Quick guide for n!ce® restorations

Prepare the tooth, digitize and design the desired restoration as usual.

**POLISH ONLY**

Mill the restoration with the n!ce® dedicated program\(^1\) of your CAD/CAM system. Smooth out the attachment point with standard grinding tools for lithium-disilicate glass-ceramic\(^2\). Try-in the restoration, check and adjust the contact points if required.

Simply polish with a standard polishing set for lithium-disilicate glass-ceramic (or use a polishing paste with a brush wheel) to achieve a natural high gloss finish\(^3\). Clean the n!ce® restoration in an ultrasonic water bath or with a steam jet.

Condition the n!ce® restoration (etch the bonding surface with 5% hydrofluoric acid gel for 20 seconds; and silanize the bonding surface). Clean and condition the prepared tooth and seat the n!ce® milled restoration with adhesive\(^4\) cement system for lithium-disilicate glass-ceramic.

**STAIN & GLAZE**

Mill the restoration with the n!ce® dedicated program\(^1\) of your CAD/CAM system. Smooth out the attachment point with standard grinding tools for lithium-disilicate glass-ceramic\(^2\). Try-in the restoration, check and adjust the contact points if required.

Clean the n!ce® restoration in an ultrasonic water bath or with a steam jet. Stain & glaze by applying individual stains for more characterization followed by glaze. Place the n!ce® restoration in the center of the firing tray on a firing cotton or use a firing pin with an auxiliary firing paste. Fire as recommended (see recommended heating profile).

Condition the n!ce® restoration (etch the bonding surface with 5% hydrofluoric acid gel for 20 seconds; and silanize the bonding surface). Clean and condition the prepared tooth and seat the n!ce® milled restoration with adhesive\(^4\) cement system for lithium-disilicate glass-ceramic.

**n!ce® restoration guidelines**

n!ce® is indicated for single tooth restorations and is intended to restore natural teeth or to be placed on top of abutments.

- The preparation must not have angles or sharp edges
- The shoulder preparation must have rounded inner edges and/or chamfer
- The static and dynamic antagonist contacts should be taken into consideration and the preparation margin should not be located on the centric antagonist contacts

### n!ce® minimum restoration thickness guidelines

<table>
<thead>
<tr>
<th>Veneer</th>
<th>Inlay</th>
<th>Partial Crown</th>
<th>Onlay</th>
<th>Crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 0.6 mm</td>
<td>≥ 1.0 mm</td>
<td>≥ 1.0 mm</td>
<td>≥ 1.0 mm</td>
<td>≥ 1.0 mm</td>
</tr>
</tbody>
</table>

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\(^1\) This program is designed specifically for n!ce® restorations and is compatible with your CAD/CAM system.

\(^2\) Lithium-disilicate glass-ceramic is a popular material for restorations due to its aesthetic properties and strength.

\(^3\) Achieving a natural high gloss finish is crucial for the esthetics of the restoration.

\(^4\) Adhesive cement systems are essential for bonding the restoration to the tooth or abutment.
n!ce® firing process

After stain & glaze

n!ce® can be stained and glazed if additional characterization is required.

Please ensure the following:
- Only use stain and glaze material compatible with a CTE value of $7.1 \times 10^{-6} \, \text{K}^{-1}$
- Only fire once the n!ce® restoration has been cleaned in water by ultrasound, or with steam

We recommend the following firing process (no vacuum required):

<table>
<thead>
<tr>
<th>Start temperature</th>
<th>Heating time (closing time)</th>
<th>Heating rate (Temp. raise)</th>
<th>End temp. (Firing temp.)</th>
<th>Holding time</th>
<th>Cooling temp.</th>
<th>Cooling rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>°C</td>
<td>mm:ss</td>
<td>°C/min</td>
<td>°C</td>
<td>mm:ss</td>
<td>°C</td>
<td>°C/min</td>
</tr>
<tr>
<td>400</td>
<td>02:00</td>
<td>60</td>
<td>770–800</td>
<td>01:00</td>
<td>400</td>
<td>25</td>
</tr>
</tbody>
</table>

- The firing temperature must not exceed 820°C.
- Utilizing a slow cooling rate is important to avoid color deviations caused by the cool down process.
- Utilizing a fast cooling rate increases the translucency of the material.

n!ce® sterilization parameters

n!ce® restorations can be sterilized under following parameters:

<table>
<thead>
<tr>
<th>Method</th>
<th>Condition</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoclave, moist heat, Fractionated vacuum</td>
<td>132 °C (270°F)</td>
<td>4 minutes; 30 minute dry time</td>
</tr>
<tr>
<td>Autoclave, moist heat, Gravity displacement</td>
<td>132 °C (270°F)</td>
<td>15 minutes; 30 minute dry time</td>
</tr>
</tbody>
</table>

From milling to n!ce smiles
In just a few steps.

Note:
- Observe the n!ce® minimum thicknesses guidelines
- Do not blast the restoration with Al₂O₃ or glass polishing beads
- In Canada, n!ce glass ceramic blocks are indicated for full contour crowns in the anterior region as well veneers, inlays and onlays in the anterior and posterior region.

REFERENCES
1 n!ce® can also be milled with the lithium-disilicate milling program
2 Ideally use water-cooled instruments, grind only at low speed and slight pressure to prevent delamination and chipping at the edges
3 For polishing the occlusal surfaces, use preferably diamond polishing tools for lithium-disilicate glass-ceramic
4 Crowns can also be seated using self-adhesive cement