APVolution S

Color Key Shade Guide and Porcelain

A new way of communication

by Aesthetic-Press



LT BL3

LT BL2

BLI



Color Key Shade Guide





INTRODUCTION

Taking the right shade for a patient is the everyday challenge for dentists and for technicians. To find the right matching shade, many variables have a big impact on the result. Some of them are the light source, the time of day, the angle of which the light shines onto the tooth, the surface texture and reflection of the tooth, the density of the material and the underlying stump shade or frame work for the final restoration.

The standard shade guides offered by the industry up to now, have certain unrealistic features technicians have difficulties to match.

First, the thickness of the shade guides are sometimes 3 to 4 x thicker than the actual crown or veneer restoration. Since color is a result of various layers, shade matching depends on the skillset and artistic work of the technician to recreate the effects, shade, value and chroma. In simple words, the technician has to work his magic to recreate a color in a crown which often times is only 0.6 mm - 1.2 mm thick vs. the shade guide showing a thickness of up to 4 mm.

THE CURRENT PROBLEM

Shade guides are often:

- Too thick
- Porous surface
- Made out of a material the patient case is not going to be made out of
- Unsatisfying or impossible evaluation of opacity level
- Impossible evaluation of stump shade effect to the desired final shade.

With the current porcelain systems on the market, the technician is not able to see or evaluate how the color of the porcelain restoration will be influenced by the underlying stump shade before starting the case. The stump shade is most critical aspect in any full porcelain restoration, either a veneer or a full porcelain crown. The stump shade influences the final color and often times has a negative effect on the shade of the crown.

This can only be avoided by choosing a certain material opacity or value to block a dark or grey looking stump. Thus, most of the shade guides of full porcelain systems on the market offer color indicators which show a porous and unfinished surface. This leads to an unsatisfying evaluation of the true shade and most importantly does not allow different case scenarios with the variety of different stump shades.

SOLUTION

...see the shade before you start the case!!

The design of the AP Color Key Shade guides shows a thickness of 0.9 mm at the incisal edge, about 1.00 mm in the center of the indicator and around 1.3 mm towards the cervical or neck of the tooth. These thicknesses are realistic for a technician to match a shade, as they reflect the average thickness of a crown.

WHY SHOULD DENTISTS USE THE AP COLOR KEY SHADE GUIDE?

The current shades guides on the market only offer a 2 dimensional approach to color and show only chroma and value.

In terms of opacity, they are only 1 dimensional.

Shade guides show a color, for example a VITA A2 only in 1 level of opacity, wether the patient is 18 or 80 years old.

The underlying shade can be an A2, yet the depth and the translucency are completely different, an effect the generic shade guides are not able to match.

The APColor Key Shade Guide offers a 4 dimensional approach.

- Color in A, B, C and D Chroma,
- Value in 1, 2, 3 and 4
- Opacity, eg LT, MT, HT and HT+ in combination with the stump shade
- Stump shade in 1-9
- Choose a shade with the material the technician is working with.
- Choose a shade with a realistic thickness of indicator.
- Choose the right kind of indicator in conjunction with the stump shade that comes closest to the patients shade.

ADVANTAGES

- Higher success rate-Less re-do rate Select matching ingots before case begins
- Traditional shade guides mostly only offer shade selection in one opacity, missing a big part of the color issue.
 Choose matching opacity/translucency: MT, LT, HT, HT +
- Shade guide manufactured with the porcelain available for the case - ensures a more realistic color selection
- Technicians can select ingots with their eye rather than depending on an app
- Much improved communication between dentist and patient, chair side, true color selection possible.

APColor Key Shade Guide Indicators

Process in pictures





SHADE GUIDE SELECTION

The APVolution S Color Key Shade Guide offers 4 different translucencies/opacities. The technician can choose according to the stump shade of the patient, which ingot is most suitable to match the patients shade.

1. Low Translucency or LT

This material shows a more opaque porcelain, which can cover dark stump shades or certain discolorations.

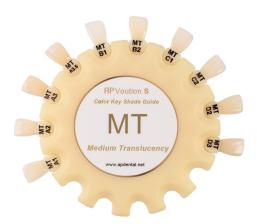
Indication: In order to get a natural looking crown, the LT ingots can be used for the press/cut back and layering technique. The additional transparent layer, will give the crown the life like appearance, yet the core material will ensure the chroma needed to match the shade.



2. Medium Translucency or MT

This material shows a medium opacity level to cover stump shades with mild discolorations.

Indication: In order to get a natural looking crown, the MT ingots can be used for the press/cut back and layering technique, or press and stain technique. It depends on the visual evaluation of the technician, which technique will be applied.



3. High Translucency or HT and HT+

This material shows a high translucency level to cover stump shades with no discoloration.

Indication: In order to get a natural looking crown, the HT ingots can be used for the press and stain technique. The overall appearance will be a natural translucent looking crown.

The HT+ ingots are designed for thin veneers or inlay only restorations offering a maximum of translucency.



4. Bleach Shades

The eleven bleach shades are available in different opacities as LT, MT and HT ingots offer a wide spectrum to choose from.

Indication: In order to get a natural looking crown, the Bleach ingots can be used in a variety of scenarios for either press & stain, or cut back & layering technique.

The technician can even increase the value if needed by adding a thin layer of transpa white layering powder mixed with a white modifier. The APVolution S&Z Powder selection offers a wide range of powders compatible with the APVolution S ingots.



5. Stump Shades

The stump shades are made in a shape to match the concavity of the APColor Key Shade Guide indicators.

In order to get the best possible light transmission, a thin film of Vaseline can be applied onto the Stump Shade indicator to ensure a best possible light transmission into the porcelain indicator.





INNOVATION:

Innovation: The concavity of the manually finished and polished porcelain indicator in combination with the stump shades offer an excellent way to select the right porcelain shade and opacity before starting the case.

The perfectly finished surface texture of the indicator enhances the reflection and visual result comparable to a high end restoration.

This increases the efficiency and success rate of any full porcelain restoration.





PORCELAIN LINE

APVOLUTION M Press to Metal

APVOLUTION Z Press to Zirconia

APVOLUTION S Silicate 400 MPa

