

Tips from practicing dentists on using products to the best advantage

Product Category: CROWN AND BRIDGE

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Practice location: Chattanooga, TN
Type of practice: General Dentistry
Years in practice: 16
System/product to be described: Screw-Retained BruxZir Hybrid Bridge
Manufacturer: Oral Arts Dental Laboratories
Company Website: www.oralartsdental.com

Description of this product and its benefits to the dental patient:

Currently there are many options for restoring mastication to the fully or partially edentulous patient. For patients with the financial resources to allow, an implant supported or retained solution is always the best option. A recently new development in restoring an edentulous patient with implants is a product coined the BruxZir Solid Zirconia Screw-Retained Hybrid Bridge. The BruxZir Hybrid is a full round-house restoration computer designed and milled from a solid disk of shaded BruxZir zirconia. After sintering the zirconia, lab techs add pink porcelain around the gingival of the teeth to create a labial flange. Titanium inserts are then cemented into the intaglio surface of the zirconia at each implant site to provide a sturdy platform against the existing implants. Labial surfaces of anterior teeth can be cut-back and layered with porcelain when needed for esthetically demanding patients. The BruxZir Hybrid provides edentulous patients with an esthetic, extremely strong and chip resistant full arch implant prosthesis.

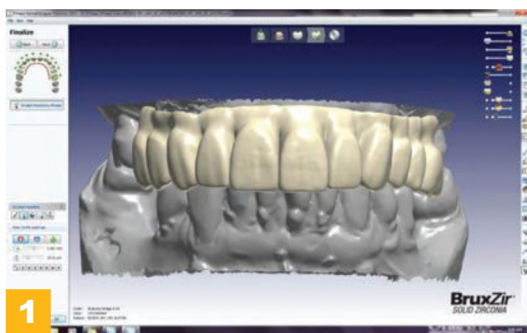


Figure 1: The Screw-Retained BruxZir Solid Zirconia Bridge is CAD/CAM designed by scanning a denture tooth try-in.
Figure 2: The bridge is milled from a solid disk of BruxZir shaded zirconia using a 5-axis milling machine.
Figure 3: Pink Porcelain is applied to create gingival contours and a labial flange. Titanium inserts are cemented into the bridge for a stable connection to each implant platform.
Figure 4: The patient was very pleased with the final outcome of the screw-retained prosthesis.

Step-by-step description of how this product is used with a patient:

After several months of implant healing the patient was appointed for an implant level impression using a stock tray and closed tray impression copings as well as an opposing impression. This was sent to the lab to create an implant verification jig using an initial model.

The precision of the final bridge requires that a verified model be used prior to fabrication of any screw-retained prosthesis. If the impression is distorted by as little as a tenth of a millimeter the final bridge



will not seat or may fail catastrophically. This phase of the treatment is critical to future appointment success.

The implant verification jig is made in the lab using a light cure material around titanium temporary cylinders and long screws. The jig is sectioned and numbered and sent to the doctor in two or more pieces.

A bite rim is also used to establish the Vertical Dimension of Occlusion and Midline.

After each section of the verification jig is seated onto the implants and luted together intra-orally a final impression is made using an open custom tray made by the lab. The impression picks up the luted jig inside the tray.

Next the lab, using the verified model and bite rim, does a denture tooth wax setup and try-in to verify the midline and esthetics of the tooth arrangement as well as the bite. Next the denture tooth try-in is scanned in the lab using a computerized laser scanner. Once scanned, the technician can copy design the denture tooth setup and mill the design from the solid disk of BruxZir zirconia.