CUSTOM SHADE MATCHING
MADE SIMPLE

By Luke S. Kahng, CDT
LSK121 Oral Prosthetics
www.LSK121.com
luke@lsk121.com
940 E. Diehl Rd
Naperville, IL 60563
Tel. 630-955-1010
INTRODUCTION

When compared to matching the central teeth, custom shade matching the laterals is much simpler. When recording the shade for the laterals, the author first looks at the value – is it high or low? How much opacity is present? He then checks for dentin translucency, color transparency and then the overlay from the incisal to the gingival areas. With his own personally fabricated ceramic custom shade tabs he can identify translucency modifications easily because they are included in the enamel overlay color. He is able to match the color and apply his porcelain build-up accordingly.

This article will illustrate how to create laterals and make their appearance as esthetically pleasing as possible; using GC Initial™ One Body materials and slightly different techniques than the traditional layering ones we normally see. Using GC Initial Lustre paste, we can apply it very lightly or with a thicker layer depending on the brush size and technique. Our case study analysis involves an examination of one patient’s unique situation.

CASE STUDY

With LSK121 ceramic fabricated shade tabs, the author was able to focus and compare more on translucency and depth of color (fig. 1) as he recorded our patient’s custom shade. The tabs were created using an enamel and dentin layering method, making it easy to match the patient’s particular shade because the color is more identifiable with what we see in natural dentition. The gingival area is slightly darker, but the incisal is brighter.

In the GC Initial IQ One Body ZR System (fig. 2), there are five available colors from which to choose: BL, A, B, C and D. If we need to create different chroma colors from the inside, we can choose to layer on the GC Initial Reflection Liner, with seven colors available. If the technician is looking for more color possibilities for a patient whose teeth do not match traditional colors, the Liners will definitely help (fig. 3). Custom ceramic shade tabs will provide a more intense color for matching with zirconia crown colors (fig. 4) with A, C, D, and B color possibilities (pictured left to right). Once received, the
white zirconia coping was checked on the model for fit (fig. 5).

Next, One Body build-up color was chosen from the “A” group (fig. 6) with no enamel or translucency powder coloring necessary. The first bake was accomplished at 810°C with full vacuum (fig. 7). Consistent oven temperature is very important to the quality of the baking appearance. To that end, an Ibex Dental Technologies Summit Porcelain oven is the choice of author (fig. 8). After firing; the restoration’s appearance was eggshell with subtle translucency already in place (fig. 9) for the incisal 1/3 area. A fit check was again performed on the cast model.

Surface texture was next created using mesial/distal line angles narrowly drawn for the illusion of subtle texture (fig. 10). To create subtle translucency, the author applied GC’s Lustre Paste in L3 to the incisal area (fig. 11). (Fig. 12) is a mirrored image of the restoration.

The crown was later tried in (fig. 13) and approval given by the patient. The crown was polished and cemented (fig. 14) providing a very happy patient a reason to smile for the camera.

**CONCLUSION**

The author noticed during the custom shading appointment that his patient dehydrated quickly and had a high smile line which made it hard to match her shine. He used a rubber polish to create the gingival to mesial and distal corner color, as well as for the incisal 1/3.

As a technician, the author knows that it’s hard to make people understand that sometimes change is needed in our methods. People like their habits and they don’t want to alter what they are used to doing. With the newer GC Initial porcelain products available and on the market, he would like to demonstrate how much more efficiently we can accomplish our porcelain work if we will attempt to learn a new system. In accepting new ideas, we are learning to think outside the box!
Fig. 1) Author created custom shade tabs

Fig. 2) GC Initial IQ One Body ZR System

Fig. 3) Reflection Liners will help with chroma color matching

Fig. 4) Custom ceramic shade tabs

Fig. 5) Zirconia coping tried on the model for fit check

Fig. 6) GC One Body build-up color "A" group
Fig. 7) After first bake, 810°C with vacuum

Fig. 8) Ibex Dental Technologies Summit Porcelain oven

Fig. 9) Eggshell appearance

Fig. 10) Surface texture markings

Fig. 11) GC Lustre Paste was applied to the incisal area for translucency

Fig. 12) Mirrored image of the restoration
Fig. 13) Try-in the mouth

Fig. 14) Post-cementation