 A; 220-240V, 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[®] DDSP Plus and Mini DDSP Plus



• The DDSP is the perfect choice for the small to medium company looking to fulfill their production requirements

- Has the ability to run 24 hour production and can build 18 shells/14 ear molds in 60-90 minutes in a variety of materials
- A wide choice of high performance materials available

• Changeover between materials can be achieved in just a few minutes

• The DDSP is the perfect partner for Digital Manufacturing

Machine Specification:	DDSP Plus	Mini DDSP Plus
Build Envelope:	100 x 75 x 100 mm**	60 x 45 x 100 mm**
Voxel Resolution in X & Y:	71µm native***	43 µm native***
Dynamic Voxel Resolution in Z:	25 - 150 μm****	25 - 150 µm****
Footprint:	45 x 78 x 45 cm	
Weight (Approx):	35 kg	
Electrical Requirement:	100-120V, 2 Amps; 220-240V, 1 Amp	

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



Vida DSP



- Compatible with 3Shape design software
 - Any STL file of a model designed from an impression or scanner can be printed
 - Capable of printing ear shells, ear molds, tips, cocoon molds for silicone otoplastics, and more
 - Changeover between materials is quick and easy with no waste
 - A wide range of high performance materials available, ranging from transparent for ear molds to skin colors for ear shells

• Very few moving parts guarantees a strong and reliable production system.

Machine Specification:

Build Envelope:	96 x 54 x 100 mm**
Voxel Resolution in X & Y:	50 µm***
Dynamic Voxel Resolution in Z:	25 - 150 μm****
Footprint:	39.5 x 35 x 78.7 cm
Weight (Approx):	34 kg
Electrical Requirement:	110 VAC @ 3A

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 DSP and Micro Plus Advantage DSP

- Smallest desktop 3-dimensional printer in the EnvisionTEC portfolio with the highest resolution
 - Using state-of-the-art DLP[®] technology from Texas instruments coupled with LED performance produces highly detailed digital ear shells and molds
 - Capable of producing 2-4 ear shells or ear molds per build in under two hours
 - Low cost, easy maintenance and user friendly personal desktop manufacturing system, designed for producing high quality ear shells and ear molds

• Utilizing a built-in USB connection, the Perfactory[®] Micro Plus Hi-Res and Plus Advantage can connect directly to your personal PC workstation and works just like a personal desktop printer

Machine Specification:	Micro Plus Hi-Res	Micro Plus Advantage	
Build Envelope:	45 x 28 x 100 mm **	65 x 40 x 100 mm	
Voxel Resolution in X & Y:	30 µm***	60 µm	
Dynamic Voxel Resolution in Z:	25 - 75 μm****		
Footprint:	22.86 x 24.13 x 63.5 cm		
Weight (Approx):	16 kg		
Electrical Requirement:	110 VAC @ 3A		

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

Photosensitive Resins

E-shell 200 Series (Opaque for Ear Shells)



200 Pink



201 Tan



202 Mocca



203 Beige



204 Cocoa

E-shell 300 Series (Transparent for Ear Molds)



205 Brown



300 Clear



301 Rose





309 Brown



310 Clear

E-shell 300 Series (Opaque for Ear Shells)



302 Red



303 Blue

500 Clear



306 Black

E-shell 500 Series (Soft for Ear Shells and Tips)







501 Pink

E-shell 600 (Transparent for Ear Molds) E-Shell 450 Series (Transparent for Custom Hearing Devices)







600 Clear 450 Clear E-shell 3000 Series (Next Gen Opaque for Ear Shells)

451 Carbon Black



3002 Red



3003 Blue



EnvisionTEC - German Precision



EnvisionTEC GmbH

Brüsseler Straße 51 D-45968 Gladbeck Germany Fon: +49 2043 9875 0 **envisiontec.com • info@envisiontec.de**

EnvisionTEC, Inc.

15162 South Commerce Dearborn, MI 48120 USA Phone: +1 313 436 4300 envisiontec.com • northamerica@envisiontec.com



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