PROCESSING OF ZIRCONIUM BLOCKS

Preferably, the Ceramill Zolid FX ML zirconium blocks are milled dry. If the zirconium blocks are ground or milled wet, the milling machine must be cleaned thoroughly beforehand. This includes the prior replacement of water and coolant, filter replacement or, if necessary, the use of a separate tank. This avoids contamination of the zirconium material by the previously processed materials (such as glass ceramics, for example). This contamination has a strong impact on translucency and may lead to a considerable reduction.

ENTERING THE ZIRCONIUM BLOCKS INTO THE SYSTEM

- The zirconium blocks are available in two block sizes: C20 for crowns (equivalent to 20/19) and B40 for bridges (equivalent to B40/19).
- Select any zirconium material in your software, pay attention to the selection of the correct block size.
- The magnification factor is printed on the zirconium block in the form of a code or number (e.g. *Z 229005) (Fig. 1).

NOTE ON PROCESSING

ZOLID FX MULTILAYER ZIRCONIUM BLOCKS UN VERSION FOR THIRD-PARTY SYSTEMS

NESTING IN THE CAM SOFTWARE

The intelligent nesting concept makes it possible to cover two VITA tooth shades with only one Zolid FX ML zirconium block. If the restoration is placed in the upper area, an A2 is achieved, and if the restoration is placed in the lower area, an A3 is achieved. Please note that the shade concept may deviate for large anterior and posterior teeth. The recommendation here is to select a zirconium block in a darker shade.

Fig. 4: In this zirconium block A2/A3, a 3-pontic bridge was nested in the lower area to achieve an A3.

SINTERING PROGRAMS FOR THIRD-PARTY SYSTEMS

After wet grinding/milling of the zirconium blocks, proceed as usual and dry the bridges before starting the sintering process. This prevents the formation of cracks in the restoration.

Use the following standard sintering program in your sintering furnace:

<table>
<thead>
<tr>
<th>Heating phase</th>
<th>Temperature 1 [°C]</th>
<th>Temperature 2 [°C]</th>
<th>Heating rate [°C/h] or [°C/min]</th>
<th>Holding time [h]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating phase</td>
<td>20</td>
<td>1450</td>
<td>480 or 8</td>
<td>-</td>
</tr>
<tr>
<td>Holding phase</td>
<td>1450</td>
<td>1450</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

NOTE

The Ceramill Therm S Speed sintering furnace enables single tooth restorations to be sintered in just two hours. Further information on the product can be found at: www.amanngirrbach.com.