FotoDent® News

You print it.

FotoDent® product world

Generative production from one source.

For decades, our digital dental products have stood for proficiency and innovation in the field of medical 3D printing. Just like it is with the classical portfolio, the system concept plays a crucial part: resins and the post-curing unit are perfectly matched, all from one source. Together with Carbon®, we are constantly working on more and more qualified laboratory methods to optimize working processes and save time and money.

Join us into the digital future! No matter whether it is for a prosthetic or orthodontic lab, only products complying with the high quality demands of dental applications and medical devices during the entire production chain will leave our facility. Results from the FotoDent® product world speak for themselves and add to the success of every future-oriented dental business.

Material data

FotoDent® IBT	90 Shore A	–	–	≥ 45 %	0.7 ≥ 0.2 Pa s
FotoDent® gingiva	~ 70 Shore A	–	–	> 40 %	~ 2 Pa s
FotoDent® tray	> 80 Shore D	≥ 2.000 MPa	≥ 75 MP a	> 5 %	~ 1 Pa s
FotoDent® cast	80–90 Shore D	≥ 2.000 MPa	≥ 100 MPa	7.5–11 %	< 0.3 Pa s

FotoDent® IBT

Biocompatible light-curing resin for manufacturing transparent indirect bonding trays. Transparency makes it easy to monitor correct bracket positioning before and during bracket placement. Flexible for easy removal and usable with all common bracket systems.

1.0 kg bottle	385 nm

FotoDent® gingiva

Light-curing resin suitable for manufacturing dental gingiva masks. The opaque pink material stays soft and flexible and can perfectly be combined with working models.

1.0 kg bottle	385 nm

FotoDent® tray

Biocompatible, light-curing resin suitable for manufacturing custom impression trays. The opaque green material offers high reactivity and low viscosity. The printed impression trays have a smooth surface which minimizes the need for manual finishing.

1.0 kg bottle	385 nm

FotoDent® cast

Light-curing resin suitable for casting removable partial denture frameworks and crowns. The material is compatible with all commercially available investment materials and burns without residue.

1.0 kg bottle	385 nm

Reliable post-curing with pioneering technology

PCU LED N_2

A laboratory unit with LED-basis for the curing of 3D printed parts which ensures the mechanics and biocompatibility through effective deep curing. Two different curing environments are selectable depending on the application area. The additional nitrogen environment of the PCU LED N2 ensures cured components without an inhibition layer – for laboratory and medical devices.

Inner dimensions polymerization chamber:

H 65 mm
W 150 mm
D 150 mm

- **Open system with 10 programmable memory spaces**
- **Simple operating concept with electronic control system**
- **Logging and monitoring of process parameters**
- **Selectable curing environments**

Professional post-curing unit for high volume production

PCU 90

The PCU 90 is a professional light polymerization unit for the curing of 3D printed parts with industrial standard. The metal halogen lights and the fine tuning of the wavelengths make the PCU 90 extremely suitable for the curing of light curing resins.

Inner dimensions polymerization chamber:

H 360 mm
W 610 mm
D 410 mm

- **Up to 62 dental models per curing process**
- **Adjustable nitrogen flow**
- **Intuitive menu for straightforward use**
- **Validated for use only with Carbon L1 Printer and DPR10 resin**

PCU LED N_2	100–240 V / 50–60 Hz, 0.7 A	9.3 kg	110 x 389 x 276 mm	red
PCU 90	230 V / 50 Hzm 220 V / 50 Hz CEE	140 kg	725 x 1185 x 612 mm	red

Hardness · Elastic modulus · Flexural strength · Tensile-/ Break-/ Bending strength · Viscosity

Voltage · Weight · Colour · Dimensions (H x W x D mm)