Proximal contact strength [µm]

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-200</td>
<td>200</td>
<td>Restoration proposal</td>
<td>Inlays Onlays Crowns</td>
</tr>
</tbody>
</table>

The setting of the Proximal contacts strength parameter affects crown, inlay and onlay restorations.
Proximal contact strength [µm]
Proximal contact strength [µm]
Clinically

Distance > 1 mm
## Occlusal Contact Strength [µm]

<table>
<thead>
<tr>
<th>Initial value</th>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-200</td>
<td>200</td>
<td>Restoration Proposal</td>
<td>Inlays Onlays</td>
</tr>
</tbody>
</table>
## Occlusal offset [µm]

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-500</td>
<td>500</td>
<td>Milling result</td>
<td>Inlays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Onlays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Crowns</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Veneers</td>
</tr>
</tbody>
</table>

If you find that all of your restorations have too little or too much material in the occlusal direction, you can compensate for this with this parameter under control.
Occlusal offset [$\mu$m]

Additional porcelain is added or reduced to the occlusal surface i.e. the z offset
Clinical applications of Occlusal offset

- **Correlation**
  - Occlusal surface in non occlusion
  - Copy occlusion and increase occlusal offset

- **Finishing**
  - Make sure to have enough material to compensate polishing

- **Caution:**
  - Extreme values can cause changes at the proximal contact
## Margin thickness [µm]

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>200</td>
<td>Milling preview &amp; result</td>
<td>Inlays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Onlays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Crowns</td>
</tr>
</tbody>
</table>

Prior to milling, the margin of the restoration is thickened by the set thickness.
Margin thickness...

..adding material at the margin

Increases the amount of material at the margin of the restoration but does not effect the fit of the restoration.
Margin thickness

Distal

0µm

+ 200µm

Distal
Margin thickness - related to Crowns

0µm

+ 200µm
Margin thickness - related to Crowns

0µm

+ 200µm
Clinical applications of the Margin thickness

- To prevent chipping of the porcelain during the milling process
- To polish margin
## Veneer thickness [$\mu$m]

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>0</td>
<td>2000</td>
<td>Initial proposal</td>
<td>Veneers</td>
</tr>
</tbody>
</table>

This parameter allows you to set the initial veneer thickness for veneer restorations using the following design techniques:

- Dental database
- Replication
Veneer thickness
Veneer thickness

More material recommended for individualization, staining and glazing
## Adhesive gap [µm]

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>150</td>
<td>Milling preview &amp; result</td>
<td>Inlays Onlays</td>
</tr>
</tbody>
</table>
Adhesive gap...

...is fading of the spacer at the preparation margin
Adhesive gap of 0 µm and 150 µm
# Spacer [µm]

<table>
<thead>
<tr>
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<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-100</td>
<td>100</td>
<td>Milling preview &amp; result</td>
<td>Inlays, Onlays, Crowns</td>
</tr>
</tbody>
</table>

- Creates room for the adhesive and resin cement
Spacer

Loose fit + 100 µm  0 µm  Tight fit - 100 µm
Spacer

..is always sealed at the margin.
The difference between Spacer & Adhesive Gap
Spacer + Adhesive Gap

Spacer: all surfaces which are covered by bonding

Adhesive gap

Depth of adhesive gap: ~400µ
Spacer + Adhesive Gap

Adhesive gap: ~400µ

Depth of adhesive gap: ~400µ

Adhesive gap can never be bigger than internal spacer + parameter spacer

Spacer in parameter settings −100µ / +100

Internal spacer: 100µ

0 – 150µ
### Scan Step Width

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>5</td>
<td>Scanning Process</td>
<td>Scanner</td>
</tr>
</tbody>
</table>

- With this parameter you can set the scan step width either at 3 or at 5 in combination with the integrated scanner.

- For example:
  - Core for crown - 5
  - Inlay - 3
## Minimal Thickness [µm]

<table>
<thead>
<tr>
<th>Initial value</th>
<th>Min. value</th>
<th>Max. value</th>
<th>Effect on</th>
<th>Works on</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>300</td>
<td>2000</td>
<td>Restoration proposal</td>
<td>Inlays, Onlays, Crowns, Veneers (database)</td>
</tr>
</tbody>
</table>

- A support tool to visualize thin areas
- Restoration proposal incorporates the minimal thickness value.
Minimal Thickness

Includes spacer

1100µm

Parameters

- Proximal contacts strength: 25 µm
- Occlusal contacts strength: 25 µm
- Occlusal offset: 0 µm
- Margin thickness: 0 µm
- Minimal thickness: 1000 µm
- Veneer thickness: 300 µm
- Adhesive gap: 0 µm
- Spacer: 0 µm
- Scan step width: 3 µm

OK
Cancel
Minimal Thickness

Includes spacer

1000µm
Minimal Thickness

Includes spacer

1200µm