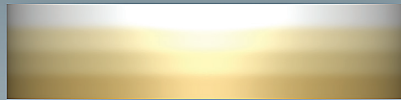




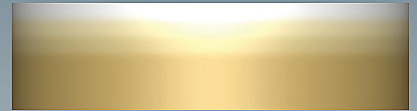
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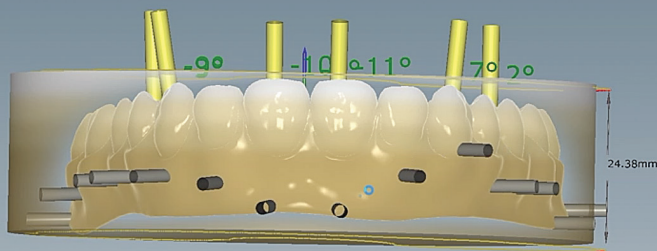
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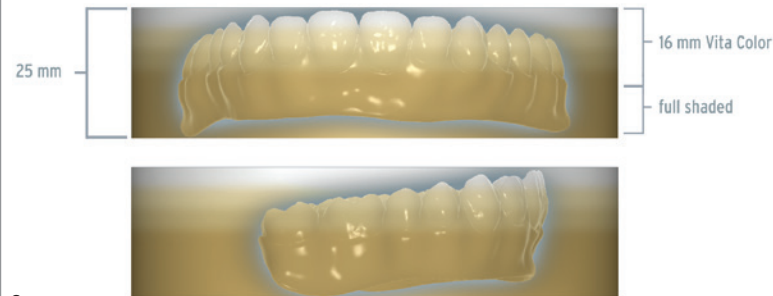
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Fig. 1: Zolid Gen-X is available in all common heights on the market (12, 14, 16, 18, 20, 22, 25 mm). – **Fig. 2:** Zolid Gen-X 16 mm. **Fig. 3:** Zolid Gen-X 22 mm with proportionally increased polychromatic shade content. **Fig. 4:** Zolid Gen-X 25 mm with extended monochromatic gingival component. **Fig. 5:** Visualisation of the shade distribution of a nested restoration made of Zolid Gen-X with the Ceramill Match 2 CAM software. **Fig. 6:** Optimally aligned restorations with a high gingival component ("REAX" bridge) to achieve the correct VITA shade while observing the asymmetrical shade distribution.

Aesthetics for all intends and purposes

Optimising outcomes in implant restorations

Dipl.-Ing. Axel Reichert, Austria

Industrial multilayer pre-shaded zirconium-oxide blanks have established a strong positive trend in the dental market for quite some time now and form part of the established state-of-the-art across a wide variety of facets in terms of integrated colour design. They ensure simple, fast and highly accurate reproducibility of colour and translucency in everyday laboratory work. For the user to be able to assess which underlying "optics" are hidden in the blank, nesting concepts are often necessary. However, these must first be imparted to the user so that the desired tooth shade prevails after sintering. If additional pronounced gingival sections are to

be added, which of course cannot meaningfully be accounted for in terms of shade in a tooth-coloured blank, then a simple "symmetrical" or evenly distributed shade gradient is often no longer sufficient for this purpose. In these cases, users can choose the aesthetic and high-strength Zolid Gen-X zirconia with integrated shade gradient from Amann Girrbach (Fig. 1). Zolid Gen-X is available in 16 VITA shades, two Bleach shades and all common heights on the market.

To ensure that the shade gradient of the tooth section is optimally matched with regard to the height of the res-

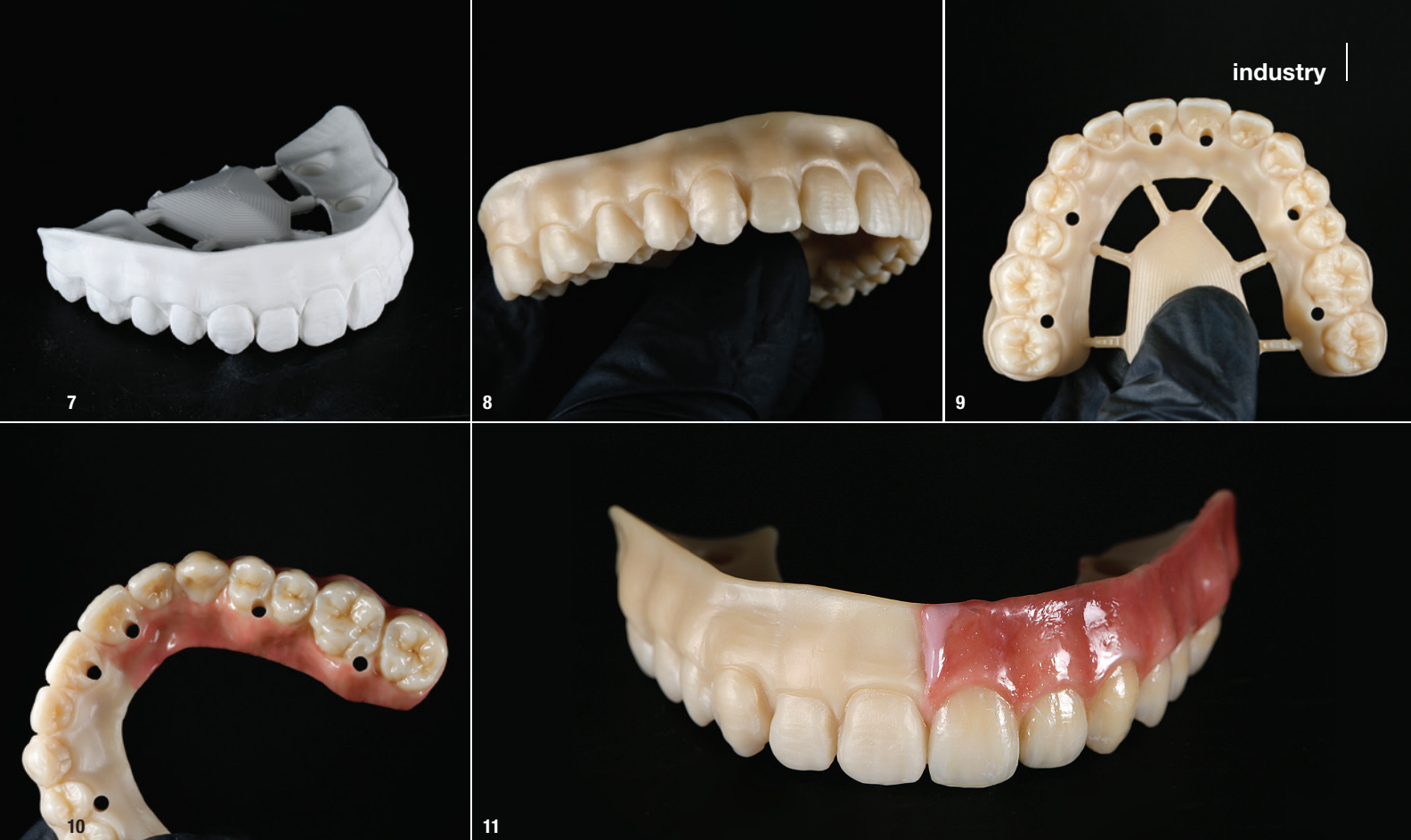


Fig. 7: Zolid Gen-X 25 mm REAX restoration prior to sintering. **Figs. 8–11:** Zolid Gen-X 25 mm REAX restoration customised with MiYO Liquid Ceramic, Benjamin Votteler (Votteler Dentaltechnik).

toration, the relationships between restoration height, tooth sections and colour distribution of the blanks to each other needs to be observed. For this reason, the incisal proportion of all Zolid Gen-X blanks was designed proportional to the blank height: the higher the blank, the greater the incisal proportion. The correct selection of the blank height is therefore decisive for an optimal shade gradient over the entire restoration. However, for a 25 mm high blank, this “symmetrical” polychromatic distribution makes little sense, as tooth or tooth crown proportions of this height do not exist in reality. For this reason, the Zolid Gen-X 25 mm blank is a special variant—preferably for implant-supported restorations with an additional high gingival component (Figs. 2–4).

If the Zolid Gen-X 25 mm blank is divided virtually into four horizontal layer sections, it appears as a 16 mm blank in terms of shade—with polychromatic and monochromatic colour components. Using the Ceramill Match 2 nesting module from Amann Girrbach, the underlying colour distribution of the blank can be visualised (Fig. 5). For 14-unit full restorations, the contours of the Spee and Wilson curves make it difficult to place all teeth optimally and evenly in the shade scheme of the blank. Alignment is therefore often selected to achieve the best possible shade distribution for the aesthetically important anterior tooth region. By using 5-axis milling machines, the fabrication of a full restoration strongly inclined or turned in the blank no longer poses a technical problem. However, if a gingival component is added, this often either no longer

fits into the blank used so far and/or one has to accept deficits in the desired aesthetics due to the only suitable alignment option.

The “asymmetrical” layer distribution of the Zolid Gen-X 25 mm blank allows making ideal use of the most common average height (16 mm) for good and direct shading by providing more “ground clearance”. This ensures a good basis for the anterior tooth aesthetics. The extended monochromatic colour portion below the 16 mm shade gradient in the blank thus enables a good compromise between aesthetics and unlimited use for ideal implementation (Fig. 6).

contact



**Dipl.-Ing.
Axel Reichert**
R&D Team Leader
Materials at Amann Girrbach
Herrschaftswiesen 1
6842 Koblach, Austria
Phone: +43 5523 62333-0
austria@amanngirrbach.com

