the dental lab

powered by cornerstone bio-comp enterprises

IMPLANT IMPRESSION MANUAL

3shape

Implant Compatibility

Custom Abutments are compatible with the following implant systems:

Astra Tech Dental - OsseoSpeed*
3.0 mm
3.5/4.0 mm
4.5/5.0 mm

Biomet 3i- Certain*
3.4 mm
4.1 mm
5.0 mm
6 mm

Neoss- Neoss*
4.0 mm

Straumann- Bone Level*
3.3 mm NC
4.1 mm RC
4.8 mm RC

Zimmer Dental- Screw-Vent*
3.5 mm
4.5 mm
5.7 mm

Keystone Dental- Prima Connex (only Titanium)
3.5 mm
4.1 mm
5.0 mm

Noble Biocare- Nobelactive*
3.5 mm NP
4.3 mm RP

Noble Biocare- Nobelreplace*
3.5 mm NP
4.3 mm RP
5.0 mm WP
6.0 mm

Hiossen
4.0 mm mini
4.5 mm standard

Ti BASE ONLY

Straumann SynOcta RN WN

IMPLANT INFORMATION

* **Available for Ti Base Screw Retained Crowns and Zirconia Abutments**

Contact the dental lab for SCAN BODIES for your digital scanner!

Other systems may be available upon request

ASTRA TECH

Implant-Level Impression Taking

Closed-tray

Components:

- Healing Abutment
- Implant Pick-up or Implant Transfer
- Implant Replica
- Hex Screwdriver

1. Before placing the Implant Transfer, make sure the pin engages the threads in the apical part of the transfer. The pin should not be visible below the indexing. If the pin is visible this could prevent the Implant Transfer from being seated correctly.

2. Use the pin as a carrier to seat the transfer into the implant.

3. Tighten the Implant Transfer securely into the implant. Make sure the internal hex is correctly engaged before tightening the pin. Secure the pin using light finger force.

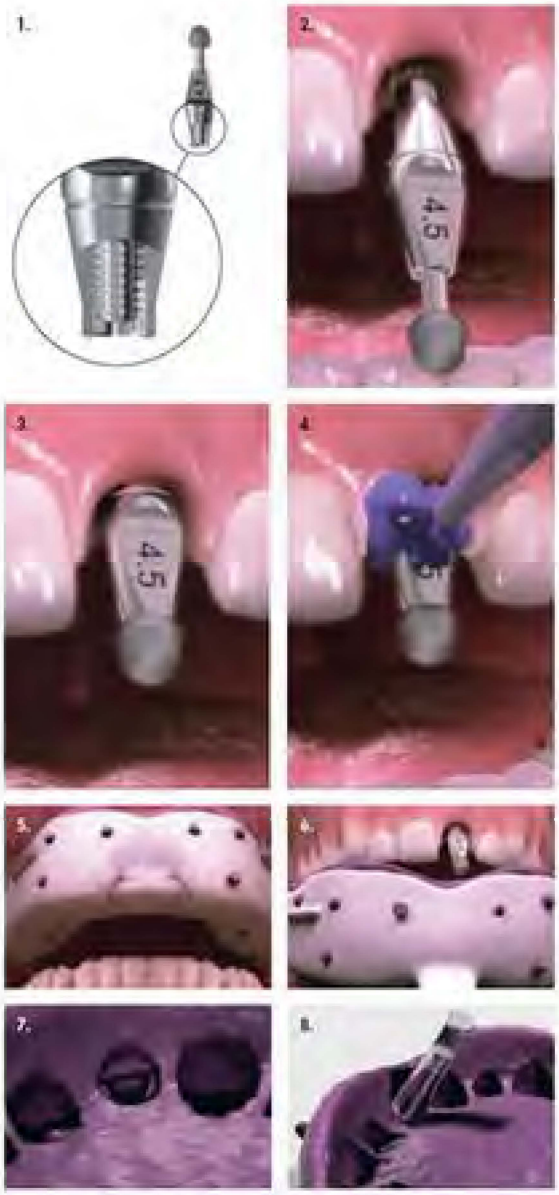
4. Prepare a rigid impression tray with space for the transfer, without interfering with the tray. Inject elastomeric impression material around the Implant Transfer and into the impression tray as soon as possible after the Temporary Abutment or Healing Abutment has been removed.

5. Take the impression.

6. Lift the tray after the impression material has set and unscrew the Implant Transfer.

7 - 8. Reposition the Implant Transfer in the impression. This is most easily done by tightening the transfer into the Implant Replica and using the replica as a handle during the positioning. Check the impression for correct and stable retention of the Implant Transfer.

Perform the first registration of jaw relations to enable mounting of the working model and opposing model into the articulator.



Images Courtesy of Astra Tech

Open-tray impression

1. Tighten the Implant Pick-up securely in the implant. Make sure the internal hex is correctly engaged before tightening the implant guide pin. Secure the guide pin with the Hex Screwdriver using light finger force.

2. Use a standard or customized impression tray. Make sure the guide pin can penetrate the tray without interfering with it. The prepared hole is covered with wax, which is penetrated by the guide pin during impression-taking.

3. Inject the elastomeric impression material around the Implant Pick-up and onto the impression tray as soon as possible after the Temporary Abutment or Healing Abutment has been removed.

4. Place the tray filled with impression material intraorally. Make sure the guide pin penetrates through the hole made in the tray. Unscrew the guide pin after the impression material has set. Make sure that the guide pin is completely disengaged from the implant before lifting the tray. Check the impression for correct and stable retention of the Implant Pick-up. Perform the first registration of jaw relations to enable mounting of the working model and opposing model into the articulator.

Immediate placement

5. If immediate placement is preferred, an impression can be taken before the implant is placed and a working model can be prepared. Remove the stone material from the working model at the implant position. At the time of implant placement, tighten an Implant Pick-up into the implant and attach a transfer key to the pickup. By using the transfer key the position of the pick-up is transferred to the pre-prepared working model. (See page 25 of the Cement-retained restorations manual).

Select shade

6. Determine and send the selected shade and details of the patient's oral situation to the dental laboratory.

Implant-Level Impression Taking

Open-tray

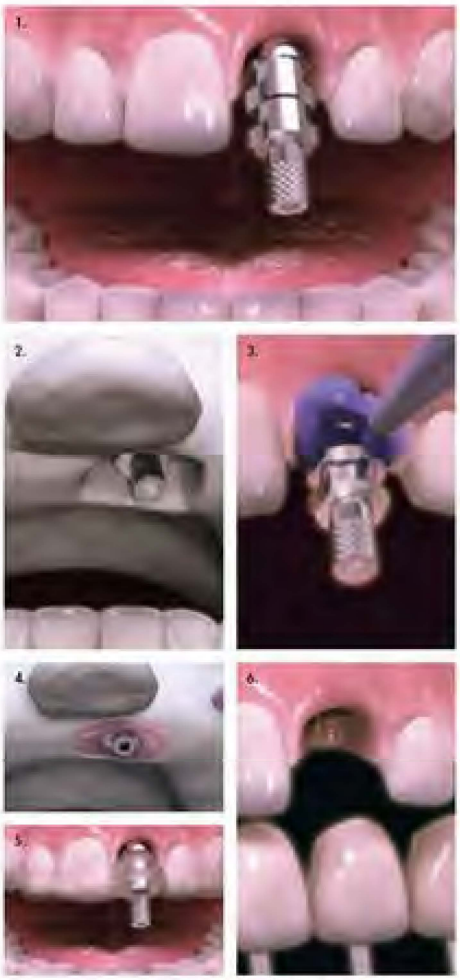


Image Courtesy of Astra Tech

Implant & Abutment Level Impressions

Pick-Up Impression Copings

(Certain* Internal Connection System Is Illustrated)

1. **Restorative Dentist**

   Select the proper Pick-Up Impression Coping by matching the EP® Diameter of the healing abutment and the color of the implant platform. To determine platform diameter, see below. Remove the healing abutment from the implant using a .048" Large Hex Driver (PHD02N or PHD03N). To help prevent accidental swallowing, thread floss through the spinner on the driver.

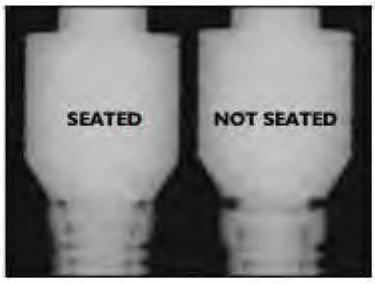
(purple)	(blue)	(yellow)	(green)
3.4mm	4.1mm	5mm	6mm

2. Activate the fingers using the QuickSeat® Activator Tool (see page 4). Place the Pick-Up Impression Coping into the implant, line up the hex and press firmly until feeling a tactile click.

   Or

   Place the Pick-Up Impression Coping on the implant and engage the hex.

   Thread the Pick-Up Impression Coping Screw into the implant until fingertight. Tighten the screw using a .048" Large Hex Driver (PHD02N or PHD03N).



3. Radiograph the interface to verify complete seating of the coping on the implant. Place the film perpendicular to the interface of the coping on the implant or abutment.

4. A custom or stock **open** impression tray is used for the Pick-Up Impression Technique. Cut a small hole into the tray so that the clinician has access to the screw head.

Implant & Abutment Level Impressions

Pick-Up Impression Copings (Cont'd)

(Certain* Internal Connection System Is Illustrated)

5. Medium or heavy body impression material is recommended for the impression material in the impression tray. Use light-body or injection consistency impression material and syringe impression material around the entire Pick-Up Impression Coping.

6. Load the impression tray and seat it in the mouth. Wipe impression material off the top of the screw so that the screw hex is visible and free of impression material before it sets. Allow the impression material to set per the manufacturer's instructions.

7. After the impression material has set, unscrew and remove the Pick-Up Impression Coping Screw using a .048" Large Hex Driver (PHD02N or PHD03N). Remove the impression from the mouth.

8. Verify that the impression material has completely adapted around the coping and that there is no impression material on the impression coping's restorative platform.

Implant & Abutment Level Impressions

Pick-Up Impression Copings (Cont'd)

(Certain* Internal Connection System Is Illustrated)

9. Immediately replace the healing abutment on the implant using a .048" Large Hex Driver Tip (RASH3N or RASH8N) with a torque device and torque to 20Ncm.

10. Laboratory

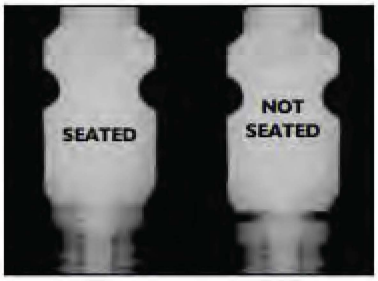
Place the proper diameter Implant Lab Analog onto the impression coping, engaging the hex. Hold the analog in place while tightening the screw with a .048" Large Hex Driver. Verify that the impression coping is completely seated on the analog. If the clinician is sending the impression to a commercial laboratory to pour the impression, do not attach the analog.

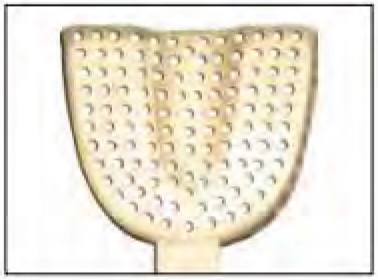
11. Syringe soft-tissue material around the coping and analog interface. Pour the cast in die stone. Articulate with the opposing cast.

Implant & Abutment Level Impressions

Twist Lock™ Transfer Impression Copings

(External Connection is Illustrated)





Restorative Dentist

1. Select the proper Twist Lock Impression Coping by matching the EP® Diameter of the healing abutment and the color of the implant platform. To determine platform diameter, see below. Remove the healing abutment from the implant using a .048" Large Hex Driver (PHD02N or PHD03N). To help prevent accidental swallowing, thread floss through the spinner on the driver.

(purple)	(blue)	(yellow)	(green)
3.4mm	4.1mm	5mm	6mm

2. Activate the fingers using the QuickSeat® Activator Tool (see page 4). Place the Twist Lock Impression Coping into the implant, line up the hex and press firmly until feeling the tactile click.

Or

Place the Twist Lock Impression Coping on the implant and engage the hex.

Thread the Twist Lock Impression Coping Screw into the implant until fingertight. Tighten the screw using the Impression Coping Driver (ICD00).

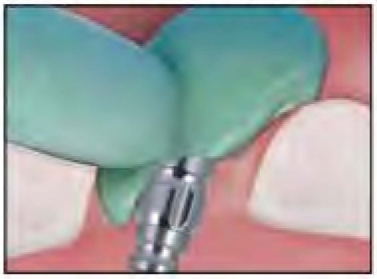
3. Radiograph the interface to verify complete seating of the coping on the implant. Place the film perpendicular to the interface of the coping on the implant or abutment.

4. A custom or stock impression tray is used for the Twist Lock Transfer Impression technique. Try in the tray to verify that there is no contact with the coping.

Implant & Abutment Level Impressions

Twist Lock™ Transfer Impression Copings (Cont'd)

(External Connection Is Illustrated)



5. Medium or heavy body impression material is recommended for the impression material in the impression tray. Use light-body or injection consistency impression material around the entire Twist Lock Impression Coping.

6. Load the impression tray and seat it in the mouth. Allow the impression material to set per the manufacturer's instructions.

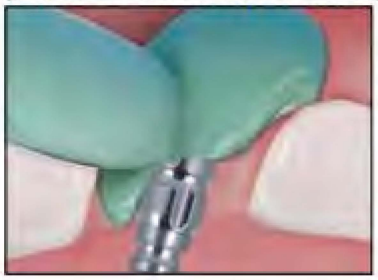
7. After the impression material has set, remove the impression from the mouth. The Twist Lock Impression Coping will remain on the implant. Verify that the impression material completely adapted around the coping.

8. Remove the Twist Lock Coping from the implant using the Impression Coping Driver (ICD00).

Implant & Abutment Level Impressions

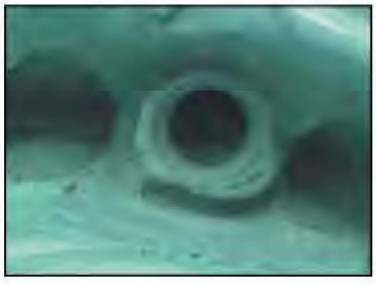
Twist Lock™ Transfer Impression Copings (Cont'd)

(External Connection Is Illustrated)



5. Medium or heavy body impression material is recommended for the impression material in the impression tray. Use light-body or injection consistency impression material around the entire Twist Lock Impression Coping.

6. Load the impression tray and seat it in the mouth. Allow the impression material to set per the manufacturer's instructions.



7. After the impression material has set, remove the impression from the mouth. The Twist Lock Impression Coping will remain on the implant. Verify that the impression material completely adapted around the coping.

8. Remove the Twist Lock Coping from the implant using the Impression Coping Driver (ICD00).

Implant & Abutment Level Impressions

Twist Lock™ Transfer Impression Copings (Cont'd)

(External Connection is Illustrated)

9. Immediately replace the healing abutment on the implant using a .048" Large Hex Driver Tip (RASH3N or RASH8N) with a torque device and torque to 20Ncm.

Laboratory

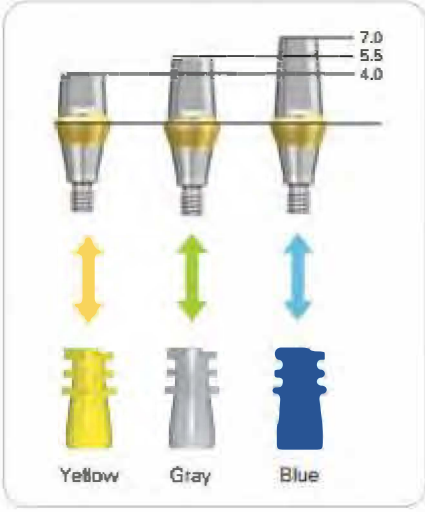
10. Place the proper diameter Implant Lab Analog into the impression coping, engaging the hex. Hold the components together while fingertightening the screw. Verify that the impression coping is completely seated on the analog.

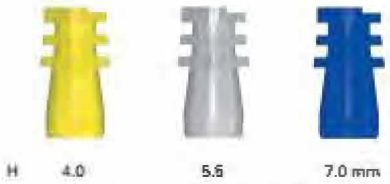
11. Re-index the impression coping/analog assembly into the impression using firm pressure to its full depth. Slightly rotate the coping/analog clockwise until feeling antirotational resistance. This indicates that the orientation grooves are locked into place and the implant hex is accurately transferred.

12. Syringe a soft-tissue material around the coping and analog interface. Pour the cast in die stone. Articulate with the opposing cast.

HIOSSEN

Rigid impression copings





Rigid impression coping

Prosthetic procedure

Select an impression coping of identical features with the abutment and press with your hand to connect. Do not forget to use an abutment height of 4/5.5/7 mm and exclusive impression coping. After connecting the coping, take an impression following the conventional method using a ready made tray.

Impression coping connection

Impression material injection

Impression taking completed

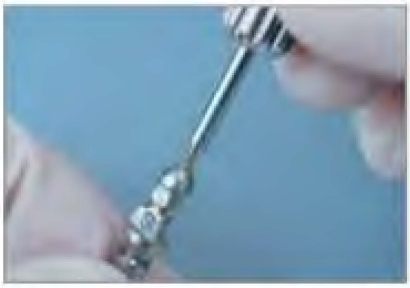
HIOSSEN

First inject impression material around the impression coping to take an impression. Remove the impression body from the mouth after the impression material has set. Then, separate the impression coping from the removed impression body. Connect a fixture lab analog and impression coping of identical connection. Check the triangle-circle structure replicated on the impression and match the internal surface of the coping to reconnect it as it was before impression taking. Remember to check whether the setting is exact after connection.

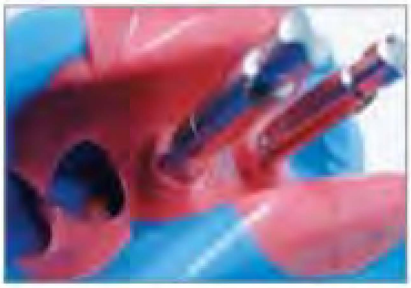
Impression material injection

Impression taking

Triangle-circle structure verification



Connecting the coping and lab analog



Repositioned coping with lab analog

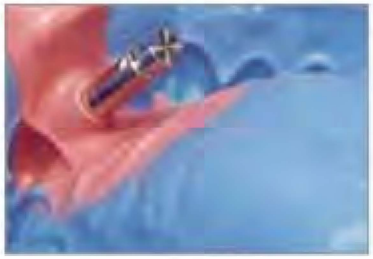
HIOSSEN

Prosthetic procedure

Predict the diameter and type (hex, non-hex) of the abutment to be used and select an impression coping that will be connected using a 1.2 Hex hand driver with hand force. When the vertical dimension is insufficient, apply the short feature. We recommend you to block-out the driver hole of the impression coping. It is essential to take a periapical x-ray to verify the exactness of the impression coping connection.

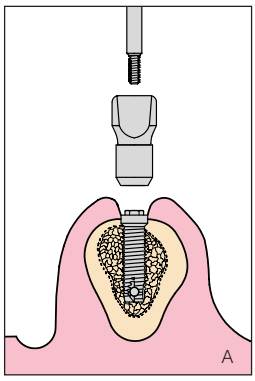
Connecting the impression coping

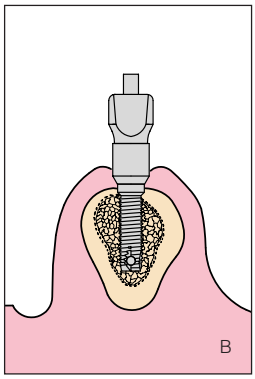
Impression taking

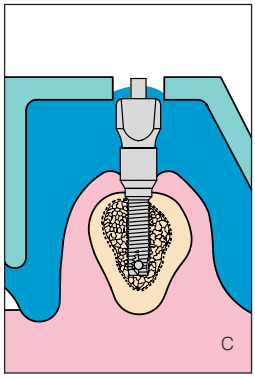


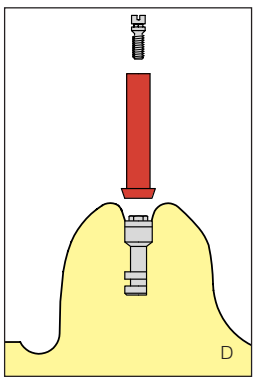
Repositioning the coping with lab analog

Impression Techniques









Impressions may be made directly to the implant, (UCLA technique), or indirectly to the tissue extension (abutment). See previous pages for **Direct vs Indirect** mode of fixation.

The Direct Impression Technique for hexed implants, technique #1, may be made with a two piece hexed impression coping to transfer the hex orientation or a one piece, flat sided impression coping that will transfer the thread timing.

For single tooth replacement and screw retained telescopic abutments, the hexed impression copings must be used.

I. Impression Direct to Hexed Implants

1. After the healing period, remove healing cap and attach impression coping onto the implant (A & B). The internal hex of the impression coping must interface with the external hex on the implant to relate the hex orientation.
2. It may be necessary to incorporate an access hole into the tray so that the coping can be disengaged before the tray is removed. Inject impression material around coping and fill the impression tray; take impression (C). After material has set, disengage the guide pin. When using a closed impression tray, seal the hex hole of the guide pin with wax before taking the impression. remove tray and attach an implant analog to the coping. Fabricate soft tissue model and attach hexed UCLA abutment. (D)

II. Impression Direct to Non-Hexed Implants

1. A healing period of two to three weeks should follow the secondary surgery before impressions are made.
2. Attach non-hex impression coping(s). Try in impression tray to verify that adequate space is provided for the impression coping(s). Inject impression material around copings, fill tray heavily, and insert. Remove tray and unscrew impression copings. Attach implant analogs to impression copings and reinsert them into their original position in the impression. If a direct abutment is to be used as an impression post, it must have a flat side to transfer the thread orientation. Fabricate soft tissue model.

III. Impression to Abutment (Tissue Extension)

1. A healing period of two to three weeks should follow the secondary surgery before impressions are made.
2. Check the Tissue Extensions to make sure they are tight and attach tapered or square impression coping(s). Try in impression tray to verify that adequate space is provided for the impression coping(s). If square impression coping(s) are used, the impression tray must have a window (also referred to as open tray) for access to the copings' internal guide pin. Inject impression material around copings, fill tray heavily, and insert. Guide pins of square copings must be disengaged before tray is removed. Attach abutment analogs to impression copings and pour model in die stone.

KEYSTONE INDUSTRIES
U.S. DENTAL MANUFACTURER

IMPRESSION & TEMPORIZATION PROCEDURES FOR INTERNAL CONNECTION IMPLANTS

Impression Procedures for PrimaConnex® Internal Connection Implants

The internal connection for PrimaConnex Implants is designed with Ti-Lobe™ Technology, a patented 6-lobe design for superior strength, stability, and esthetics.


PrimaConnex Impression Post

PrimaConnex Implant Impression Posts

Each impression post is packaged with a long screw for open tray impressions and a short screw for closed tray impressions. When implants are divergent from each other, angled or placed across the arch, an open tray impression is recommended. When restoring a single-tooth implant, a closed tray impression can be used.

CAUTION: PrimaConnex Impression Posts are packaged and then gamma sterilized. When reusing, sterilization is recommended by following standard cleaning protocol and the sterilization protocol on page 2.

NOTE: Use the appropriate diameter of the Implant Impression Post to match the diameter of the healing abutment. They are available in contoured and straight diameters. When seating the Impression Post into the implant, the Impression Post captures the implant's vertical and rotational position.

Procedure for Seating PrimaConnex Implant Impression Posts

Place the long screw (open tray technique) or short screw (closed tray technique) into the top of the Impression Post body. Connect the Quad Driver to the screw and deliver the assembly to the implant. Lightly tighten the screw. Rotate the Impression Post body into the lobed connection of the implant until it is fully seated. Firmly tighten the screw by hand. Take a radiograph to verify the Impression Post is completely seated.

Procedure For Taking an Open Tray Impression


Healing Abutment

Step 1:

Take an alginate impression of the implant site and fabricate a full arch custom tray.

(Block out over the implant sites approximately 15mm. All other areas of the arch use the standard block out technique.)

Step 2:

Cut hole(s) in the top of the custom tray over the implant site(s) to allow the Impression Post screw to protrude through the top of the tray.


Step 3

Step 3:

Remove the Healing Abutment with the Quad Driver.

(If tissue is covering a multi-unit restoration, remove one Healing Abutment at a time and then place an Impression Post to prevent the tissue from slumping.)

Step 4

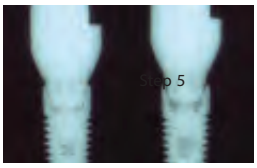
Step 4:

Inspect the implant prosthetic table for tissue invagination.

(If tissue is covering the prosthetic table, replace the healing abutment lightly and have the patient return to the surgical doctor or contact the surgical doctor for guidance.)

Step 5:

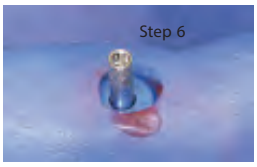
Place the screw into the Impression Post and place over the implant. The Impression Post body will self-align into the lobed connection of the implant. Firmly tighten the screw by hand.



Step 6:

Take a radiograph to verify that the Impression Post is completely seated.

(The X-ray cone should be perpendicular to the implant.)



Step 7

Step 7:

Place the custom tray in the mouth to verify that the screw(s) are extended approximately 2mm above the top of the tray.

Step 8

Step 8:

Block out the square hole in the top of the screw with a soft wax.

Step 9

Step 9:

Syringe the impression material around the entire body of the Impression Post exposing only the top of the screw.

(Impression materials: any medium to heavy body polyvinylsiloxane.)

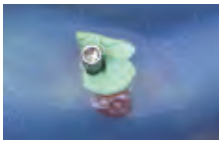
Step 10

Step 10:

Fill and seat the custom tray in the mouth covering the Impression Post and exposing the top of the screw through the hole in the top of the tray.

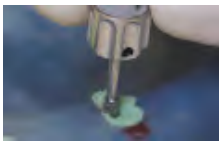
KEYSTONE INDUSTRIES
U.S. DENTAL MANUFACTURER

IMPRESSION & TEMPORIZATION PROCEDURES FOR INTERNAL CONNECTION IMPLANTS


Step 11

Step 11:

Once the impression tray is seated and before the material sets, remove the impression material from the top of the tray to expose the screw.


Step 12

Step 12:

Once the material has set, remove the screw from the Impression Post and remove the impression tray from the mouth.

(The Impression Post will be embedded inside of the impression.)


Step 13

Step 13:

Replace the Healing Abutment.

Step 14:

Inspect the impression for accuracy.


Step 15

Step 15:

Place the Implant Analog (replica of the implant) onto the male lobed portion of the Impression Post body in the impression. Slide the screw through the top of the impression and engage the analog.This step may be completed by the laboratory technician.

(Hand tighten the screw. Firmly hold the analog so that the Impresion Post will not move or dislodge within the impression.)


Step 16

Step 16:

Send the impression with the seated Implant Analog, opposing model, shade, and bite registration to the laboratory.

KEYSTONE INDUSTRIES
U.S. DENTAL MANUFACTURER


Healing Abutment

Procedure For Taking a Closed Tray Impression

Step 1:

Take an alginate impression of the implant site and fabricate a full arch custom tray.

(Block out over the implant sites approximately 15mm. Use a standard block out technique for all other areas of the arch.)


Step 2

Step 2:

Remove the Healing Abutment with the Quad Driver.

(Ifit is a multi-unit restoration, remove one Healing Abutment at a time and place the Impression Post to avoid the tissue slumping.)


Step 3

Step 3:

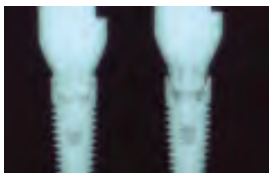
Inspect the implant prosthetic table for tissue invagination.

(If the tissue is covering the prosthetic table, replace the Healing Abutment lightly and return the patient to the surgical doctor or contact the surgical doctor for guidance.)


Step 4

Step 4:

Place the screw into the Impression Post and place over the implant. The Impression Post body will self-align into the lobed connection of the implant. Firmly tighten the screw by hand.


Step 5

Step 5:

Take a radiograph to verify that the Impression Post is completely seated.

(The X-ray cone should be perpendicular to the implant prosthetic table.)


Step 6

Step 6:

Block out the square hole in the top of the screw with a soft wax.

KEYSTONE INDUSTRIES
U.S. DENTAL MANUFACTURER

IMPRESSION & TEMPORIZATION PROCEDURES FOR INTERNAL CONNECTION IMPLANTS


Step 7

Step 7:

Syringe the impression material around the entire impression post.

(Impression materials: any medium to heavy body polyvinylsiloxane.)

Step 8:

Fill the full arch impression tray with impression material and seat the custom tray in the mouth covering the impression post.

Step 9:

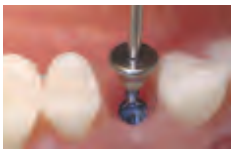
Once the material has set in the mouth, remove the impression tray.

(The impression post body and short screw will remain in the mouth.)


Step 11.1

Step 10:

Inspect the impression for accuracy.


Step 11.2

Step 11:

Remove the Impression Post with the Quad Driver and replace the Healing Abutment.

(Remove one Impression Post at a time and immediately seat the appropriate Healing Abutment.)


Step 12

Step 12:

Select the indicated Implant Analog (replica of the implant). Place the Impression Post into the female lobed portion of the analog and hand tighten the screw with the Quad Driver.


Step 13.1

Step 13:

Seat the impression post connected to the Implant Analog back into the impression, aligning the flat side of the Impression Post to the flat side of the impression. Steps 12 and 13 may be completed by the laboratory technician.


Step 13.2

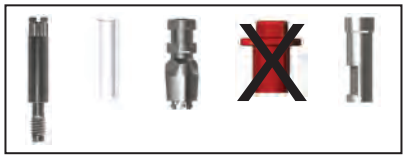
Step 14:

Send the impression with the seated Impression Post and Implant Analog, opposing model, shade, and bite registration to the laboratory.

Neoss Clinical Impression Procedure - Open Tray

1. Use the Impression Coping as supplied.
   Note: The Neoss Impression coping is 'self-seating'. This means that the screw will not engage the implant if the coping is not correctly seated. However a radiograph is recommended if there is any uncertainty or risk of soft tissue entrapment.

"All-in-one" impression coping set



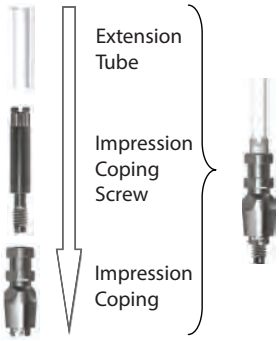
2. Expose the head of the implant – e.g. remove the cover screw or healing / provisional abutment and ensure that the top of the implant is clear of any soft or hard tissue.

3. Place desired length impression coping and impression coping scre (8, 11 or 18mm) onto the implant and tighten the screw – hand tightening is sufficient, use the screwdriver and manual handle.

Neoss screwdriver = Manual Handle (51126) and Machine Screwdriver (51139/51140)

4. Try-in the modified impression tray (with a window previously cut in the area of the implant) and ensure that the tray is clear of the impression coping and the plastic tube extends beyond the impression tray. The plastic tube may be reduced prior to taking the impression.

5. Using a medium to heavy body impression material, inject around the impression coping and fill the impression tray.



6. Seat the impression tray and ensure the plastic tube(s) is clearly visible.

7. After the impression material has set, grasp the plastic sleeve with tweezers and remove.

8. Using the screwdriver ensure that the impression coping screw ha been completely undone/disengaged from the implant and remo the impression.

   Note: Upon removal of the impression the implants are covered by replacing the healing/provisional abutment.

9. Using the screwdriver attach the implant replica to the impression coping, ensure correct seating and hand tighten. Avoid twisting th impression coping in the impression – DO NOT OVER TIGHTEN.

Neoss Clinical Impression Procedure - Closed Tray

In a closed tray technique the impression coping remains seated when the impression is removed. Once the replica has been attached it is then re-seated into the impression.

Note: This technique may be contra-indicated in cases where implant angulation is severe.

1. Use the Impression Coping as supplied – remove the plastic extension tube.

   Note: The Neoss Impression coping is 'self-seating'. This means that the screw will not engage the implant if the coping is not correctly seated. However a radiograph is recommended if there is any uncertainty or risk of soft tissue entrapment.

2. Expose the implant – e.g. remove the cover screw or healing/provisional abutment and ensure that the top of the implant is clear of any soft or hard tissue.

3. Place the desired length impression coping and impression coping screw (8, 11 or 18mm) onto the implant and tighten the screw with the screw-driver and manual handle. (Step 1)

   Position the Red Plastic Cap on the Impression Coping. The impression coping needs to be properly oriented in the Red Plastic Cap, meaning that the coping will slide without resistance almost completely down into the cap before a final push seats the coping. (Step 2)

   Note: The impression cap needs to be properly oriented on the Impression Coping, the 2 flat vertical sides help orientation so that the cap slides without resistance over the impression coping.

4. Using a medium to heavy body impression material, inject around the impression coping and fill the impression tray.

5. Seat the impression tray.

6. When the impression material has set, remove the impression (the Red Plastic Impression Cap is 'picked up' in the impression).

7. Using the screwdriver unscrew and remove the Implant Level Impression coping.

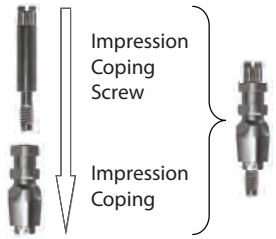
8. The Implant replica (supplied with the impression coping) is screwed into the impression coping with the impression screw. (Step 3)

9. Reposition the Impression Coping with the replica attached back into the Red Plastic Cap in the impression (use the two flat sides of the Impression Coping for alignment into the Red Plastic Cap).

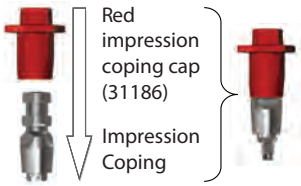
"All-in-one" impression coping set

Neoss screwdriver = Manual Handle (51126) and Machine Screwdriver (51139/51140)

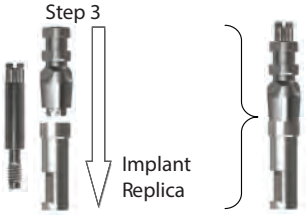
Step 1



Step 2



Step 3



NobelReplace™
Impression techniques – implant level

CLOSED TRAY AND OPEN TRAY QUICK GUIDE

This Quick Guide does not replace the Instructions for Use. Please review the instructions for use included with the products.

Product images are not necessarily to scale.

In order to improve readability, Nobel Biocare does not use TM/ ® in running text. In so doing, however, Nobel Biocare does not waive any right to the trademark or registered mark and nothing herein shall be construed to the contrary.

Indications:
- After a one-stage procedure when indexing of the implant position is desired at the time of implant placement.
- After a two-stage procedure when a healing abutment or temporary restoration has been in place and the soft tissue has healed.

Closed tray instructions

Step 1
- Remove the Healing Abutment NobelReplace™ using Screwdriver Unigrip and by rotating it counterclockwise.

Step 2
- Insert the closed tray impression coping into the implant. Ensure that the tri-channel configuration on the impression coping engages the tri-channel connection in the implant.
- Use the Screwdriver Unigrip and hand tighten the screw.

Or

- Use the Plastic Impression Coping Closed Tray for NobelReplace, intended for single units and short-span bridges with parallel implants. Single use only.
- Align the lobes of the impression coping with the internal tri-channels and push the impression coping firmly into place. Verify the correct seating. Skip to Step 4.

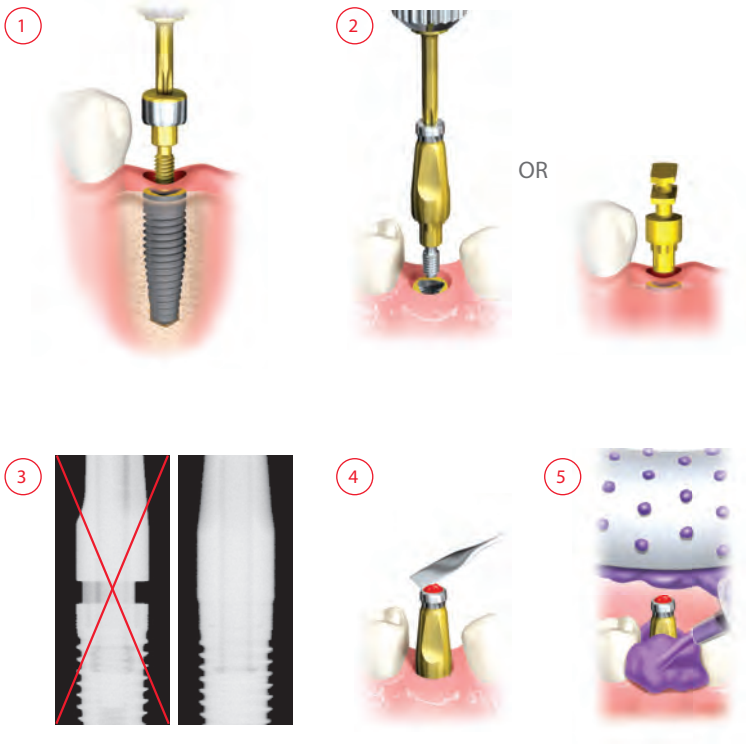
Step 3
- Take a radiograph to verify proper seating of the impression coping. For the correct radiograph seating, see example to the right.

Step 4
- Block out the Unigrip driver indentation on the impression coping.

Step 5
- Inject a heavy body impression material (polyether material or polyvinylsiloxane) around the impression coping and into the tray. Record the impression.

Step 6
- Remove the block-out material from the Unigrip driver indentation on the impression coping.
- Remove the impression coping and replace the healing abutment. For model fabrication, you or your dental laboratory should provide corresponding implant replicas.
- Attach the impression coping onto the corresponding implant replica and ensure accurate seating.

Step 7
- Place the impression coping implant replica assembly into its corresponding location in the impression and send to the dental laboratory for model fabrication.



Open tray instructions

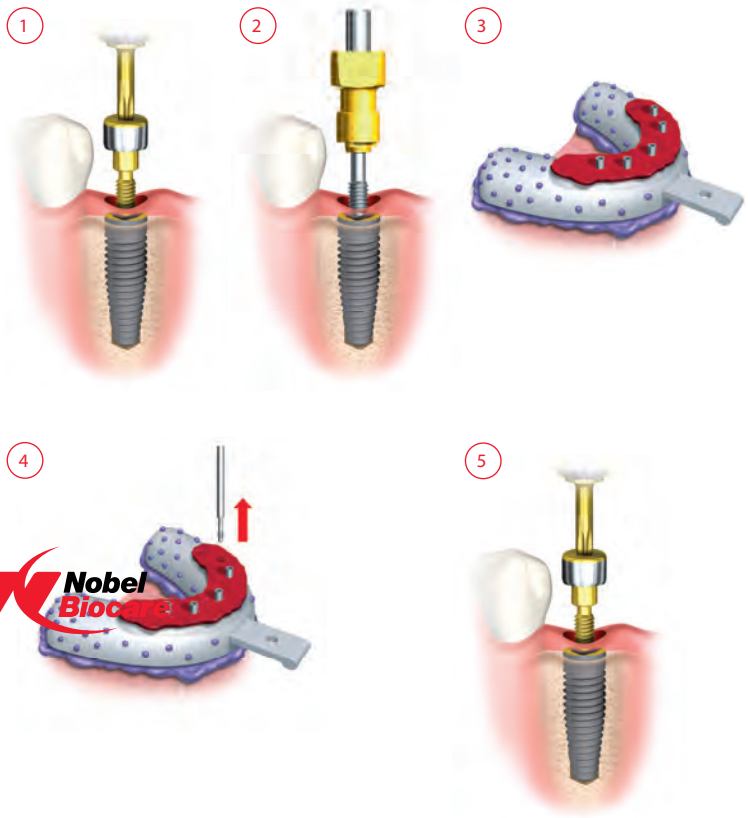
Step 1
– Remove the Healing Abutment NobelReplace™ using Screwdriver Unigrip and by rotating it counterclockwise.

Step 2
– Place the open tray impression coping into the implant. Ensure that the tri-channel configuration on the impression coping engages the tri-channel connection in the implant.
– Tighten the guide pin using the Screwdriver Unigrip.
– Verify proper seating of the impression coping.

Step 3
– Relieve and perforate the impression tray to allow full seating of the tray and protrusion of the guide pins. If there is a large opening, it may be closed off using baseplate wax, with the guide pins indenting or perforating the wax.
– Inject impression material around each impression coping.
– Fill the tray with impression material and seat the impression tray fully so that the tips of all the guide pins are identified.

Step 4
– After the impression material has set, unscrew the guide pins.
– Remove the impression tray and send to the dental laboratory, including the guide pins. For model fabrication, corresponding implant replicas should be provided by you or your dental laboratory.

Step 5
– Replace the healing abutment.



Materials for use with the closed or open tray impression technique

	Description	Item number
	Screwdrivers	
	Screwdriver Manual Unigrip 20mm	29148
	Screwdriver Manual Unigrip 28mm	29149
	Screwdriver Manual Unigrip 36mm	29150
	Impression Coping (closed tray)	
	Impr Cop Cl Tr NobelReplace NP ∅ 3.5mm	33537
	Impr Cop Cl Tr NobelReplace NP ∅ 4.5mm	33470
	Impr Cop Cl Tr NobelReplace RP ∅ 4.3mm	33540
	Impr Cop Cl Tr NobelReplace RP ∅ 5.3mm	33471
	Impr Cop Cl Tr NobelReplace WP ∅ 5mm	33472
	Impr Cop Cl Tr NobelReplace WP ∅ 6mm	29494
	Impr Cop Cl Tr NobelReplace 6.0 ∅ 6mm	30040
	Impr Cop Cl Tr NobelReplace 6.0 ∅ 7mm	33473
	Low Profile Impression Coping (closed tray)	
	Impr Cop Cl Tr Low Profile NobRpl NP ∅ 3.5mm	33538
	Impr Cop Cl Tr Low Profile NobRpl NP ∅ 4.5mm	33474
	Impr Cop Cl Tr Low Profile NobRpl RP ∅ 4.3mm	33541
	Impr Cop Cl Tr Low Profile NobRpl RP ∅ 5.3mm	33475
	Impr Cop Cl Tr Low Profile NobRpl WP ∅ 5mm	33476
	Impr Cop Cl Tr Low Profile NobRpl WP ∅ 6mm	32178
	Impr Cop Cl Tr Low Profile NobRpl 6.0 ∅ 6mm	32179
	Impr Cop Cl Tr Low Profile NobRpl 6.0 ∅ 7mm	33477

	Description	Item number
	Plastic Impression Coping (closed tray)	
	Impr Cop Cl Tr Plastic NobRpl NP ∅ 3.5mm	32425
	Impr Cop Cl Tr Plastic NobRpl NP ∅ 4.5mm	33478
	Impr Cop Cl Tr Plastic NobRpl RP ∅ 4.3mm	33542
	Impr Cop Cl Tr Plastic NobRpl RP ∅ 5.3mm	33479
	Impr Cop Cl Tr Plastic NobRpl WP ∅ 5mm	33480
	Impr Cop Cl Tr Plastic NobRpl WP ∅ 6mm	32427
	Impr Cop Cl Tr Plastic NobRpl 6.0 ∅ 6mm	32428
	Impr Cop Cl Tr Plastic NobRpl 6.0 ∅ 7mm	33481
	Impression Coping (open tray)	
	Impr Cop Op Tr NobelReplace NP ∅ 3.5mm	29485
	Impr Cop Op Tr NobelReplace NP ∅ 4.5mm	33466
	Impr Cop Op Tr NobelReplace RP ∅ 4.3mm	33539
	Impr Cop Op Tr NobelReplace RP ∅ 5.3mm	33467
	Impr Cop Op Tr NobelReplace WP ∅ 5mm	33468
	Impr Cop Op Tr NobelReplace WP ∅ 6mm	29493
	Impr Cop Op Tr NobelReplace 6.0 ∅ 6mm	30039
	Impr Cop Op Tr NobelReplace 6.0 ∅ 7mm	33469
	Implant Replica	
	Implant Replica NobelReplace NP	29498
	Implant Replica NobelReplace NP 20/pkg	29499
	Implant Replica NobelReplace RP	29500
	Implant Replica NobelReplace RP 20/pkg	29501
	Implant Replica NobelReplace WP	29502
	Implant Replica NobelReplace WP 20/pkg	29503
	Implant Replica NobelReplace 6.0	29995

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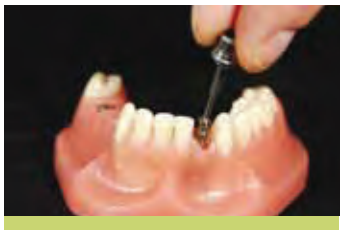
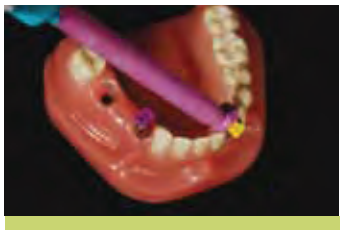
CLOSED TRAY IMPRESSION TECHNIQUE FOR BONE LEVEL IMPLANTS



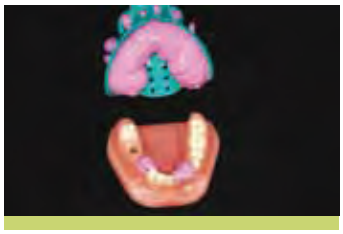
1. Place the impression post into the implant and tighten the guide screw using the SCS screwdriver.

2. Place the polymer impression cap on top of the fixed impression post. The color of the cap must correspond to the color of the positioning screw in the post and the arrows must align in a buccal-lingual direction.

3. Push the impression cap in an apical direction until it clicks. The impression cap is now firmly seated on the impression post.



4. Apply impression material around the impression post. This ensures that a complete impression is taken.



5. Fill tray with impression material and take the impression.

6. Once the material is cured, carefully remove the tray.

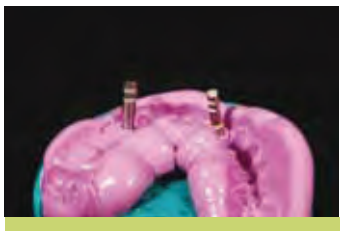
7. The impression cap remains in the impression material and is automatically pulled off from the impression post with the removal of the tray.

8. Unscrew and remove the impression post from the patient's mouth. Mount the impression post onto the analog using the guide screw.

9. Ensure the color code of the analog corresponds to the color code of the polymer cap in the impression material.

10. Reposition the impression post in the tray.

11. Gently push the impression post until you feel a tactile response of engagement.



12. The impression is now ready to be used to create a model.

Procedure for NC and RC closed tray impression taking is the same.

RC COMPONENTS			NC COMPONENTS		
025.4201		RC Impression post, with guide screw and cap	025.2201		NC Impression post, with guide screw and cap
025.4101		RC Implant analog	025.2101		NC Implant analog
	046.401		SCS screwdriver		

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TAKING AN IMPRESSION WITH THE SYNOCTA® PROSTHETIC SYSTEM

There are two options available for taking an impression:

The **closed tray** technique is regarded as standard procedure for taking an impression and can be used in most cases. The closed tray option allows the impression cap to snap into place.

The **open tray** technique is most advantageous in cases where the implant shoulder is placed very deeply and the gingiva is very close. In this case, the open tray impression procedure allows the impression cap to be screwed tightly and precisely to the implant; loosening of the impression cap following displacement by the gingiva is avoided.

Tip: To ensure accuracy of the impression procedure, do not damage the shoulder or the margin of the impression cap.

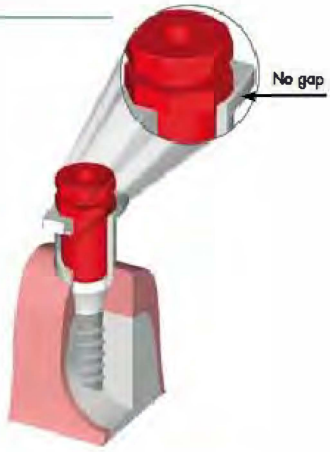
Closed tray technique

Art. no. 048.017Wd
RN impression cap

Art. no. 048.070Wd
RN synOcta® positioning cylinder

Art. no. 048.013
WN impression cap

Art. no. 048.095
WN synOcta® positioning cylinder



After removing the healing cap with an SCS screwdriver, clean both the shoulder and the internal configuration of the implant of blood and tissue residue prior to the impression procedure. Push the impression cap onto the implant shoulder until it clicks into place. Gently turn the impression cap to ensure that it is securely seated. When the cap is properly engaged, it can be rotated on the implant.

Next, properly align the octagon of the positioning cylinder with the internal octagon in the implant; then, push the positioning cylinder down into the impression cap as far as it will go. Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber). There should be no gap between the positioning cylinder and impression cap.

The closed tray impression procedure for Wide Neck implants is identical to the procedure for Regular Neck implants.

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Open tray technique

A tray with perforations is required for this impression procedure.

After removing the healing cap with an SCS screwdriver, clean both the shoulder and the internal configuration of the implant of blood and tissue residue prior to the impression procedure. Place the impression cap onto the implant shoulder and carefully position the octagon into the implant before tightening the screw. If available space is limited, reduce the occlusal aspect of the cap by one retention ring after removing the guide screw.

The custom-made tray (light-cured resin) contains perforations for the guide screws. Take the impression using an elastomeric impression material (polyvinyl siloxane or polyether rubber). Once cured, loosen the guide screw and remove the impression.

Option: If occlusal space is adequate, the impression can be taken with the open tray RN impression cap with built-in handle (048.090). The impression procedure is the same.

The open tray impression procedure for Wide Neck implants is identical to the procedure for Regular Neck implants.

Art. no. 048.010
RN synOcta®
impression cap

Art. no. 048.090
RN synOcta®
impression cap with built-in handle

Art. no. 048.091
WN synOcta®
impression cap

For easy identification, the transfer system is color-coded. The positioning cylinder, analog, and open tray impression caps are all color-coded **red** for Regular Neck implants. The snap-on closed tray impression cap is white. The analog and open tray impression cap are color-coded **grey** for Wide Neck implants. The positioning cylinder and snap-on closed tray impression cap are white.

Instrument options

SCS screwdrivers for ratchet

Extra short (046.400) 

Short (046.401) 

Long (046.402) 

For additional information, refer to the brochure "Crown and bridge restorations with the synOcta® prosthetic system" (USIT 187).

RN Regular Neck (Ø 4.8 mm restorative platform)
WN Wide Neck (Ø 6.5 mm restorative platform)

Important: As with all products that are used intraorally, care must be taken to prevent aspiration.

4/07 USIT 153

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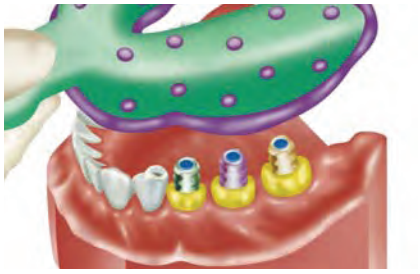
Closed Tray Impression Procedure

1: Screw Indirect Transfers onto implants with the 1.25mmD Hex Tool. The Fixture Mount/Transfer can also be used.

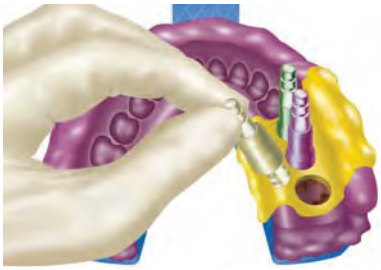
2: For a closed tray (indirect) impression, retaining screws are used that match the height of the transfer.

3: Block out holes on top of the screws with wax or other suitable material to prevent impression material from entering.



4: Record the impression. Place light to medium body impression material around transfer and record a full-arch impression with medium body material.

5: Unscrew each transfer from the implant bodies using the 1.25mmD Hex Tool and attach the appropriate implant replica with the same retaining screw.

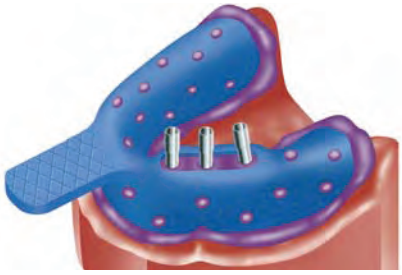


6: Place the transfers back into the impression material with the replicas attached.
The impression is now ready to send to the laboratory for fabrication of a stone model.

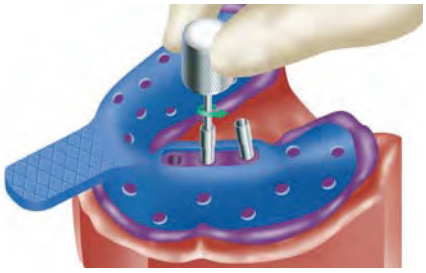
Open Tray Impression Procedure

1: For an open tray (direct) impression technique, use the Direct Transfers with the long retaining screws that are included. Attach the transfers to the implants with the 1.25mmD Hex Tool.

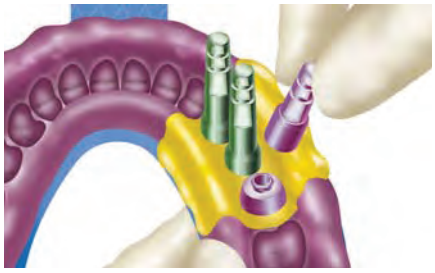
2: Use a custom tray and prepare holes that will line up with the transfers when the impression is taken. Block out holes on top of the screws with wax or other suitable material.



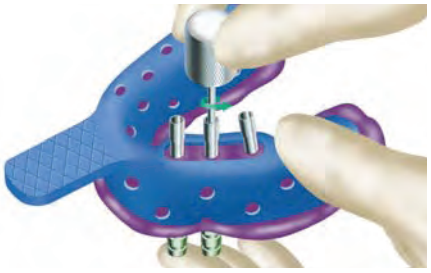
3: Place light to medium body impression material around transfers and record a full-arch impression with medium body material.
The screws will protrude through the tray.



4: With the tray still in place, unscrew and remove all the retaining screws. Then remove tray, capturing the transfers in the impression material.



5: After removing the impression tray, connect the implant replicas to the transfers which are still in place in the impression material.



6: Screw transfers and replicas together with the 1.25mmD Hex Tool. Hold replica in place to prevent rotation of the transfer. The impression can now be sent to the laboratory.