INNOVATION THROUGH TECHNOLOGY & EXPERIENCE



SEPTEMBER 2019

Making smiles for you Since 1982

IMPLANTS:

TRANSLUCENCY vs.
STRENGTH

CHECK OUT OUR UPDATED WEBSITE!

dentalceramicsic.com

"Thanks for all the work you send our way!"

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Happy Fall!! Greetings From Dental Ceramics of Iowa City!

Where Did Summer Go?

Summer left us way too quick!! I'm hoping you all had a wonderful one, full of exciting travels and spending quality time with friends and family.

Did you know?

We fabricate bleaching trays, as well as ortho hard acrylic retainers! We also create custom guides for implant placement; it's a quick guide for ideal placement from our perspective. We don't have the CBCT scan to see exactly where the bone is, however it helps with the angle of placement. They are inexpensive compared to other surgical guides and we can duplicate and fabricate the patient's essex retainer. As of late, we have been particularly busy with implant cases; because of that our stock of implant parts has become quite extensive! Special orders can be placed for any implant part or brand that we don't already have in-house!

ZIRCONIA FACTS!

We mill several types of zirconia. The prettier ones have a lower strength factor. Although new ones are on the horizon!

The location of a restoration, and the biting force, is critical to determining the required strength level of a zirconia material. Most fractures occur to molars and pre-molars, as a result of the high stress they endure in the back of the mouth. To avoid fractures, the occlusal thickness must be adjusted to compensate for the strength of the selected zirconia material.

For example, if a zirconia restoration with a flexural strength of 1100 MPa needs to withstand a force of 400 Newtons, which is the typical force a second molar receives, then the minimum occlusal thickness needs to be 0.6 mm.

The 1100 MPa material is one of the strongest zirconia's out there and works well in the molar region and for bridges; this is our typical CYZ crown. This zirconia is manufactured in the USA!!

The more translucent the material is (around 750 MPA) works well for anterior restorations. Layered zirconia is another option. We typically try to leave a full zirconia occlusal or lingual surface to provide as much strength as possible and layer the facial surface for a highly esthetic crown. This is the best option when with occlusal clearance being minimal.