

BruxZir® Crowns & Bridges

Designed and milled using CAD/CAM technology, BruxZir® Solid Zirconia is a monolithic zirconia crown, bridge, screw-retained implant crown, inlay or onlay with no porcelain overlay. First launched as being “More Brawn Than Beauty,” the material was originally intended to provide a durable, more aesthetic alternative to posterior metal occlusal PFMs or cast gold restorations for demanding situations like bruxers, implant restorations and areas with limited occlusal space. Now, thanks to the new BruxZir Shaded formulation, BruxZir restorations exhibit improved translucency and color similar to natural dentition, making them a restorative option in the anterior as well. Complete color penetration all the way through the restorations ensures greater shade consistency and prevents any shade changes after occlusal adjustment.

Indications

BruxZir Solid Zirconia is indicated for crowns, bridges, implants, inlays and onlays, screw-retained implant crowns and full-arch implant prostheses. It is an aesthetic alternative to PFM metal occlusal/lingual or full-cast restorations. The chip proof durability of a BruxZir restoration is ideal for bruxing patients who have broken natural teeth or previous PFM restorations. BruxZir Solid Zirconia is also ideal when the patient lacks the preparation space for a PFM.

Patient Benefits

- Wear-friendly to opposing natural dentition
- Resistant to chipping because it is made of solid zirconia with no porcelain overlay
- Glazed to a smooth surface to reduce plaque accumulation

BruxZir® Anterior Solid Zirconia

BruxZir® Anterior is the latest advancement in the BruxZir Solid Zirconia product line. This highly aesthetic restorative material is kind to natural opposing dentition during occlusal and parafunctional activity and is designed specifically to satisfy the aesthetic and functional requirements of the anterior region of the mouth. Exhibiting an average flexural strength of 650 MPa with translucency and color similar to natural dentition, BruxZir Anterior is an ideal, aesthetic solution for your anterior cases. In addition to its aesthetics, BruxZir Anterior prep requirements are more conservative than competitors in its class with only 0.8 mm of reduction required though 1.25 mm is ideal. BruxZir Anterior restorations are designed and milled using CAD/CAM technology to ensure a precise fit.

Indications

BruxZir Anterior restorations exceed the ISO strength requirements for cemented all-ceramic restorations and are ideal for anterior and premolar cases. Indications include single-unit crowns and 3-unit bridges with one pontic. Also an aesthetic alternative to a PFM with metal occlusion due to limited space.

Patient Benefits

- Highly aesthetic restorative material with translucency and color similar to natural teeth
- Keep more of your healthy natural tooth, due to the minimal preparation requirements of BruxZir Anterior
- Chip-resistant, as it is made of solid zirconia with no porcelain overlay
- Glazed to a smooth surface to reduce plaque accumulation

BruxZir® Solid Zirconia Full-Arch Implant Prosthesis

The BruxZir® Solid Zirconia Full-Arch Implant Prosthesis offers a fixed, all-zirconia implant solution for edentulous patients desiring a more durable and aesthetic replacement for removable dentures. Constructed from 100 percent BruxZir Solid Zirconia, this full-arch restoration dramatically improves speech and chewing function and attaches to implants via titanium connections. BruxZir Solid Zirconia offers superior fracture toughness and exhibits flexural strength up to 1,465 MPa, making it ideal for enduring the functional stresses that dentures must withstand.

- BruxZir Solid Zirconia is biocompatible and lifelike, exhibiting remarkable translucency and color similar to natural dentition. State-of-the-art CAD/CAM technology is employed to achieve a precise fit and a predictable result. Strong, hygienic and affordably priced, the BruxZir Solid Zirconia Full-Arch Implant Prosthesis offers exceptional resistance to the chips, fractures and stains that can compromise acrylic dentures.
- Also available for partial-arch indications (5-7 units), the BruxZir Partial-Arch Implant Prosthesis is an aesthetic, more durable replacement for removable partial dentures. The BruxZir Partial-Arch Implant Prosthesis helps clinicians achieve a predictable restorative result and dramatically improves patient quality of life.

Indications

- Indicated for edentulous patients that desire a completely fixed restorative option that is both highly aesthetic and natural-looking. The BruxZir Solid Zirconia Full-Arch Implant Prosthesis is designed for patients who have moderate to severe ridge resorption.

BruxZir® Screw-Retained Implant Crowns

Retrievable, cement-free and durable, BruxZir® Screw-Retained Implant Crowns are a convenient, hygienic and predictable restorative option. Easily removed without damage to the crown, screw-retained implant crowns provide convenient access for restoration cleaning, replacement of prosthetic screws, and assessment of the soft tissue and adjacent teeth. They are the optimal choice in clinical situations where limited interocclusal clearance is a factor or residual cement is a concern. Constructed from monolithic solid zirconia with a titanium base connection, BruxZir Screw-Retained Implant Crowns offer exceptional fracture resistance and aesthetics, and are the perfect fit for a wide variety of challenging prosthetic circumstances.

Indications

Indicated for single-unit implant restorations where easy retrievability of the crown is desired or limited vertical dimension is a concern. BruxZir Screw-Retained Implant Crowns are an aesthetic and exceptionally strong solution for addressing various prosthetic considerations.

Technical Information

BruxZir® Solid Zirconia is indicated for crowns, bridges, screw-retained implant crowns and full-arch implant prostheses. It is an aesthetic alternative to PFM metal occlusal/lingual or full-cast restorations and ideal for restorations requiring extra durability such as crowns under partials or screw-retained implant crowns. The chip-proof durability of BruxZir restorations also makes them ideal for bruxers who have broken natural teeth or previous PFM restorations. BruxZir restorations are also ideal for patients lacking the preparation space for a PFM.

BruxZir Anterior is the latest advancement in the BruxZir Solid Zirconia product line. This highly aesthetic restorative material is designed specifically to satisfy the aesthetic and functional requirements of the anterior region of the mouth. Exhibiting an average flexural strength of 650 MPa with translucency and color similar to natural dentition, BruxZir Anterior is an ideal, aesthetic solution for your anterior cases. BruxZir Anterior restorations exceed the ISO strength requirements for cemented all-ceramic restorations and are ideal for anterior and premolar cases. Indications include single-unit crowns and bridges with one pontic.

Preparation Requirements for BruxZir Crowns & Bridges

Shoulder preparation not needed, feather edge is OK. It is a conservative preparation similar to full-cast gold, so any preparation with at least 0.5 mm of occlusal space is acceptable.

Minimum occlusal reduction of 0.5 mm; 1 mm is ideal.

For BruxZir Anterior restorations, a minimum occlusal reduction of 0.8 mm; 1.25 mm is ideal.

Cementation Recommendations

Ceramir Crown & Bridge or a resin-reinforced glass ionomer cement such as RelyX™ Luting Cement (3M ESPE; St. Paul, Minn.) or GC Fuji Plus™ (GC America; Alsip, Ill.)

For short or over-tapered preparations, use a resin cement such as RelyX™ Unicem (3M ESPE) or Panavia™ F2.0 (Kuraray; New York, N.Y.)

Cementing or Bonding BruxZir Crowns & Bridges

Cementing BruxZir restorations with Ceramir (Doxa Dental) Crown and Bridge cement:

- Try BruxZir crown in mouth and make any necessary adjustments to contacts and occlusion.
- Rinse internal surface of BruxZir crown with air and water, and place Ivoclean (Ivoclar) inside of restoration and rinse off after 20 seconds.
- Mix and place Ceramir cement in crown, seat crown on tooth and proceed with cleanup as it enters doughy stage.

Cementing BruxZir restorations with resin-modified glass ionomer (RMGI) cements, such as RelyX Luting Plus (3M ESPE) and Fuji-CEM (GC America):

- Try BruxZir crown in mouth and make any necessary adjustments to contacts and occlusion.
- Sandblast internal surface of BruxZir crown for 15 seconds, or place Ivoclean (Ivoclar) inside of restoration and rinse off after 20 seconds.
- Place zirconia primer, such as Z-Prime Plus (Bisco) or Monobond Plus (Ivoclar), on internal surface of BruxZir restoration and dry for 3-5 seconds with an air syringe.
- Mix and place RelyX Luting Plus or Fuji-CEM cement in crown, seat crown on tooth and proceed with cleanup.

Bonding BruxZir restorations with self-adhesive resin cements such as RelyX Unicem (3M ESPE) and Maxcem Elite (Kerr), self-etching resin cements such as Panavia F 2.0 (Kuraray) and MultiLink Automix (Ivoclar), or etch-and-rinse resin cements such as NX3 (Kerr) and Variolink 2 (Ivoclar):

- Try BruxZir crown in mouth and make any necessary adjustments to contacts and occlusion.
- Sandblast internal surface of BruxZir crown for 15 seconds, or place Ivoclean (Ivoclar) inside of restoration and rinse off after 20 seconds.
- Place zirconia primer, such as Z-Prime Plus (Bisco) or Monobond Plus (Ivoclar), on internal surface of BruxZir restoration and dry for 3-5 seconds with an air syringe.
- Mix and place any of the resin cements above in crown, seat crown on tooth and proceed with cleanup.

BruxZir Case Gallery:

www.bruxzir.com/dental-zirconia/case-gallery/