

DENTCA™

A permanent solution for your provisional needs!
Tired of manually grinding acrylic for Crown and
Bridge provisional restorations?
Experience the simplest solution today.



Dentca now offers 3D printable acrylic crown and bridge materials to create aesthetic and well-fitting restorations for your lab and dental office. Experience the difference with Dentca's simple workflows and revolutionary material.

Simply:

DESIGN

PRINT

CURE

Available colors: A1, A2, A3, A3.5, B1 & B2.

Crown & Bridge Manufacture Overview:

Design

- Scan your model if you did not receive digital files.
- Design your Crown/Bridge with your preferred software, and export in a printer loadable format.

Printing

- Load your Crown or Bridge files into your M2 Series Carbon Printer, generate supports and base.
- Place the corresponding Dentca C&B Material for Carbon Printers on the resin tank & print.



Post-Processing & Polishing

- Remove the printed teeth from the building plate, wash them with IPA and remove any supports from the denture base and teeth.
- Remove any support marks from the teeth with an acrylic bur.
- Submerge the dentures in a glycerol bath and post cure them on a Dymax ECE 5000 curing unit for 10 minutes per side or 20 minutes on the Dreve PCU LED N2 curing unit.
- Polish the external surface of the crowns/bridges with pumice; then switch to a dry lathe disc and polishing paste for a glossy finish.



DENTCA/Carbon Material Details

Crown & Bridge Material Pricing and Yield	
DENTCA-Crown & Bridge Material for Carbon Printers \$500/kg	
Available Shades: A1, A2, A3, A3.5, B1 & B2	
*1kg yields approx. 50 arches or 700 units	

Equipment Pricing	
Carbon M Series Printer	Please contact dental@carbon3d.com for more information
Dymax 5000 ECE Curing unit	\$6,550 (To acquire please visit https://www.dymax.com/curing-systems/flood-lamps/flood-lamps-ece-series)
Dreve PCU LED N2 Curing Unit	\$5,518 Please contact http://Innovation-meditech.de/en/shop

Technical Data	
Flexural Strength	> 50 MPa
Compressive Strength	> 100 MPa

DENTCA Crown & Bridge Material FAQ's

Does Dentca design Crowns and Bridges as a service or has a design software available to use?

At this time, Dentca does not offer Crown & Bridge design services, nor is it available at www.dentcadesign.com.

How is manufacture training provided?

In most instances post processing training is provided via online webinars, video conference and training videos. For printing operation training, please contact Carbon directly.

What makes Carbon printer the ideal partner for printing Dentca Dentures?

Carbon is our preferred partner as its printers have proven to be a complete 3D manufacturing solution for labs. The robust and reliable printer quality is ideal for denture production

How can I acquire printing materials?

Trays and materials can be ordered on www.dentca.com (Account registration necessary).

What is the approved longevity of the material?

The Dentca Crown & Bridge material is a permanent material that can stay in the mouth until the final restoration is ready (30 Days in Canada due to Canada Health Regulations).

How is it the DENTCA Crown & Bridge material different from the DENTCA Teeth Material? Can I use the DENTCA teeth material for Crown and Bridge?

DENTCA teeth material is specifically engineered for use in denture manufacture, while the Crown & Bridge material is engineered for its own purpose. Materials should not be substituted or interexchanged with one another.

How do Dentca's 3D Printable Crown & Bridge materials differ from conventional?

The DENTCA Crown and teeth material is made of several acrylates which have been applied to dental field. Physical properties and biocompatibilities have passed the FDA requirements and are similar to conventional acrylic material used for manufacturing Crown and Bridge temporaries.

What is the micron layers I need to use for printing?

50-100 Microns.

Can I stain this material after printing?

Yes, DENTCA's crowns & Bridges can be stained just like any other acrylic temporary.

Do I need to preheat the glycerol bath to cure the material?

Yes, it needs to be preheated to 60-80 degrees celsius.

If I had to grind the crown/Bridge for fitting, can I use conventional auto-cure acrylic material to reline?

Yes, if any quick relines are needed conventional auto-cure acrylic can be used to adjust fit..

What material should be used for cementing these Crowns/Bridges?

Any temporary cement would work.