Prosthetics manual 4.0: ICX-templant®

Years

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IMPRESSION TECHNIQUES
for all diameters of the ICX-templant®
3.75 mm
4.1 mm
4.8 mm

Detailed Descriptions for:

- Closed Tray Implant-Level Impressions
- Open Tray Implant-Level Impressions
- Direct Abutment Impressions

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The ICX-templant® Implant System offers a simple yet precise option for "CLOSED TRAY IMPLANT-LEVEL IMPRESSIONS"

All three implant diameters use the same impression coping for the closed tray technique.

The item “ICX Impression Post, Closed Impression” (Item No. C-005-020002): consists of the following three components:

1. Impression cap
2. Connection screw
3. Closed impression coping

1. Place the impression coping implant-level onto the implant.

2. Seat the impression cap onto the impression coping. Take the impression. The tray can be standard or customized.

   Use a firm putty (we recommend “IMPREGUM,” hard silicone or comparable hard impression material.

Important:
We strongly advise against using alginites or comparable soft impression materials.
3. The tray can be removed after the impression material is set. The impression cap remains in the impression material.

4. Loosen the impression coping using the hex tool. Remove the impression coping and connection screw and send the complete impression component assembly to the laboratory.

**IMPORTANT – MANDATORY - IMPORTANT:**

Label the impression coping when taking closed tray impressions. The technician has to reposition the impression coping at the same location as where the impression was taken. Mark the impression coping. The plastic tubes which are included are useful for this purpose. Mark as shown in the photo.

Replace healing cap or provisional restoration immediately to prevent soft tissue collapse.

5. **LABORATORY:**

The laboratory technician torques the impression coping onto the lab or implant analog. The impression coping is repositioned in the model. The impression cap guarantees a unique repositioning of the assembly. The master cast is then poured with dental stone according to the plaster manufacturer’s instructions.

**Tip:**

We recommend using a soft tissue mask made of a suitable material when fabricating the cast.
The ICX-templant® Implant System offers a simple yet precise option for “OPEN TRAY IMPLANT LEVEL IMPRESSIONS”

All three implant diameters use the same impression coping for the open tray technique.

The item “ICX Impression Post, Open Impression” (Item No. C-005-030001): consists of the following two components:

1. Connection screw
2. Open impression coping

1. Place the impression coping implant-level onto the implant.

2. Take an impression using a customized tray. Use a firm putty (we recommend “IMPREGUM,” hard silicone or comparable hard impression material.)

Important:
We strongly advise against using alginates or comparable soft impression materials.
3. Remove the connection screw with the hex tool after the impression material is set.

**Important:**
Please remove the connection screw completely.

4. Carefully loosen the tray in the mouth and remove it. Evaluate the tray for accurate coping placement.

5. After verification, send the tray and connection screw to the laboratory.

6. **LABORATORY:**
The laboratory technician uses the supplied connection screw to attach the implant body analog to the impression copings which are fixed in the tray. The master cast is then poured with dental stone according to the plaster manufacturer’s instructions.

**TIP:**
We recommend using a soft tissue mask made of a suitable material when fabricating the cast.
The “DIRECT ABUTMENT IMPRESSION” technique is a sound and rapid impression method.

Instead of making use of the accustomed impression coping, insert the final zirconia or titanium abutment into the mouth. These are available in different gingival heights and angles.

After making the selection as appropriate, attach the abutments (A) with the connection screw and torque the connection screw (B) to 30 N-cm.

The abutments can now be prepped according to your preparation style for customizing. The existing preparation margin of our abutments can be customized and also the emergence profile can be shaped and transferred to the master cast.

After preparation is complete (C), verify that the connection screw is properly seated and torque all screws to 30 N-cm.
After preparation is complete, seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly (1) to fill in the screw head.

Seal the remainder of the counterbore with a polymer of your choosing (2). The impression cannot be taken until the counterbore is sealed and proper attachment of the connection screw has been doubly verified.

Take the impression in the same way and using the same everyday methods as you are accustomed to using for taking impressions from a natural tooth.

The abutment remains in the mouth. The provisional restoration is carried out in the same way as for a natural tooth, only now on the attached abutment.

LABORATORY:
The technician creates a master cast and prepares the implant appliance on the posts (plaster or polymer). The final appliance is permanently or provisionally attached. You can work with the cement or adhesive that is customary in your practice for the DIRECT abutment impression method.
PROSTHETICS/ PROSTHETIC DENTISTRY
for all diameters of the ICX-Templant®
3.75 mm
4.1 mm
4.8 mm

Detailed Descriptions for

- I. Single Tooth Restoration
- II. Multiple Tooth Restoration
- III. Telescopic Crowns
- IV. Bar Restorations
Impressions – see Chapter on Impressions
Model Constructions – see Chapter on Impressions

Three options are available for single tooth restoration:

1. Prefabricated Titanium Abutments
2. Individual burn-out Abutments / individual cast-on and solderable abutments
3. Prefabricated Zirconia Abutments

I.a PREFABRICATED TITANIUM ABUTMENTS:

LABORATORY
After the model has been prepared, the technician measures the gingival height and the angulation of the required abutments. The technician grinds the abutment and prepares the crown in the usual manner.

DENTIST:
The individually prepared titanium abutments are inserted using the connection screw and torqued to 30 N-cm.

Then seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly (1) to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing (2).

The crown should only be cemented after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
I.b INDIVIDUAL BURNOUT ABUTMENTS
INDIVIDUAL CAST-ON AND SOLDERABLE GOLD ABUTMENTS

LABORATORY:
After the model has been prepared, the technician models the ideal abutment geometry based on the individual abutments.

The abutment is embedded and cast in the material of your choice.

Particular attention should be given to the inlay area of the connection screw to ensure that no flaws are present.

After the abutment fits properly, the crown can be prepared in the usual manner.

DENTIST:
The customized abutments are inserted using the connection screw and torqued to 30 N-cm.

Then seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing.

The crown should only be cemented after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
I.c PREFABRICATED ZIRCONIA ABUTMENTS

LABORATORY:
After the model has been prepared, the technician measures the gingival height and the angulation of the required abutments. The technician grinds the zirconia abutment and prepares the crown in the usual manner.

DENTIST:
The customized zirconia abutments are inserted using the connection screw and torqued to 30 N-cm. Then seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing.

The crown should only be cemented after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
MULTIPLE TOOTH RESTORATION
Prefabricated Titanium Abutments

Impressions – see Chapter on Impressions
Model Constructions – see Chapter on Impressions

Three options are available for single tooth restoration:

1. Prefabricated Titanium Abutments
2. Individual burn-out Abutments / individual cast-on and solderable abutments
3. Prefabricated Zirconia Abutments

I.a PREFABRICATED TITANIUM ABUTMENTS

LABORATORY:
After the model has been prepared, the technician measures the gingival height and the angulation of the required abutments. The technician grinds the abutment and prepares the crown in the usual manner.

DENTIST:
The individually prepared titanium abutments are inserted using the connection screw and torqued to 30 N-cm.

Then seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly (1) to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing (2).

The crown should only be cemented after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
I.b INDIVIDUAL BURNOUT ABUTMENTS/INDIVIDUAL CAST-ON AND SOLDERABLE GOLD ABUTMENTS

LABORATORY:
After the model has been prepared, the technician models the ideal abutment geometry based on the individual abutments.

The abutment is embedded and cast in the material of your choice.

Particular attention should be given to the inlay area of the connection screw to ensure that no flaws are present.

After the abutment fits properly, the crown can be prepared in the usual manner.

DENTIST:
The individually prepared titanium abutments are inserted using the connection screw and torqued to 30 N-cm.

Then seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly (1) to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing (2).

The crown should only be cemented after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
I.c PREFABRICATED ZIRCONIA ABUTMENTS

LABORATORY:
After the model has been prepared, the technician measures the gingival height and the angulation of the required abutments. The technician grinds the zirconia abutment and prepares the crown in the usual manner.

DENTIST:
The customized zirconia abutments are inserted using the connection screw and torqued to 30 N-cm. Then seal the counterbore in the abutment. Use a bit of cotton swabbed with petroleum jelly to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing.

The crown should only be cemented after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
TÜV CERTIFICATES

Zertifikat
Die Zertifizierungsstelle der TÜV Rheinland Product Safety GmbH

bewertet, dass die Organisation:
medentis medical GmbH
Gartenstr. 12
53507 Dormeu Deutschland

für den Geltungsbereich:
Design, Entwicklung, Herstellung und Vertrieb von Produkten der Gewerblichen Implantologie
(ähnliche Anliegen für entsprechende Standards)
ein Qualitätsmanagementsystem eingerichtet hat und anwendet.

Der Nachweis wurde erbracht, dass die Forderungen der
EN ISO 9001:2008
erfüllt sind. Das Qualitätsmanagementsystem unterliegt einer jährlichen Überwachung.

Zertifikat Nummer:
SV 9002716 001

Ein Audit wurde durchgeführt, Bericht-Nr. 31459657 003

Dieses Zertifikat ist gültig bis: 17.02.2014

Kühn, der 2014/2/18
Dipl.-Ing. U. Federspach
TÜV Rheinland Product Safety GmbH, Am Greuln Stein, D-61185 Düsseldorf

Zertifikat
Die Zertifizierungsstelle der TÜV Rheinland LGA Products GmbH

bewertet, dass die Organisation:
medentis medical GmbH
Gartenstr. 12
53507 Dormeu Deutschland

für den Geltungsbereich:
Design, Entwicklung, Herstellung und Vertrieb von Produkten der Gewerblichen Implantologie
(ähnliche Anliegen für entsprechende Standards)
ein Qualitätsmanagementsystem für Medizinprodukte eingerichtet hat und anwendet.

Der Nachweis wurde erbracht, dass die Forderungen der
erfüllt sind. Das Qualitätsmanagementsystem unterliegt einer jährlichen Überwachung.

Zertifikat Nummer:
SA 6022717 001

Ein Audit wurde durchgeführt, Bericht-Nr. 21504465 004


Datum: 29.02.2011
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INDIVIDUAL BURNOUT ABUTMENTS/
INDIVIDUAL CAST-ON AND SOLDERABLE GOLD ABUTMENTS

LABORATORY:
After the model has been prepared, the technician models the primary coping using the individual abutments.

The abutment is embedded and cast in the material of your choice.

Particular attention should be given to the inlay area of the connection screw to ensure that no flaws are present.

After the abutment fits properly, the secondary crown can be prepared in the usual manner.

DENTIST:
The individual primary copings are inserted using the connection screw and torqued to 30 N-cm.

Then seal the counterbore in the primary copings. Use a bit of cotton swabbed with petroleum jelly to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing.

The secondary crown should only be inserted after the counterbore is sealed and proper attachment of the connection screw has been doubly verified.
Two options are available for bar restorations:

1. Individual burn-out Abutments / individual cast-on and solderable abutments
2. Prefabricated Titanium Abutments

IV.a INDIVIDUAL BURNOUT ABUTMENTS/
INDIVIDUAL CAST-ON AND SOLDERABLE GOLD ABUTMENTS

LABORATORY:
After the model has been prepared, the technician models the castable bar framework using the individual abutments.

The bar framework is embedded and cast in the material of your choice.

Particular attention should be given to the inlay area of the connection screw to ensure that no flaws are present.

Once a stress-free fit on the model is obtained for the bar framework, the rider can be prepared in the usual manner.

DENTIST:
The individually prepared bar construction is inserted using the connection screws and torqued to 30 N-cm.

Then seal the counterbores in the abutments. Use a bit of cotton swabbed with petroleum jelly to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing.

Final insertion of the overdenture should only occur after all counterbores are sealed and proper attachment of the connection screws has been doubly verified.
**IV.b PREFabricated Bar Abutments**

**LABORATORY:**
After the model has been prepared, the technician grinds the prefabricated titanium abutments to ensure that they have a uniform insertion direction. The occlusal height of the abutments should be minimized. Afterwards the bar construction is prepared in the same way as for a ferrule attachment.

The bar framework model is lifted off the titanium abutments, embedded and cast in the material of your choice.

Once a stress-free fit for the bar construction the titanium abutments is is obtained, the bar construction is cemented to the titanium abutments. (Recommended is C&B Metabond Cement frpm Parkell (1 800 243 7446.) )

**DENTIST:**
The individually prepared and stress-free cemented bar construction is inserted using the connection screws and torqued to 30 N-cm.

Then seal the counterbores in the abutments. Use a bit of cotton swabbed with petroleum jelly to fill in the screw head. Seal the remainder of the counterbore with a polymer of your choosing.

Final insertion of the bar-borne prosthetic should only occur after all counterbores are sealed and proper attachment of the connection screws has been doubly verified.

**TIP:**
The prefabricated titanium bar components can also be laser welded.
www.medentis.de

ICX templant®

www.medentis.de

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