Individualised layering with the Matrix Set

Custom build up concentrates on reproducing patient specific shades and shade characteristics with their light optical elements such as brightness, transparency, fluorescence and opalescence.

The ceramic compounds of the Matrix set have remarkable aesthetic properties. With their easy layering, they make completely natural results possible. The Matrix aesthetic concept, which is developed in cooperation with MDT Paul A. Fiechter, has a simple layered structure that is easy to implement.

Explanation of the Matrix components

- **MD Mamelon Dentine; SD Secondary Dentine** – Ceramics which balance chroma and fluorescence to illuminate the mamelon structures naturally.
- **VL Value** – Highly fluorescent ceramics for influencing the brightness in the incisal region.
- **OS Opal Incisals** – These incisal ceramics replace the corresponding standard incisal materials. They are arranged and used in the same manner.
- **OT Opal Transpa** – Transparent ceramics for use with custom build up techniques, which reflect the spectrum of natural enamel.
- **OT1 – OT10** – Neutral opalescence, where the concentration increases from OT1 to OT10, whereby the transparency decreases. OT1 is the most transparent Opal ceramic. OT10 is whitish opal.
- **OTY; OTB; OTA; OTG and OT Ice**: Opal Transpa ceramics with modified shades
  - OT Yellow
  - OT Blue
  - OT Amber
  - OT Grey
  - OT Ice

Fig. 40 Matrix shade guide.
Fig. 41 Mixing the appropriate shade of dentine with mamelon or secondary dentine increases its chroma in the cervical region. These compounds intensify the colours’ luminosity with their matching of chroma and fluorescence. (Alternatively, the colour-coordinated Increasers can also be used).

Fig. 42 The crowns are built up fully with dentine or chroma dentine to allow them to be cut back in a controlled manner.

Fig. 43 The central incisor has been cut back.

Fig. 44 To control the brightness or partial brightening of the dentine, the value materials in the incisal region are somewhat thicker (about 0.3 mm) and layered to the tooth with thin tapering.

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Matrix layering.
Fig. 45 Smooth transitions are important to avoid distinct borders between the value material and base shade.

Fig. 46 ...and contoured like mamelons with a brush. This creates impressive interaction between the lighter and darker shaded areas. The resulting mamelon structures are further illuminated from within the layers by the highly fluorescent value materials.

Fig. 47 A ridge of e.g. Opal transpa ice is laid over the mamelons.
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Fig. 48 The mamelon structures are then overlaid with Opal incisal.

Fig. 49 The desired anatomical contours are then built up with the correct shade of Opal incisal or various Opal Transpa materials.

Fig. 50 Fully built up crown.
Glaze firing

Fig. 51 Final stage ready for glaze and/or polish.

Fig. 52 In transmitted light.