

CROWNS

IPS e.max[®] CAD/Press

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Reinforced glass ceramics have been successfully used in all-ceramic restorations for more than 15 years. Now IPS e.max CAD/Press unites the latest in CAD/CAM processing and pressing technologies with a high performance lithium disilicate glass ceramic. The result – an incredibly precise, and affordable, solution for single anterior and posterior all-ceramic crowns.

Exceptionally accurate CAD/CAM milling or Pressing from a single solid block of glass ceramic creates a life-like, durable restoration with flexural strength of 360 – 400 MPa (second only to cast gold). Best of all, you can use all of your standard techniques – traditional all-ceramic preparation and conventional or adhesive cementation.



The “Technology”

Revolutionizing the way all-ceramic crowns are crafted, Aurum Ceramic's state-of-the-art CAD/CAM and Press facilities offer unsurpassed precision. Digitally equilibrated occlusion, contacts and beautifully consistent anatomy virtually eliminate the need for chair side adjustments. The system's unparalleled accuracy ensures restorations with outstanding marginal fit and easy seating. Final strength and physical properties are achieved through a unique final in-laboratory crystallization process.



The “Material”

Thanks to an innovative manufacturing process, IPS e.max CAD/Press features an impressive homogeneity and shade blend with natural dentition. Its actual optical properties promote light transmission into the restoration. The shade you see on the outside of the restoration is the same shade you see on the inside. There are no dark metal substructures or snow-white Zirconia-based cores to mask out.

Features and Benefits

E.max CAD/Press from Aurum Ceramic – the perfect answer for single anterior and posterior all-ceramic crowns.

- Strong lithium disilicate glass ceramic — 360 - 400 MPa flexural strength second only to cast gold.
- Milled with CAD/CAM technology or Pressed for ultra-precise fit.
- Virtually perfect contacts, margins and occlusion.
- Beautiful blend with natural dentition — enhanced by Aurum Ceramic's unique optical techniques.
- Traditional all-ceramic preparation. Conventional or adhesive cementation.



Indications:

- Anterior full-coverage crowns.
- Posterior full-coverage crowns.
- Implant superstructures for single tooth restorations.

Contraindications:

- Knife-edge irregular margins.
- Insufficient preparation reduction.
- Bridges.
- Veneers.
- Inlays/Onlays.

Shade Selection:

- For basic shades, use the Vita Lumin, Vita 3D Master or Chromascop Shade Guides.
- For bleached shades, use the Chromascop Bleached Shade Guide, Vita 3D Master Bleached Shade Guide or Illuminé Shade Guide.

Laboratory Requirements:

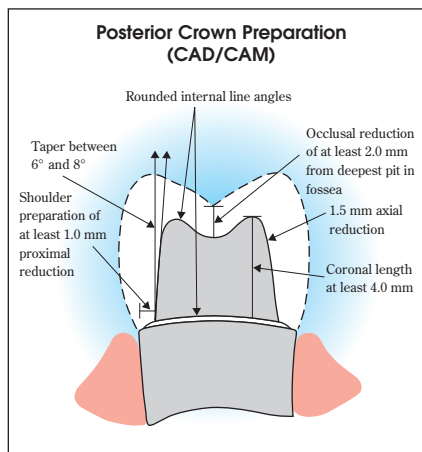
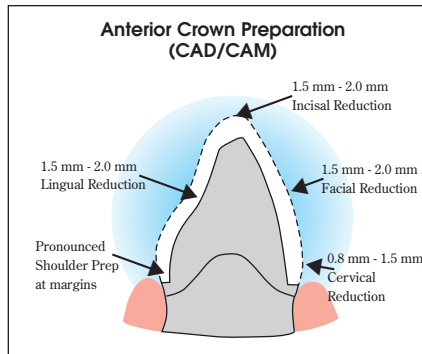
1. Thoroughly detailed prescription denoting which teeth are to be crowned, extracted and/or bridged as well as selected shade.
2. Clear and accurate upper and lower full arch impressions or study models.
3. Bite registration.

Techniques and Tips:

A. Crown Preparation

- a) IPS e.max CAD/Press can be fabricated on conservative 360° butt or chamfer margin preparations. Clear margins are a prerequisite for an accurate restoration.
- b) Margins should be sharp, but all internal features, whether positive or negative, should be rounded as with any all-ceramic. Avoid sharp angles and undercuts.
- c) The incisal edge of the prepared tooth should be at least 1 mm (milling tool dimension) in order to enable optimal milling of the incisal area during the computer-aided manufacturing process.
- d) Maintain an even reduction of anatomical form.

- e) These are minimum requirements. Strength will be increased with more tooth reduction (Note: opacity will be less, translucency will be better).
- f) Include a pre-op model for all anterior cases. Include an impression of temporaries for all anterior restorations when four units are involved.



B. Try-in

- Only “passive” pressure should be needed to fully seat the restoration.
- Never force restorations into place.
- If restorations fail to seat passively in the mouth, but fit on the model, please return to the lab with a new impression.

C. Cementation

- IPS e.max CAD/Press crowns can be cemented with any conventional PFM

cement (e.g., Glass Ionomer) or Composite Resin Cement (e.g., MultiLink or Panavia 21). *NOTE: Cements with higher expansion rates (e.g., hybrid ionomer cements) must NOT be used.*

- All final seating should be accomplished with only “passive” finger force. Never force restorations into place.
- Clean tooth surfaces. Tooth surface should not be dehydrated when cement is applied. Excessive drying concentrates protein debris and prevents efficient wetting of tooth surface.
- Never use varnishes to protect tooth if polyacrylic acid cements are used (prevents chemical bonding to tooth structure).
- Protect margins of cement with varnish after initial set (5 to 6 minutes). Saliva should not come into direct contact with unset cement.

D. Bonding

- IPS e.max CAD/Press crowns can also be seated adhesively (i.e., place rubber dam, apply silane to internal surface of restoration, total etch, dentin bonding, dual cure resin, etc.).
- All recommendations for the bonding systems should be followed.
- When placing temporaries, care must be taken to use only eugenol-free temporary cements if practitioner intends to bond the final restorations in place.

Adjustment Tips:

- Use low speed smooth cutting instruments to prevent fracture-causing stresses.
- Avoid internal adjustment of IPS e.max CAD restorations. When adjustments are necessary, adjust prepped tooth.
- Only adjust contacts prior to cementation/bonding.
- Adjust occlusion only after final seating and full cure of cement.
- Avoid carbide use.

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