VISUMAX (ZEISS MEDITEC) FLAP CREATION MADE EASY

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Overview

- Settings
- Choice of cones
- Successful Docking
- Lifting of Flap
- Patient Selection
- Unusual Scenarios
VisuMax: Eye Fixation

- **Gentle Corneal interface design**
  - Non-applanating -- Spherical contact lens to cornea
  - Suction is only applied during actual laser procedure
  - Low suction pressure
  - Minimal IOP increase
  - No vision loss during suction
  - Automatic visual-axis centration
Application of VisuMax: Choice of cones

**Recommended flap diameter:**
- 7.9mm for S size
- 8.5mm for M size

**S Size:** min WTW < 11.8mm
**M Size:** min WTW > 12.2mm
**L Size:** min WTW > 12.7mm

*WTW value is according to IOL-Master*
Application of VisuMax: Treatment Procedure

Treatment Mode:
- Standard
- Fast
- Expert

Standard Mode:
Spot Distance:0.0030mm
Track Distance:0.0030mm

Fast Mode:
Spot Distance:0.0050mm
Track Distance:0.0050mm

Expert: Customisable. Surgeon can adjust spot and track distances

1: Spot Distance  2:Track Distance
## SNEC Standard Settings

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Settings</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Mode</td>
<td>Fast mode</td>
<td></td>
</tr>
<tr>
<td>Cone size</td>
<td>Small</td>
<td>Medium if WTW &gt; 12.0</td>
</tr>
<tr>
<td>Energy (energy offset)*</td>
<td>32</td>
<td>Higher for 1(^{st}) case of the day</td>
</tr>
<tr>
<td>Flap size</td>
<td>7.9 mm</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>115 microns</td>
<td>Thicker if K &gt;47</td>
</tr>
<tr>
<td>Side cut angle</td>
<td>85 degrees</td>
<td></td>
</tr>
<tr>
<td>Hinge angle</td>
<td>70 degrees</td>
<td></td>
</tr>
<tr>
<td>Hinge width</td>
<td>4.8 mm</td>
<td></td>
</tr>
<tr>
<td>Hinge position</td>
<td>Superior</td>
<td></td>
</tr>
</tbody>
</table>

* Energy offset is a compensating equivalent. 1 offset = 5nJ

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* Diagrams: 2 diagrams showing angles and positions related to flap and hinge.

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Application of VisuMax: Treatment Planning

- Max. Limit depending on used TP Size S, M or L
- Diameter in Flap Bed
- Note OZ (Excimer Laser)
- Note WtW (IOL Master)

- Recommendation 100µm – 120µm
- Note Pachymetrie
- Note Ablation Depth
- Range 80µm – 220µm (Flap)

- Recommendation 110° Sidecut Angle
- Note Diameter Limit Change
- Range 45° - 135°

- Range 0° - 360°
- Users choice (e.g. 65° possible)
- Note needed changes
- Most used 90° (superior)
Preparing the Suction Cone

Attaching the cone

Cone attached

Fixing the tube
Preparing the Eye
Applying the Suction Cone

1. Move patient's eye towards cone
2. Dry the eye just before contact
3. Corneal contact
4. Centration
   No conjunctiva
   Apply suction button
5. At least 4 bars
   Wait for “Ready”
6. Flap Cut with foot pedal

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Patient Selection

- Almost all patients, esp
  - Females
  - Small palpebral apertures
  - Prominent nose
- Not preferred if
  - Patient tends to squeeze eyes or tears easily
  - Need thinner flaps
  - Need large flaps (H-LASIK)
Advantages of the Visumax

- Lower suction pressure – more comfortable
- No blackout
- Good centration with fixation light
- Absence of subconjunctival haemorrhage
- Good for small palpebral aperture
A presentation by...

Thank You

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