INSTRUCTIONS FOR THE DENTIST

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

Screw-retained
(Open tray)

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

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

3. Undo the screws and remove the impression.

4. Sending the impression to the dental lab.

5. Screw the synOcta® Analog to the impression caps hand-tight.

Snap-on
(Closed tray)

1. Attach impression caps to the implants. The cap has engaged when a "click" is heard. If the cap is correctly seated, it can be turned on the implant.

2. The octagon of the synOcta® Positioning cylinder must be aligned with the octagon of the implant and inserted into the impression cap up to the limit stop.

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

4. Sending the impression to the dental lab.

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

Make the working model from special hard plaster, Type 4 (DIN 13911).

Note: The impression-taking method is identical for implant shoulder Ø 4.8 mm RN and implant shoulder Ø 6.5 mm WN.

Art. No.		Article	Dimensions	Material
Components for synOcta® impressions				
048.017V4		RN impression cap, snap-on	height 8.0 mm	plastic
048.070V4		RN synOcta® positioning cylinder, red, snap-on	height 12.0 mm	plastic
048.010		RN synOcta® impression cap, screw-retained, red, with integral guide screw	height 10.1 mm	anodized aluminium/titanium
048.090		RN synOcta® impression cap, built-in handle, red, with integral guide screw	height 21.0 mm	anodized aluminium/titanium
048.013		WN impression cap, snap-on	height 8.0 mm	plastic
048.095		WN synOcta® positioning cylinder, white, snap-on	height 12.0 mm	plastic
048.091		WN synOcta® impression cap, screw-retained, with integral guide screw	height 10.0 mm	aluminium/titanium
synOcta® Master cast fabrication				
048.124		RN synOcta® analog, gray (with red stripe)	length 12.0 mm	stainless steel
048.171		WN synOcta analog, gray	length 12.0 mm	stainless steel
Prosthetic Instruments				
046.400		SCS Screwdriver, extra short	length 15.0 mm	stainless steel
046.401		SCS Screwdriver, short	length 21.0 mm	stainless steel
046.402		SCS Screwdriver, long	length 27.0 mm	stainless steel
046.410		SCS Screwdriver, extra short, for handpiece adapter	length 20.0 mm	stainless steel
046.411		SCS Screwdriver, short, for handpiece adapter	length 26.0 mm	stainless steel
046.412		SCS Screwdriver, long, for handpiece adapter	length 32.0 mm	stainless steel

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

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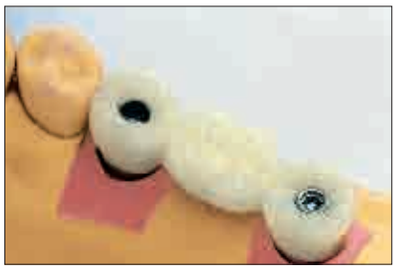
INSTRUCTIONS FOR THE DENTIST

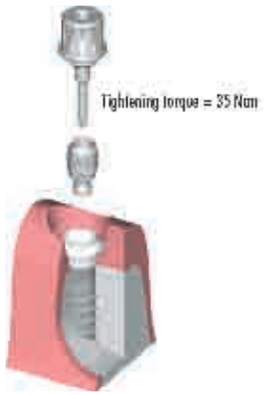
RN synOcta® 1.5 Screw retained

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.

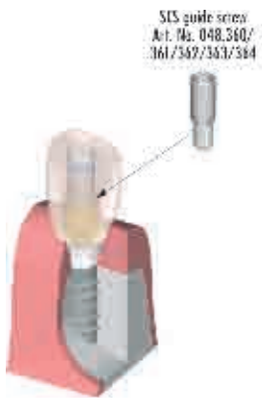




2. Insert the abutments into the implants and tighten the basal screws to a torque of **35 Ncm.**

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!



B. *Screw retention with SCS guide screw (Art. No. 048.360/361/362/363/364).*
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.

Art. No.		Article	Dimensions	Material
SCS occlusal and guide screws (according to the type of restoration)				
048.350 048.350V4		SCS Occlusal screw	length 4.4 mm	titanium
048.360V4		Guide screw for RN synOcta® coping bar, cannot be shortened	length 6.0 mm	titanium
048.361V4		Guide screw for RN synOcta® coping bar, can be shortened by 1.6 mm	length 6.0 mm	titanium
048.362V4		SCS Guide screw for milling cylinder, cannot be shortened	length 8.0 mm	titanium
048.363V4		Guide screw for milling cylinder, can be shortened by 2.0 mm	length 8.0 mm	titanium
048.364V4		Guide screw, can be shortened by 2.0 mm	length 10.0 mm	titanium

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.

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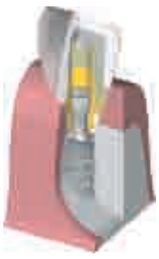
INSTRUCTIONS FOR THE DENTIST

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.

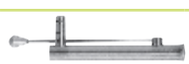
1. Align the octagon of the customized gold abutment on the octagon of the implant and insert the meso-structure into the implant. Tighten the basal screw with a force of **35 Ncm.**



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.

Art. No.		Article	Dimensions	Material
Transfer of the synOcta® Cement retained abutments				
048.059V4		Transfer aid for 048.605, RN	height 6.5 mm	plastic
048.054V4		Transfer aid for 048.606, WN	height 6.5 mm	plastic

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
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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.

Art. No.		Article	Dimensions	Material
Transfer of the RN and WN synOcta® Angled abutments				
048.000V4		Transfer aid for RN synOcta® Angled, short, 15° and 20°	height 4.0 mm	plastic
048.002V4		Transfer aid for RN synOcta® Angled, long, 15° and 20°	height 4.0 mm	plastic
048.032		Transfer aid for WN synOcta® Angled, 15°	height 5.0 mm	plastic
048.350 048.350V4		SCS occlusal screw	length 4.4 mm	titanium

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.

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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).

Art. No.		Article	Dimensions	Material
Transfer of the RN synOcta® Transversal (TS) abutment				
048.003V4		Transfer aid for RN synOcta® TS abutment	height 5.0 mm	plastic

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

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INSTRUCTIONS FOR THE DENTIST

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

Screwing in the abutment

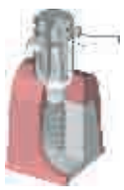
1. Insert the RN solid abutment into the driver and screw it into the implant.
Note: WN solid abutments must be screwed into the WN implant using the SCS screwdriver.

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 intraorally 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.

Art. no.		Article	Dimensions	Material
RN and WN solid abutments				
048.540		RN Solid abutment, 6°, yellow	height 4.0 mm	titanium
048.541		RN Solid abutment, 6°, gray	height 5.5 mm	titanium
048.542		RN Solid abutment, 6°, blue	height 7.0 mm	titanium
048.545		WN Solid abutment, 6°, green	height 4.0 mm	titanium
048.546		WN Solid abutment, 6°, brown	height 5.5 mm	titanium
Color-coded components for RN and WN impressions				
048.017V4		RN impression cap	height 8.0 mm	plastic
048.060V4		Positioning cylinder for 048.540, yellow	height 10.2 mm	plastic
048.061V4		Positioning cylinder for 048.541, gray	height 10.2 mm	plastic
048.062V4		Positioning cylinder for 048.542, blue	height 10.2 mm	plastic
048.013V4		WN Impression cap	height 8.0 mm	plastic
048.065V4		Positioning cylinder for 048.545, green	height 10.0 mm	plastic
048.066V4		Positioning cylinder for 048.546, brown	height 10.0 mm	plastic
Components for RN and WN temporary restorations				
048.654		RN Temporary coping for RN solid abutments, bridge	height 8.5 mm	plastic
048.655		RN Temporary coping for RN solid abutments, crown	height 8.5 mm	plastic
048.047V4		RN Protective cap, cemented, for 048.540	height 5.8 mm	PEEK
048.048V4		RN Protective cap, cemented, for 048.541	height 7.3 mm	PEEK
048.049V4		RN Protective cap, cemented, for 048.542	height 8.8 mm	PEEK
048.656		WN Temporary coping for WN solid abutments, bridge	height 7.3 mm	plastic
048.657		WN Temporary coping for WN solid abutments, crown	height 7.3 mm	plastic
048.051		WN Protective cap, cemented, for 048.545	height 6.0 mm	PEEK
048.052		WN Protective cap, cemented, for 048.546	height 7.5 mm	PEEK

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 .

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INSTRUCTIONS FOR THE DENTAL TECHNICIAN

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

Fabrication of the mesostructure

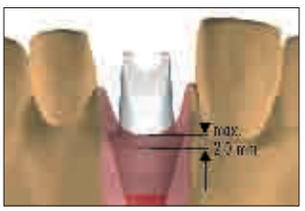
1. In order to design the emergence profile optimally on the neck of the crown, a gingival mask should be made on the master cast.

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	Ceramicor/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.

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