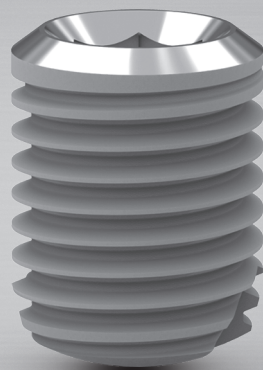




Prosthetic procedure manual

Zinic[®]SHORTY

Internal hexagonal connection implants



ZINIC[®]SHORTY

Prosthetic procedure manual

About this manual

This manual is intended to provide users of ZIACOM[®] products with an instruction guide for the use of their products. It is not intended to describe methods or procedures for diagnosis, treatment planning or implant localisation, nor to replace or replace regulated training or professional judgement on the needs of individual patients.

The procedures described and illustrated in this manual show an ideal clinical situation for implant rehabilitation and are limited to an example of procedures with a specific platform (RP regular platform). This manual is not intended to cover the wide range of clinical conditions that may occur during implant treatment. The experience and judgement of the professional will prevail over the recommendations made in this or any other ZIACOM[®] manual.

This manual describes the use of internal hexagonal connection abutment in prosthetic procedures. Consult availability of abutment by platform for each type of internal hexagonal connection implant.

In this manual of prosthodontic procedures, the processes are separated into two distinct types:

1. **Clinical:** corresponds to the procedures performed in the oral cavity by the clinician. These are all those clinical procedures that precede the prosthesis preparation in the laboratory or the required intermediate tests.
2. **Laboratory:** corresponds to the procedures performed by the prosthetist in the laboratory for the prosthesis preparation. The aim of these processes is to obtain a final product for the masticatory function rehabilitation.

RX only: Caution, Federal Law (US) restricts these devices to sale by on the order of a dentist or physician.

All instruments (surgical and prosthetic), surgical boxes and components are supplied WITHOUT STERILIZING. They must be removed from their original package for sterilisation prior to first clinical use. Consult the general cleaning, disinfection and sterilisation recommendations on our website www.ziacom.es or in this manual.



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Important information

Read this carefully before using ZIACOM® products

General information

This document contains basic information about the use of ZIACOM® Dental Implant Systems, henceforth, ZIACOM® products. This document has been written as a quick reference guide for the professional in charge of the treatment, henceforth, "User". It does not provide sufficient indications and technical specifications for the use of ZIACOM® products. It is neither an alternative nor a substitute for specialised training and professional clinical experience.

ZIACOM® products must be used in accordance with proper treatment planning and in strict accordance with the surgical and prosthetic protocols established by the manufacturer. Before using a ZIACOM® product, please read the specific surgical and prosthetic protocols as well as the operating and maintenance instructions carefully. You can consult them on our website www.ziacom.es or request them from your nearest ZIACOM® authorised distributor.

Information about responsibility, safety and guarantee.

The indications for use and handling of ZIACOM® products are based on the published international literature, current clinical standards and our clinical experience with our products and should therefore be understood as general indicative information. The handling and use of ZIACOM® products, as they are beyond the control of Ziacom Medical SLU, are the sole responsibility of the user. Ziacom Medical SLU, its subsidiaries and/or its official distributors decline all responsibility, express or implicit, totally or partially, for any possible damage or loss caused by the improper handling of the product or by any other fact not contemplated in its protocols and manuals for the correct use of its products.

The user of the product must ensure that the ZIACOM® product used is suitable for the intended procedure and purpose. Neither these instructions for use nor the protocols for working with or handling the products relieve the user of this obligation. The use, handling and clinical application of ZIACOM® products must be carried out by qualified professional personnel with the necessary qualifications according to the current legislation of each country.

The use, handling and/or application, fully or in part, of ZIACOM® products in any of their manufacturing phases by unqualified personnel or without the necessary qualifications, automatically voids any type of guarantee and may cause serious damage to the patient's health.

ZIACOM® products are part of an own system, with its design features and working protocols, which include dental implants, abutments and prosthetic components and surgical or prosthetic instruments. The use of ZIACOM® products in combination with elements or components from other manufacturers can lead to treatment failure, serious damage to bone structures, tissue and patient health, as well as undesired cosmetic results. For this reason, only original ZIACOM® products should be used.

The clinician, who is responsible for the treatment, is solely responsible for ensuring that original ZIACOM® products are used and that they are used in accordance with the instructions for use and the corresponding handling protocols throughout the entire implant treatment process. The use of ZIACOM® components, instruments or any other non-original product used alone or in combination with any of the original ZIACOM® products will automatically void any guarantee on the original ZIACOM® products.

Please consult the ZIACOM® Guarantee Program on our website www.ziacom.es

Warning Non entire ZIACOM® products are available in all countries. Please consult their availability.

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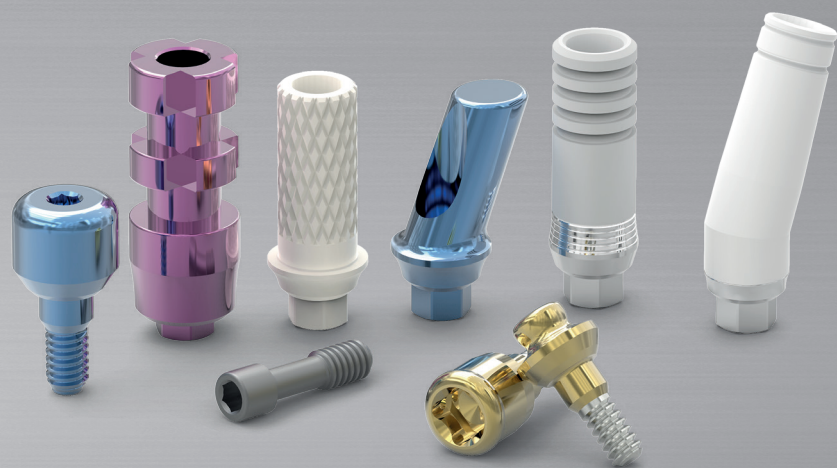
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Zinic[®]SHORTY

Prosthetic procedure

Prosthetic abutments classification according to restoration type

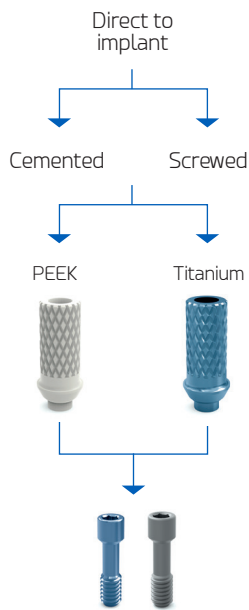
- **Provisional restoration direct to implant**
- **Provisional restoration on transepithelial**
- **Definitive restoration direct to implant**
 - Cemented restoration
 - Screwed restoration
- **Restoration on transepithelial**
 - Basic[®]
 - XDrive[®]



Prosthetic abutments classification

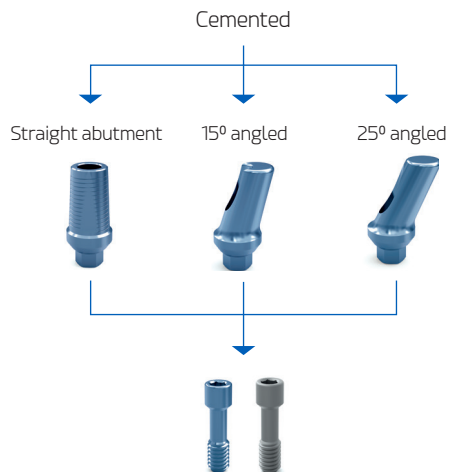
Provisional restoration

Direct to implant



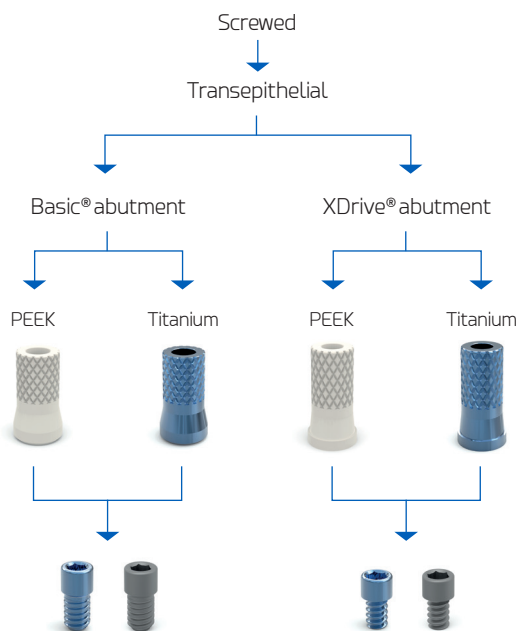
Definitive restoration

Cemented



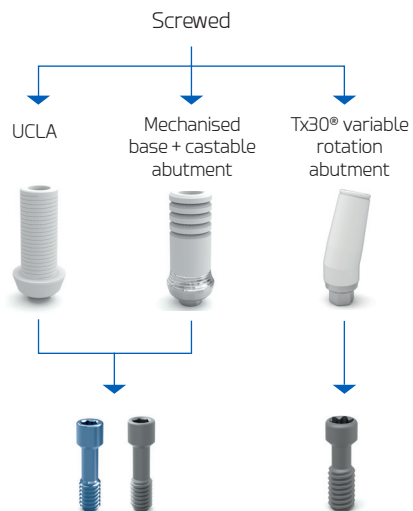
Provisional restoration

Screwed



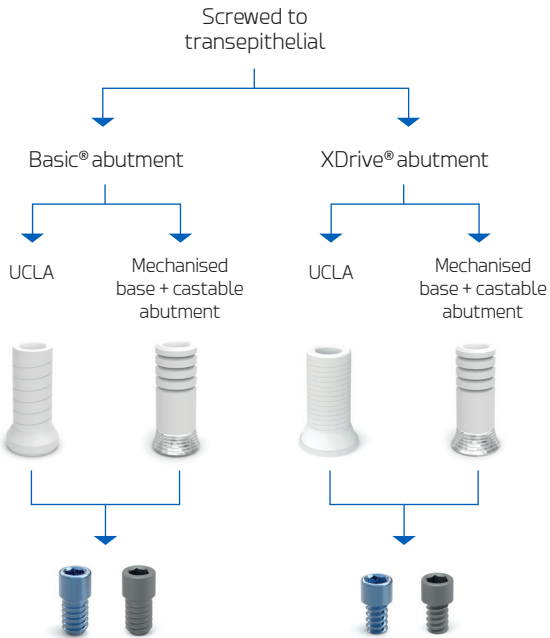
Definitive restoration

Screwed



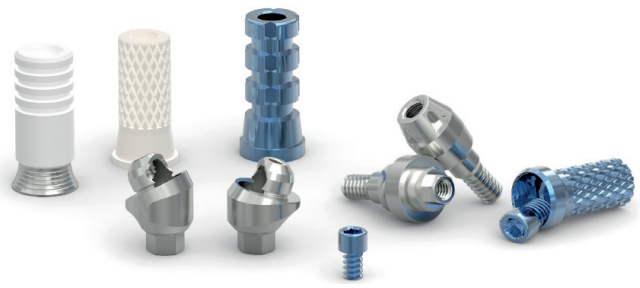
Definitive restoration

Screwed to transepithelial



• Important:

The Zinic®Shorty implant is recommended for posterior maxillary and mandibular areas. Additionally, splinting is recommended in multiple cases and its use in combination with conventional length implants in complete restorations.

Important: consult availability of abutments by platform for each type of internal hexagonal connection implant.

Zinic[®]SHORTY

Prosthetic procedure

Impression techniques

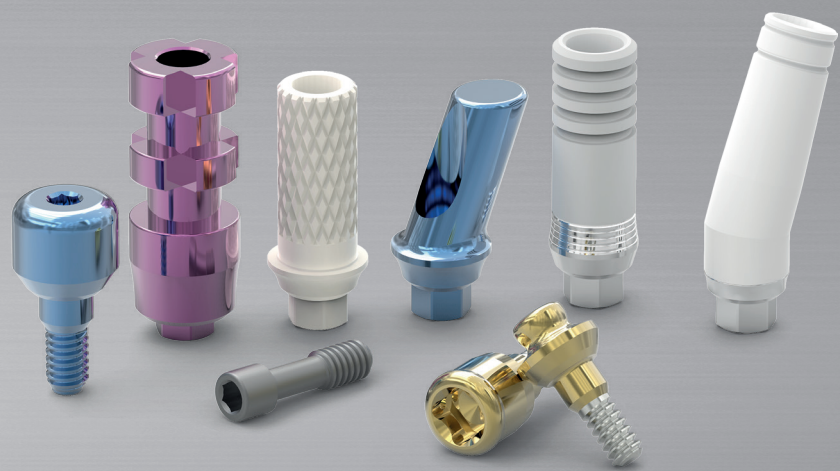
- **Open tray direct to implant**
ZPlus[®]
Short or long impression transfer
- **Closed tray**
Z2Plus[®] (single)
Pick-Up impression abutment (multiple)
- **Open tray using transepithelials**
Basic[®]
XDrive[®]

- **Important:**

The Zinic[®]Shorty implant is recommended for posterior maxillary and mandibular areas. Additionally, splinting is recommended in multiple cases and its use in combination with conventional length implants in complete restorations.

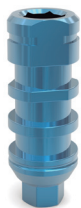


Zinic[®]SHORTY



Impression

Open tray direct to implant with ZPlus®



ZPlus®

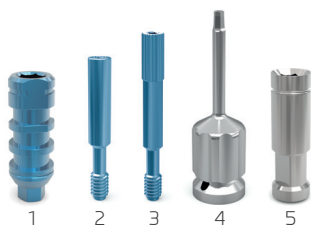
• **Purpose:**

The impression is considered the negative representation of the oral cavity. Open tray impression consists of transferring the implant position from the oral cavity to the working model. This process is carried out using the pick-up impression technique, the abutment is retained within the impression material after polymerisation; a customised tray is used for this purpose. Finally, this impression is cast to obtain the positive model or working model. This abutment can be used for single or multiple impressions.

Note: anodised abutment in blue and magenta colours depending on the RP and WP platform respectively.

Introduction | Required Materials

1. ZPlus® RP Abutment
2. Impression screw (Ref. LTZ3401)
3. Impression screw - Quickly screw (Ref. LT3401Z)
4. Surgical screwdriver (Ref. LMSD)
5. Analogue (Ref. IAZ3400)

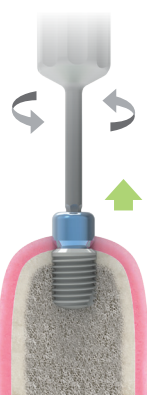


Procedure: The following illustrations are an example of a single open tray impression with ZPlus® on RP platform.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

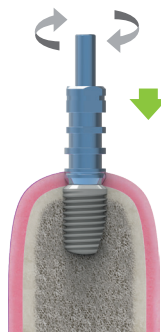
Verify that there is no interference from surrounding tissues in the implant connection.



Step 02

Clinical

Place the ZPlus® into the implant



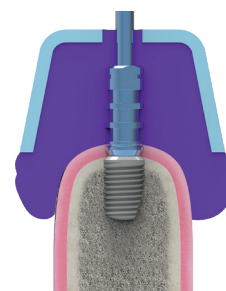
Insert ZPlus® into the implant, checking for proper fit in the connection, and place the impression screw either manually or with a surgical screwdriver by turning clockwise. Apply manual torque (see torque table on page 50). Check the proper fit of the impression abutment on the implant by performing a periapical radiography.



Step 03

Clinical

Impression

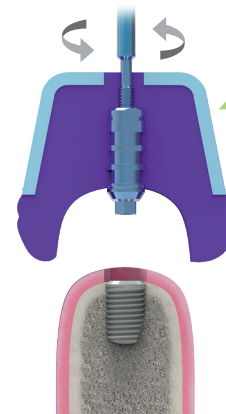


Select the customisable impression tray. Customise the tray by drilling a hole in the area corresponding to the implant and select a screw that protrudes from the tray. Place the elastomeric impression material around the impression abutment and then fill the tray. Take the impression according to the manufacturer's recommendations. Remove excess material from the screw heads.

Step 04

Clinical

Remove the tray

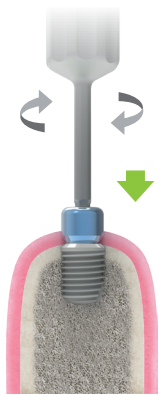


Manually unscrew the impression screw with the surgical screwdriver and remove the impression tray. Check that the impression quality is optimal for sending to the laboratory. ZPlus® must be retained in the impression material. Send to the laboratory the impression, impression screw, analogue and laboratory order.



Step 05 Clinical

Place the healing abutment

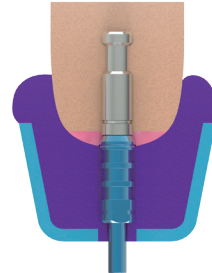


Relocate the healing abutment immediately in the implant to prevent soft tissue collapse.



Step 08 Laboratory

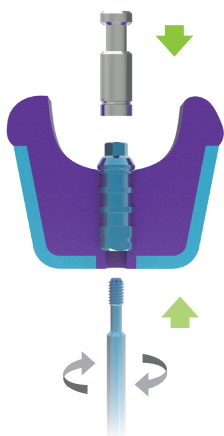
Impression pouring



Weigh, mix and pour type IV plaster (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) into the impression according to the manufacturer's recommendations.

Step 06 Laboratory

Analogue positioning

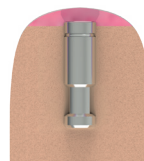


Position the implant analogue on ZPlus® impression abutment, checking the correct fit on the hexagon, and secure it manually with the impression screw. Check that both components are seated correctly.



Step 09 Laboratory

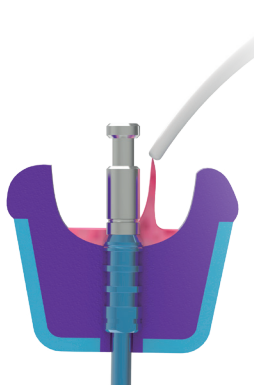
Working model



After the plaster has set, remove the impression screw and tray. Relate the working model to the antagonist model using the bite registration.

Step 07 Laboratory

Soft tissue representation on the working model



Inject material of your choice around the impression abutment, up to the appropriate level, to obtain a correct soft tissue simulation.

Impression

Open tray direct to implant using impression abutment



Impression abutment

• **Purpose:**

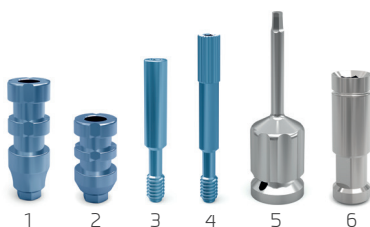
The impression is considered the negative representation of the oral cavity. Open tray impression consists of transferring the implant position from the oral cavity to the working model. This process is carried out using the pick-up impression technique, the abutment is retained within the impression material after polymerisation; a customised tray is used for this purpose. Finally, this impression is cast to obtain the positive model or working model. This abutment can be used for single or multiple impressions.

The clinician can select the abutment that fits the oral cavity requirements as the case may be. For this, you can select either the short abutment with a height of 7,80 mm or the long abutment with a height of 11,80 mm.

Note: anodised abutment in blue and magenta colours depending on the RP and WP platform respectively.

Introduction | Required Materials

1. Long impression screw (Ref. TCZ3400)
2. Short impression screw (Ref. TCZ3401)
3. Impression screw (Ref. LTZ3401)
4. Impression screw - Quickly screw (Ref. LT3401Z)
5. Surgical screwdriver (Ref. LMSD)
6. Analogue (Ref. IAZ3400)

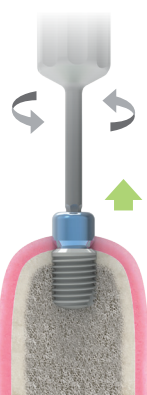


Procedure: The following illustrations are an example of an open tray impression with long impression abutment on RP platform.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

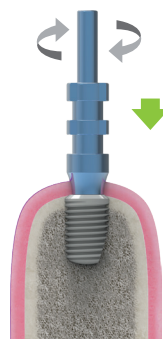
Verify that there is no interference from surrounding tissues in the implant connection.



Step 02

Clinical

Place the impression abutment into the implant



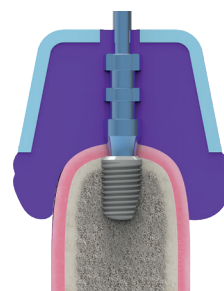
Insert the impression abutment into the implant, checking for proper fit in the connection, and place the impression screw either manually or with a surgical screwdriver by turning clockwise. Apply manual torque (see torque table on page 50). Check the proper fit of the impression abutment on the implant by performing a periapical radiography.



Step 03

Clinical

Impression

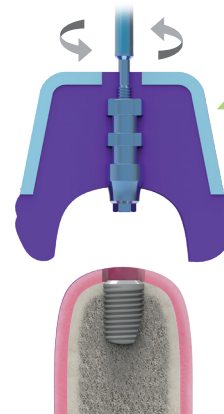


Select the customisable impression tray. Customise the tray by drilling a hole in the area corresponding to the implant and select a screw that protrudes from the tray. Place the elastomeric impression material around the impression abutment and then fill the tray. Take the impression according to the manufacturer's recommendations. Remove excess material from the screw heads.

Step 04

Clinical

Remove the tray

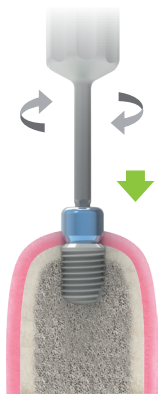


Manually unscrew the impression screw with the surgical screwdriver and remove the impression tray. Check that the impression quality is optimal for sending to the laboratory. The impression abutment must be retained in the impression material. Send to the laboratory the impression, impression screw, analogue and laboratory order.



Step 05 Clinical

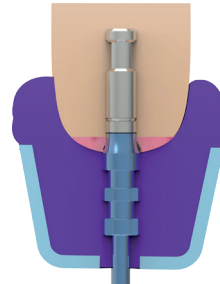
Place the healing abutment



Relocate the healing abutment immediately in the implant to prevent soft tissue collapse.

Step 08 Laboratory

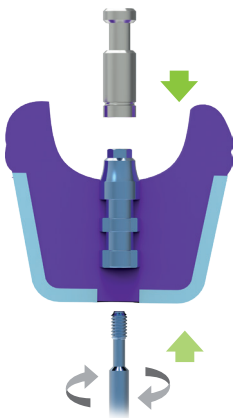
Impression pouring



Weigh, mix and pour type IV plaster (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) into the impression according to the manufacturer's recommendations.

Step 06 Laboratory

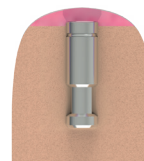
Analogue positioning



Position the implant analogue on the impression abutment, checking the correct fit on the hexagon, and secure it manually with the impression screw. Check that both components are seated correctly.

Step 09 Laboratory

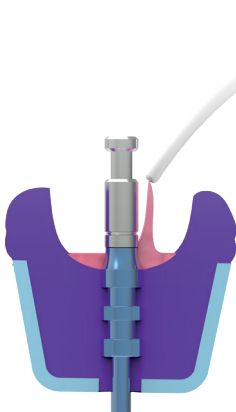
Working model



After the plaster has set, remove the impression screw and tray. Relate the working model to the antagonist model using the bite registration.

Step 07 Laboratory

Soft tissue representation on the working model



Inject material of your choice around the impression abutment, up to the appropriate level, to obtain a correct soft tissue simulation.

Impression

Closed tray with Z2Plus® Mount or with Z2Plus® impression abutment



Z2Plus®

• **Purpose:**

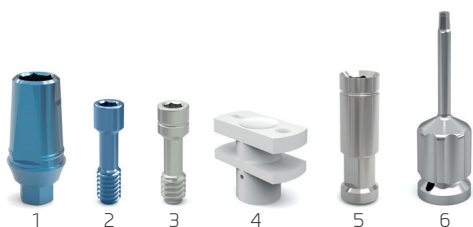
The impression is considered the negative representation of the oral cavity. Open tray impression consists of transferring the implant position from the oral cavity to the working model. This process is carried out using the pick-up impression technique, the transfer is retained inside the impression material after polymerisation and a conventional tray is used. Finally, this impression is cast to obtain the positive model or working model.

Z2Plus® closed tray impression

The clinician will select this technique in cases of single restoration with a non-rotating impression abutment.

Introduction | Required Materials

1. Z2Plus® Abutment
2. Clinical screw (Ref. DSZ3400)
3. Laboratory screw (Ref. LBZ3400)
4. Snap-On impression transfer to Z2Plus® (Ref. ZPU3400)
5. Analogue (Ref. IAZ3400)
6. Surgical screwdriver (Ref. LMSD)

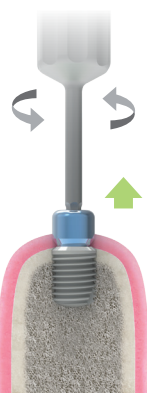


Procedure: The following illustrations are an example of a closed tray impression with Z2Plus® abutment on RP platform.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

Verify that there is no interference from surrounding tissues in the implant connection.



Step 02

Clinical

Place the Z2Plus® into the implant



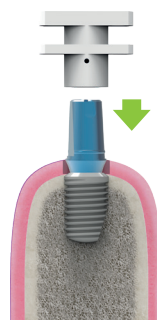
Identify anti-rotational plane of the Z2Plus® abutment and orient it to buccal side. Insert the abutment into the implant, checking for proper fit at the connection. Attach both using laboratory screw by tightening using surgical screwdriver, rotating clockwise and applying manual torque (see torque table on page 50). Check the proper fit of the impression abutment on the implant by performing a periapical radiography.



Step 03

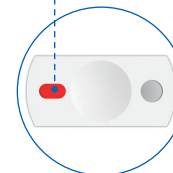
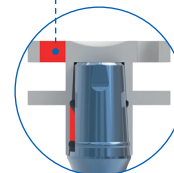
Clinical

Place the Snap-On impression transfer



Side view of the Snap-On transfer, align to the abutment plane

Marking of the anti-rotational plane of the abutment

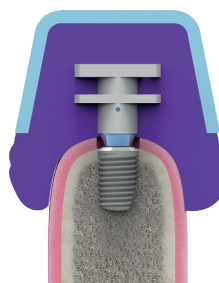


Identify the oval-shaped hole in the upper flap of the transfer, this coincides with the internal plane of the transfer. Orient the oval towards the buccal side and insert it over the Z2Plus® abutment and press until you feel the final seating with a "click".

Step 04

Clinical

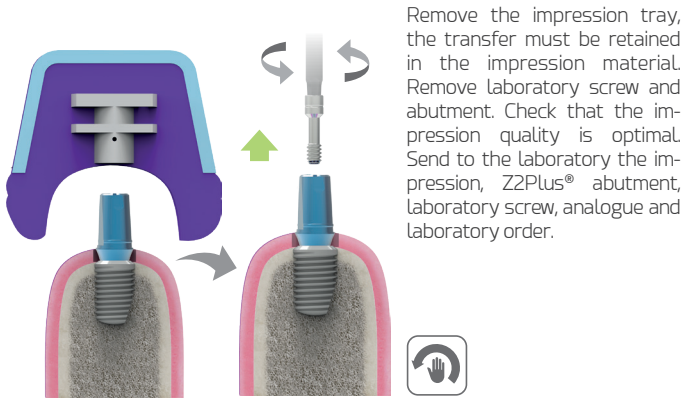
Impression



Select the tray for the impression. Place the elastomeric impression material around the impression abutment and then fill the tray. Take the impression according to the manufacturer's recommendations.

Step 05 Clinical

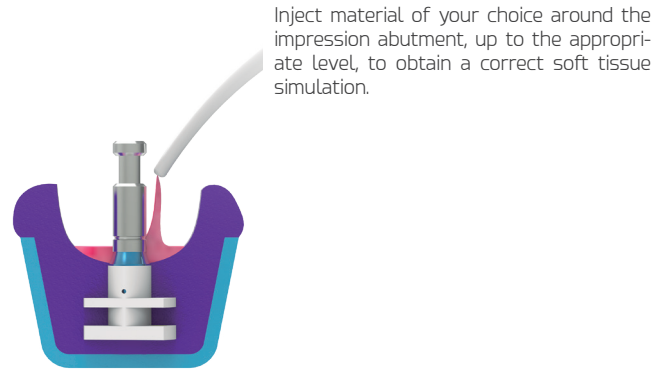
Remove the tray



Remove the impression tray, the transfer must be retained in the impression material. Remove laboratory screw and abutment. Check that the impression quality is optimal. Send to the laboratory the impression, Z2Plus® abutment, laboratory screw, analogue and laboratory order.

Step 08 Laboratory

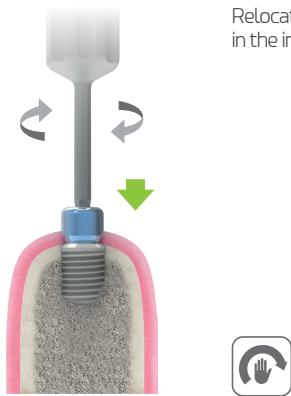
Soft tissue representation on the working model



Inject material of your choice around the impression abutment, up to the appropriate level, to obtain a correct soft tissue simulation.

Step 06 Clinical

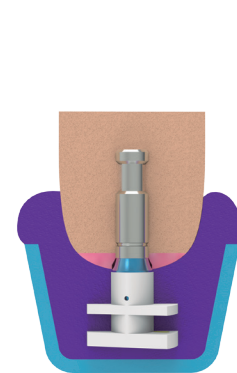
Place the healing abutment



Relocate the healing abutment immediately in the implant to prevent soft tissue collapse.

Step 09 Laboratory

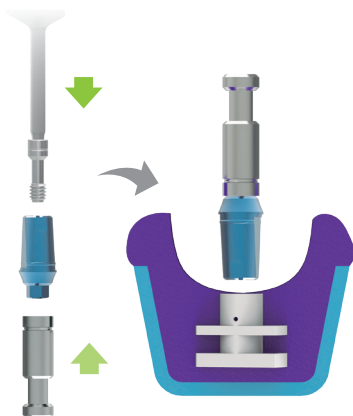
Impression pouring



Weigh, mix and pour type IV plaster (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) into the impression according to the manufacturer's recommendations.

Step 07 Laboratory

Analogue positioning



Position the Z2Plus® abutment over the analogue, checking that the connection is correctly adjusted, and place the laboratory screw manually with a surgical screwdriver. Insert the abutment-analogue assembly into the impression transfer retained in the impression material, orienting the anti-rotational plane towards the vestibular. Check that both components are seated correctly.

Step 10 Laboratory

Working model

After the plaster has set, remove clinical screw, Z2Plus® abutment and tray. Relate the working model to the antagonist model using the bite registration.

Impression

Closed tray using Pick-Up



Pick-Up

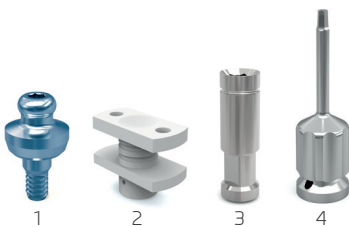
• **Purpose:**

The impression is considered the negative representation of the oral cavity. Closed tray impression consists of transferring the implant position from the oral cavity to the working model. This process is carried out using the pick-up impression technique, the transfer is retained inside the impression material after polymerisation and a conventional tray is used. Finally, this impression is cast to obtain the positive model or working model.

The clinician will select this technique in cases of multiple restorations as it is a rotating abutment.

Introduction | Required Materials

1. Pick-Up impression abutment (Ref. PUZ3400)
2. Pick-Up impression transfer (Ref. CPU3410)
3. Analogue (Ref. IAZ3400)
4. Surgical screwdriver (Ref. LMSD)

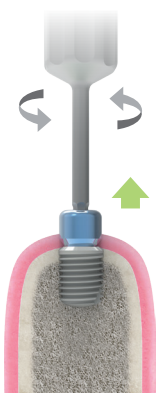


Procedure: The following illustrations are an example of a closed tray impression on Pick-Up abutments on RP platform with Pick-Up transfer.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

Verify that there is no interference from surrounding tissues in the implant connection.



Step 02

Clinical

Place Pick-Up impression abutment into the implant



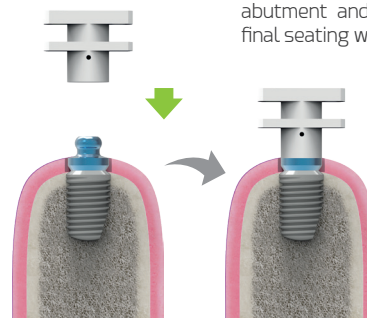
Screw the abutment onto the implant using a surgical screwdriver, applying manual torque. Check the proper fit of the impression abutment on the implant by performing a periapical radiography.



Step 03

Clinical

Place the Pick-Up impression transfer



Position the impression transfer over the abutment and press until perceiving the final seating with a "click".

Step 04

Clinical

Pick-Up impression transfer splinting

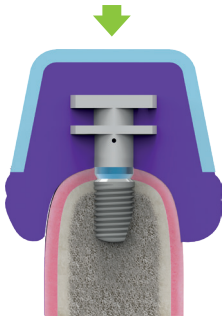
Splint the impression abutments using the technique of your choice and following the manufacturer's instructions for the material selected for splinting.



Step 05 Clinical

Impression

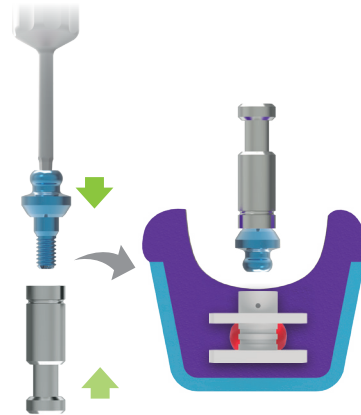
Select the tray for the impression. Place the elastomeric impression material around the impression transfer and then fill the tray. Take the impression according to the manufacturer's recommendations.



Step 08 Laboratory

Analogue positioning

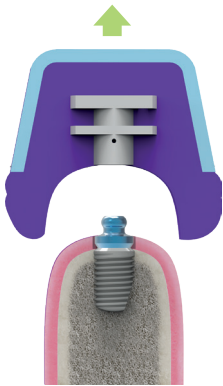
Position the abutment over the analogue and check that the connection is correctly adjusted. Insert the abutment-analogue assembly into the impression transfer retained in the impression material. Check that both components are seated correctly.



Step 06 Clinical

Remove the tray

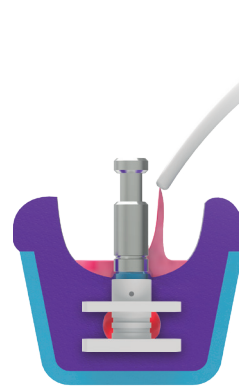
Remove the impression tray, the transfer must be retained in the impression material. Remove the abutment. Check that the impression quality is optimal for sending to the laboratory. Send to the laboratory the impression, impression abutment, analogue and laboratory order.



Step 09 Laboratory

Soft tissue representation on the working model

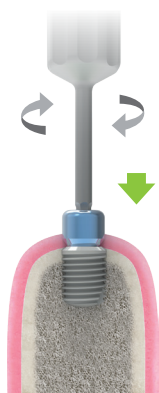
Inject material of your choice around the impression abutment, up to the appropriate level, to obtain a correct soft tissue simulation.



Step 07 Clinical

Place the healing abutment

Relocate the healing abutment immediately in the implant to prevent soft tissue collapse.

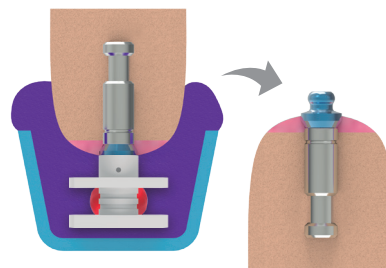


Step 10 Laboratory

Impression pouring and working model

Weigh, mix and pour type IV plaster (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) into the impression according to the manufacturer's recommendations.

After the plaster has set, remove the impression tray. Relate the working model to the antagonist model using the bite registration.



Impression

Open tray to Basic® transepithelial



Basic®

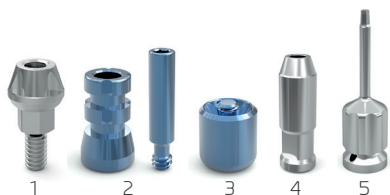
• **Purpose:**

The Basic® transepithelial abutments are indicated for single or multiple restorations, depending on the selected non-rotating or rotating abutment, respectively. They allow implants rehabilitation with up to 36° of disparallelism. The impression technique is applied on either of the two types of abutments, rotating or non-rotating connection, and is independent of the abutment gingival height chosen by the clinician for the treatment.

Important: In cases of multiple restorations, it is recommended to place Zinic®Shorty implants in combination with conventional length implants.

Introduction | Required Materials

1. Basic® abutment (Ref. BASICZ402N) NO ROT
2. Basic® impression abutment + impression screw (Ref. BATNEX34) NO ROT
3. Healing abutment (Ref. BAHAX34)
4. Analogue (Ref. BAIANEX34)
5. Surgical screwdriver (Ref. LMSD)

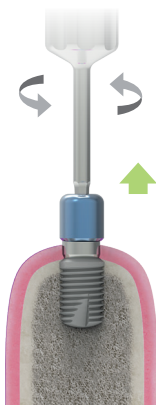


Procedure: The following illustrations are an example of an open tray impression on Basic® abutment on RP platform for single restoration.

Step 01

Clinical

Remove Basic®healing abutments



Remove Basic® healing abutment from the implant manually using the surgical screwdriver by turning anti-clockwise.

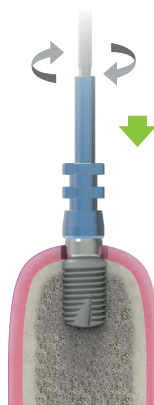
Verify that there is no interference from surrounding tissues in the implant connection.



Step 02

Clinical

Place the impression abutments



Insert the impression abutments onto the Basic® abutment and place the impression screw using a surgical screwdriver, turning clockwise. Apply manual torque. Check the correct fit of the impression abutments on the Basic® abutments by performing periapical radiographies.

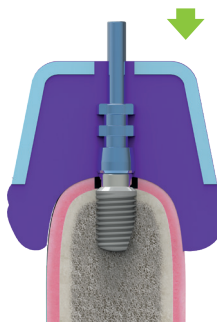
Caution: In the case of multiple rehabilitation, splint the impression abutments using the technique of your choice and following the manufacturer's instructions for the material selected for splinting.



Step 03

Clinical

Impression

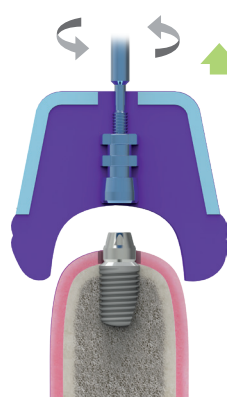


Select the customisable impression tray. Customise the tray by drilling a hole in the area corresponding to the implant and check that the screw protrudes from the tray. Place the elastomeric impression material around the impression abutment and then refill the tray. Make the impression according to the manufacturer's recommendations. Remove excess material from the screw heads.

Step 04

Clinical

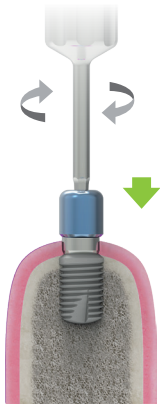
Remove the tray



Manually unscrew the impression screw with the surgical screwdriver and remove the impression tray. Check that the impression quality is optimal for sending to the laboratory. The impression abutments must be retained in the impression material. Send to the laboratory the impression, impression screws, analogues and laboratory order.

Step 05 Clinical

Place Basic® healing abutments

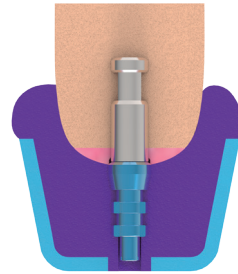


Relocate Basic® healing abutment immediately onto the implant to prevent soft tissue collapse.



Step 08 Laboratory

Impression pouring



Weigh, mix and pour type IV plaster (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) into the impression following the manufacturer's recommendations.

Step 06 Laboratory

Basic® analogues positioning

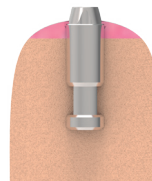


Position Basic® analogue in the impression abutment, checking the correct fit, and secure it manually with the impression screw using a surgical screwdriver. Check that both components are seated correctly.



Step 09 Laboratory

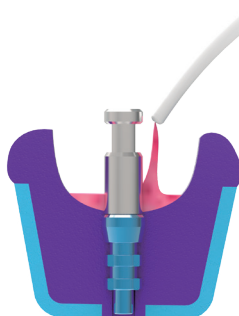
Working model



After the plaster has set, remove impression screws and impression tray. Relate the working model to the opposing model using the bite registration.

Step 07 Laboratory

Soft tissue representation on the working model



Inject material of your choice around the impression abutment, up to the appropriate level, to obtain a correct soft tissue simulation.



Impression

Open tray to XDrive® transepithelial



XDrive®

• **Purpose:**

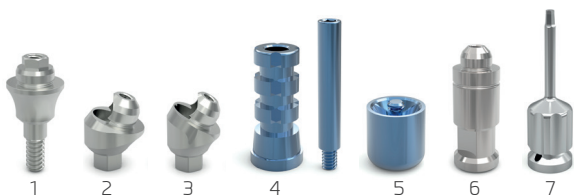
The impression is considered the negative representation of the oral cavity. Open tray impression consists of transferring the implant position from the oral cavity to the working model. This process is carried out using the pick-up impression technique, the abutment is retained within the impression material after polymerisation; a customised tray is used for this purpose. Finally, this impression is cast to obtain the positive model or working model.

Open tray impression for XDrive® transepithelial

XDrive® transepithelial abutments are indicated for multiple restorations. They allow the rehabilitation of angled implants. The impression technique can be applied to both straight and angled abutments and is independent of the abutment gingival height chosen by the clinician for the treatment.

Introduction | Required Materials

1. XDrive® straight abutment (Ref. XST10Z30)
2. XDrive® angled abutment 17° (Ref. XA210Z17)
3. XDrive® angled abutment 30° (Ref. XA310Z30)
4. XDrive® impression abutment + impression screw (Ref. XT103400)
5. Healing abutment (Ref. XH103400)
6. XDrive® analogue (Ref. XIA103400)
7. Surgical screwdriver (Ref. LMSD)



Procedure: The following illustrations are an example of an open tray impression on XDrive® abutments on RP platform for multiple restoration.

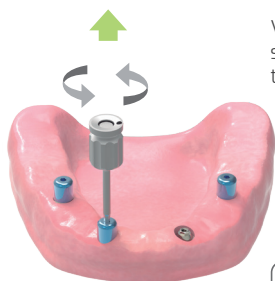
Step 01

Clinical

Remove XDrive® healing abutments

Remove XDrive® healing abutment from the implants manually with the surgical screwdriver by turning anti-clockwise.

Verify that there is no interference from surrounding tissues in the abutment connection.

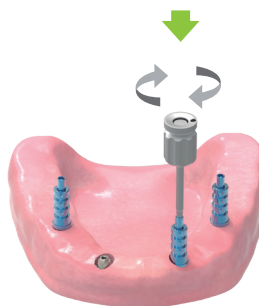


Step 02

Clinical

Place the impression abutments

Insert the impression abutments onto the XDrive® abutments and place the impression screw using a surgical screwdriver, turning clockwise. Apply manual torque. Check the correct fit of the impression abutment on the XDrive® abutments by performing a periapical radiography.



Step 03

Clinical

Abutments splinting

Splint the impression abutments using the technique of your choice and following the manufacturer's instructions for the material selected for splinting.



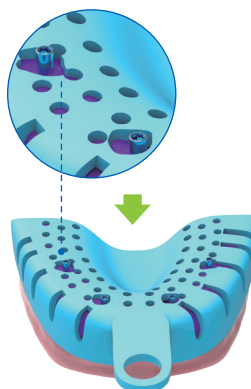
Important: In cases of complete restorations, it is recommended to place Zinic®Shorty implants in combination with conventional length implants and splinting of the implants, both for impression and for the final restoration.

Step 04

Clinical

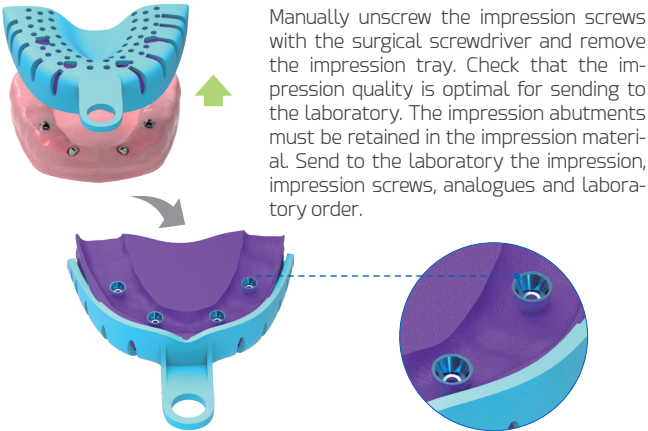
Impression

Select the customisable impression tray. Customise the tray by drilling a hole in the area corresponding to the implant and check that the screw protrudes from the tray. Place the elastomeric impression material around the impression abutments and then refill the tray. Make the impression according to the manufacturer's recommendations. Remove excess material from the screw heads.



Step 05 Clinical

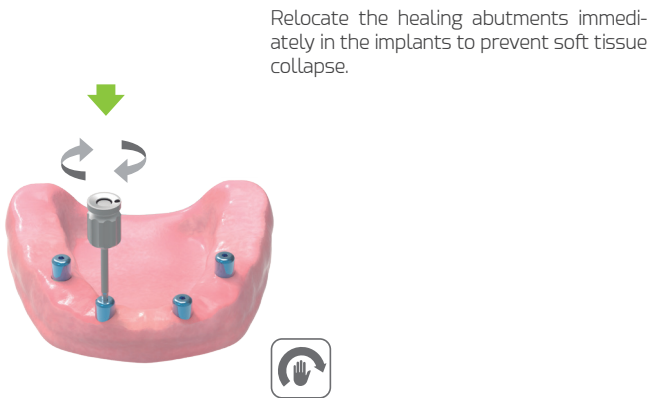
Remove the tray



Manually unscrew the impression screws with the surgical screwdriver and remove the impression tray. Check that the impression quality is optimal for sending to the laboratory. The impression abutments must be retained in the impression material. Send to the laboratory the impression, impression screws, analogues and laboratory order.

Step 06 Laboratory

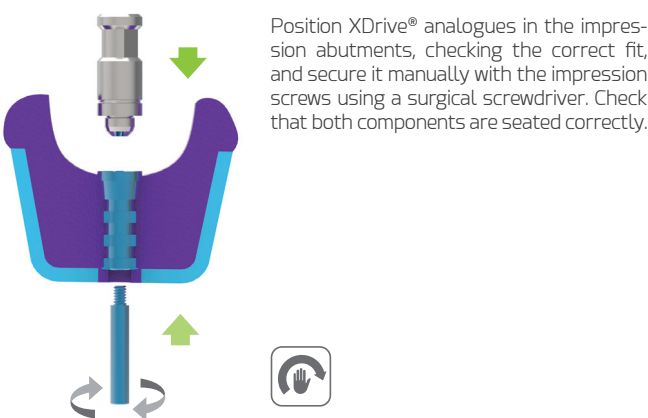
Place XDrive® healing abutments



Relocate the healing abutments immediately in the implants to prevent soft tissue collapse.

Step 07 Laboratory

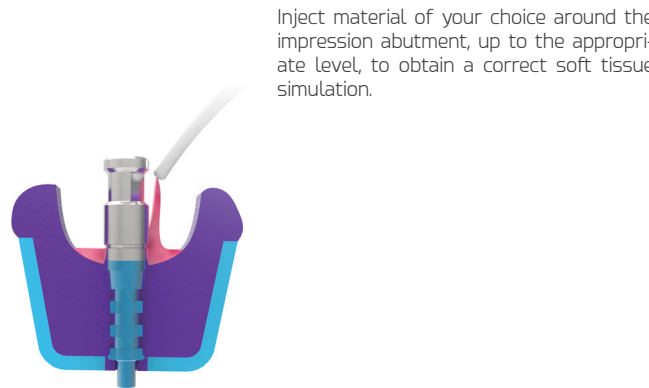
XDrive® analogue positioning



Position XDrive® analogues in the impression abutments, checking the correct fit, and secure it manually with the impression screws using a surgical screwdriver. Check that both components are seated correctly.

Step 08 Laboratory

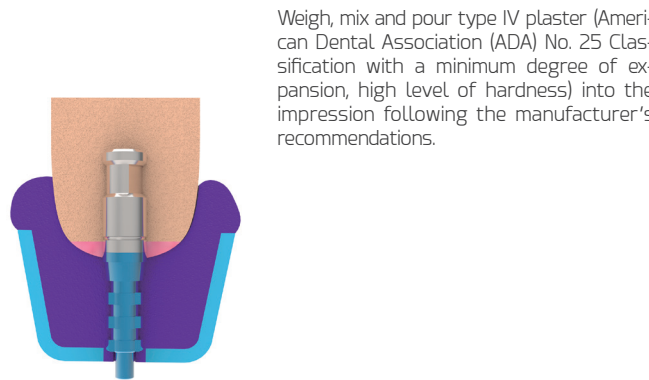
Soft tissue representation on the working model



Inject material of your choice around the impression abutment, up to the appropriate level, to obtain a correct soft tissue simulation.

Step 09 Laboratory

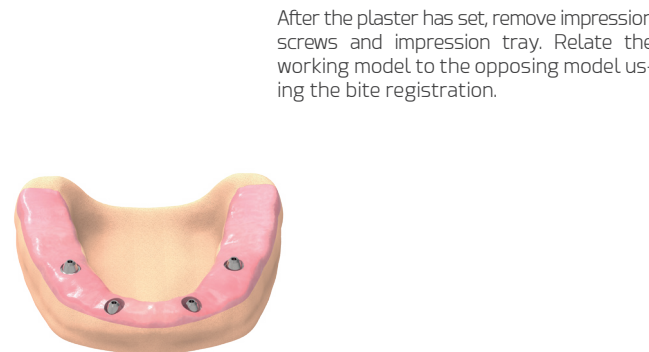
Impression pouring



Weigh, mix and pour type IV plaster (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) into the impression following the manufacturer's recommendations.

Step 10 Laboratory

Working model



After the plaster has set, remove impression screws and impression tray. Relate the working model to the opposing model using the bite registration.

Zinic[®]SHORTY

Prosthetic procedure

Provisional restorations

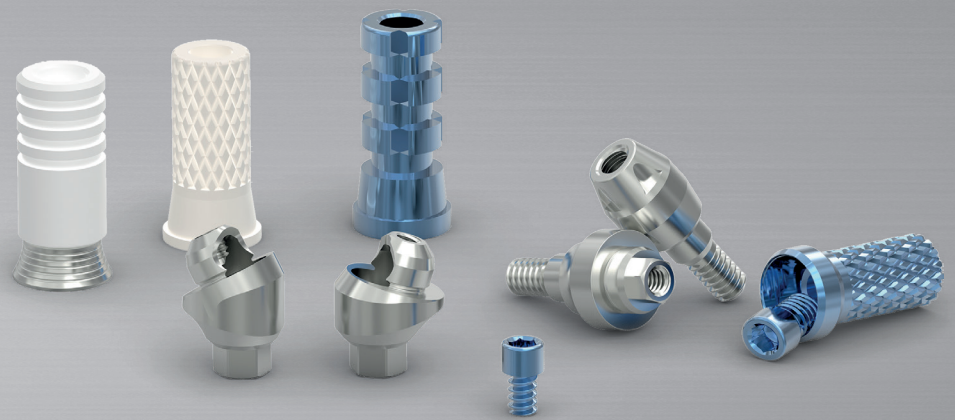
- **Cemented with PEEK abutment or Titanium direct to implant**
- **Screwed with PEEK or Titanium abutment direct to implant**
 - a) Intraoral cementation
 - b) Extraoral cementation
- **Screwed with PEEK or Titanium abutment on transepithelial Basic[®] XDrive[®]**

- **Important:**

The Zinic[®]Shorty implant is recommended for posterior maxillary and mandibular areas. Additionally, splinting is recommended in multiple cases and its use in combination with conventional length implants in complete restorations.



Zinic[®]SHORTY



Provisional restorations

Cemented using provisional abutments



Provisionals

• **Purpose:**

Provisional abutments are used for the fabrication of single or multiple provisional restorations and are available in PEEK and Titanium. This option allows the professional to model the soft tissue and shape the emergence profile. PEEK abutments are indicated for aesthetic areas and immediate loading.

Introduction | Required Materials

1. PEEK provisional abutment (Ref. RUZP3410) ROT
2. PEEK provisional abutment (Ref. NUZP3410) NO ROT
3. Titanium provisional abutment (Ref. RUZT3410) ROT
4. Titanium provisional abutment (Ref. NUZT3410) NO ROT
5. Clinical screw (Ref. DSZ3400)
6. Kiran® clinical screw (Ref. DSZ3410)
7. Laboratory screw (Ref. LBZ3400)
8. Analogue (Ref. IAZ3400)
9. Surgical screwdriver (Ref. LMSD)

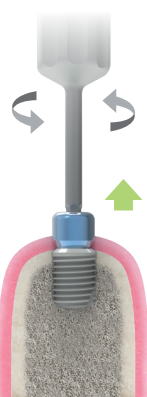


Procedure: The following illustrations are an example of a single cemented provisional restoration with a PEEK abutment on RP platform.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

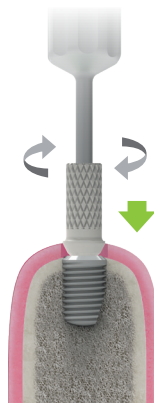
Verify that there is no interference from surrounding tissues in the abutment connection.



Step 02

Clinical

Place the provisional abutment



Insert the provisional abutment into the implant, checking that the fit is correct between the two components. Insert the laboratory screw using a surgical screwdriver and turn it clockwise. Apply manual torque. Mark the abutment height according to the available interocclusal space and check the gingival contour.



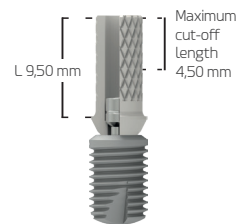
Step 03

Clinical

Abutment preparation



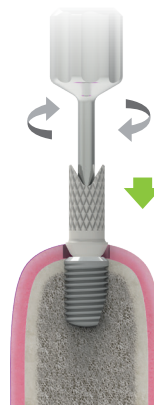
Remove the abutment from the implant and relocate the healing abutment to prevent soft tissue collapse. Attach the abutment to a corresponding platform analogue. Attach both with a laboratory screw using a surgical screwdriver. Prepare the abutment according to the marks made in the previous step.



Step 04

Clinical

Place the modified provisional abutment



Insert the provisional abutment into the implant, checking that the fit is correct. Place the clinical screw using a surgical screwdriver and turn it clockwise. Place the clinical screw manually or using a surgical screwdriver and apply 30Ncm of torque using a screwdriver tip.



Caution: Do not exceed the set torque.

Step 05 **Clinical**

Fill screw access canal



Place a resilient material on top of screw access canal, then block with filling material. This procedure will allow easy access to the screw in the future. Prior to making the restoration, apply a separator onto the abutment.

Step 06 **Clinical**

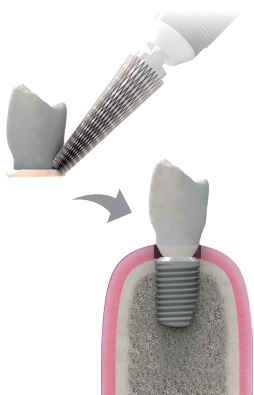
Make the crown and fill it



Fabricate a provisional crown using the chosen method. Mix the filling material and place it in the crown, position the crown on the provisional abutment.

Step 07 **Clinical**

Excess removal, fit and cementing



Remove excess off the filling material from the crown and polish. Place the crown over the abutment to check the occlusion, fitting and gingival contour. Make the required modifications and polish again. Remove from the abutment the separator waste previously placed. Cement the crown according to the cement manufacturer's recommendations.

Provisional restorations

Screwed using provisional abutments

a) Intraoral cementation procedure

• Purpose:

Provisional abutments are used for the fabrication of single or multiple provisional restorations and are available in PEEK and Titanium. This option allows the professional to model the soft tissue and shape the emergence profile. PEEK abutments are indicated for aesthetic areas and immediate loading.



Provisionals

Introduction | Required Materials

1. PEEK provisional abutment (Ref. RUZP3410) ROT
2. PEEK provisional abutment (Ref. NUZP3410) NO ROT
3. Titanium provisional abutment (Ref. RUZT3410) ROT
4. Titanium provisional abutment (Ref. NUZT3410) NO ROT
5. Laboratory screw (Ref. LBZ3400)
6. Clinical screw (Ref. DSZ3400)
7. Kiran® clinical screw (Ref. DSZ3410)
8. Impression screw (Ref. LTZ3401)
9. Impression screw - Quickly screw (Ref. LT3401Z)
10. Analogue (Ref. IAZ3400)
11. Surgical screwdriver (Ref. LMSD)

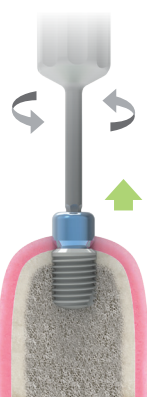


Procedure: The following illustrations are an example of a single screwed provisional restoration with a titanium abutment on RP platform.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

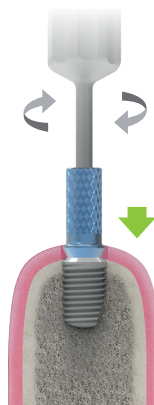
Verify that there is no interference from surrounding tissues in the abutment connection.



Step 02

Clinical

Place the provisional abutment



Insert the provisional abutment into the implant, checking that the fit is correct between the two components. Insert the laboratory screw using a surgical screwdriver and turn it clockwise. Apply manual torque. Mark the abutment height according to the available interocclusal space and check the gingival contour.



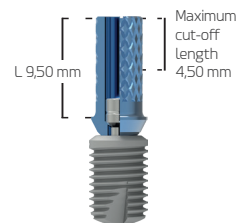
Step 03

Clinical

Abutment preparation



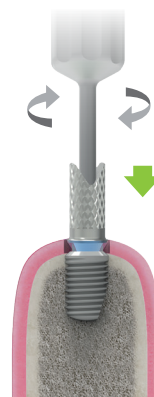
Remove the abutment from the implant and relocate the healing abutment to prevent soft tissue collapse. Attach the abutment to a corresponding platform analogue with laboratory screw and surgical screwdriver. Prepare the abutment according to the marks made in the previous step.



Step 04

Clinical

Place the modified provisional abutment



Insert the provisional abutment into the implant, checking that the fit is correct, and place the laboratory screw manually or using a surgical screwdriver. Apply manual torque.



Step 05 Clinical

Fabrication and adjustment of the crown

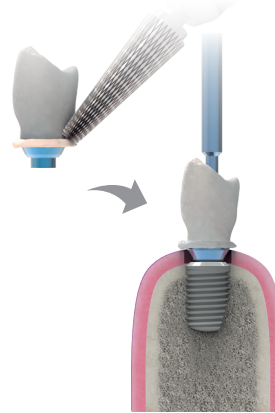
Fabricate a provisional crown using the method of your choice and modify it according to the patient's needs.



Step 08 Clinical

Excess removal, fit and cementing

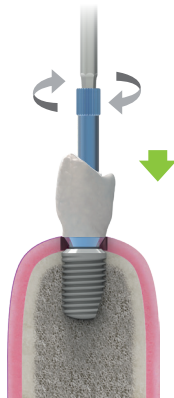
Remove excess of the filling material from the crown and polish. Place the crown over the abutment to check the occlusion, fitting and gingival contour. Make the required modifications and polish again. Cement the crown according to the manufacturer's recommendations.



Step 06 Clinical

Place impression screw and drill the crown

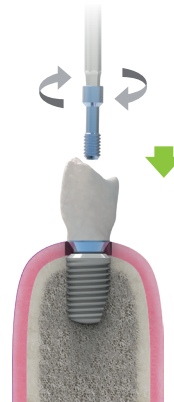
Remove laboratory screw. Relocate using a impression screw and torque manually. Drill the crown at the top to allow the screw to pass through it.



Step 09 Clinical

Screw restoration to implant

Position the abutment-restoration assembly over the implant. Place the clinical screw using a surgical screwdriver and tighten manually. Apply 30Ncm of torque using a contra-angle screwdriver tip or a torque wrench (see torque table on page 50).



Caution: Do not exceed the set torque.

Step 07 Clinical

Fill the crown and cement

Mix the filling material, fill the crown and place it on the provisional abutment. After polymerising the filling material, remove the impression screw and crown.



Provisional restorations

Screwed using provisional abutments

b) Extraoral cementation procedure

• Purpose:

Provisional abutments are used for the fabrication of single or multiple provisional restorations and are available in PEEK and Titanium. This option allows the professional to model the soft tissue and shape the emergence profile. PEEK abutments are indicated for aesthetic areas and immediate loading.



Provisionals

Introduction | Required Materials

1. PEEK provisional abutment (Ref. RUZP3410) ROT
2. PEEK provisional abutment (Ref. NUZP3410) NO ROT
3. Titanium provisional abutment (Ref. RUZT3410) ROT
4. Titanium provisional abutment (Ref. NUZT3410) NO ROT
5. Laboratory screw (Ref. LBZ3400)
6. Clinical screw (Ref. DSZ3400)
7. Kiran® clinical screw (Ref. DSZ3410)
8. Impression screw (Ref. LTZ3401)
9. Impression screw - Quickly screw (Ref. LT3401Z)
10. Analogue (Ref. IAZ3400)
11. Surgical screwdriver (Ref. LMSD)

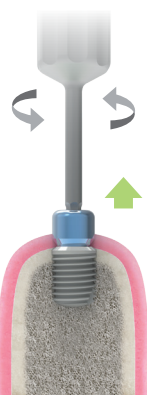


Procedure: The following illustrations are an example of a single screwed provisional restoration with a titanium abutment on RP platform.

Step 01

Clinical

Remove the healing abutment



Remove the healing abutment from the implant manually with the surgical screwdriver by turning anti-clockwise.

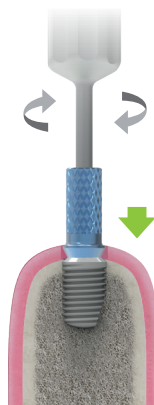
Verify that there is no interference from surrounding tissues in the abutment connection.



Step 02

Clinical

Place the provisional abutment



Insert the provisional abutment into the implant, checking that the fit is correct between the two components. Insert the laboratory screw using a surgical screwdriver and turn it clockwise. Apply manual torque. Mark the abutment height according to the available interocclusal space and check the gingival contour.



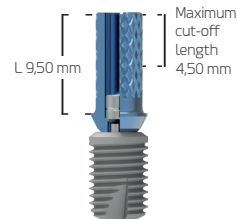
Step 03

Clinical

Abutment preparation



Remove the abutment from the implant and relocate the healing abutment to prevent soft tissue collapse. Attach the abutment to a corresponding platform analogue with laboratory screw and surgical screwdriver. Prepare the abutment according to the marks made in the previous step.



Step 04

Clinical

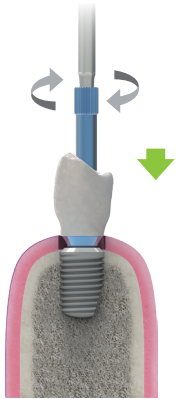
Fabrication and adjustment of the crown



Make a provisional crown with the method of your choice and modify it according to the patient's needs.

Step 05 Clinical

Place impression screw and drill the crown

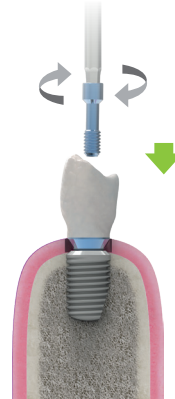


Remove clinical screw. Relocate using a impression screw and torque manually. Drill the crown at the top to allow the screw to pass through it.



Step 08 Clinical

Screw restoration to implant



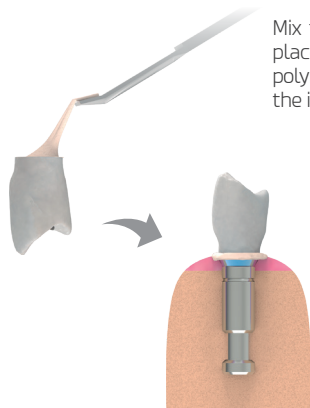
Position the abutment-restoration assembly over the implant. Place the clinical screw manually or with a surgical screwdriver and apply 30Ncm of torque using a screwdriver tip (see torque table on page 50).



Caution: Do not exceed the set torque.

Step 06 Clinical

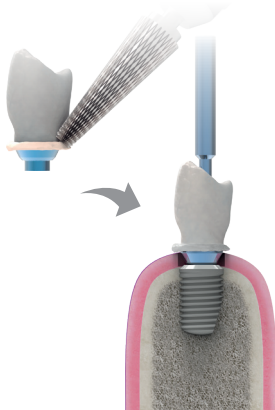
Fill the crown and cement



Mix the filling material, fill the crown and place it on the provisional abutment. After polymerization of the filling material, remove the impression screw and crown.

Step 07 Clinical

Excess removal, fit and cementing



Remove excess filling material from the crown and polish. Place the crown over the abutment to check the occlusion, fit and gingival contour. Make the required modifications and polish again. Cement the crown according to the manufacturer's recommendations.

Provisional restorations

Screwed on Basic® transepithelials



Basic®

• **Purpose:**

The Basic® transepithelial abutments are indicated for single or multiple restorations, depending on the selected non-rotating or rotating abutment, respectively. They allow implants rehabilitation with up to 36° of disparelism. Provisional abutments made of PEEK or titanium allow the fabrication of immediate or delayed loading screwed provisional prosthesis.

Important: In cases of complete restorations, it is recommended to place Zinic®Shorty implants in combination with conventional length implants.

Introduction | Required Materials

1. Basic® abutment (Ref. BASICZ202) ROT
2. Basic® provisional abutment (Ref. BARUP34) ROT
3. Basic® provisional abutment (Ref. BARUT10) ROT
4. Basic® clinical screw (Ref. BDSEI3400)
5. Kiran® Basic® clinical screw (Ref. BDSEI3410)
6. Basic® laboratory screw (Ref. BDSEI3401)
7. Surgical screwdriver (Ref. LMSD)
8. Basic® insertion key (Ref. MABA100)
9. Screwdriver handle (Ref. MADW10)
10. Torque wrench (Ref. TORK50)

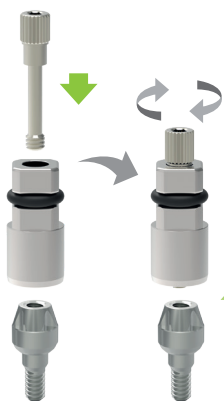


Procedure: The following illustrations represent the example of a multiple screwed provisional restoration with a PEEK abutment on Basic® transepithelial abutment on RP platform.

Step 01

Clinical

Select Basic® abutments



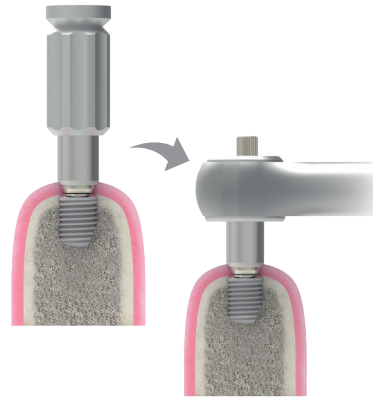
Identify the implant platform and determine the gingival height of the required Basic® abutments. Select abutment type to use: rotating or non-rotating.



Step 02

Clinical

Place Basic® abutments on implant



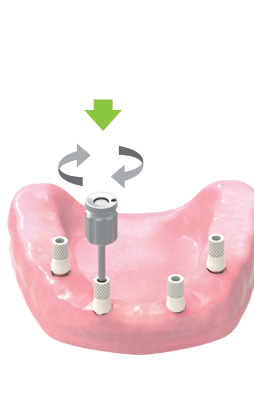
Position the straight abutment on the insertion key and tighten with the rear screw. Screw the straight abutment-insertion key assembly to the implant manually with the adapter handle. Insert torque wrench over the insertion key and apply torque at 30 Ncm (see torque table on page 50).



Step 03

Clinical

Place Basic® provisional abutments



Insert the provisional abutment to be used on the Basic® abutment, making sure that the adjustment is correct between both and fix it with the Basic® laboratory screw using a surgical screwdriver, turning clockwise. Apply manual torque.



Step 04

Clinical

Transfer abutments position to the prosthesis

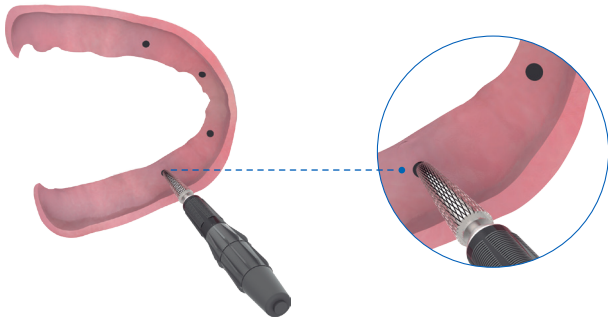


Mark on top of the provisional abutments with the technique of your choice (suitable marker, articulating paper, among others). Place the prosthesis in the oral cavity and press on the cylinders to transfer the marks. Remove the prosthesis. Check the visibility of the marks. Repeat the procedure if necessary.

Step 05 Clinical

Drill holes in the prosthesis

Use an acrylic or laboratory drill to perforate the material in the marked areas. Drill the through hole in the marks.



Step 08 Clinical

Remove prosthesis and make final try-in

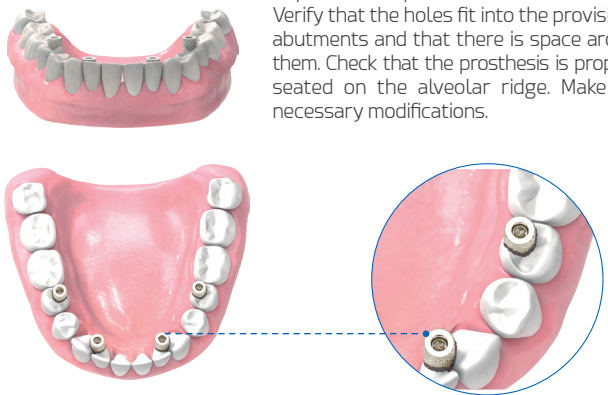
Remove laboratory screws with a surgical screwdriver. Extract the prosthesis. Verify that the abutments are correctly attached to the prosthesis. Perform soft tissue re-line if necessary. Cut off the height of the provisional abutments until they are flush with the prosthesis on its occlusal side, avoiding overheating. Make the final modifications, occlusion adjustment and polishing.



Step 06 Clinical

Check the prosthesis fitting

Reposition the prosthesis in the oral cavity. Verify that the holes fit into the provisional abutments and that there is space around them. Check that the prosthesis is properly seated on the alveolar ridge. Make any necessary modifications.



Step 09 Clinical

Reposition the prosthesis in the oral cavity

Reposition the prosthesis on the transepithelial abutments and check the fit. Place the clinical screw using a surgical screwdriver and tighten manually. Apply 25Ncm of torque using a contra-angle screwdriver tip or a torque wrench (see torque table on page 50).



Important note: Do not exceed 25 Ncm to avoid screw fractures.

Step 07 Clinical

Attach the provisional abutments to the prosthesis

Fill the abutment screw canal with the material of your choice to prevent the filling material to enter into the abutments. Use the filling material to fix the provisional abutments, following the manufacturer's recommendations.



Provisional restorations

Screwed on XDrive® transepithelials



XDrive®

• **Purpose:**

XDrive® transepithelial abutments are intermediate abutments that are indicated for multiple implant and/or angled implant restorations. The rehabilitation techniques can be applied to both straight and angled abutments and is independent of the abutment gingival height chosen by the clinician for the treatment.

Provisional abutments made of PEEK or titanium allow the fabrication of immediate or delayed loading screwed provisional prosthesis.

Important: In cases of complete restorations, it is recommended to place Zinic®Shorty implants in combination with conventional length implants.

Introduction | Required Materials

1. XDrive® straight abutment (Ref. XST10Z20)
2. XDrive® angled abutment 17° (Ref. XA210Z17)
3. XDrive® angled abutment 30° (Ref. XA310Z30)
4. XDrive® provisional abutment (Ref. XST3410)
5. XDrive® provisional abutment (Ref. XSP3410)
6. XDrive® clinical screw (Ref. XDS103410)
7. Kiran® XDrive® clinical screw (Ref. XDS103411)
8. Surgical screwdriver (Ref. LMSD)
9. Screwdriver tip CA (Ref. MESD)
10. Screwdriver tip (Ref. LMSD1)
11. XDrive® insertion key (Ref. MABA200)
12. Screwdriver handle (Ref. MADW10)
13. Torque wrench (Ref. TORK50)



Procedure: The following illustrations represent the example of a multiple screwed provisional restoration with a titanium abutment on XDrive® transepithelial abutment on RP platform.

Step 01

Clinical

Select and place XDrive® abutments on implant



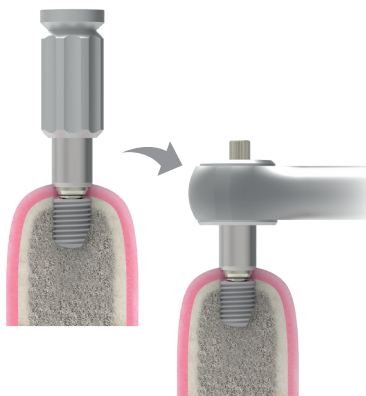
Identify the implant platform and determine the gingival height of the required XDrive® abutments. Select the abutment type to use: straight, 17° angled or 30° angled.



Step 02-A

Clinical

Straight abutments



Position the straight abutment on the insertion key and tighten with the rear screw. Screw the straight abutment-insertion key assembly to the implant manually with the adapter handle. Insert torque wrench over the insertion key and apply torque at 30 Ncm (see torque table on page 50).



Caution: Do not exceed the set torque.

Step 02-B

Clinical

Angled abutments



Insert the angled abutment into the implant and choose the position for angle correction. Screw manually using a surgical screwdriver. Then, with a contra-angle or ratchet screwdriver tip, apply a torque of 30Ncm with the contra-angle or torque wrench, as appropriate.

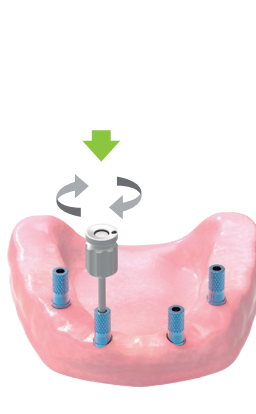


Caution: Do not exceed the set torque.

Step 03

Clinical

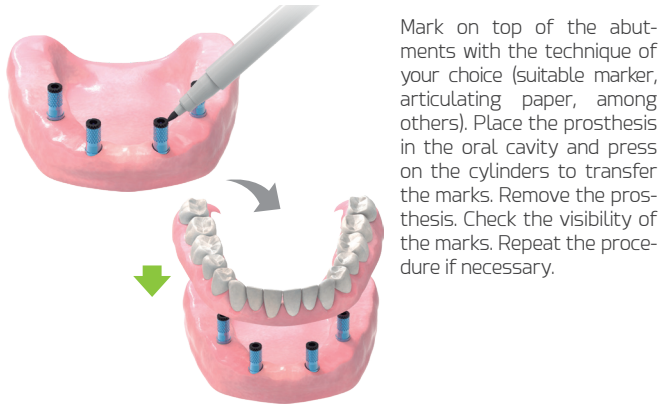
Place XDrive® abutments



Insert the provisional abutment to be used on the XDrive® abutment, making sure that the fit is correct between both and attach it with XDrive® laboratory screw using a surgical screwdriver, turning clockwise. Apply manual torque.

Step 04 Clinical

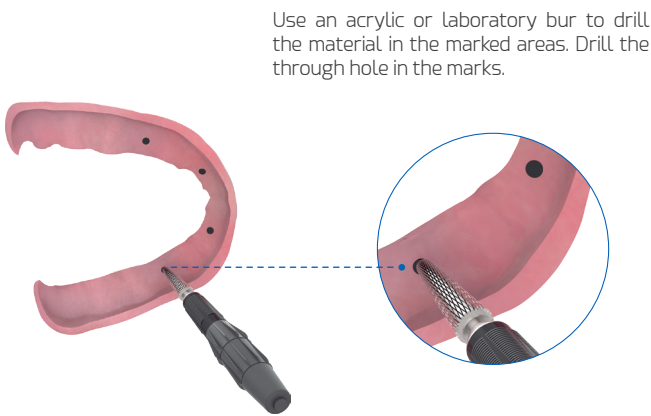
Transfer abutments position to the prosthesis



Mark on top of the abutments with the technique of your choice (suitable marker, articulating paper, among others). Place the prosthesis in the oral cavity and press on the cylinders to transfer the marks. Remove the prosthesis. Check the visibility of the marks. Repeat the procedure if necessary.

Step 05 Clinical

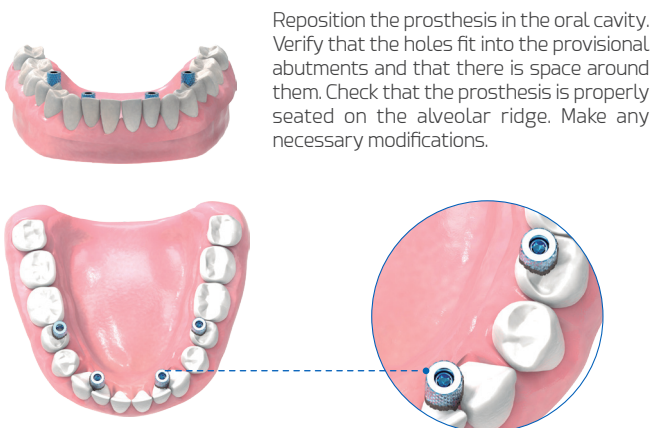
Drill holes in the prosthesis



Use an acrylic or laboratory bur to drill the material in the marked areas. Drill the through hole in the marks.

Step 06 Clinical

Check the prosthesis fitting



Reposition the prosthesis in the oral cavity. Verify that the holes fit into the provisional abutments and that there is space around them. Check that the prosthesis is properly seated on the alveolar ridge. Make any necessary modifications.

Step 07 Clinical

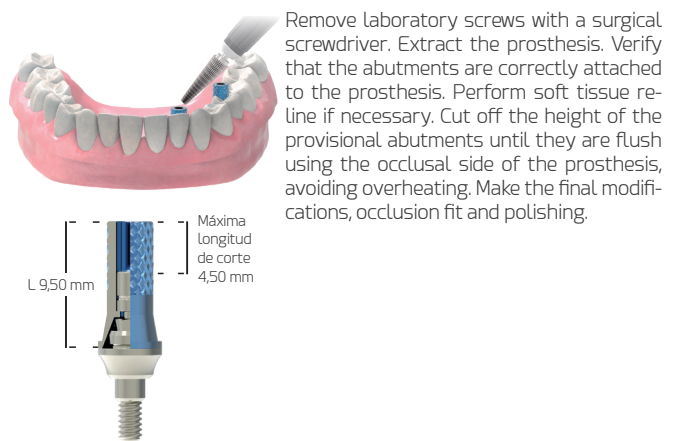
Attach the provisional abutments to the prosthesis



Fill the abutment screw canal with the material of your choice to prevent the filling material to enter into the abutments. Use the filling material to fix the provisional abutments, following the manufacturer's recommendations.

Step 08 Clinical

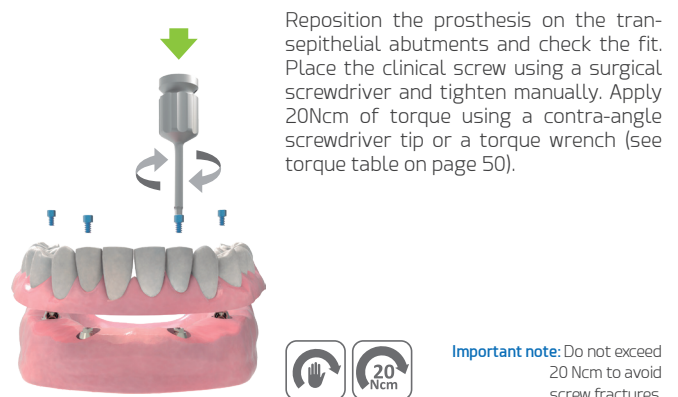
Remove prosthesis and make final try-in



Remove laboratory screws with a surgical screwdriver. Extract the prosthesis. Verify that the abutments are correctly attached to the prosthesis. Perform soft tissue re-line if necessary. Cut off the height of the provisional abutments until they are flush using the occlusal side of the prosthesis, avoiding overheating. Make the final modifications, occlusion fit and polishing.

Step 09 Clinical

Reposition the prosthesis in the oral cavity



Reposition the prosthesis on the trans-epithelial abutments and check the fit. Place the clinical screw using a surgical screwdriver and tighten manually. Apply 20Ncm of torque using a contra-angle screwdriver tip or a torque wrench (see torque table on page 50).



Important note: Do not exceed 20 Ncm to avoid screw fractures.

Zinic[®]SHORTY

Prosthetic procedure

Definitive restorations

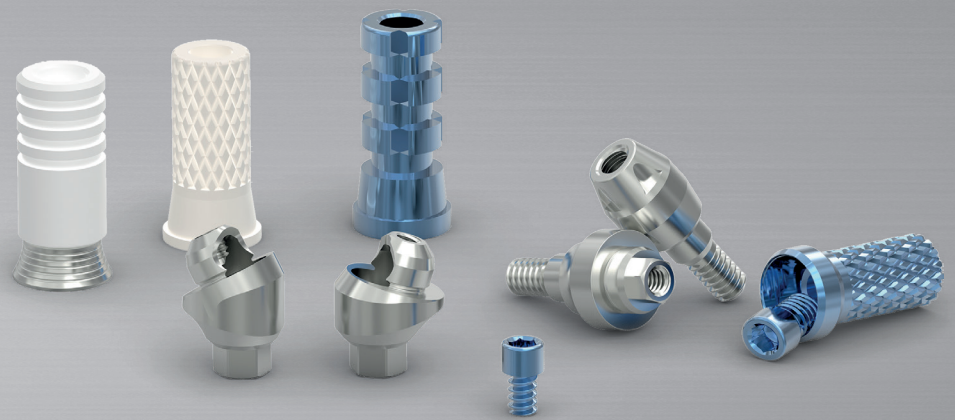
- **Cemented on abutments**
(Straight abutment, 15° angled and 25° angled)
- **Screwed on abutments**
Castable
Mechanised base + castable abutment
Tx30[®]
- **Screwed to transepithelial**
Basic[®]
XDrive[®]

- **Important:**

The Zinic[®]Shorty implant is recommended for posterior maxillary and mandibular areas. Additionally, splinting is recommended in multiple cases and its use in combination with conventional length implants in complete restorations.



Zinic[®]SHORTY



Cemented restorations

On abutments direct to implant



Straight abutment

• **Purpose:**
 Cemented abutments are used for single or multiple restorations with intraoral cementation. The restoration is fabricated in the laboratory using the method selected by the professional, the abutment is then fixed to the implant using the clinical screw and the restoration is finally cemented in the oral cavity.

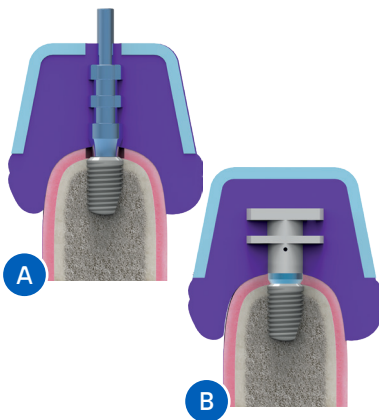
Introduction | Required Materials

1. Straight abutment (Ref. STZ3415)
2. 15° angled abutment (Ref. A1Z3415)
3. 25° angled abutment (Ref. A1Z3425)
4. Clinical screw (Ref. DSZ3400)
5. Kiran® clinical screw (Ref. DSZ3410)
6. Laboratory screw (Ref. LBZ3400)
7. Surgical screwdriver (Ref. LMSD)
8. Screwdriver tip (Ref. LMSD1)
9. Torque wrench (Ref. TORK50)



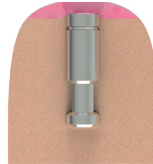
Procedure: The following illustrations represent the example of a final cemented single restoration using a straight abutment direct to implant on RP platform.

Step 01 Clinical Impression



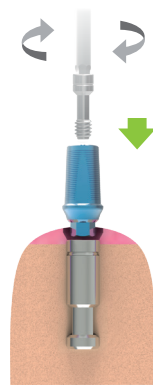
Perform the implant impression with the method of your choice, open tray (option A) or closed tray (option B), following the procedure explained in the section on impression techniques. Take the impression of the opposing arch. Make bite registration. Send to the laboratory the impressions, analogue, impression screw, laboratory screw and bite registration.

Step 02 Laboratory Working model obtaining



Make the working models in plaster type IV (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) following the manufacturer's recommendations. Model soft tissue and articulate with bite registration according to the usual laboratory procedures.

Step 03 Laboratory Select and attach the abutment



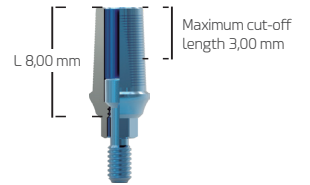
Select the abutment considering the implant platform, gingival height and angle required. Position the abutment on the analogue, making sure that the fit is correct in the connection, and attach with the laboratory screw manually using the surgical screwdriver. Evaluate interocclusal space, angle and soft tissue contours. Mark the abutment with the modifications to be made, considering the minimum thickness of the restoration material.



Step 04 Laboratory Abutment preparation

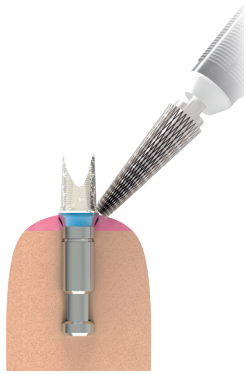


Remove the abutment from the analogue and secure it to a universal handle with the proper tip. Prepare the abutment according to the references of the marks made in the previous step. Define the preparation margins. Make a mark on the buccal side of the abutment to facilitate the abutment positioning in the oral cavity.



Step 05 Laboratory

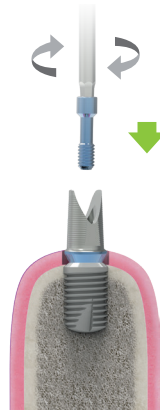
Mount abutment into model



To make the final adjustments, position the abutment on the model and secure it with the laboratory screw using manual torque. Consider the preparation of margins, in aesthetic zone between 0.5-1 mm subgingival, in non-aesthetic areas preparation must be at the gingival or supragingival level.

Step 08 Clinical

Clean and place abutment in mouth

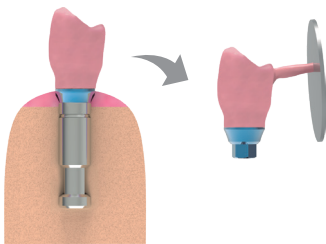


Disinfect the prepared abutment and crown. Remove the healing abutment or provisional prosthesis with the surgical screwdriver. Verify that there is no interference from surrounding tissues over the implant connection. Position the abutment on the implant, making sure that the fit is correct between the two components, and attach with the clinical screw, manually with the surgical screwdriver. Perform a periapical radiography to verify that the abutment is correctly seated on the implant.



Step 06 Laboratory

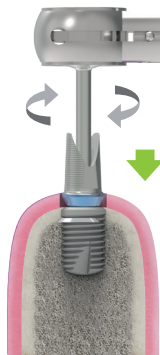
Wax and cast metal coping



Seal the screw access channel to prevent contamination with the waxing material and apply the isolation agent. Wax-up the coping, separate it from the abutment and add the casting sprue. Cast the framework with the lost wax casting technique, following the manufacturer's recommendations for the selected material.

Step 09 Clinical

Apply final torque to clinical screw



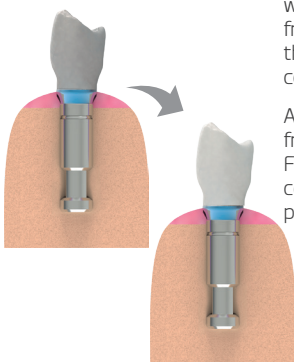
Tighten the clinical screw to 30 Ncm using a screwdriver tip and torque wrench. The tip is attached to the ratchet through the 4x4mm square connection (see torque table on page 50).



Caution: Do not exceed the set torque.

Step 07 Laboratory

Crown preparation and ceramic layering



Remove the casting sprue from the framework casting. Check the fit of the metal framework with the abutment. Carry out the final adjustments before applying the ceramic layers.

Apply the opaque layer over the metal framework and then apply the ceramic. Finish the restoration with the usual procedure. Send the finished crown and prepared abutment to the professional.

Step 10 Clinical

Crown cementation



Place a resilient material in the screw access channel at the top of the screw canal, then block with filling material. This procedure will allow easy access to the screw in the future. Place the crown over the abutment to check the occlusion, fit and contour. Modify the framework if necessary to improve fit, contour or occlusion of the restoration and polish. Finally, cement the crown using the cement of your choice, following the manufacturer's recommendations. Remove excess cement. Check the correct fit of the crown on the abutment by performing a periapical radiography.

Definitive restorations

Screwed direct to implant



UCLA or mechanised base abutments

• **Purpose:**

UCLA-type or Co-Cr mechanised base castable abutments are used for single or multiple restorations. In the laboratory, procedures for obtaining crowns or bridges are performed, and the restorations are fixed directly to the implant using a clinical screw.

Introduction | Required Materials

1. UCLA-castable (Ref. NUZ3400) NO ROT
2. Mechanised base + castable abutment (Ref. BNUZ34) NO ROT
3. Clinical screw (Ref. DSZ3400)
4. Kiran® clinical screw (Ref. DSZ3410)
5. Laboratory screw (Ref. LBZ3400)
6. Surgical screwdriver (Ref. LMSD)
7. Screwdriver tip (Ref. LMSD1)
8. Torque wrench (Ref. TORK50)

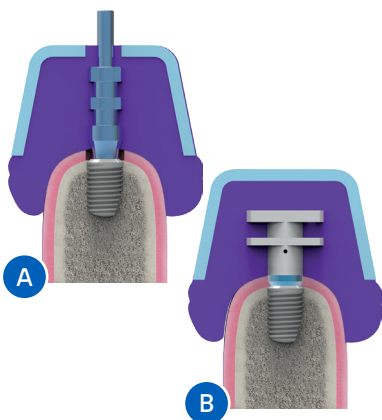


Procedure: The following illustrations are an example of a definitive screwed single restoration using a castable abutment on RP platform.

Step 01

Clinical

Impression



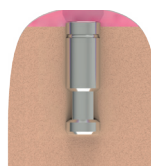
Perform the implant impression with the method of your choice, open tray (option A) or closed tray (option B), following the procedure explained in the section on impression techniques. Take the impression of the opposing arch. Make bite registration. Send to the laboratory the impressions, analogue, impression screw, laboratory screw and bite registration.

Step 02

Laboratory

Working model obtaining

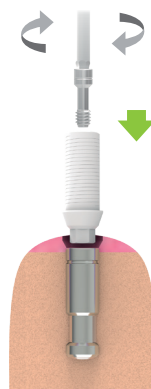
Make the working models in plaster type IV (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) following the manufacturer's recommendations. Model soft tissue and articulate with bite registration according to the usual laboratory procedures.



Step 03

Laboratory

Abutment selection



Select the abutment considering the implant platform. Position the abutment on the analogue, making sure that the fit is correct in the connection, and attach with the laboratory screw manually using the surgical screwdriver. Evaluate the interocclusal space.

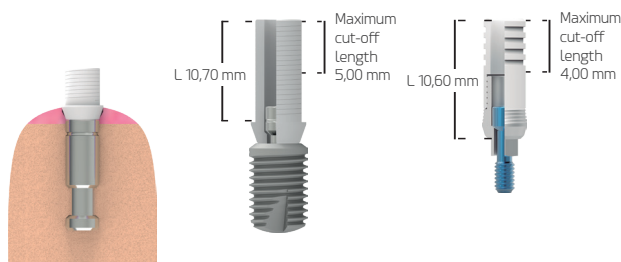


Step 04

Laboratory

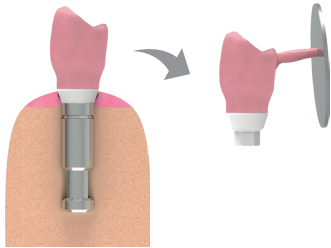
Abutment preparation

Prepare the abutment and make the modifications if necessary, considering the interocclusal space.



Step 05 Laboratory

Wax and cast metal coping



Seal the screw access channel to prevent contamination with the waxing material. Wax-up the coping, separate it from the abutment and add the casting sprue. Cast the framework with the lost wax casting technique, following the manufacturer's recommendations.

Step 08 Clinical

Clean and place abutment in mouth

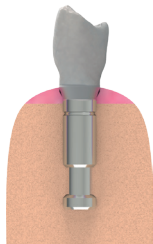


Disinfect the restoration. Remove the healing abutment or provisional prosthesis with the surgical screwdriver. Verify that there is no interference from surrounding tissues over the implant connection. Position the restoration on the implant and attach it manually with the clinical screw using a surgical screwdriver. Perform a periapical radiography to verify the correct seating of the restoration on the implant.



Step 06 Laboratory

Crown preparation for ceramic



Remove the casting sprue from the framework casting. Check the fitting of the metal framework with the abutment. Carry out the final adjustments before applying the ceramic layers.

Step 09 Clinical

Apply final screw torque



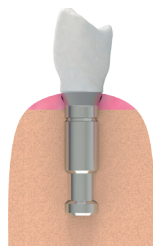
Tighten the clinical screw to 30 Ncm using a screwdriver tip and torque wrench. The tip is attached to the ratchet through the 4x4mm square connection (see torque table on page 50).



Caution: Do not exceed the set torque.

Step 07 Laboratory

Ceramic layering



Apply the opaque layer over the metal framework and then apply the ceramic. Finish the crown with the usual procedure. Send the finished crown and prepared abutment to the professional.

Step 10 Clinical

Fill the screw access hole



Place a resilient material in the screw access channel at the top of the screw canal, then block with filling material. This procedure will allow easy access to the screw in the future. Check the proper fit of the abutment on the implant by performing a periapical radiography.

Definitive restorations

Screwed to implant with Tx30® variable rotation abutment



Tx30® abutment variable rotation

• Purpose:
Tx30® abutments consist of a Co-Cr mechanised base and castable plastics of different fixed angles, which can rotate 360° on the base. They are used for single or multiple restorations. In the laboratory, the procedures for obtaining a crown or bridge are performed. The restorations are attached directly to the implant with Tx30® clinical screw using the Tx30® screwdriver, these components are specially designed to allow the screw to be tightened in angled cases.

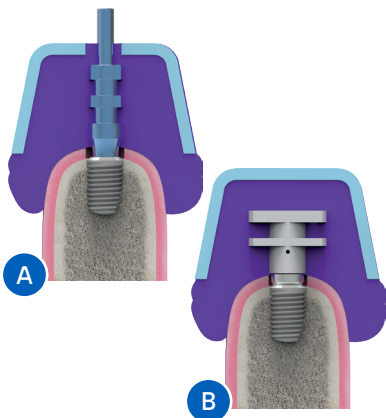
Introduction | Required Materials

1. Tx30® mechanised base abutment + 2 castable abutments (15° and 20°) (Ref. BNUZ34TX) NO ROT
2. Tx30® mechanised base abutment + 2 castable abutments (20° and 25°) (Ref. BNUZ34TX1) NO ROT
3. Kiran® Tx30® clinical screw (Ref. DSZ3410TX)
4. Tx30® screwdriver tip ratchet/manual (Ref. LMSD1TX)
5. Tx30® screwdriver tip CA (Ref. MESD1TX)
6. Tx30® prosthetic screwdriver manual (Ref. LMSD1TX)
7. Torque wrench (Ref. TORK50)



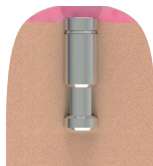
Procedure: The following illustrations are an example of a definitive screwed single restoration with Tx30® abutment variable rotation on RP platform.

Step 01 Clinical Impression



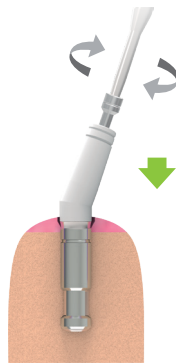
Take the implant impression with the method of your choice, open tray (option A) or closed tray (option B), following the procedure explained in the impression section. Take the impression of the opposing arch. Make bite registration. Send to the laboratory the impressions, analogue, impression screw, Tx30® Kiran® clinical screw and bite registration.

Step 02 Laboratory Working model obtaining



Make the working models in plaster type IV (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) following the manufacturer's recommendations. Model soft tissue and articulate with bite registration according to the usual laboratory procedures.

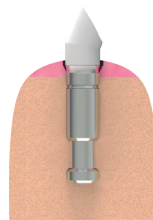
Step 03 Laboratory Abutment selection



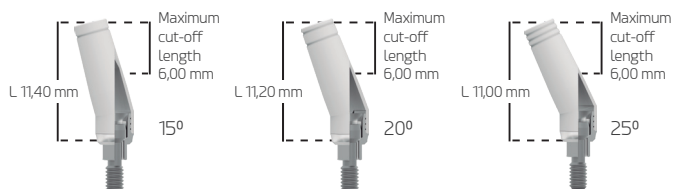
Select the abutment considering the implant platform. Position the mechanised base on the analogue by checking the correct fit on the connection. Secure the mechanised base manually with the Tx30® clinic screw using the Tx30® surgical screwdriver. Select the castable angled abutment (15°, 20° and 25°) according to the clinical case. Select the castable angled abutment based on the location and angle of the implant to determine the emergence of the screw channel. Press the castable abutment onto the mechanised base. Turn the castable abutment on the mechanised base until the desired position is achieved.



Step 04 Laboratory Abutment preparation

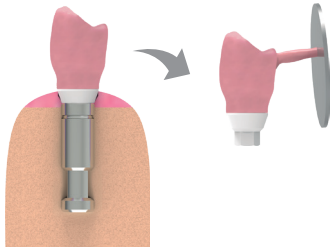


Evaluate the interocclusal space. Prepare the abutment and make the necessary modifications, considering the interocclusal space.



Step 05 Laboratory

Wax and cast crown metal base



Seal the screw access channel to prevent contamination with the waxing material. Wax-up the coping, separate it from the abutment and add the casting sprue. Cast the framework with the lost wax casting technique, following the manufacturer's recommendations.

Step 08 Clinical

Clean and place abutment in mouth

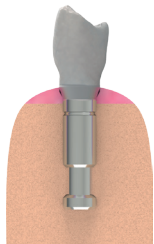


Disinfect the restoration. Remove the healing abutment or provisional prosthesis with the surgical Tx30® screwdriver. Verify that there is no interference from surrounding tissues over the implant connection. Position the restoration on the implant and attach it manually with Tx30® Kiran® clinical screw using Tx30® surgical screwdriver. Perform a periapical radiography to verify the correct seating of the restoration on the implant.



Step 06 Laboratory

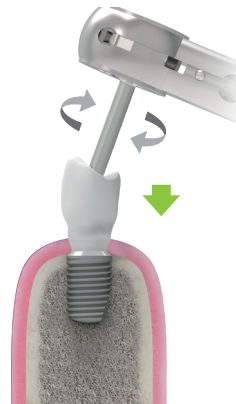
Crown preparation for ceramic



Remove the casting sprue from the framework casting. Check abutment fit. Carry out the final adjustments before applying the ceramic layers.

Step 09 Clinical

Apply final screw torque



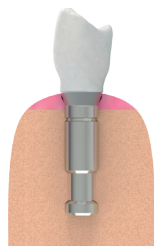
Tighten the clinical screw to 30 Ncm using the Tx30® contra-angle screwdriver tip or Tx30® ratchet screwdriver tip (see torque table on page 50).



Caution: Do not exceed the set torque.

Step 07 Laboratory

Ceramic layering



Apply the opaque layer over the metal framework and then apply the ceramic. Finish the crown with the usual procedure. Send the finished crown and prepared abutment to the professional.

Step 10 Clinical

Fill the screw access hole



Place a resilient material in the screw access channel at the top of the screw, then block with filling material. This procedure will allow easy access to the screw in the future. Check the proper fit of the abutment on the implant by performing a periapical radiography.

Definitive restorations

Screwed to Basic® transepithelial abutment



Basic®

• **Purpose:**

Basic® transepithelial abutments are indicated for single or multiple restorations depending on the chosen abutment. They allow implants rehabilitation with up to 36° of disparelism. The definitive restoration will be fabricated in the laboratory with castable or Co-Cr mechanised base + castable abutments that are positioned over the transepithelial abutments.

Important: In cases of complete restorations, it is recommended to place Zinic®Shorty implants in combination with conventional length implants.

Introduction | Required Materials

1. Basic® abutment (Ref. BASICZ402) ROT
2. Basic® UCLA (Ref. BARUEX34) ROT
3. Basic® mechanised base + castable abutment (Ref. BBRU34) ROT
4. Basic® clinical screw (Ref. BDSEI3400)
5. Kiran® Basic® clinical screw (Ref. BDSEI3410)
6. Basic® laboratory screw (Ref. BDSEI3401)
7. Basic® healing abutment (Ref. BAHAEX34)
8. Basic® analogue (Ref. BAIAX34)
9. Surgical screwdriver (Ref. LMSD)
10. Basic® insertion key (Ref. MABA100)
11. Screwdriver handle (Ref. MADW10)
12. Torque wrench (Ref. TORK50)



12

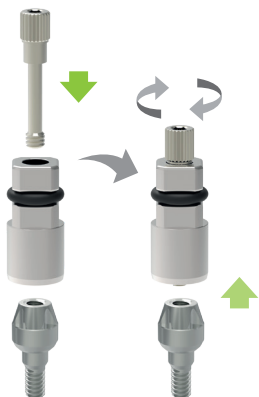


Procedure: The following illustrations are an example of a definitive screwed multiple restoration with Basic® abutment on RP platform.

Step 01

Clinical

Select Basic® abutments



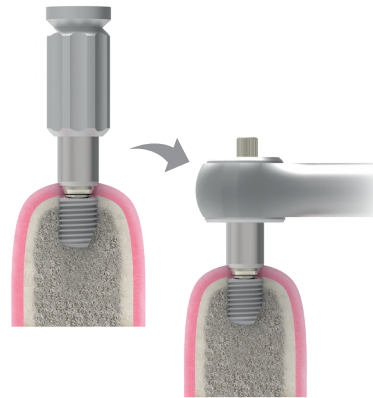
Identify the implant platform and determine the gingival height of the required Basic® abutments. Select abutment type to use: rotating or non-rotating.



Step 02

Clinical

Place Basic® abutments on implant



Position the abutment on the insertion key and tighten with the rear screw. Screw the insertion key-abutment assembly to the implant manually. Insert torque wrench over the insertion key and apply torque at 30 Ncm (see torque table on page 50).

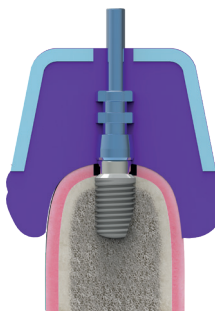


Caution:
Do not exceed the set torque.

Step 03

Clinical

Impression into transepithelial abutments

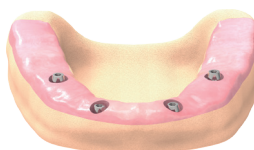


Perform the implant impression, following the procedure explained in section impression techniques. Take the impression of the opposing arch. Make bite registration. Send to the laboratory the impressions, analogue, impression screw, Basic® laboratory screw and bite registration. Relocate Basic® healing abutments.

Step 04

Laboratory

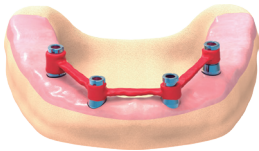
Working model obtaining



Make the working models in plaster type IV (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) following the manufacturer's recommendations. Model soft tissue and articulate with bite registration according to the usual laboratory procedures.

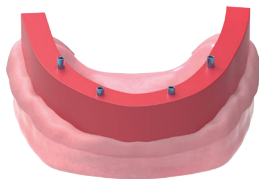
Step 05 Laboratory
Check passive fit

Position the impression abutments on Basic® abutments in the working model and attach with impression screw manually using a surgical screwdriver. Splint the abutments with the usual technique. Send the passive fit to the clinician for intraoral verification. If the framework does not fit passively, make modifications if necessary, cut off and repeat the splinting.



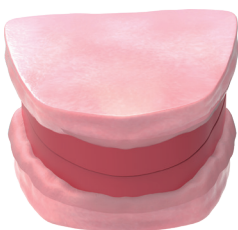
Step 06 Laboratory
Record base wax-rims fabrication

Fabricate record base wax-rims, with fixing holes and send it to the clinician to determine the intermaxillary relationships and marking of reference lines.



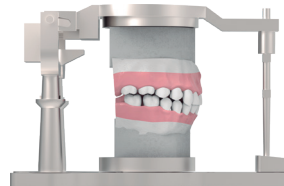
Step 07 Clinical
Make intermaxillary relationship

Remove Basic® healing abutments using a surgical screwdriver. Set wax-rims to Basic® abutments using the laboratory screw. Determine facial fullness, reference planes, midline, smile line and commissures. Vertical dimension record. Relocate the healing abutments to prevent soft tissue collapse and send the records to the laboratory.



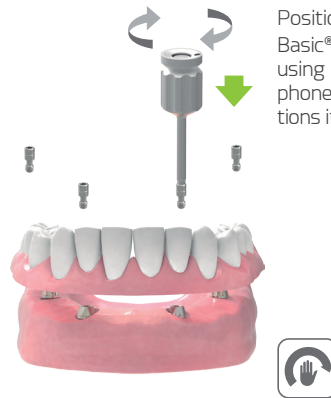
Step 08 Laboratory
Setting up the teeth

Attach the denture base to the model and mount it on the articulator together with its opposing model and start setting up the teeth. Modify the teeth to allow the screws access.



Step 09 Clinical
Teeth try-in

Position the prosthesis and attach it to Basic® abutments with a laboratory screw using a hand screwdriver. Verify occlusion, phonetics and aesthetics. Make modifications if necessary.



Step 10 Laboratory
Teeth set up registration

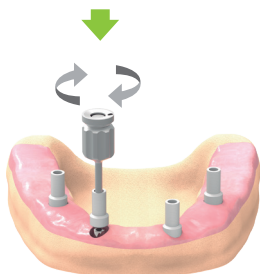
Make a silicone key in the vestibular area of the prosthesis teeth.



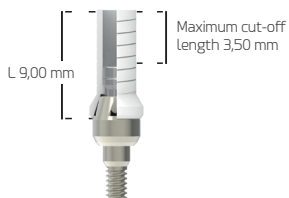
Step 11

Laboratory

Place and modify Basic® abutments



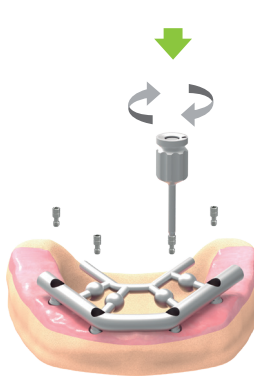
Position the castable or castable with mechanised base abutments on the Basic® in the working model and attach them manually using a surgical screwdriver. Use the silicone key as a guide to modify the castable abutments.



Step 14

Laboratory

Verify the framework

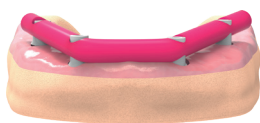


Place the framework on the model and attach it with Basic® laboratory screw using a hand screwdriver and check the fitting. If the metal framework does not fit passively, make modifications if necessary, cut off, repeat splinting and weld it again.

Step 12

Laboratory

Design and wax the framework

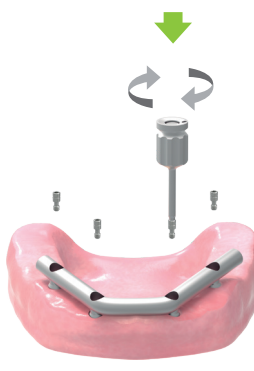


Design and wax the prosthesis framework according to the usual design criteria, which facilitate hygiene and acrylic retention in the framework.

Step 15

Clinical

Metal try-in

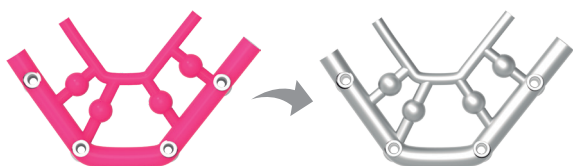


Remove Basic® healing abutments using a surgical screwdriver. Place the framework on the transepithelial abutments and check that it seats passively on each abutment. Perform periapical radiographies to verify the correct seating of the framework. If the framework does not fit passively, make modifications if necessary, cut off and repeat the splinting. Relocate the healing abutments.

Step 13

Laboratory

Framework casting



Prepare the waxed framework for casting following normal laboratory procedures. Cast the framework, revise and polish as necessary.

Step 16

Laboratory

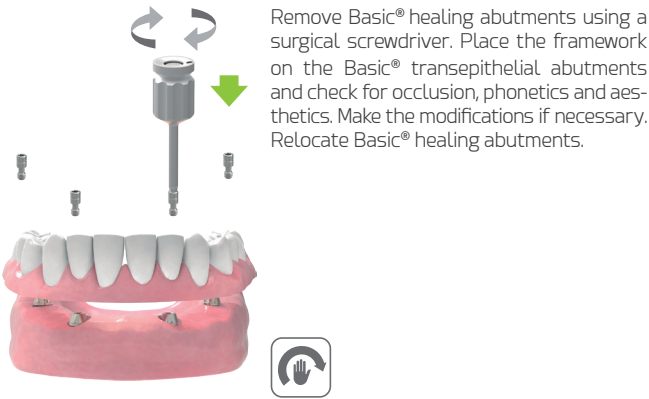
Prosthesis fabrication



Once the framework passivity has been checked, position the teeth in wax-rim following the conventional procedures for the manufacture of prosthesis. Send the hybrid prosthesis to the clinician.

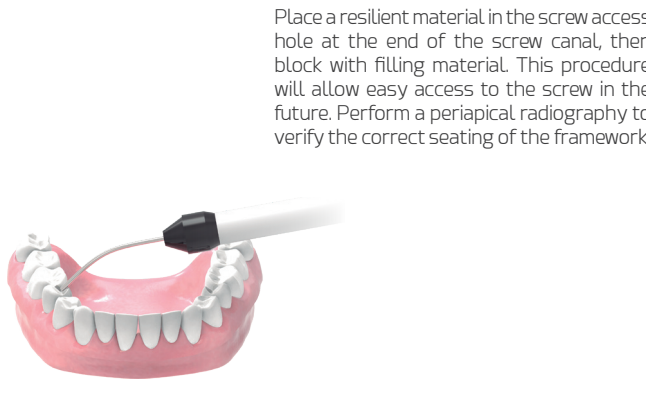
Step 17 Clinical

Prosthesis final inspection



Step 20 Clinical

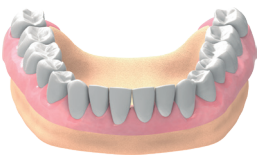
Fill the screw access hole



Step 18 Laboratory

Acrylic of the prosthesis

Carry out the usual flasking and curing processes for the manufacture of the final prosthesis.



Step 19 Clinical

Apply final screw torque

Remove Basic® healing abutments using a surgical screwdriver. Place the framework on the Basic® transepithelial abutments and attach it with the clinical screw at 25 Ncm using a screwdriver tip and torque wrench (see torque table on page 50).



Important note: Do not exceed 25 Ncm to avoid screw fractures.

Definitive restorations

Screwed to XDrive® transepithelial abutment



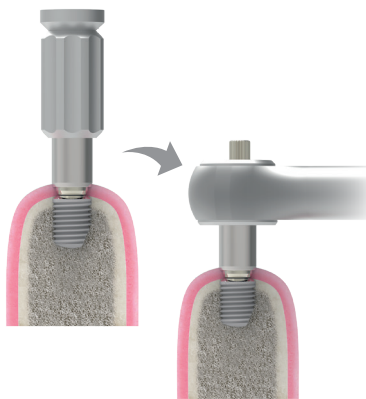
Purpose:
 XDrive® transepithelial abutments are intermediate abutments that are indicated for multiple implant and/or angled implant restorations. The rehabilitation techniques can be applied to both straight and angled abutments and is independent of the abutment gingival height chosen by the clinician for the treatment.

The definitive restoration will be fabricated in the laboratory with castable or Co-Cr mechanised base + castable abutments that are positioned over the transepithelial abutments.

Important: In cases of complete restorations, it is recommended to place Zinic®Shorty implants in combination with conventional length implants.

Step 02-A Clinical

Straight abutments



Position the straight abutment on the insertion key and tighten with the rear screw. Screw the insertion key-abutment assembly to the implant manually. Insert torque wrench over the insertion key and apply torque at 30 Ncm (see torque table on page 50).

Caution: Do not exceed the set torque.

Introduction | Required Materials

1. XDrive® straight abutment (Ref. XST10Z20) ROT
2. XDrive® angled abutment 17° (Ref. XA210Z17) ROT
3. XDrive® angled abutment 30° (Ref. XA310Z30) ROT
4. XDrive® UCLA (Ref. XRU103400) ROT
5. XDrive® mechanised base + castable abutment (Ref. XBRU34) ROT
6. XDrive® clinical screw (Ref. XDS103410)
7. Kiran® XDrive® clinical screw (Ref. XDS103411)
8. XDrive® laboratory screw (Ref. XLB103410)
9. XDrive® healing abutment (Ref. XH103400)
10. XDrive® analogue (Ref. XIA103400)
11. Surgical screwdriver (Ref. LMSD)
12. Screwdriver tip CA (Ref. MESD)
13. Screwdriver tip (Ref. LMSD1)
14. XDrive® insertion key (Ref. MABA200)
15. Screwdriver handle (Ref. MADW10)
16. Torque wrench (Ref. TORK50)



Procedure: The following illustrations are an example of a screwed definitive multiple restoration with XDrive® abutment on RP platform.

Step 02-B Clinical

Angled abutments



Insert the angled abutment into the implant and choose the position for angle correction. Screw manually using a surgical screwdriver. Then, with a contra-angle or ratchet screwdriver tip, apply a torque of 30Ncm with the contra-angle or torque wrench, as appropriate.

Caution: Do not exceed the set torque.

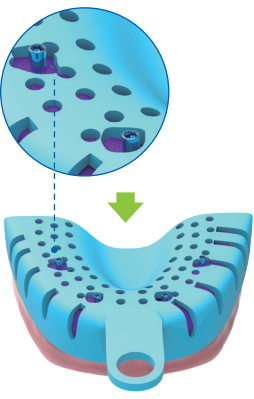
Step 01 Clinical

Select and place XDrive® abutments on implant

Identify the implant platform and determine the gingival height of the required XDrive® abutments. Select the abutment type to use: straight, 17° angled or 30° angled

Step 03 Clinical

Impression into transepithelial abutments



Perform the implant impression following the procedure explain in the impression technique section. Take the impression of the opposing arch. Make bite registration. Send to the laboratory the impressions, analogue, impression screw, XDrive® laboratory screw and intermaxillary registration. Relocate XDrive® healing abutments.

Step 04 Laboratory

Working model obtaining

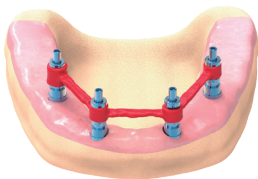
Make the working models in plaster type IV (American Dental Association (ADA) No. 25 Classification with a minimum degree of expansion, high level of hardness) following the manufacturer's recommendations. Model soft tissue and articulate with bite registration according to the usual laboratory procedures.



Step 05 Laboratory

Check passive fit

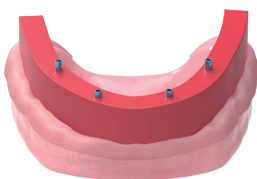
Position the impression abutments on XDrive® abutments in the working model and attach with impression screw manually using a surgical screwdriver. Splint the abutments with the usual technique. Send the passive fit to the clinician for intraoral verification. If the framework does not fit passively, make the necessary modifications, cut off and repeat the splinting.



Step 06 Laboratory

Record base wax-rims fabrication

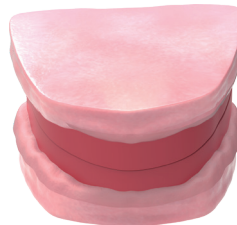
Fabricate record base wax-rims, with fixing holes and send it to the clinician to determine the intermaxillary relationships and marking of reference lines.



Step 07 Clinical

Make intermaxillary relationship

Remove XDrive® healing abutments using a surgical screwdriver. Set wax-rims to XDrive® abutments using the laboratory screw. Determine facial fullness, reference planes, midline, smile line and commissures. Vertical dimension record. Relocate the healing abutments to prevent soft tissue collapse and send the records to the laboratory.



Step 08 Laboratory

Setting up the teeth

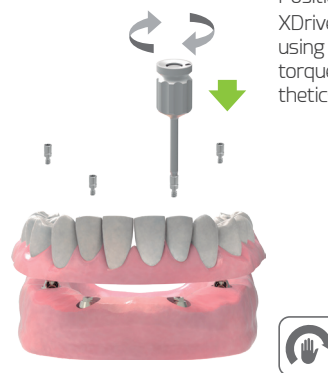
Attach the denture base to the model and mount it on the articulator together with its opposing model and start setting up the teeth. Modify the teeth to allow the screws access.



Step 09 Clinical

Teeth try-in

Position the prosthesis and attach it to XDrive® abutments with a laboratory screw using a hand screwdriver. Apply manual torque. Check occlusion, phonetics and aesthetics. Make modifications if necessary.



Step 10

Laboratory

Teeth set up registration

Make a silicone key in the vestibular area of the prosthesis teeth.

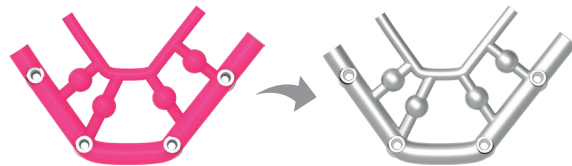


Step 13

Laboratory

Framework casting

Prepare the waxed framework for casting following normal laboratory procedures. Cast the framework, revise and polish as necessary.

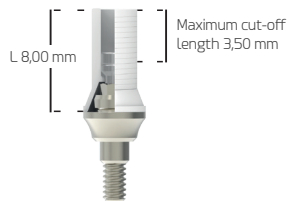
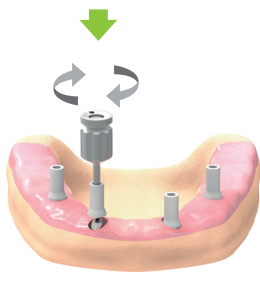


Step 11

Laboratory

Place and modify XDrive® abutments

Position the castable or castable with mechanised base abutments on the XDrive® in the working model checking the correct fit on the connection and attach them manually with a surgical screwdriver. Use the silicone key as a guide to modify the castable abutments.

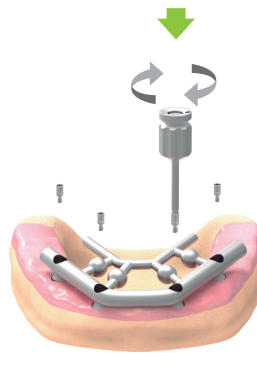


Step 14

Laboratory

Verify the framework

Place the framework on the model and attach it using XDrive® screws and check the fitting. If the fitting is not correct, section the framework, fit the sectioned parts on the abutments, splint the assembly and weld it again.

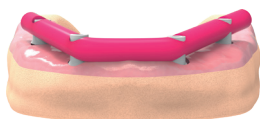


Step 12

Laboratory

Design and wax the framework

Design and wax the prosthesis framework according to the usual design criteria, which facilitate hygiene and acrylic retention in the framework.

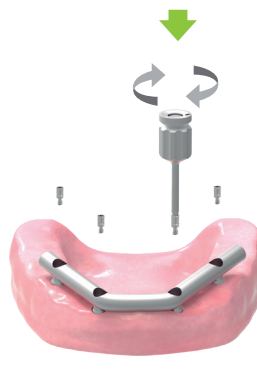


Step 15

Clinical

Metal try-in

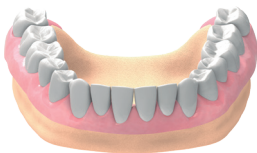
Remove XDrive® healing abutments using a surgical screwdriver. Place the framework on the XDrive® transepithelial abutments and check that it seats passively on each abutment. Perform periapical radiographies to verify the correct seating of the framework. If the fitting is not correct, section the framework, fit the sectioned parts on the abutments and splint the assembly. Send it to the laboratory for welding. Relocate healing abutments.



Step 16 Laboratory

Prosthesis fabrication

Once the framework passivity has been checked, position the teeth in wax-rim following the conventional procedures for the manufacture of prosthesis. Send the hybrid prosthesis to the clinician.



Step 19 Clinical

Apply final screw torque

Remove XDrive® healing abutments using a surgical screwdriver. Place the framework on the XDrive® transepithelial abutments and attach it with the clinical screw at 20 Ncm using a screwdriver tip and torque wrench. (see torque table on page 50).



Important note: Do not exceed 20 Ncm to avoid screw fractures.

Step 17 Clinical

Prosthesis final check

Remove XDrive® healing abutments using a surgical screwdriver. Place the framework on the XDrive® transepithelial abutments and check for occlusion, phonetics and aesthetics. Make the modifications if necessary. Relocate XDrive® healing abutments.



Step 20 Clinical

Fill the screw access hole

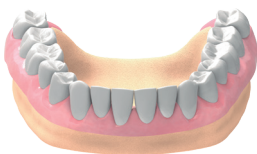
Place a resilient material in the screw access hole at the end of the screw canal, then block with filling material. This procedure will allow easy access to the screw in the future. Perform a periapical radiography to verify the correct seating of the prosthesis.



Step 18 Laboratory





























Acrylic of the prosthesis

Carry out the usual flasking and curing processes for the manufacture of the final prosthesis.



How to interpret the symbology of this catalogue

Symbology

| Symbol | Meaning | Symbol | Meaning | Symbol | Meaning |
|---|--|---|---|---|---------------------------------------|
|  | Rotatory element |  | Screw metrics (mm) |  | Cobalt-chromium manufactured |
|  | Non-rotatory element |  | 45° support angle |  | PEEK manufactured |
|  | Use with manual torque (consult table below) |  | 90° support angle |  | Castable manufactured |
|  | Maximum torque usage |  | Rotation use with CA |  | Plastic manufactured |
|  | Ratchet torque |  | Maximum turning speed |  | Recommended sterilisation temperature |
|  | Screw connection |  | Maximum usage number |  | Non-sterile product |
|  | Kirator® Connection |  | Single use product |  | Use with abundant irrigation |
|  | Basic® Connection |  | Titanium Grade 5 manufactured |  | Maximum angle |
|  | XDrive® Connection |  | Stainless Steel manufactured | | |
|  | Tx30® Connection |  | Cobalt-Chromium + castable manufactured | | |

Torque table for abutments

| Element/Abutment | Instrument/Tool | Torque |
|--|---------------------------------|--------|
| Cover screws/healing abutments | Hexagonal screwdriver 1,25mm | Manual |
| Impression abutments screw | Hexagonal screwdriver 1,25mm | Manual |
| Laboratory screws | Hexagonal screwdriver 1,25mm | 10 Ncm |
| Clinical screws direct to implant | Hexagonal screwdriver 1,25mm | 30 Ncm |
| Kiran® clinical screws direct to implant | Hexagonal screwdriver 1,25mm | 30 Ncm |
| Basic®/XDrive® abutments | Insertion keys: MABA100/MABA200 | 30 Ncm |
| Clinical screws on Basic® | Hexagonal screwdriver 1,25mm | 25 Ncm |
| Kiran® clinical screws on Basic® | Hexagonal screwdriver 1,25mm | 25 Ncm |
| Clinical screws on XDrive® | Hexagonal screwdriver 1,25mm | 20 Ncm |
| Kiran® clinical screws on XDrive® | Hexagonal screwdriver 1,25mm | 20 Ncm |
| ZiaCam® Scanbody + screw | Hexagonal screwdriver 1,25mm | Manual |
| Tx30® abutment/screw (Variable Rotation) | Tx30® Torx screwdriver | 30 Ncm |

- For immediate loading: DO NOT torque manually, block to final torque.
- When using a screwdriver or adapter for contra-angle (CA), DO NOT exceed a maximum speed of 25 Rpm.

Attention: exceeding the recommended torque for screws and abutments endangers the prosthetic restoration and may result in damage to the implant structure. In this case, ZIACOM® product guarantee will be cancelled.

Instructions for cleaning and disinfection of: instruments and boxes (surgical and prosthetic)

Protocol to be carried out by qualified personnel for the preparation of instruments and surgical/prosthetic boxes for use.

ATTENTION: the instruments and surgical/prosthetic boxes must be cleaned and disinfected after each use and sterilised before their next use. Pay attention to sharp elements, the use of gloves is recommended to avoid accidents during handling when following these instructions. Do not clean or disinfect instruments of different materials together.

Cleaning and disinfection of instruments

1- Disassembly

- Disassemble the instruments that require it such as manual ratchets (see diagram below), drills and drill stops...
- Disassemble the surgical/prosthetic boxes into their components for proper cleaning.
- Uncouple the micro-implants insertion key from the handle (see diagram below).

2- Cleaning

- Immerse the instruments in a solution of a cleaning agent suitable for dental instruments to facilitate the removal of adhering biological debris.
- Remove biological residue manually with a soft brush and pH-neutral detergent.
- Rinse with plenty of water.
- Perform a final rinse with deionised water.
- Always use pH-neutral detergents and non-abrasive tools to clean surgical/prosthetic boxes so as not to damage the surfaces of the box.

3- Disinfection

- Immerse the instruments in a disinfectant explicitly indicated for dental instruments.
- For disinfection with ultrasonic equipment: immerse the material in the ultrasonic bath.
- Rinse with plenty of deionised water to remove any residues of the disinfectant.
- Dry the material with filtered compressed air.

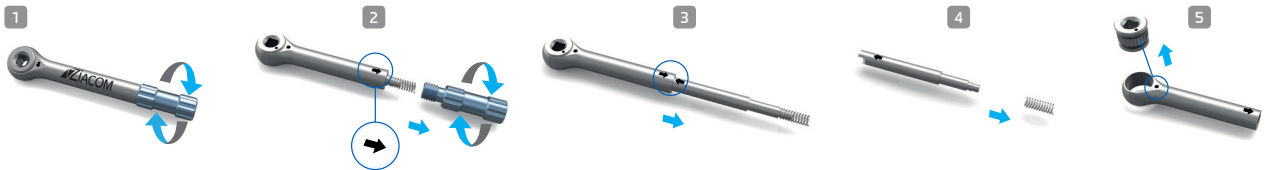
IMPORTANT:

- Follow the instructions of the disinfectant manufacturer to determine concentrations and times.
- Follow the instructions of the manufacturer of the ultrasound equipment to determine temperature, concentration and times.

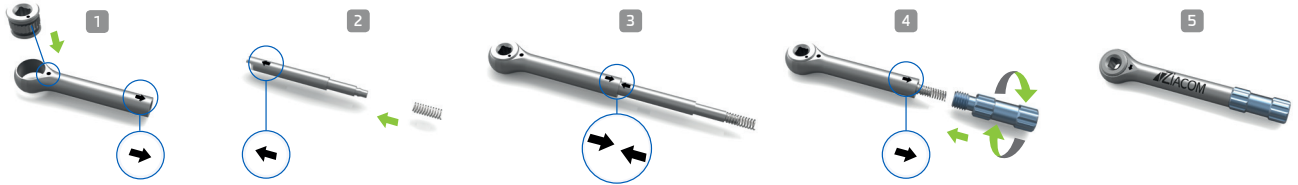
4- Inspection

- Check that the instruments are perfectly clean, otherwise repeat the above cleaning and disinfection steps.
- Discard instruments that show damage and replace them for the next surgery.
- Verify that the instruments and surgical/prosthetic boxes are perfectly dry before assembly and sterilisation.

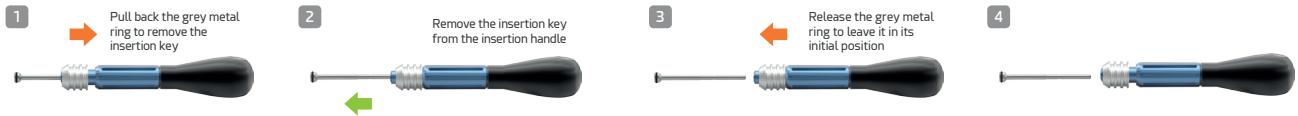
Disassembly of ZIACOM® ratchets



Assembly of ZIACOM® ratchets



Disassembly of DSQ® micro-implant insertion handle



Assembly of DSQ® micro-implant insertion handle



Sterilisation instructions for: orthodontic micro-implants, abutments, instruments and boxes (surgical and prosthetic)

Protocol to be carried out by qualified personnel for the sterilisation of micro-implants, abutments, instruments and surgical/prosthetic boxes for use.

ATTENTION: all micro-implants, abutments, instruments and surgical/prosthetic boxes are supplied NON-STERILE. They should be sterilised as directed before the first clinical use.

They must be removed from their original packaging for sterilisation prior to first clinical use. Surgical/prosthetic instruments and boxes should be cleaned and disinfected after each use and sterilised prior to use. Do not sterilise instruments of different materials together, unless the corresponding surgical/prosthetic box is used correctly.

Steam autoclave sterilisation: sterilisation of micro-implants, abutments, instruments and boxes

- Insert the material individually into sterilisation bags and seal the bags.

For joint sterilisation: assemble the instruments in their corresponding surgical box, insert the box in a sterilisation bag and seal the bag.

- Place the bags to be sterilised in the autoclave.

- Sterilise in steam autoclave at 134°C/273°F (max. 137°C/276°F), for 4 min (minimum) and 2 atm of pressure.

Only for USA: the validated and recommended sterilisation cycle is in a steam and gravity autoclave at 132°C/270°F, minimum 15 minutes and drying time 15-30 minutes.

IMPORTANT:

- Make sure that the drying phase is completed to prevent the products from coming out wet.
- Check the sterilisation equipment if the sterilisation material or bags are wet at the end of the sterilisation.
- Carry out the maintenance of the autoclave with the established periodicity and the necessary actions, following the manufacturer's instructions.

Conservation of ZIACOM® products (micro-implants, abutments, instruments and boxes)

- Keep the products in the original ZIACOM® packaging in a dry and clean environment until use.
- After sterilisation, keep the products (micro-implants, instruments, abutments and surgical boxes) in their sealed sterilisation bags and in a dry and clean environment.
- Never exceed the expiration dates determined by the manufacturer of the sterilisation bags.

IMPORTANT:

- Follow the instructions of the manufacturer of the sterilisation bags.

General recommendations

- Never use damaged or dirty material. Never reuse products indicated for a single use, the user is responsible for the correct follow up of the instructions described in this document.
- Always wear gloves when cleaning the material.
- Follow the safety instructions given by the manufacturer of the disinfection agent.
- Sterility cannot be guaranteed if the sterilisation bag is open, damaged or wet.
- Respect all phases of the steriliser. If the sterilisation material or bags have water or moisture residues, check the autoclave and dry the bags.
- Carry out the maintenance of the autoclave according to its manufacturer, with the established periodicity.
- The sterilisation, cleaning and disinfection processes progressively deteriorate the instruments. Inspect the instruments carefully for signs of deterioration.
- Ziacom Medical SLU recommends following these instructions to avoid impairing the purpose and safety of its products. If alternative procedures are used, it is the responsibility of the user to ensure that the chosen cleaning, disinfection and sterilisation procedure achieves the desired results without affecting the products.

Note. For the most up-to-date version of the cleaning, disinfection and sterilisation instructions, please visit our website www.ziacom.es



ZINIC[®]SHORTY



General sales conditions

Consult the general sales conditions updated in our web www.ziacom.es

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Important

- For the most up-to-date version of the catalogues, please visit our website www.ziacom.es
- Check the availability of each product by country.



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