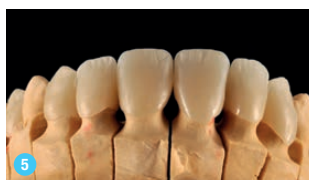


New Zirconia KATANA™ Digital Concept

Since 2010, thanks to its increased translucency, KATANA™ HT has become paramount in fully meeting the ever more demanding aesthetics in restorations where a zirconia frame is used in combination with new generation ceramics CZR. Such ceramics feature an enhanced leucite balancing, which makes them stronger and more durable. 1 2 3 4



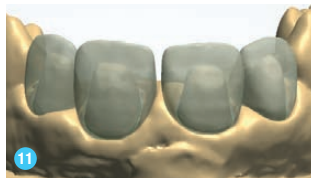
Since 2013, ML-Multi Layer technology has made it possible to skip the infiltration phase through multi-layered dentine/enamel millable discs. Such Multi-layered discs allow CUT-BACK solutions that definitely improve the function-related result as the palatal part of the restoration can be manufactured by using KATANA™ ML Zirconia only. Thus, without limiting the aesthetic results (which are reached by enamel-ceramic LUSTER porcelain with “MICRO LAYERING technique”, the restoration benefits of the low abrasiveness of the functional-occlusal areas which is reached through simple and effective mechanical polishing without either surface staining or glasuring. 5 6 7 8 9





DANIELE RONDONI

- Graduating in 1979, Daniele Rondoni opened a laboratory in 1982, which is also the home of the AAT Community College he founded.
- Teacher and counsellor for the “Italian School for Dental Technicians” at the University of Chieti, University of Sienna and University of Rome Tor Vergata.
- EAED and IAED Active Member and a SICED Associate and O.L.
- International Instructor for Kuraray Noritake Dental products.
- Author of “Tecnica della Multistratificazione in ceramica” (Ceramic Multilayering Technique) and a lab manual about the use of composite materials, introducing his own method – the “Inverted Hardness Layering System”.



New generation KATANA™ UTML and STML introduced in 2015 can be used for anterior restoration thanks to the cubic zirconia based products that have been made available to make it possible to conceive a bi-layer to mono-layer transition in most clinical situations.



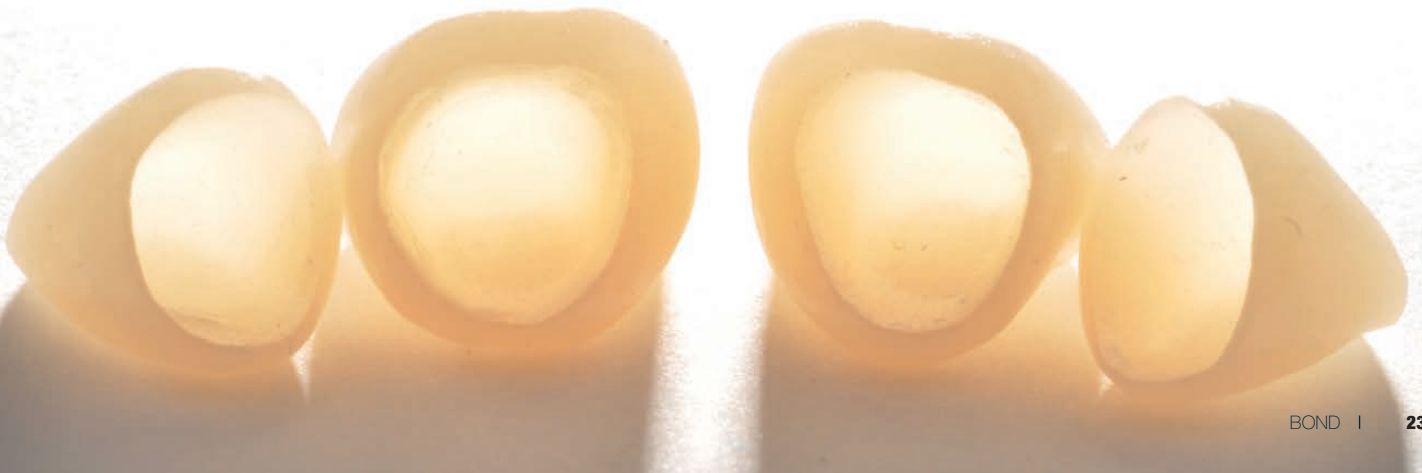
Cubic zirconia features superior optical behavior. Although mechanically inferior in performance to conventional zirconia, KATANA™ UTML and STML are aging-resistant, while UTML offers the same translucency as lithium disilicate based solution.

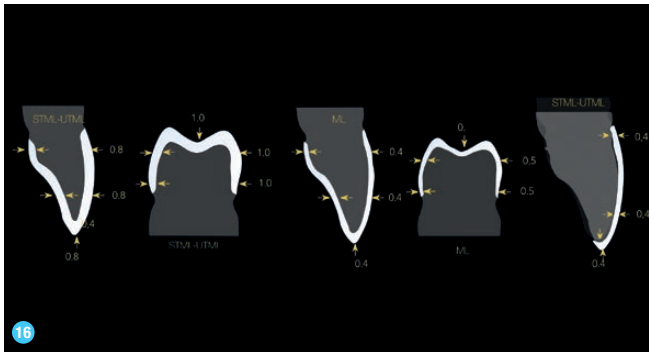
“ZERO-CUTBACK technique” is one of the ideal techniques that can be achieved with cubic zirconia solution. They can perfectly replicate digital projects without any need for subsequent layering and can be easily painted and mechanically polished in the palatal area. 10 11 12 13 14 15



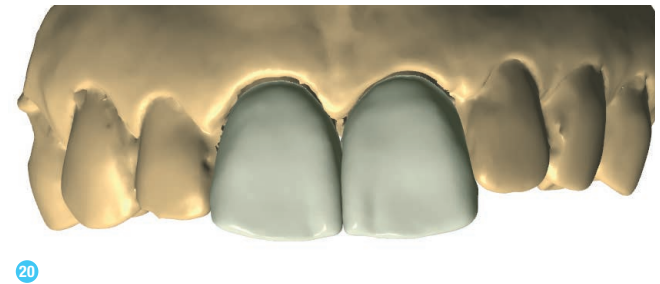
Kuraray Noritake Dental has also developed CZR FC Paste Stain with a wide range of coloring pastes specially designed for full-anatomical solution of multi-layered zirconia. Their effectiveness is proven to be enhanced when used with “ULTRA MICRO LAYERING technique” on thin glasure or thin transparent ceramic mass.

15



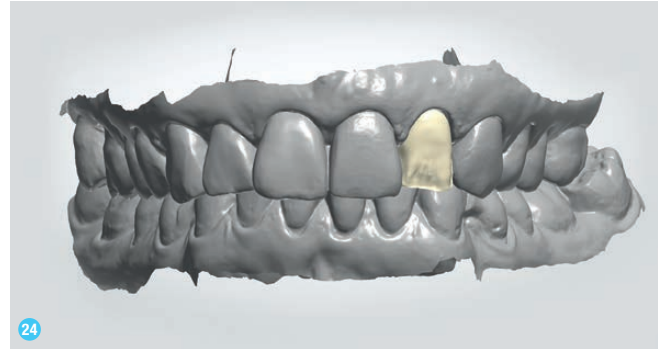
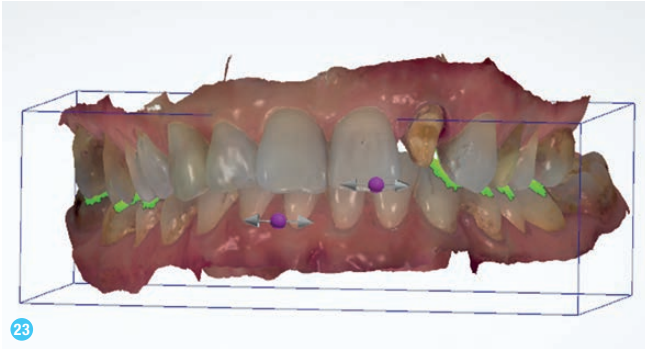


Another advantage with STML and UTML products is the lower thickness, respectful of the latest micro-invasive dentistry standards and current market requests. [16](#)



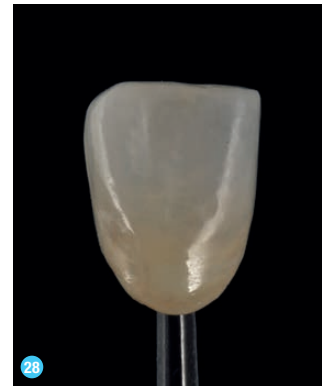
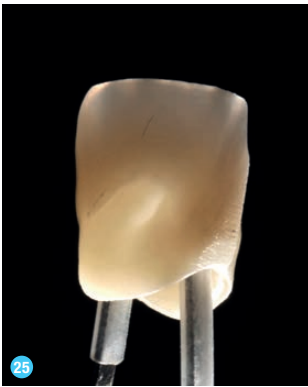
Excellent flexural strengths higher than 550/750 MPa allow restoration to feature micro-invasive thicknesses from 0.4 mm on, p.e. on laminates. Unlike PFZ, zirconia lower thicknesses ensure better results. [17](#) [18](#) [19](#) [20](#) [21](#) [22](#)





Above all, new generation zirconia makes the digital work-flow more efficient and performing, from the intra-oral impression to the final product which can be manufactured “model-free”.

23 24 25 26 27 28



Thus a new procedure standard is introduced, where simplified adhesive cementation through composite cements opens the the way to zirconia-based adhesive restoration techniques. Regarding adhesion, unlike glass-ceramic, zirconia is not etchable, yet it can be fixed through phosphate monomer MDP, i.e. Panavia™ V5 29 30 31 32 33 34 35

