

Zirkonzahn®

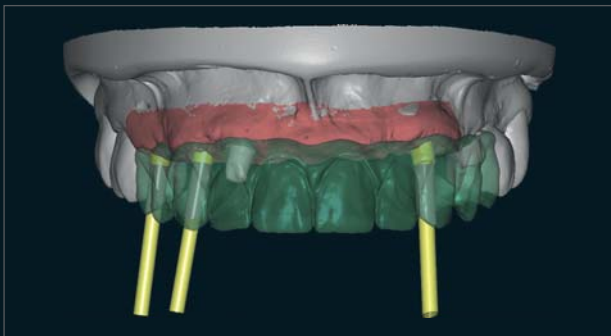
Human Zirconium Technology



DENTAL CULTURE FROM MEXICO

OCCLUSALLY SCREW-RETAINED TEN-UNIT PRETTAU® BRIDGE IN THE MAXILLA

The aim of this case was to manufacture an occlusally screw-retained ten-unit Prettau® Bridge (15 to 25) starting from a prototype including the maxillary and mandibular models and the gingival masks of the patient case. The challenge in this case was that implants 12 and 23 had a pronounced vestibular alignment: thus, we had to change the inclinations of the screw access channels from vestibular to palatal. First of all, we created a case in the Zirkonzahn.Archiv software. We digitally recorded the prototype and the implant situation with the S600 ARTI Scanner. Implants 13 and 15 were detected with the help of Scanmarkers, while at sites 12 and 23 titanium bases were screwed in place on the model. Titanium bases allowed the “occlusal screwed manual” function to be activated in the Zirkonzahn.Modellier software and to incline the respective screw access channels accordingly. If, by contrast, the implants are scanned with Scanmarkers, the position of the channels is already predetermined and cannot be changed. The inclinations of the screw access channels at sites 15, 13 and 23 now automatically met the previously mentioned aesthetic requirements. The inclination of the access channels for implants 12 and 25 was determined during the modelling step. Once completed in the modelling software, the virtual wax-up was transferred to the Zirkonzahn.Nesting software. The wax-up was nested in a Prettau® Zirconia blank and fixed with connectors and a sintering stabiliser. The milling was performed with our 5+1 axes milling unit. The structure was then reduced manually in the anterior region (14 to 24) and in the gingiva, stained with Colour Liquid Prettau® Aquarell, sintered and layered with ICE Zirkon Ceramics. After the wash firing and first dentin firing, the desired depth effect had already been achieved and we applied the ceramics to give the restoration its final shape. The correction firing was carried out with Ceramic Enamel and Ceramic Transpa 2. We then shaped the surface structure of the ceramic material with different diamond burs, replicating the shape and the refraction of the natural tooth. Finally, we painted the structure with ICE Zirkon 3D Stains by Enrico Steger. Ceramic Low Fuser was added in some areas, followed by a stain and glaze firing.





EDUCATED BY ZIRKONZAHN

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To have a look at the complete gallery of this case visit our website www.zirkonzahn.com



M1 WET HEAVY METAL MILLING UNIT

- 5+1 axes simultaneous milling and orbit technology
- For processing zirconia, resin, wax, wood, sinter metal, cobalt-chrome, titanium, glass ceramics, composite as well as Raw-Abutments® and Bridge-Rods depending on equipment
- Milling Spindle Hard Automatic
- Tool Changer function with 8-fold Tool Magazine
- CAD/CAM Milling Bur 6 mm for more stability during milling
- Wet processing
- Particularly space-saving



HUMAN ZIRCONIUM TECHNOLOGY

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