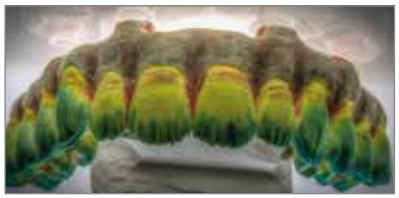

The Initial series

. . . a game changer

Clinical case by **Bill Marais**

Dr Bill MARAIS

Born in Johannesburg, South Africa, Bill moved to Cape Town at the start of his high school years. In 1993, he graduated as a Registered Dental Technician, after 4 years of study in Dental Technology (recognized Bachelors Degree in Prosthetic Sciences in the USA), from Cape Peninsula University of Technology.

After working in a dental lab in South Africa for 3 years, Bill immigrated to the USA in 1996. In 1999, Bill opened his own lab, Disa Dental Studio, in Santa Monica, California. Bill moved his family and Disa Dental Studio to Portland, Oregon, in January 2011. Disa Dental Studio is a one-man lab focusing on high-end, complex, combination cases.

Bill is grateful to be a Key Opinion Leader for GC America. Bill lectures and teaches nationally representing GC America as well as independently. He also teaches Dental Photography classes.

As a dental technician, my Achilles Heel has always been my artistic ability, always . . . and this definitely includes replicating gingival tissue.

With years behind me in this profession, and the accumulation of experience, I still believed I was lacking in my artistic skills as I struggled to achieve high end results.

The turning point for me came with my being introduced to GC Initial Zr-FS and GC Initial Zr Gum Shade Set, INvivo internal/external stains, GC Initial IQ One Body Lustre Pastes NF and especially the GC Initial IQ One Body Lustre Pastes NF Gum Shades.

A complete game changer for me! For the very first time in my career, what I saw (in existing photographs and the live patient), and what I worked to copy in the lab . . . I achieved those same results! I was able to mimic natural gingiva.

I genuinely hope that you are able to follow my simple step-by-step illustrations below and that you are able to achieve customized gingival effects. Please note that my intent with this case was to create ethnic gingival effect using GC Initial products as mentioned above.

Figure 1 Frame directly out of sinter oven. Frame will be lightly sandblasted at pressure of 2 bar with Aluminum Oxide and then steam cleaned so that a foundation of Lustre Paste can be applied (**Figure 2**).
Lustre Paste application will serve as a foundation where upon ceramic can be layered as well as for characterization of the zirconia frame.

Figure 3 Frame is pre-wet using a very thin layer of Lustre Paste Diluting Liquid, and then lightly blown with air, leaving a very thin film. This film of Diluting Liquid helps in the application of Lustre Pastes ... acts a wetting agent.
Figure 4 Application of Lustre Body Shade A to cervical areas.

Figure 5 Continuation of application of the Lustre Body Shade A.
Figure 6 Application of Lustre Paste NF Neutral on all monolithic surfaces, as well as all areas to be layered.

Figure 7 Characterization using INvivo Stains.
Figure 8 Application of Lustre Paste Gum G-23 (Base Light) to the gingival areas.

Figure 9 Continuation of application Lustre Paste Gum G-23 (Base Light) to the remaining gingival areas. Result of Lustre Paste application after first bake.
Figure 10 The frame was fired at 850°C due to the mass of the frame - cannot be fired at a "single unit" firing cycle.

Figure 11 Frame ready to receive second application of Lustre Paste Gum Shades and INvivo Stains in the gingival area.
Figure 12 Second layer of Lustre Paste Gum G-23 (Base Light) is applied.

Figure 13 INvivo Stain IV-10 and Lustre Paste Gum G-23 (Base Light) (mixed 50/50) is applied to complete the gingival area.
Figure 14 Application of pure INvivo Stain IV-10, INvivo Stain IV-11, INvivo Stain IV-13 and INvivo Stain IV-9 is applied directly into the Lustre Light 23 and INvivo 10 /Lustre Base Light 23 mixed 50/50 Lustre Paste Gum G-36 (Intensive Red) is used to finalize characterization.

Figure 15 Frame ready to be fired for second time - once again at 850°C.
Figure 16 Result after second firing.

Figure 17 Layering of Zr-FS Powder Cervical Translucent CT-22 (Yellow). Layering of Zr-FS powder Enamel Opal EOP-2 (Red).
Figure 18 Layering of Zr-FS powder Enamel E-58 (Blue).

Figure 19 Final layering and completion of contour with Zr-FS powder Enamel E-58 (Blue).
Figure 20 & 21 Same layering pattern follows on adjacent teeth.

Figure 22 Frame after third firing at 850°C.

Figure 23 & 24 Correction layering with Zr-FS powder Enamel E-58 (Blue) and start of layering Lustre Paste Gum G-24 (Base Dark) (Yellow).

Figure 25 & 26 Final layering of gingival tissue area with Zr-FS powder Gum G-35 (Intensive Cream).

Figure 27 Frame cooling after fourth firing at 840°C.

Figure 28 Shaping and contouring.

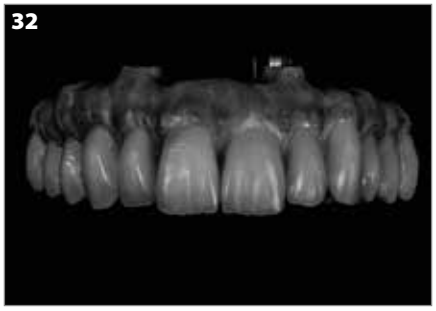

Figure 29 - 32 Final shape and contour checked with Gold Ceramic Detail Enhancer.

Figure 33 Application of a thin layer of Lustre Paste Gum G-35 (Intensive Cream) on entire gingival area.

Figure 34 Zr-FS powder Gum G-24 (Base Dark) is sprinkled onto the Lustre Paste Gum G-35 (Intensive Cream) 35 layer.

Figure 35 Excess powder is blown off with air and results are as above.

Figure 36 Final glaze firing at 800°C.

Figure 37 - 42 End result

Credit to: Beto Macedo, DDS, Ms, PhD, Prosthodontist, private practice Naples/Florida.