INSTRUCTIONS FOR THE DENTIST

synOcta® impression procedure, „Screw-retained“ and „Snap-on“

1. Attach synOcta® Impression caps to implants. Hand-tighten screws.

3. Undo the screws and remove the impression.

2. Take the impression with a special tray with perforations for screws and elastomer impression material (vinyl polysiloxane or polyether rubber).

4. Sending the impression to the dental lab.

3. Take the impression with elastomer impression materials (vinyl polysiloxane or polyether rubber).

5. Screwing synOcta® Analogs into the impression cap.

5. Replace synOcta® Analogs into the impression. The shoulder must engage audibly.

Make the working model from special hard plaster, Type 4 (DIN 13991).

Note: The impression-taking method is identical for implant shoulder Ø 4.8 mm RN and implant shoulder Ø 6.5 mm WN.
<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Article Description</th>
<th>Dimensions</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.017V4</td>
<td>RN impression cap, snap-on</td>
<td>height 8.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.070V4</td>
<td>RN synOcta® positioning cylinder, red, snap-on</td>
<td>height 12.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.010</td>
<td>RN synOcta® impression cap, screw-retained, red, with integral guide screw</td>
<td>height 10.1 mm</td>
<td>anodized aluminium/titanium</td>
</tr>
<tr>
<td>048.090</td>
<td>RN synOcta® impression cap, built-in handle, red, with integral guide screw</td>
<td>height 21.0 mm</td>
<td>anodized aluminium/titanium</td>
</tr>
<tr>
<td>048.013</td>
<td>WN impression cap, snap-on</td>
<td>height 8.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.095</td>
<td>WN synOcta® positioning cylinder, white, snap-on</td>
<td>height 12.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.091</td>
<td>WN synOcta® impression cap, screw-retained, with integral guide screw</td>
<td>height 10.0 mm</td>
<td>anodized aluminium/titanium</td>
</tr>
<tr>
<td>048.124</td>
<td>RN synOcta® analog, gray (with red stripe)</td>
<td>length 12.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>048.171</td>
<td>WN synOcta® analog, gray</td>
<td>length 12.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>046.400</td>
<td>SCS Screwdriver, extra short</td>
<td>length 15.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>046.401</td>
<td>SCS Screwdriver, short</td>
<td>length 21.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>046.402</td>
<td>SCS Screwdriver, long</td>
<td>length 27.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>046.410</td>
<td>SCS Screwdriver, extra short, for handpiece adapter</td>
<td>length 20.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>046.411</td>
<td>SCS Screwdriver, short, for handpiece adapter</td>
<td>length 26.0 mm</td>
<td>stainless steel</td>
</tr>
<tr>
<td>046.412</td>
<td>SCS Screwdriver, long, for handpiece adapter</td>
<td>length 32.0 mm</td>
<td>stainless steel</td>
</tr>
</tbody>
</table>

**Caution:** The plastic parts are intended for single use only. They must not be sterilized. To avoid damage (loss of elasticity, embrittlement) to the plastic parts, they must be protected from exposure to strong light or heat.

For detailed information, refer to our brochure "PROSTHETICS, Crown and Bridge Restorations with the synOcta® Prosthetic System", Art. No. 152.255.
INSTRUCTIONS FOR THE DENTIST

RN synOcta® 1.5 Screw retained

Placement of two RN synOcta® 1.5 Screw retained abutments in implants

After fabrication, the restoration is given to the dentist on the master cast together with the abutments.

Note: The method of placing the RN and WN synOcta® 1.5 Screw-retained abutments is identical.

1. Remove the superstructure and the abutments from the master cast with an SCS screwdriver.

2. Insert the abutments into the implants and tighten the basal screws to a torque of 35 Ncm.

3. Two methods for screw retention of the superstructure:

A. Screw retention with SCS occlusal screw (Art. No. 048,350).
   In this method, the screw head is covered with some wax or gutta-percha and subsequently the transocclusal screw channel is sealed off (e.g. with composite).
   Tightening torque = 15 Ncm!

   In this method, the SCS guide screw is shortened in the mouth to the level of the occlusal plane.
   Tightening torque = 15 Ncm!
Important: For tightening the basal screw, the ratchet (Art. No. 046.119) with attached torque control device (Art. No. 046.049) and an SCS screwdriver (Art. No. 046.400/401/402) are required.

Important: The abutment must be positioned in the octagon before the screw is tightened. The basal screw in the synOcta® 1.5 Screw-retained abutment is tightened to a torque of 35 Ncm.

The SCS occlusal and guide screws are tightened to a torque of 15 Ncm.

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Article</th>
<th>Dimensions</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.350</td>
<td>SCS Occlusal screw</td>
<td>length 4.4 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.350V4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>048.360V4</td>
<td>Guide screw for RN synOcta® coping bar; cannot be shortened</td>
<td>length 6.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.361V4</td>
<td>Guide screw for RN synOcta® coping bar; can be shortened by 1.6 mm</td>
<td>length 6.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.362V4</td>
<td>SCS Guide screw for milling cylinder; cannot be shortened</td>
<td>length 8.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.363V4</td>
<td>Guide screw for milling cylinder; can be shortened by 2.0 mm</td>
<td>length 8.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.364V4</td>
<td>Guide screw, can be shortened by 2.0 mm</td>
<td>length 10.0 mm</td>
<td>titanium</td>
</tr>
</tbody>
</table>

Prosthetic instruments

- SCS screwdriver (extra short 046.400, short 046.401, long 046.402)
- Ratchet, incl. service instrument 046.119
- Torque control device for ratchet 046.049
- Holding key 046.064

For detailed information, refer to our brochure “PROSTHETICS, Crown and Bridge Restorations with the synOcta® Prosthetic System”, Art. No. 152.255.

**Note:**

RN = Regular Neck  
WN = Wide Neck
INSTRUCTIONS FOR THE DENTIST

RN synOcta® gold abutment

RN synOcta® gold abutment – placement of the final restoration

After fabrication, the restoration is given to the dentist on the master cast.

1. Align the octagon of the customized gold abutment on the octagon of the implant and insert the mesostructure into the implant. Tighten the basal screw with a force of 35 Ncm.

2. Then seal off the screw channel with gutta-percha, and finally cement the crown onto the mesostructure.
Important: For tightening the basal screw, the ratchet (Art. No. 046.119) with attached torque control device (Art. No. 046.049) and an SCS screwdriver (Art. No. 046.400/401/402) are required.

Important: The abutment must be positioned in the octagon before the screw is tightened. The basal screw in the RN synOcta® gold abutment is tightened to a torque of 35 Ncm.

**Prosthetic instruments**

- SCS screwdriver (extra short 046.400, short 046.401, long 046.402)
- Ratchet, incl. service instrument 046.119
- Torque control device for ratchet 046.049
- Holding key 046.064

For detailed information, refer to our brochure “PROSTHETICS, Crown and Bridge Restorations with the synOcta® Prosthetic System”, Art. No. 152.255.

RN = Regular Neck
INSTRUCTIONS FOR THE DENTIST

RN and WN synOcta® Cement retained

Placement of two RN synOcta® Cement retained abutments in implants

After fabrication, the restoration is given to the dentist on the master cast together with the abutments. 

Note: The method of incorporating the RN and WN synOcta® Cement-retained abutments is identical.

1. Undo the basal screws with the SCS screwdriver and transfer the index, with the abutments, from the master cast to the implants.

2. Tighten the basal screws to a torque of 35 Ncm.

Note: In order to be able to release the basal screws again if required, fill the screw head and the abutment with gutta-percha. Then cement the superstructure permanently.
Important: For tightening the basal screw, the ratchet (Art. No. 046.119) with attached torque control device (Art. No. 046.049) and an SCS screwdriver (Art. No. 046.400/401/402) are required.

Important: The abutment must be positioned in the octagon before the screw is tightened. Tighten the basal screw in the synOcta® Cement retained abutment to a torque of 35 Ncm.

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Article</th>
<th>Dimensions</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.059V4</td>
<td>Transfer aid for 048.605, RN</td>
<td>height 6.5 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.054V4</td>
<td>Transfer aid for 048.606, WN</td>
<td>height 6.5 mm</td>
<td>plastic</td>
</tr>
</tbody>
</table>

Prosthetic instruments

- SCS screwdriver (extra short 046.400, short 046.401, long 046.402)
- Ratchet, incl. service instrument 046.119
- Torque control device for ratchet 046.049
- Holding key 046.064

Caution: The plastic parts are intended for single use only. They must not be sterilized. To avoid damage (loss of elasticity, embrittlement) to the plastic parts, they must be protected from exposure to strong light or heat.

For detailed information, refer to our brochure “PROSTHETICS. Crown and Bridge Restorations with the synOcta® Prosthetic System”, Art. No. 152.255.

RN = Regular Neck
WN = Wide Neck
INSTRUCTIONS FOR THE DENTIST

RN and WN synOcta® Angled

Placement of an RN synOcta® Angled abutment into the implant

After fabrication, the restoration is given to the dentist on the master cast together with the abutments.

1. Undo the basal screw with the SCS screwdriver and remove the index from the master cast.
2. Insert the abutment into the implant and tighten the basal screw to a torque of 35 Ncm.
3. Undo the occlusal screw and remove the index. Then cement or screw in the restoration.

Note: If the restoration is cemented, the lateral and occlusal opening must be sealed off with gutta-percha.

Placement of a WN synOcta® Angled abutment into the implant

1. Undo the basal screw with the SCS screwdriver and remove the index from the master cast.
2. Insert the abutment into the implant and tighten the basal screw to a torque of 35 Ncm.
3. Remove the index, then cement the restoration.

Note: Before cementing the restoration, the lateral opening must be sealed off with gutta-percha.
Important: For tightening the basal screw, the ratchet (Art. No. 046.119) with attached torque control device (Art. No. 046.049) and an SCS screwdriver (Art. No. 046.400/401/402) are required.

Important: The abutment must be positioned in the octagon before the screw is tightened. The basal screw in the RN and WN synOcta® Angled abutment is tightened to a torque of 35 Ncm.

Important: If a screw-retained restoration is used, the SCS occlusal screw must be tightened to a torque of 15 Ncm.

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Article</th>
<th>Dimensions</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.000V4</td>
<td>Transfer aid for RN synOcta® Angled, short, 15° and 20°</td>
<td>height 4.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.002V4</td>
<td>Transfer aid for RN synOcta® Angled, long, 15° and 20°</td>
<td>height 4.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.032</td>
<td>Transfer aid for WN synOcta® Angled, 15°</td>
<td>height 5.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.350</td>
<td>SCS occlusal screw</td>
<td>length 4.4 mm</td>
<td>titanium</td>
</tr>
</tbody>
</table>

Prosthetic instruments

SCS screwdriver (extra short 046.400, short 046.401, long 046.402)

Ratchet, incl. service instrument 046.119

Torque control device for ratchet 046.049

Holding key 046.064

Caution: The plastic parts are intended for single use only. They must not be sterilized. To avoid damage (loss of elasticity, embrittlement) to the plastic parts, they must be protected from exposure to strong light or heat.

For detailed information, refer to our brochure “PROSTHETICS, Crown and Bridge Restorations with the synOcta® Prosthetic System”, Art. No. 152.255.
INSTRUCTIONS FOR THE DENTIST

RN synOcta® Transversal

Placement of an RN synOcta® Transversal (TS) abutment into the implant

After fabrication, the restoration is given to the dentist on the master cast together with the abutments.

1. Undo the basal screw with the SCS screwdriver and remove the index from the master cast.

2. Insert the abutment into the implant and tighten the basal screw to a torque of 35 Ncm. Then incorporate the superstructure.

3. Attach the restoration with the transversal screw, and carefully hand-tighten the transversal screw with the TS hexagonal screwdriver.
Important: For tightening the basal screw, the ratchet (Art. No. 046.119) with attached torque control device (Art. No. 046.049) and an SCS screwdriver (Art. No. 046.400/401/402) are required.

Important: The abutment must be positioned in the octagon before the screw is tightened. Tighten the basal screw in the RN synOcta® Transversal (TS) abutment to a torque of 35 Ncm.

Important: The transversal screw must only be hand-tightened with the TS screwdriver (Art. No. 046.420).

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Article</th>
<th>Dimensions</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>048.003V4</td>
<td>Transfer aid for RN synOcta® TS abutment</td>
<td>Height 5.0 mm</td>
<td>plastic</td>
</tr>
</tbody>
</table>

Prosthetic instruments

SCS screwdriver (extra short 046.400, short 046.401, long 046.402)

Ratchet, incl. service instrument 046.119

Torque control device for ratchet 046.049

Holding key 046.064

TS hexagonal screwdriver 046.420

Caution: The plastic parts are intended for single use only. They must not be sterilized. To avoid damage (loss of elasticity, embrittlement) to the plastic parts, they must be protected from exposure to strong light or heat.

For detailed information, refer to our brochure “PROSTHETICS, Crown and Bridge Restorations with the synOcta® Prosthetic System”, Art. No. 152.255.

RN = Regular Neck
INSTRUCTIONS FOR THE DENTIST

Screwing in an RN solid abutment with subsequent impression taking and temporary restoration

Screwing in the abutment

1. Insert the RN solid abutment into the driver and screw it into the implant.
   Note: WN solid abutments must be screwed into the WN implant using the SCS screwdriver.

2. Position the ratchet with attached torque control device and stabilize with the holding key.

3. Tighten the abutment with a force of 35 Ncm and remove the instruments again.

Taking the impression

1. Attach impression cap to implant (make sure it “clicks” into place). If it is correctly seated, the impression cap is easy to turn on the implant.

2. Insert the positioning cylinder into the impression cap. Check that it is seated without any gap.

3. Take the impression with elastomer impression material (vinyl polysiloxane or polyether rubber). Impression, e.g. for RN (gray, height 5.5 mm) and WN (green, height 4.0 mm) following removal from the mouth.

Temporary restoration

Option A: Temporary restoration with temporary copings (plastic).

Temporary copings can be individually shortened and coated with plastic on the master cast or intrarally by the conventional technique.

Option B: Temporary restoration with protective caps (PEEK).

Protective caps are cemented on solid abutments with temporary cement.

Note: The method of impression taking and the temporary restoration are identical for RN and WN solid abutments.
<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Article</th>
<th>Dimensions</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RN and WN solid abutments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>048.540</td>
<td>RN Solid abutment, 6&quot;, yellow</td>
<td>height 4.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.541</td>
<td>RN Solid abutment, 6&quot;, gray</td>
<td>height 5.5 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.542</td>
<td>RN Solid abutment, 6&quot;, blue</td>
<td>height 7.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.543</td>
<td>WN Solid abutment, 6&quot;, green</td>
<td>height 4.0 mm</td>
<td>titanium</td>
</tr>
<tr>
<td>048.546</td>
<td>WN Solid abutment, 6&quot;, brown</td>
<td>height 5.5 mm</td>
<td>titanium</td>
</tr>
<tr>
<td><strong>Color-coded components for RN and WN impressions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>048.017V4</td>
<td>RN impression cap</td>
<td>height 8.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.069V4</td>
<td>Positioning cylinder for 048.540, yellow</td>
<td>height 10.2 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.061V4</td>
<td>Positioning cylinder for 048.541, gray</td>
<td>height 10.2 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.062V4</td>
<td>Positioning cylinder for 048.542, blue</td>
<td>height 10.2 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.013V4</td>
<td>WN Impression cap</td>
<td>height 8.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.065V4</td>
<td>Positioning cylinder for 048.545, green</td>
<td>height 10.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.066V4</td>
<td>Positioning cylinder for 048.546, brown</td>
<td>height 10.0 mm</td>
<td>plastic</td>
</tr>
<tr>
<td><strong>Components for RN and WN temporary restorations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>048.654</td>
<td>RN Temporary coping for RN solid abutments, bridge</td>
<td>height 8.5 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.655</td>
<td>RN Temporary coping for RN solid abutments, crown</td>
<td>height 8.5 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.047V4</td>
<td>RN Protective cap, cemented, for 048.540</td>
<td>height 5.8 mm</td>
<td>PEEK</td>
</tr>
<tr>
<td>048.048V4</td>
<td>RN Protective cap, cemented, for 048.541</td>
<td>height 7.3 mm</td>
<td>PEEK</td>
</tr>
<tr>
<td>048.049V4</td>
<td>RN Protective cap, cemented, for 048.542</td>
<td>height 8.8 mm</td>
<td>PEEK</td>
</tr>
<tr>
<td>048.656</td>
<td>WN Temporary coping for WN solid abutments, bridge</td>
<td>height 7.3 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.657</td>
<td>WN Temporary coping for WN solid abutments, crown</td>
<td>height 7.3 mm</td>
<td>plastic</td>
</tr>
<tr>
<td>048.051</td>
<td>WN Protective cap, cemented, for 048.545</td>
<td>height 6.0 mm</td>
<td>PEEK</td>
</tr>
<tr>
<td>048.052</td>
<td>WN Protective cap, cemented, for 048.546</td>
<td>height 7.5 mm</td>
<td>PEEK</td>
</tr>
</tbody>
</table>

**Caution:** The plastic parts are intended for single use only. They must not be sterilized. To avoid damage (loss of elasticity, embrittlement) to the plastic parts, they must be protected from exposure to strong light or heat.

**Inserting instruments for RN and WN Solid abutments**

For RN Solid abutments: solid abutment driver (short, 046.067, long, 046.068)

For WN Solid abutments: SCS screwdriver (extra short 046.400, short 046.401, long 046.402)

Ratchet 046.119

Torque control device 046.049

Holding key 046.064

For detailed information, refer to our brochures "PROSTHETICS, fixed Crown and Bridge Restorations with the solid abutment system", Art. No. 152.254 and "PROSTHETICS, temporary copings for solid abutments", Art. No. 152.282
INSTRUCTIONS FOR THE DENTAL TECHNICIAN

Fabrication of a mesostructure with the RN synOcta®
gold abutment and a cement-retained crown

Fabrication of the mesostructure

1. In order to design the emergence profile optimally on the neck of the crown, a gingival mask should be made on the master cast.

2. Attach the RN synOcta® gold abutment to the analog, ensuring that the abutment is aligned in the octagon of the analog. Then hand-tighten the screw with an SCS screwdriver.

3. If required, the modeling aid can be shortened occlusally to suit the anatomical conditions.

4. Make a wax model of the mesostructure on the abutment. Minimum wax thickness 0.7 mm.

5. Check for correct spacing with the silicone index from the wax-up.

6. For reasons of hygiene, the mesostructure/crown cement gap must not be more than 2.0 mm below the gingiva.

7. Embed the mesostructure.
   Do not use a wetting agent!
   To prevent the cast-on alloy overflowing, it is essential to clean the slender edge of the coping and the internal configuration thoroughly with alcohol.

8. Cast the mesostructure in the conventional way. Do not use speed investment materials! Follow the instructions for use provided by the manufacturer of the investment material and cast-on alloy!

9. Carefully devest the casting using only ultrasound, water jet or pickling. Do not sandblast!

10. Finish the mesostructure. Polish the subgingival part.
**Fabrication of the cement-retained crown**

11. Block out the screw channel and model the crown.

12. Invest, cast and veneer the crown in the conventional way.

13. a The mesostructure with the finished crown.

13. b

---

### Art. No. Article Dimensions Material

| RN synOcta® gold abutment for transocclusal screw-retained or cement-retained crowns |
|-------------------------------------------------|----------|----------|-------------------------------|
| 048.642  | RN synOcta® gold abutment for premounted modeling aid (including screw*) | height 14.1 mm | Ceramic/or-burn-out plastic/titanium |

*also available as spare part Art. No. 048.356

For detailed information, refer to our brochure “PROSTHETICS: Crown and Bridge Restorations with the synOcta® Prosthetic System”, Art. No. 152.255.

RN = Regular Neck