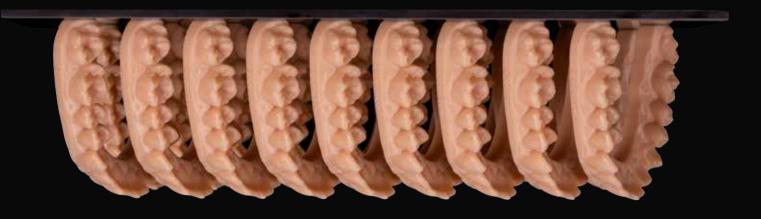


# You print it



The solution for those who "simply want to print":

The digital workflow from Dreve offers the regulatory-secured process from the preparation of the data to the finished application.

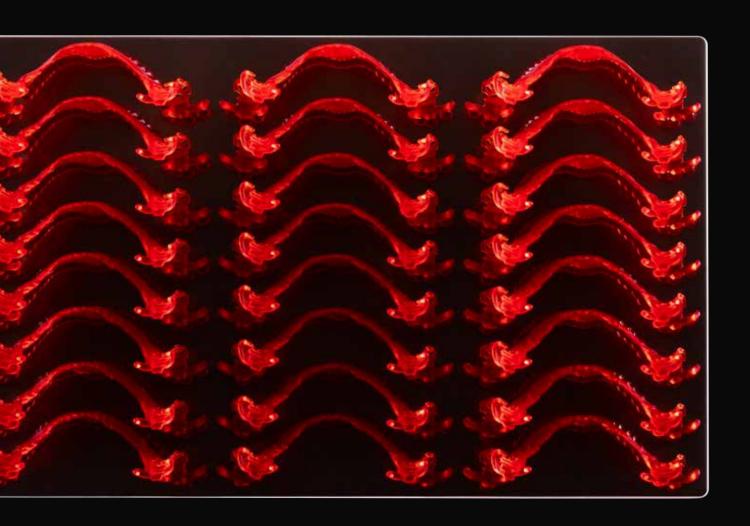
phrozen.dreve.com



# For those who simply want to print

In more and more areas of everyday dental work, the path leads to the digital laboratory. To ensure greater flexibility and more efficient workflows at the end of this path, we offer the digital workflow – qualified by Dreve. All process steps of the dental 3D workflow are seamlessly integrated and ensure consistently high quality.

You achieve precise print results in series with a complete system in which all process components are seamlessly integrated. The Dreve 3D printing product portfolio is based on the system concept: devices and materials, software and hardware are optimally matched and adjusted to each other. This results in a validated process chain with printed products that are more precise and last longer.



# The digital process "qualified by Dreve"



### **Slicer** Conversion to printable file

With the help of Dreve's own slicing software, an STL file is converted into a file that can be read by the printer. The upload to the printer is direct and uncomplicated.



### **Print profiles** The material "fact sheet"

The print profile contains all the parameters necessary to process a resin on a specific type of printer, for example exposure times. All print profiles have been elaborately worked out and precisely set by the company's own process technology department. Several profiles are available for each material – tailored to each application.



### Materials FotoDent®

The FotoDent® product world offers you a wide range of materials for tailor-made 3D printing resins for every dental need.



### **Printing Phrozen Sonic XL 4K**

The devices calibrated in Unna with fixed factory adjustments implement all settings optimally. The very large stainless steel build platform enables a high print volume with low purchase and maintenance costs.



### **Cleaning FotoWash**

The washing unit effectively removes excess resin that adheres to printed components after the printing process.



### Post-curing PCU vario, PCU LED N<sub>2</sub>

Crucial for the perfect result: a powerful light curing unit! For the validated process, the components must be post-cured after cleaning so that the final material properties can be set.

FotoDent®



Leading in detail precision in 3D printing resin manufacturing:

With the FotoDent® product world, you benefit from our many years of expertise with numerous innovations in medical 3D printing. You will receive a wide material variety of customized 3D printing resins for every dental need.





### FotoDent® splint 405 nm

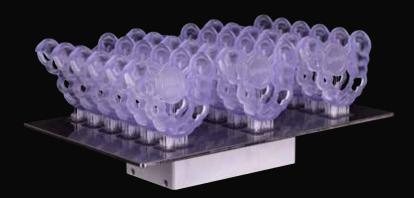
Light-curing material for the production of dental splints by using the 3D printing process. The molded part produced is extremely fracture-resistant and has a homogeneous surface. Dental splints made from FotoDent® splint are biocompatible.

Print speed (mm/h)	21
Print time/platform (min)	141
Print time/part (min)	11.8
Parts/platform (vert.)	12
Material consumption (g/part)	7
Height (mm)	50
Cost/part (€/part)	-

ltem	
1.0 kg	D35800

### FotoDent®





## FotoDent® guide 385 / 405 nm

Light-curing resin for the fabrication of dental drill guides. Guides made from FotoDent® guide are dimensionally stable and biocompatible.

Print speed (mm/h)	20.05
Print time/platform (min)	146
Print time/part (min)	9.1
Parts/platform (vert.)	16
Material consumption (g/part)	5
Height (mm)	50
Cost/part (€/part)	1.53

### Iten

385 nm, 1.0 kg, clear transparent	D35650
405 nm, 1.0 kg, blue transparent	D35600



### FotoDent® IBT 385 nm

Light-curing resin for the fabrication of transparent, orthodontic transfer trays. Verification of correct bracket positions possible at any time – before and after bonding. Optimum flexibility for easy removal. Can be used with all common bracket systems.

Print speed (mm/h)	12.4
Print time/platform (min)	48
Print time/part (min)	4.8
Parts/platform (hor.)	10
Material consumption (g/part)	6
Height (mm)	10
Cost/part (€/part)	1.53

### Item



### FotoDent®





### FotoDent® cast 385 / 405 nm

Light-curing resin for the production of castable molded parts for dental casting technology. The material is highly compatible: It can be used with all commercially available embedding materials.

Print speed (mm/h)	23.1
Print time/platform (min)	91
Print time/part (min)	7.6
Parts/platform (vert.)	12
Material consumption (g/part)	5
Height (mm)	35
Cost/part (€/part)	1.41
Item	
1.0 kg	D35100



### FotoDent® denture 385 nm

Light-curing resin for the production of dental prosthetic bases. The use of the resin enables accurate results with the greatest possible dimensional stability. FotoDent® denture is free of MMA and color stable.

Print speed (mm/h)	24.6
Print time/platform (min)	134
Print time/part (min)	8.9
Parts/platform (vert.)	15
Material consumption (g/part)	15
Height (mm)	55
Cost/part (€/part)	4.92

### ltem

pink transparent, 1.0 kg	D35500
pink opaque, 1.0 kg	D35501



FotoDent®





### FotoDent® TCB 385 nm

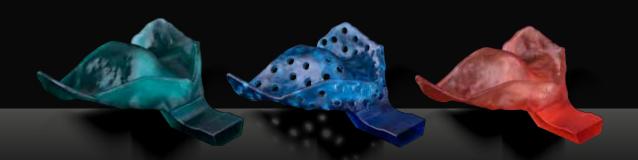
FotoDent® TCB is a 3D printable composite material for the fabrication of temporary crowns and bridges. Suitable for chairside and laboratory printers. Available in the colors A1, A2, A3, A3.5, B1 and BleachX.



### FotoDent® tray2 385 / 405 nm

Optimized, biocompatible resin for the fabrication of dental, individual impression trays. High reactivity with low viscosity. Simplified cleaning and improved mechanical properties. Two times faster printing times, layer thicknesses of 300  $\mu m$  possible. The finished impression trays have a homogeneous surface, which significantly reduces manual reworking.

Print speed (mm/h)	60
Print time/platform (min)	70
Print time/part (min)	4.4
Parts/platform (vert.)	16
Material consumption (g/part)	15
Height (mm)	70
Cost/part (€/part)	2.5
blue transparent, 1.0 kg	D353001
green transparent, 1.0 kg	D353002
reddish transparent, 1.0 kg	D353003



### FotoDent®





### FotoDent® gingiva 385 nm

Light-curing resin for the fabrication of dental gingival masks. Permanently soft and flexible. Perfect combinable with the working models made of FotoDent® biobased model and model2 resins.

Print speed (mm/h)	16.4
Print time/platform (min)	70
Print time/part (min)	1.3
Parts/platform (hor.)	55
Material consumption (g/part)	2
Height (mm)	19
Cost/part (€/part)	0.50
Item	



### FotoDent® biobased model 385 nm

Light-curing resin that consists of 50 % renewable raw materials. The material properties are optimally for model production (also in the aligner workflow). The material can be cleaned with FotoClean.

Print speed (mm/h)	20.07
Print time/platform (min)	38
Print time/part (min)	3.8
Parts/platform (hor.)	10
Material consumption (g/part)	12
Height (mm)	13
Cost/part (€/part)	1.94
Item	

### FotoDent® insulant

Biobased insulating agent for 3D printed resin models in the processing of autopolymers. Optimum insulation between the resin dental model and the resin plate for the scattering process in the orthodontic field. Also suitable for the fabrication of dentures, e.g. from Castdon.



100 ml D4370

### FotoDent®





### FotoDent® model2\* 385 nm

Light-curing resin for the fabrication of dental working models for orthodontics and prosthetics. Faster printing process due to higher output with the accustomed detail precision.

Print speed (mm/h)	20.7
Print time/platform (min)	38
Print time/part (min)	3.8
Parts/platform (hor.)	10
Material consumption (g/part)	12
Height (mm)	13
Cost/part (€/part)	1.71

### Item

beige opaque, 1.0 kg	D354002
black, 1.0 kg	D354003
white, 1.0 kg	D354004









# FotoDent® model3 385 / 405 nm

FotoDent® model3 is the latest variant of the dental model range. It can be processed on all common DLP and LCD printing systems. The printed dental model can be easily cleaned with water after production and impresses with its high drawing accuracy.

Print speed (mm/h)	23.0
Print time/platform (min)	29
Print time/part (min)	2.9
Parts/platform (hor.)	10
Material consumption (g/part)	12
Height (mm)	13
Cost/part (€/part)	1.23

### Item

1.0 ka		D354005

# **Printing**

### Phrozen Sonic XL 4K - Qualified by Dreve



The Dreve version of the Phrozen Sonic XL 4K has undergone some changes compared to the standard version of the device. For example, we have changed the build platform, which results in optimal adhesion properties for the components. The harder material means that the platform is much less prone to wear than the series version. The Dreve ElementS slicing software also has a positive effect on user-friendliness and perfects the print result.

### Phrozen Sonic XL 4K

Compact LCD desktop printer with  $52 \mu m$  printing precision thanks to 4K display and high light intensity for fast build times. High-quality processed full metal housing, large installation space and easy tray handling make the Dreve version of the Sonic XL 4K a user-friendly 3D printer for all dental applications.

### **Qualified by Dreve**

- Building platform with optimal adhesion properties
- Customized software with precisely adjusted print profiles
- Dreve ElementS slicer and optimized print profiles for top results
- Comprehensive service and support from our experts
- DreveCONNECT
   The 3D printing community exclusively for "Qualified by Dreve" customers.

   Register now! connect.dreve.de











### **Features**

- + Very large construction volume: 200 × 125 × 200 mm
- + Easy replacement of components such as the tray foil
- + 52 µm printing precision thanks to 4K display
- + High light intensity for short build time
- + WLAN, LAN and USB connection
- + Web-based control and monitoring
- + Touchscreen, intuitive software
- + Low maintenance

	ı
Power supply	100-240 V / 50-60 Hz, 0.7 A
Dimensions (H x W x D)	470×330×290 mm
Weight	approx. 18 kg
Layer thickness	0.01-0.30 mm
Item	
Phrozen Sonic XL 4K, white	D3500
Phrozen Sonic XL 4K. red	D3500X1





# **Cleaning**

### **FotoWash**



Our washing unit effectively removes excess resin that adheres to the printed components after the printing process. This material must be completely washed off before post-curing. Cleaning is described in the instructions for the respective FotoDent® material.

### **FotoWash**

Cleaning unit for 3D printed components after the printing process. Unit with magnetic stirrer technology and automatic transfer between the two basins. Various cleaning programs can be selected and created via the touchscreen. The platform of the Sonic XL 4K can be hooked directly into the unit and cleaned together with the adhering components.

### **Features**

- Coordinated cleaning profiles for the FotoDent® materials
- + Optimal match for the Sonic XL 4K
- Automatic transfer between pre-cleaning and post-cleaning

Power supply	100-240 V / 50-60 Hz
Dimensions (H x W x D)	600×570×400 mm
Weight	approx. 15 kg

ltem

FotoWash D3600



# **Post-curing**

**PCU** vario



Crucial for the perfect result: a powerful light curing unit!

For the validated process, the components must be post-cured after cleaning to ensure that the final material properties can be set and biocompatibility can be achieved for medical products. Our post-curing units round off the safe manufacturing process of 3D printed medical products and are convincing due to their simple operation.

### **PCU** vario

LED-based laboratory device for curing 3D printed components. Ensuring mechanics and biocompatibility through effective deep curing. The PCU vario offers both the option of a vacuum atmosphere as well as the option of curing under nitrogen. Biocompatible curing without inhibition layer can be guaranteed.

### **Features**

- Modular design with up to 3 polymerization chambers and only one control module
- Open system with 30 freely programmable memory locations
- Logging and monitoring of process parameters
- Nitrogen and vacuum atmosphere possible

Power supply	100-240 V / 50-60 Hz, 500 W
Dimensions (H x W x D)	240×660×410 mm
Polymerization chamber's inner dimensions (H x W x D)	80×420×270 mm
Weight	approx. 38 kg



PCU vario 4319



# Post-curing



# PCU LED N<sub>2</sub>

LED-based laboratory device for curing 3D printed parts. Ensuring mechanics and biocompatibility biocompatibility through effective deep curing. Two different curing environments can be selected depending on the application area. The nitrogen environment of the PCU LED  $N_2$  ensures cured parts without an inhibition layer – for laboratory and medical products.

### **Features**

- Open system with 10 freely programmable memory location
- Simple operating concept with electronic control
- Logging and monitoring of process parameters
- + Multiple curing environments

Power supply	100-240 V / 50-60 Hz, 0,7 A
Dimensions (H x W x D)	110 × 389 × 276 mm
Polymerization chamber's inner dimensions (H x W x D)	65×150×150 mm
Weight	approx. 9.3 kg
PCU LED N <sub>2</sub>	4317





# We print it

Do you need support? We are available to you at all times with our Print@Dreve service as a back-up at any time.

Print@Dreve is your service offer for generatively manufactured dental components "Made in Germany". High-performance printing systems enable the highest industry standards in terms of precision, build volume, material and process flexibility. Because the entire workflow, which also includes cleaning and final curing of the models, is consistently developed further and innovations are continuously worked on in the company's own research and development department, Print@Dreve consistently offers the required detail precision at an acceptable unit price.







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