ENGLISH - EN

TSA® Prosthodontic Procedure

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SYMBOL	CAPTION
	Phibo Dental Solutions, S.L. P.I. Mas d'en Cisa | Gato Pérez 3-9 | 08181 | Sentmenat | Barcelona | Spain
	Caution!
	This is a medical device intended to be used on patients.
	The implants are supplied sterile. Sterilized by gamma irradiation. The sterile barrier is the outer blister sealed with Tyvek.
	If the packaging is damaged or has been opened accidentally, the sterility of the implants that are supplied sterilized may be compromised. Do not use the product and immediately inform the manufacturer at the email address garantiacalidad@phibo.com.
	The reuse and/or reprocessing of disposable products can lead to loss of functionality and/or safety of the product and, potentially, cause problems for the patient.
 'Do not re-sterilize'	Re-sterilization of disposable products can lead to loss of functionality and/or safety of the product and cause potential problems for the patient.
'Single patient use'	The use of disposable products for more than one patient can result in loss of functionality and/or safety of the product and, potentially, cause problems for the patient.
	Medical devices must be safely disposed of in approved medical containers for such purposes, and in accordance with the requirements of current local regulations.
	The labeling of the products referred to in these instructions for use includes traceability with UDI encoding/unique identification of the device.
'IFU' 	These instructions for use are electronic and are not attached in paper format. They are intended for health professionals. The instructions can be downloaded from the Downloads section of the manufacturer's website at www.phibo.com.
 **0123**	CE 0123 represents certification by TUV SUD.

TECHNICAL INFORMATION

The information below is not sufficient for the use of Phibo® dental implants, but the person who manipulates it must have sufficient training and information on the dental implant technique for the use of Phibo® dental implants.

If you are not familiar with the clinical procedure described here, you can contact your advisor in the Phibo® business area and they will provide you with any information and/or training you may require to perform this procedure.

Consult the detailed information in the implant package insert before use. The instructions for use and maintenance of Phibo® products are listed in the documents and procedure manuals for the Phibo® implant system.

Phibo® prosthodontic components and instruments are supplied unsterilized. They must be cleaned, disinfected and sterilized before and after use, according to the process described in the document “Cleaning, Disinfection and Sterilization of Prosthodontic Components and Instruments” PROSPLD

IMPORTANT BEFORE USING PHIBO®

In its innovative and patented design, the Phibo® implant system incorporates advanced technological features, developed only for professionals who understand technology as an advantage and design as a benefit.

Phibo® complies with all the requirements established by European laws and guidelines relating to the manufacture and distribution of medical and health products. The Phibo® implant system is certified and authorized for sale by the corresponding European Notified Body. Phibo Dental Solutions, S.L. complies with the most rigorous international quality regulations for healthcare products, guaranteeing the perfect quality of its products, with the sole objective of constantly increasing customer satisfaction.

The use of other components or products not manufactured by Phibo Dental Solutions, S.L., that come into contact with the originals of the Phibo® implant system manufactured by Phibo Dental Solutions, S.L. according to the original design specifications, may cause serious damage to the patient's health as they are not contemplated for use with those referred to in the documentation provided by the manufacturer. Any use of non-original components or instruments indicated in this procedure, which come into contact with those referred to, will automatically void any type of warranty on the products manufactured by Phibo Dental Solutions, S.L.

The use and application of the Phibo® dental implant system is beyond the manufacturer's control. The user is responsible for any damages that may be caused by the use of the product, releasing Phibo Dental Solutions, S.L. from liability for damages or losses resulting from improper handling or use.

The reuse of single-use products may result in potential deterioration of their features, which involves the risk of tissue infection, surgical or prosthodontic failure, and/or deterioration of the patient's health.

Phibo® implant system documentation is periodically renewed according to the state of science and technology. Phibo® product users should request product information on a regular basis, in addition to attending regularly established product and technical training courses. The use and placement of Phibo® implants in unsuitable areas and the use of surgical instruments or prosthetic components not listed in this procedure can cause serious damage to the patient's health and total loss of product warranty. The Phibo® implant system is designed for teeth rehabilitation in a single or multiple way, according to the traditional clinical processes listed in this documentation, and cases with insufficient bone for implant placement, clinical risk cases such as sinus lift, fillings, advanced surgical techniques, unsuitable or severe cases of non-parallel implants, among others, are excluded from any warranty.

The Phibo® implant system is distributed internationally in different countries with different technical and health regulations and legislations, and there may be differences in the procedure content from one country to another. Please contact the exclusive Phibo® distributor in your country and request documentation regarding the products and their availability.

Phibo®, TSA®, TSH®, Avantblast®, ProUnic®, ProUnic Plus, are registered and/or commercial trademarks of Phibo Dental Solutions, S.L. Phibo® implants are protected by an international patent. Other products and accessories are protected by patents or patents pending.

Any illustrations that may appear in this document are not made to scale.

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INTRODUCTION

The objective of this Prosthodontic Procedure is to allow for a global view of all attachments, establishing the procedure for the different prosthodontic restorations that can be performed on the Phibo® TSA® implant system, both for clinical and laboratory use. From single cases, multiple cases, fixed prostheses and complete restorations to their different forms of connection: cement-retained, screw-retained and mixed.

With the Phibo® TSA® system, you can make multiple options available in current Implantology. The Phibo® TSA® implant system has a wide range of attachments that allow for simple and versatile prosthodontic restorations on implants, with solutions for aesthetic and functional components that guarantee a successful treatment for the patient.

Up to 7 different options are available for direct closed-tray or indirect open-tray impression taking, depending on the planning of the prosthesis to be restored.

Thanks to the unique design of the ProUnic® Advance Abutment, for Series 3, 4 and 5, precise retention is obtained with the connection to the TSA® implant by means of a single screw, with which we obtain greater prosthetic simplicity.

The availability of ProUnic Plus™ and ProUnic® ADVANCE attachments with different transmucosal heights, 1.00mm, 2.00mm and 3.00mm, allows us to adapt the emergence profile of the crown to adjacent natural teeth and soft tissue thickness.

For cases of angulation between implants greater than 10º in Series 3 and 14º in Series 4, and when the occlusal height from the implant is less than 5mm in full or partial restorations, the use of the rotation ProUnic® Aesthetic Abutment is recommended. For single implants, the use of the ProUnic® Aesthetic Anti-Rotation Abutment is recommended.

The Phibo® TSA® system has a range of millable abutments, with different heights and angulation for use in cement-retained prosthetic restorations.

The combination of these attachments in aesthetic and immediate loading processes with temporary prosthesis allows us to work safely throughout the rehabilitation process.

IMPLANT-DEPENDENT PROCEDURES AND PROSTHODONTIC RESTORATIONS

DIRECT IMMEDIATE AESTHETICS:

Temporary restoration without occlusal contact, performed in the same surgical procedure, after implant insertion. The temporary prosthesis is fabricated in the laboratory and relined at the clinic.

INDIRECT IMMEDIATE AESTHETICS:

Temporary restoration without occlusal contact, within 24 hours after implant insertion. Once the impression has been taken, the temporary prosthesis is fabricated, relined and adjusted in the laboratory.

DIRECT IMMEDIATE LOADING:

Temporary restoration with occlusal contact, performed in the same surgical procedure, after implant insertion. The temporary prosthesis is fabricated and relined at the clinic.

INDIRECT IMMEDIATE LOADING:

Temporary or permanent restoration with occlusal contact, within 24 hours after implant insertion. Once the impression has been taken, the temporary or permanent prosthesis is fabricated, relined and adjusted in the laboratory.

In the case of bar-retained overdentures, if indicated, a second adjustment of the overdenture will be performed in the mouth.

EARLY LOADING:

Temporary or permanent restoration with occlusal contact, after 6 weeks in the mandible and 8

weeks in the maxilla, from implant insertion Prosthetic process performed in the laboratory. The use of a primary stability measurement device is recommended in order to check if the values obtained are optimal for this technique.

DELAYED LOADING:

Temporary or permanent restoration with occlusal contact, after 3 months in the mandible and 6 months in the maxilla, from implant insertion. Prosthetic process performed in the laboratory.

FEATURES Phibo® TSA® ABUTMENTS

PROUNIC PLUS™

FEATURES.

ProUnic Plus™ abutments are machined from titanium and plastic.

Abutments and attachments are color-coded according to the series. It includes two abutment types:

· The assembly, ProUnic Plus™ abutment and screw, with one abutment per Phibo® TSA® Implant Series.

· The assembly, ProUnic transmucosal abutment and screw, with three abutments for Series 3 and 4 with transmucosal cylindrical smooth area with a height of 1, 2 and 3mm and one abutment of 1mm for Series 5, which allow to level the emergence height of the crown to adjacent natural teeth and soft tissue thickness.

The connection geometry of the ProUnic Plus™ transmucosal abutments (shoulder-abutment) to the prosthesis, is identical to that of the implant shoulder and ProUnic Plus™ Abutment, allowing us to use the same components to fabricate the prosthesis in all cases. The final fixation torque to the implant is 35N·cm.

The ProUnic Plus™ abutment, together with its transmucosal version, has a characteristic angulation in the upper cone for each implant series. For Series 3, the ProUnic Plus™ abutment features an upper cone that emerges at an angle of 5°, the Series 4 abutment emerges at an angle of 7°, and the Series 5 abutment emerges at an angle of 6°.

This angulation allows us to avoid non-parallel implants of the same Series, up to 10º in Series 3, 14º in Series 4 and 12º in Series 5.

INDICATIONS

· Base abutment to support single screw-retained crowns, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment to support partial or full, fixed screw-retained restorations, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment with short or long extension to support single cement-retained crowns, fabricated with the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment with short or long extension to support full and partial single fixed cement-retained restorations, fabricated with the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment to support bar-retained overdenture implants,

through conventional casting on the castable abutment.

PRECAUTIONS

· The procedure requires greater precision in the insertion of the implant in the intermediate rehabilitation processes and in the adjustments of the fabricated prosthesis.

· In cement-retained restorations, control the excess of cemented material since it is difficult to remove once it has set.

CONTRAINDICATIONS

· When the entry hole of the permanent clinical screw in the crown or bridge falls in areas of aesthetic compromise.

· For angulation between implants greater than 10º in Series 3 implants and 14º in Series 4 implants (in these cases the use of the ProUnic® ADVANCE Abutment or ProUnic® Aesthetic Rotation Abutment is recommended).

· In cases with occlusal spaces of less than 5 mm in screw-retained restorations (the ProUnic® Aesthetic Anti-Rotation Abutment is used instead for single units or the ProUnic® Aesthetic Rotation Abutment for bridges). In cement-retained restorations there must be an effective abutment height of 4mm, in order to obtain a sufficient prosthesis-abutment bonding surface (using the indicated cement).

COMPLEMENTARY PROUNIC PLUS™ ABUTMENT ATTACHMENTS:

· ProUnic Plus™ Abutment Carrier:

Instrument to hold the abutment and screw, transport it to the mouth and fix the abutment by manual tightening of the screw.

· Plastic cap for temporary units on ProUnic Plus™ Abutment:

Attachment for immediate temporary restorations on Prounic Plus™.

· Clinic and laboratory screw.

Clinical screw: For temporary and permanent fixation of screw-retained prosthesis.

Laboratory screw: For temporary fixation in clinical transfer and laboratory handling procedures.

· ProUnic Plus™ abutment protective cap:

It is used in both immediate restoration procedures and early or delayed restoration procedures. For shaping and healing of the soft tissue around the abutment and to prevent tissue collapse after surgery.

· Plastic impression carrier for ProUnic Plus™ Abutment:

Machined plastic attachment with mechanical click friction retention (NonStop™ System).

. Metal impression carrier for ProUnic Plus™ Abutment:

Machined titanium attachment with retention screw. Available for taking impressions using open or closed tray technique and for single or multiple restorations.

· ProUnic Plus™ analog:

One-piece analog of the implant + abutment assembly, used to transfer the implant-abutment position in the oral cavity to the laboratory working model. It is used in single restorations, and in multiple restorations when the lack of parallelism between implants does not exceed that of the abutments. In case of non-parallel implants, the ProUnic analog is substituted for the ProUnic

Plus™ for the TSA® + Duplit™ abutment implant analog as deemed necessary.

· ProUnic Plus™ Abutment Duplits™:

A Duplit™ is a permanent ProUnic Plus™ abutment analog. For use in:

- Clinic: as a trial attachment on TSA® Implant for the selection of the permanent abutment height.

- Laboratory along with the implant analog as: substitute for the permanent ProUnic Plus™ abutment that has been placed in the mouth on the implant, for handling during fabrication of the provisional or permanent prosthesis.

· In cases of non-parallel implants exceeding the angulations of the abutments in the laboratory working model.

- Castable abutments:

A distinction is made between castable abutments for screw-retained restorations and cement-retained restorations.

PROUNIC® ADVANCE® ABUTMENT

FEATURES

ProUnic Advance™ abutments are machined from titanium and plastic. Abutments and attachments are color-coded according to the series. It includes two abutment types:

· The ProUnic Advance Abutment and Phibo® TSA® implant screw assembly, with one abutment per implant Series.

· The ProUnic® Advance transmucosal abutment and Phibo® TSA® implant screw assembly, with three abutments for Series 3 and 4 with transmucosal cylindrical smooth area with a height of 1, 2 and 3mm and one abutment of 1mm for Series 5, which allow to level the emergence height of the crown to adjacent natural teeth and soft tissue thickness.

The connection geometry of the ProUnic Advance transmucosal abutments (shoulder-abutment) to the prosthesis, is identical to that of the implant shoulder and ProUnic® Advance Abutment, allowing us to use the same components to fabricate the prosthesis in all cases.

The final fixation torque to the implant is 35 N.cm.

The ProUnic® Advance abutment, together with its transmucosal version, has an angulation of 15º in the three series, series 3, series 4 and series 5, recommended to rectify greater non-parallelism.

INDICATIONS

· Base abutment to support single screw-retained crowns, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment to support partial or full, fixed screw-retained restorations, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment to support bar-retained overdenture implants, through conventional casting on the castable abutment.

PRECAUTIONS

· The procedure requires precision in the insertion of the implant in the intermediate rehabilitation processes and in the adjustments of the fabricated prosthesis.

CONTRAINDICATIONS

· When the entry hole of the permanent clinical screw in the crown or bridge falls in areas of aesthetic compromise.

PROUNIC® AESTHETIC.

FEATURES:

ProUnic® Aesthetic abutments are machined from titanium and plastic. Abutments and attachments are color-coded according to the series.

For handling, fastening and tightening, use a 1.00mm manual or mechanical driver. The

The ProUnic® Aesthetic range of products includes two abutment types:

PROUNIC® AESTHETIC ANTI-ROTATION ABUTMENT:

Two-component abutment (body and retention screw). The fixation torque to the implant is

25 N·cm Available for Phibo® TSA® implant Series 3 and 4. This abutment has an angulation of 7º at the emergence of the upper cone for the two Series. This angulation allows us to avoid non-parallel implants, up to 14º.

PROUNIC® AESTHETIC ROTATION ABUTMENT:

Single-component abutment. The fixation torque to the implant is 25 N·cm. Available for Series 3 and 4. This abutment has an angulation of 15º at the emergence of the upper cone for the two Series. This angulation allows us to avoid non-parallel implants, up to 30º.

INDICATIONS

PROUNIC® AESTHETIC ANTI-ROTATION ABUTMENT:

· When the occlusal height from the implant is less than 5 mm.

· Base abutment to support single screw-retained crowns, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

PROUNIC® AESTHETIC ROTATION ABUTMENT:

· When the occlusal height from the implant is less than 5mm.

· Base abutment to support full and partial single fixed screw-retained restorations, fabricated with the conventional anti-rotation and wax-up castable abutment technique.

CONTRAINDICATIONS

· When the position of the crown retention screw entry hole results in

aesthetic compromise.

COMPLEMENTARY PROUNIC® AESTHETIC ABUTMENT ATTACHMENTS:

· ProUnic® Aesthetic Anti-Rotation Abutment Carrier:

Instrument to hold the abutment and screw, transport it to the mouth and fix the abutment by manual tightening of the screw.

· Clinic and laboratory screw.

· Clinical screw: For temporary and permanent fixation of screw-retained prosthesis.

· Laboratory screw: For temporary fixation in clinical transfer and laboratory handling procedures.

· Duplits™ for ProUnic® Aesthetic anti-rotation and rotation abutments: A Duplit™ is a permanent ProUnic® Aesthetic abutment analog.

· Anti-rotation and Rotation Castable Abutments: For screw-retained restorations.

DUAL-PRESS™

FEATURES.

The Dual-Press™ Abutment is a temporary titanium abutment, supplied with its screw, with dual function: impression taking and temporary restoration using the Dual-Press™ plastic carrier. The fixation torque to the temporary implant is 25 N·cm.

The Dual-Press™ Abutment is machined from titanium.

The height of the Dual-Press™ abutment depends on the Phibo® TSA® Implant Series: Series 3: The height of the abutment body is 2.90mm and the height of the screw head is 2.00mm. Entire assembly of 4.90 mm.

Series 4: The height of the abutment body is 3.30mm and the height of the screw head is 2.00mm. Entire assembly of 5.90 mm. Series 5: The height of the abutment body is 3.60mm and the height of the screw head is 2.00mm. Entire assembly of 5.60 mm.

INDICATIONS

· Temporary dual-function base abutment:

· Base for impression taking.

· Base for a temporary restoration.

CONTRAINDICATIONS

· In cases with occlusal spaces smaller than 5 mm.

COMPLEMENTARY ATTACHMENTS:

· Dual-Press™ impression carrier and temporary unit:

Attachment for impression taking and temporary immediate restorations on the abutment.

MILLABLE ABUTMENTS.

FEATURES.

Millable Abutments are machined from titanium and plastic. It includes the following abutment types:

Millable non-shouldered abutment.

Millable shouldered abutment with 0.5 mm, 1.5 mm, 3mm shoulder. 15º and 25º angled millable abutment.

15º angled millable abutment with 1mm shoulder and 25º angled abutment with 1mm shoulder.

As the name suggests, Millable Abutments are designed to be milled and modified at the user's convenience for use in cement-retained restorations. They are supplied with an implant retention

screw, which is fixed with a torque of 35 N·cm.

INDICATIONS

· To level the emergence height of the crown to the adjacent natural teeth and soft tissue thickness (4 options).

· When the occlusal height from the implant is greater than 6mm.

· When it is necessary to adjust the height of the opposing arch and parallelize the insertion axis of the prosthesis.

· In fixed restorations with non-parallel implants exceeding 10° for Series 3 implants, 14° for Series 4 implants and 12° for Series 5 implants of Phibo® TSA®.

· In single or multiple restorations where, due to the position of the implant, the entry hole of the retention screw in a screw-retained prosthesis compromises the restoration aesthetics.

PRECAUTIONS

· Possible prolonged tissue response due to the used cement.

· Retention with prosthetic cement in extension.

· Less control of crown or bridge seating during the cementation process.

CONTRAINDICATIONS

· When the occlusal height from the implant platform is less than 4mm.

COMPLEMENTARY ATTACHMENTS:

· Castable Millable Non-shouldered Abutments: machined plastic attachment that faithfully reproduces the connection to the implant shoulder. For wax-up on Millable Non-shouldered Abutments.

BALL ABUTMENTS

FEATURES.

The Ball Abutment is a base abutment for the fabrication of mucosa-implant-supported overdenture restorations. The Ball Abutment is machined from titanium. The following Ball Abutment sizes are available for each Implant Series:

· TSA® Implant Series 3:

Abutments with 1.0mm, 3.0mm and 5.0mm transmucosal area.

· TSA® Implant Series 4: Abutments with 1.0mm, 3.0mm and 5.0mm transmucosal area. The final fixation torque to the implant is 35N-cm. Maximum allowable angulation: 30º between implants.

INDICATIONS

· Base abutment for the fabrication of mucosa-implant-supported ball-retained overdenture restorations, in the Mandibular area.

· In cases with significant deficit of the mandibular elastic bone mass, where the placement of implants for other types of rehabilitation involves a high risk of bone fracture.

RELATIVE CONTRAINDICATIONS

· In maxillary bone. As a greater number of implants have to be placed due to low bone density, the adjustment of the relines and overdenture to the abutment is more complicated.

· In all cases in which another type of rehabilitation is indicated.

· In restorations with more than two implants with severe non-parallelism (since inserting the prosthesis would be difficult).

COMPLEMENTARY ATTACHMENTS:

· Titanium O-ring cap:

An attachment that is integrated into the lower part of the overdenture and retains it to the implant when connected to the ball abutment. The element that provides the retention functionality between the cap and the abutment is a rubber O-ring seated inside the cap.

TEMPORARY RESTORATIONS ON PHIBO TSA® IMPLANTS

The objectives of temporary implant restoration are:

AESTHETIC OBJECTIVES

Creation of an appropriate emergence profile, which also depends on:

· The position of the implant.

· Depth.

· Emergence.

· Direction.

· Gingival biotype.

· Fine.

· Thick.

BIOLOGICAL OBJECTIVES

For the correct:

· Formation of a peri-implant sulcus.

· Biological seal formation.

· Organized bone apposition.

BIOMECHANICAL OBJECTIVES

With the prosthesis slightly infraoccluded and without lateralities, the objective is to achieve a progressive and controlled function of:

· The axial load.

· Bending.

FUNCTIONAL OBJECTIVES

· Functional adaptation of implants to load resistance, through the gradual modification of temporary crowns according to bone quality.

· Control of clinical and radiographic signs of the state of tissue maturation.

· For rehabilitation using a temporary prosthesis, the Phibo TSA® implant system has two alternatives for support:

· Restoration on ProUnic Plus™ and/or transmucosal abutments using Plastic Caps for temporary units with mechanical click and clinical screw retention system (NonStop™ System).

· Restoration on Dual-Press™ Abutment using an impression carrier and temporary unit with mechanical click and cement retention system (NonStop™ System).

In the case of the ProUnic Plus™ Abutment, the use of the Plastic cap for temporary units allows for temporary restoration on the potential permanent abutment.

In the case of the Dual-Press™ abutment, the use of the Dual-Press™ plastic impression carrier allows us to perform a temporary restoration as an option to the use of a permanent ProUnic Plus™ Abutment.

These immediate loading options allow the mechanical and functional adaptation of bone and soft tissue (emergence profile) from the moment the implant is inserted, as well as the adaptation of soft tissue to progressive loads and protection of the biological sealing.

If functional immediate loading is not indicated, a temporary aesthetic restoration is performed to promote biological soft tissue adaptation and sealing and early restoration of the immunological function of the soft tissue.

PHIBO TSA® TEMPORARY RESTORATIONS

ATTACHMENTS

· Temporary cap for Phibo® TSA® for temporary units machined from plastic material.

· ProUnic Plus™ machined titanium abutment for Phibo® TSA® implants.

GENERAL INDICATIONS

· Single and multiple fixed restorations.

APPLICABLE PROCEDURES

· Aesthetics and direct immediate loading.

· Indirect immediate loading.

OBJECTIVES

· Soft tissue remodeling to create an emergence profile suitable for rehabilitation.

· Stimulation of bone and mucosal tissue repair in immediate restorations, allowing mechanical adaptation, biological sealing, aesthetics and function of the peri-implant sulcus.

· Immediate and progressive mechanical adaptation of bone tissue to functional load, formation of more structured osteoid tissue and early remodeling according to functional needs.

CONTRAINDICATIONS

· Immediate loading is contraindicated when the biomechanics of temporary rehabilitation cannot be controlled in patients with joint or occlusal pathologies.

In those cases where the implant has been inserted at a torque lower than 35Nw.

RECOMMENDATIONS

· The treatment is carried out after adequate diagnosis and planning of the case.

PROUNIC PLUS™ AESTHETIC PROCEDURE AND DIRECT IMMEDIATE LOADING

DIRECT IMMEDIATE AESTHETICS

The objective of the treatment involves the placement of the temporary prosthesis without occlusal contact, in the same surgical procedure, after implant insertion.

DIRECT IMMEDIATE LOADING

The objective of the treatment involves the placement of the temporary prosthesis with occlusal contact, in the same surgical procedure, after implant insertion.

The preparation, relining and fitting of the temporary prosthesis is performed directly in the mouth. The temporary prosthesis is fabricated in the laboratory before surgery or directly in the mouth in special cases of short crowns and/or bridges.

CLINIC ATTACHMENTS, MATERIAL AND INSTRUMENTS

· ProUnic Plus™ abutment for Phibo® TSA® implants.

· ProUnic Plus™ abutment and/or ProUnic Plus™ transmucosal abutments with height of 1, 2 and 3mm for Phibo® TSA® implants.

· Cap for temporary units ProUnic Plus™ Abutment of Phibo® TSA® Implants.

· ProUnic Plus™ clinical screw for Phibo® TSA® implants.

· ProUnic Plus™ laboratory screw for Phibo® TSA® implants.

· ProUnic Plus™ abutment protective cap for Phibo® TSA® Implants

· Phibo® 1.25 mm driver.

· Phibo® 1.25mm ratchet driver bit

· Phibo® torque ratchet.

·*Self-curing resin for temporary units.

·*Mixing cup and syringe dispenser.

·*Laboratory pre-shaped resin crown or bridge, white or transparent.

*Instrument for modeling.

*Rotation cutting-roughing and polishing instrument for handpieces.

**MATERIAL NOT SUPPLIED BY Phibo®*

OPERATING PROCEDURE

SURGICAL SPLINT MANUFACTURE, TEMPORARY PROSTHESIS.

- Perform a diagnostic wax-up on the models mounted on a semi-adjustable articulator.

- Using this wax-up as a reference, fabricate the transparent surgical splint and the temporary prosthesis.

- Drill holes in the surgical splint to guide the placement of the implants.

- Drill the holes on the occlusal side of the prosthesis for the passage of clinical and laboratory screws.

PLACEMENT OF PROUNIC PLUS™ ABUTMENT AND PROTECTIVE CAP.

- Select the appropriate ProUnic Plus™ abutment. Use ProUnic Plus™ Abutment Duplits™ to choose the appropriate one for the thickness of the gingival tissue and occlusal emergence plane.

- Fix the ProUnic® Plus retention screw with a 1.25mm manual driver and pass it through the coronal hole in the abutment until it protrudes at the end.

- Insert the assembly into the ProUnic Plus™ abutment carrier and retain it by mechanical

friction by applying light pressure.

- Position the ProUnic Plus™ abutment on the implant by engaging the hexagons, adjusting them with small turns. Tighten the screw manually.

- Remove the ProUnic Plus™ Abutment carrier.

- Tighten the abutment screw with a force of 25 N-cm (since this is a temporary restoration)

with the torque wrench and the 1.25mm bit.

- Place the protective cap on the ProUnic Plus™ Abutment and suture around it. The cap help shape and separate the soft tissue, thus preventing it from collapsing.

PLASTIC PROTECTIVE CAP HANDLING:

The plastic protective cap is positioned on the Prounic Plus™ abutment or transmucosal abutments, with the 1.25mm clinical driver, by matching the active hexagonal tip of the driver with the hexagonal socket of the protection cap until you hear a click from the retention system, NonStop™ System. The assembly is brought into the oral cavity and fixed to the abutment by applying light occlusal-gingival pressure and clockwise and counterclockwise rotation. To remove the cap, a clinical probe is passed through one of the four circumferential orifices until it comes out of the opposite orifice. From here, and by applying a slight lever in the opposite direction to the active tip of the probe, the cap is easily detached and removed from the oral cavity using the probe.

INSERTION OF PLASTIC CAP FOR TEMPORARY UNITS.

- Manually insert the cap for temporary units (temporary restoration support) into the ProUnic Plus™ or transmucosal abutment, check the fit between hexagons, apply light finger pressure on the coronal plane of the cap until the mechanical click retention of the abutment is activated, NonStop™ System.

- Check the stability of the cap.

- Pass the laboratory screw through the cap and thread it by hand as much as possible, thus achieving a double click and screw retention. The position of the laboratory screw allows us to check the insertion axis of the temporary prosthesis and the location of the entry hole of the clinical screw.

PROSTHESIS ADAPTATION

Insert the temporary prosthesis through the laboratory screw through the perforation performed at occlusal level (for molars and premolars) or palatine/lingual level (for incisors and canines), up to the level of the outer cone of the implant, cap and gum. Readjust the prosthesis and positioner to eliminate

any interference.

- Occlusal adjustment until the desired height is achieved.

RELINE AND PLACEMENT OF PROSTHESIS.

It is advisable to use a rubber dam to avoid contact between impression materials and soft tissue.

- Remove the prosthesis, dry it well and apply a thin layer of acrylic inside the crown and around the cap.

- Apply petroleum jelly around the prosthesis and surgical splint in the reline areas to prevent adhesions.

- Insert the prosthesis with the laboratory screw and remove excess material before it sets. It is advisable to turn the screw to prevent it from sticking to the resin. If gaps appear between the prosthesis and the screw, reline it again.

- Remove the screw and prosthesis manually once the material has set, applying slight axial force with a crown and bridge extractor.

Remove excess material and proceed with the final remodeling and polishing of the prosthesis to allow soft tissue healing and formation of the emergence profile.

- Insert the prosthesis in the mouth with light pressure until you feel the retention anchorage, NonStop™ System.

- Screw the permanent with the permanent clinical screw, with manual torque.

- Check the occlusion to ensure that there is no occlusal contact for Immediate Aesthetics, or make the appropriate occlusal adjustments for Immediate Loading.

- Apply petroleum jelly to the hole in the prosthesis; protect the screw with cotton and cover it with temporary sealing material.

Note: When placing the permanent prosthesis, the permanent ProUnic Plus™ abutment initially worn by the patient with the temporary prosthesis will be replaced by the selected permanent ProUnic Plus™ Abutment or by another suitable abutment.

PROUNIC PLUS™ AESTHETIC PROCEDURE AND INDIRECT IMMEDIATE LOADING

The procedure objective is the placement of a temporary restoration with occlusal contact, within 24 hours after implant insertion.

INDICATIONS

When, due to its technical difficulty, the adaptation of the prosthesis made before the intervention has to be performed in the laboratory.

When, for any reason, the temporary prosthesis has to be made in the laboratory after surgery.

ATTACHMENTS, MATERIAL, AND INSTRUMENTS

CLINIC

· ProUnic Plus™ carrier for Phibo® TSA® implants.

· ProUnic Plus™ abutment and/or ProUnic Plus™ transmucosal abutments with height of 1, 2 and 3mm for Phibo® TSA® implants.

· Phibo® 1.25 mm driver.

· Phibo® 1.25mm ratchet driver bit

· Phibo® torque ratchet.

· ProUnic Plus™ Abutment Plastic impression carrier for Phibo® TSA® implants.

. ProUnic Plus™ Abutment metal impression carrier for Phibo® TSA® Implants.

· ProUnic Plus™ abutment protective cap for Phibo® TSA® Implants.

LABORATORY

· ProUnic Plus™ analog for Phibo® TSA® implants.

· ProUnic Plus™ and transmucosal ProUnic Plus™ Duplits™ for Phibo® TSA® implants.

· TSA® implant analog.

· ProUnic Plus™ temporary cap for Phibo® TSA® Implants.

· ProUnic Plus™ clinical screw for Phibo® TSA® implants.

· ProUnic Plus™ laboratory screw for Phibo® TSA® implants.

· Phibo® 1.25 mm driver.

·*Self-curing resin for temporary units.

·*Mixing cup and syringe dispenser.

·*Laboratory pre-shaped resin crown or bridge, white or transparent.

-*Modeling instrument.

·*Rotation cutting-roughing and polishing instruments for handpieces (burs, discs, abrasive rubbers, etc.)

**MATERIAL NOT SUPPLIED BY Phibo®*

OPERATING PROCEDURE

AT CLINIC

- Select the appropriate ProUnic Plus™ abutment. Use the ProUnic Plus™ Abutment Duplits™ to choose the appropriate one for the gingival tissue thickness and occlusal emergence plane.

- Fix the ProUnic Plus™ retention screw with a 1.25mm manual driver and pass it through the coronal hole in the abutment until it protrudes at the end.

- Insert the assembly into the ProUnic Plus™ abutment carrier and retain it by

mechanical friction by applying light pressure.

- Position the ProUnic Plus™ abutment on the implant by engaging the hexagons, adjusting them with small turns. Tighten the screw manually.

- Remove the ProUnic Plus™ Abutment carrier.

- Fix the impression carrier on the ProUnic Plus™ Abutment and suture around it. The impression carrier shapes and separates the soft tissue, preventing it from collapsing.

- Take the impression. It is advisable to use rubber dams to prevent silicone from contacting the suture. See impression taking procedure.

- Remove the tray with the impression carrier. Cover the ProUnic™ Abutment with the protective cap

to prevent the soft tissue from collapsing while the prosthesis is being fabricated in the laboratory.

LABORATORY

- Attach to the impression carrier retained in the impression

- ProUnic Plus™ analog.

- ProUnic™ or transmucosal Duplit™ left in the mouth, attached to an implant analog.

INDICATIONS ON ANALOGUES:

The ProUnic Plus™ abutment analog is suitable for modeling temporary or permanent restorations where:

· The gingiva that makes up the emergence profile of the temporary or permanent crown is not expected to show signs of recession.

· Non-parallelism is lower than that achieved by the sum of the angles of two adjacent or distant ProUnic Plus™ abutments. 10° for Series 3, 14° for Series 4 and 12° for Series 5.

The ProUnic Plus™ or transmucosal Duplit™, together with the implant analog, is indicated

to transfer exactly the type of ProUnic Plus™ Abutment that the patient is wearing in the mouth to the model, in cases where:

· The level of final gingival positioning is not predictable.

· In cases of non-parallelism between implants greater than that achieved by the sum of the angles of two adjacent or distant ProUnic Plus™ abutments.

- In cases where a permanent transmucosal abutment is used on the implant for the temporary restoration, the use of the transmucosal abutment Duplit™ on the implant analog allows us to replace the transmucosal Duplit™ with the Duplit™ suitable for the fabrication of permanent restoration, in cases of gingival recession. The choice of the permanent abutment can also be made directly in the mouth at the time of preparing the permanent restoration.

IMPRESSION MOLDING

- Once the selected analog (ProUnic Plus™ analog or ProUnic Plus™ TSA® + ProUnic Plus™ Duplit™ implant analog) has been positioned on the ProUnic Plus™ abutment impression transfer, the impression is poured with plaster or plaster cast to make the working model. We recommend the use of silicone gums or gingival masks around the analog to observe and ensure the perfect fit of attachments and prostheses, simulating soft tissue.

- Once the plaster has set, the model is removed, prepared, conditioned and mounted on the articulator using the records taken. This model can be used to prepare temporary units and to manufacture the permanent prosthesis.

MANUFACTURE AND ADJUSTMENT OF TEMPORARY PROSTHESIS IN LABORATORY

- Position the Temporary Cap on the ProUnic Plus™ analog or TSA® implant analog + Duplit™ and check the fitting between hexagons. Apply light pressure with the finger until the mechanical retention is exceeded.

- Apply coronal pressure until you hear the activation of retention system, Non-Stop™ system.

- Check that the temporary cap is stable and still in this position and perfectly seated on the ProUnic Plus™ analog or TSA® implant analog plus Duplit™.

Pass the screw through the Temporary Cap. Thread it by manual torque to the analog. The position of the laboratory screw allows us to check the insertion axis of the temporary prosthesis and the location of the entry hole of the clinical screw.

- Occlusal adjustment of the cap until the desired height is achieved.

- Fabricate the temporary prosthesis using standard laboratory techniques.

CLINIC

- Place the prosthesis in the mouth applying sufficient pressure to reach the final position for adjustment through the NonStop™ System, pass the clinical screw.

- Adjust the occlusion so that there are functional contacts.

- Apply petroleum jelly to the hole in the prosthesis; protect the screw with cotton and cover it with temporary sealing material.

Note: When placing the permanent prosthesis, the permanent ProUnic Plus™ abutment initially worn by the patient with the temporary prosthesis will be replaced by the selected permanent ProUnic Plus™ Abutment or by another suitable abutment.

DUAL-PRESS™ AESTHETIC PROCEDURE AND DIRECT IMMEDIATE LOADING

FEATURES

- Dual-Press™ machined titanium abutment for Phibo® TSA® Implants.

- Dual-Press™ machined plastic impression carrier for Phibo® TSA® implants.

APPLICABLE PROCEDURE

· Aesthetics and Direct Immediate Loading.

GENERAL INDICATIONS

- Generally, in those cases where an immediate, early or delayed temporary prosthesis is indicated, but the use of the Temporary Plastic Cap on ProUnic Plus™ Abutment is contraindicated.

· When the entry hole of the clinical retention screw results in aesthetic compromise.

- When non-parallel implants exceed 10º for Series 3, 14º for Series 4 and 12º for Series 5.

OBJECTIVES

· Soft tissue remodeling through the preparation of an emergence profile suitable for rehabilitation.

· Stimulation of tissue repair in immediate restorations, allowing mechanical adaptation, biological sealing, aesthetics and function of the peri-implant sulcus.

· Immediate and progressive mechanical adaptation of bone tissue to functional load, formation of more structured osteoid tissue and early remodeling according to functional needs.

RELATIVE CONTRAINDICATIONS

· When the biomechanics of temporary restoration cannot be controlled in patients with joint and/or occlusal pathologies.

· In those cases where the implant has been inserted at a torque lower than 35Nw.

· In all cases where the ProUnic Plus™ Abutment is used.

RECOMMENDATIONS

· The treatment is carried out after adequate diagnosis and planning of the clinical case.

ATTACHMENTS, MATERIAL, AND INSTRUMENTS

CLINIC

· Dual-Press™ abutment for Phibo® TSA® Implants.

· Dual-Press™ impression carrier for Phibo® TSA® implants.

· Phibo® 1.25 mm driver.

·*Self-curing resin for temporary units.

·*Mixing cup and syringe dispenser.

-*Temporary or transparent crown preformed in the laboratory.

-*Modeling instrument.

·*Rotation cutting-roughing and polishing instruments for handpieces (Burs, discs, abrasive rubbers, etc.)

**MATERIAL NOT SUPPLIED BY Phibo®*

AESTHETIC PROCEDURE AND DIRECT IMMEDIATE LOADING

CLINIC

The objective of treatment is the placement of a temporary restoration within 1 to 3 hours after implant insertion.

POSITIONING THE DUAL-PRESS™ TITANIUM ABUTMENT.

- Attach the 1.25 mm fixed driver to the conical head of the retention screw. Pass the screw through

The abutment body, turning it with the driver to pass the internal thread of the abutment body until the screw protrudes at the lower end.

- Thread the screw and abutment assembly to the implant, matching the abutment edges to the hexagons of the implant.

- Screw by hand until the end of the thread is reached.

PLACEMENT OF THE DUAL-PRESS™ IMPRESSION CARRIER

IMPRESSION TAKING

- Position the Dual-Press™ impression carrier on the titanium abutment by applying

occlusal-gingival pressure until you hear a click, Non-Stop ™ System. Check that the hexagons of the Dual-Press™ impression carrier and abutment have engaged by turning them clockwise and counterclockwise.

ADAPTATION AND PLACEMENT OF TEMPORARY PROSTHESIS

- Once the carrier has been positioned on the abutment, mark the level where it will be cut, both in the occlusal-gingival direction and on the mesial or distal side (in case of convergent non-parallelism), to accommodate the prosthesis previously made or a premanufactured polycarbonate crown.

- Remove the plastic from the oral cavity and cut at the desired height with a disc. Reshape the side faces if necessary. Make small horizontal and vertical retentions to retain the acrylic relining material.

- Place the plastic over the titanium abutment and dry it.

- Reline the prosthesis with acrylic.

- Remove excess material before setting.

- Remove the prosthesis-plastic assembly once the relining material has set.

- Remove remaining excess material and polish with rotating instruments.

- Attach the prosthesis to the abutment by click, NonStop™ System, and temporary cement.

- Check the occlusion to ensure that there is no occlusal contact for Immediate Aesthetics, or make the appropriate occlusal adjustments for Immediate Loading.

Phibo® TSA® IMPRESSION TAKING
TRANSFER TO MODEL

The Phibo TSA® system has attachments to register the position of the implant in the oral cavity and to take the impression either for a direct closed-tray technique or an indirect open-tray technique.

ATTACHMENTS FOR IMPRESSION TAKING

The Phibo TSA® system offers 7 systems for transferring the implant position in the mandibular or maxillary bone to the laboratory plaster working model:

· Direct impression taking on ProUnic Plus™ abutment previously fixed on the implant with the Plastic impression carrier on ProUnic Plus™ Abutment (Closed-tray).

. · Direct impression taking on ProUnic Plus™ abutment previously fixed on the implant with the Anti-rotation metal impression carrier on ProUnic Plus™ Abutment (Open-tray).

. · Direct impression taking on ProUnic Plus™ abutment previously fixed on the implant with the Rotation metal impression carrier on ProUnic Plus™ Abutment (Open-tray).

. · Direct impression taking on ProUnic Plus™ abutment previously fixed on the implant with the

Rotation metal impression carrier on ProUnic Plus™ Abutment (Closed-tray).

Direct impression taking of implant without permanent abutment, with:

· Metal impression carrier for the Open-tray technique.

. · Metal impression carrier for the Closed-tray technique.

· Dual-Press™ impression carrier and temporary unit (Closed-tray).

IMPRESSION TAKING. PROUNIC PLUS™ CARRIER

FEATURES

Available in two materials: plastic and metal.

· Plastic that is adjusted through the friction retention system on the ProUnic Plus™ Abutment, NonStop™ System. Designed for optimal retention and transfer.

. Titanium that is positioned on the ProUnic Plus™ Abutment. Designed for optimal retention and transfer.

USE

Transfer the implant and ProUnic Plus™ Abutment from the oral cavity to the working model,

without removing the ProUnic Plus™ Abutment from the mouth.

INDICATIONS

Whenever a ProUnic Plus™ Abutment is in place.

CONTRAINDICATIONS

Severe non-parallelism.

RECOMMENDATIONS

The fit must be checked when the abutment platform is subgingival.

· Anti-rotation testing of the ProUnic Plus™ plastic impression carrier is recommended.

ATTACHMENTS AND MATERIAL

CLINIC

· ProUnic Plus™ carrier for Phibo® TSA® implants.

· ProUnic Plus™ abutment for Phibo® TSA® implants.

· ProUnic Plus™ Abutment plastic or metal impression carrier for Phibo® TSA® implants.

· ProUnic Plus™ abutment protective cap for Phibo® TSA® Implants.

· Phibo® 1.25 mm driver.

*Standard or customized tray.

·*Impression material.

·*Exploration probe.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· ProUnic Plus™ analog for Phibo® TSA® implants.

· ProUnic Plus™ and transmucosal ProUnic Plus™ Duplits™ for Phibo® TSA® implants.

· TSA® implant analog

· Phibo® 1.25 mm driver.

OPERATING PROCEDURE

CLINIC

- Remove the healing abutment.

- Select the appropriate ProUnic Plus™ abutment. Use the ProUnic Plus™ Abutment Duplits™ to choose the appropriate one for the gingival tissue thickness and occlusal emergence plane.

- Fix the ProUnic Plus™ retention screw with a 1.25mm manual driver and pass it through the coronal hole in the abutment until it protrudes at the end.

- Insert the assembly into the ProUnic Plus™ abutment carrier, applying slight pressure to secure them through mechanical friction retention.

- Position the ProUnic Plus™ abutment on the implant by engaging the hexagons, adjusting them with small turns. Tighten the screw manually.

- Remove the ProUnic Plus™ Abutment carrier.

- Tighten ProUnic Plus™ abutment screw by applying a force of 25 N·cm using the torque wrench and the 1.25 mm ratchet tip.

- Attach the impression carrier of the ProUnic Plus™ Abutment by occlusal-gingival pressure and twist until you hear a click, NonStop™ system. Check the fit with the outer cone of the implant.

- Reduce the occlusal height of the carrier if necessary by cutting the first or second "T" with a disc or bur, leaving the third "T" as vertical retention for the impression material.

- In case of non-parallel adjacent implants preventing the entry of the carrier, trim as necessary without touching the abutment connection.

- Air dry the impression carrier.

- Apply liquid impression material around the impression carrier and below the “T”.

- Immediately insert the tray into your mouth with the impression material.

- Remove the tray once the material has set, by dragging the carrier.

- Place the protective cap on the ProUnic Plus™ Abutment and implant shoulder.

Materials required for laboratory:

- Impression taken with the Impression Carrier for the ProUnic Plus™ Abutment.

- ProUnic Plus™ analog or implant analog and Duplit™ for ProUnic Plus™ Abutments.

- Bite registration.

- Opposing arch model (or opposing arch model impression).

LABORATORY

- Place the analogues to the impression carrier on the ProUnic Plus™ Abutment. Analog options:

· ProUnic Plus™ analog.

- The Phibo TSA® implant analog and ProUnic Plus™ or Transmucosal abutment Duplit™ assembly.

Technical note:

Indications for use of ProUnic Plus™ analogues and Duplits™ of ProUnic Plus™ and transmucosal abutments.

· The ProUnic Plus™ analog is suitable for preparing those temporary or permanent restorations in the model where the gum that makes up the emergence profile of the temporary or permanent crown does not have signs of recession.

The ProUnic Plus™ or transmucosal Duplit™ together with the implant analog are indicated to transfer exactly the type of ProUnic Plus™ abutment that the patient is wearing in the mouth to the model, in cases where:

· The level of final gingival positioning is not predictable.

· In cases of non-parallelism between implants or between implants and adjacent teeth greater than

that achieved by the sum of the angles of two ProUnic Plus™ abutments.

- For the fabrication of the permanent prosthesis, the use of the transmucosal abutment Duplit™ in the patient's mouth, allows it to be replaced in the working model, by the Duplit™ appropriate to the height of the soft tissue that has finally remained after its healing period or by a millable abutment in cases of non-parallel implants. The choice of the permanent abutment can also be made directly in the mouth.

- Pour gingival mask into the soft tissue area and wait for it to set.

- Pour plaster into the rest of the tray to get the working model.

- Remove the model from the impression.

- Cut out and condition the model.

- Mount the models on a semi-adjustable articulator.

Examine:

· Implant and abutment position (angulation and parallelism).

· Available spaces and dimensions. A laboratory aid is the distance-to-implant indicator.

Phibo TSA® or planning gauges. Its design helps check the available space by determining the ideal distance that should exist between the center of the implant towards the mesial and distal contact points, and the future restoration with respect to the adjacent crown or implant.

· Soft tissue height from the implant shoulder to the free gingival margin, for emergence profile preparation.

- Type of opposing arch.

- With the information obtained, choose the appropriate attachments to fabricate the prosthesis.

IMPRESSION TAKING. METAL CARRIERS.

FEATURES

- Titanium attachments.

. Open-tray carrier.

. Closed-tray carrier.

(The blister contains the carrier, according to the chosen technique, and the corresponding retention screw).

USE

· Implant Direct Impression.

· In cases of severe non-parallelism between implants or between implants and teeth, impressions are taken with open-tray and a long retention screw.

· In cases of parallelism between implants or between implants and teeth, impressions can be taken with closed-tray and a short retention screw.

INDICATIONS

· In cases of visibly non-parallel implants.

· In all cases where accurate planning of the abutment type is not possible.

RELATIVE CONTRAINDICATIONS

· When the use of the ProUnic Plus™ Abutment has been planned.

- When placement of a temporary structure on the Dual- Press™ Abutment is indicated. When the distance and angulation between implants does not allow for the use of the metal carrier.

RECOMMENDATIONS

· The procedure for placing and fixing the impression carrier on the implant must be followed.

· In case of significant tissue thickness, it is advisable to perform an X-Ray to monitor the placement of the carrier onto the implant shoulder.

ATTACHMENTS AND MATERIAL

CLINIC

· TSA® standard metal impression carrier for Open-tray technique or TSA® standard metal impression carrier for Closed-tray technique .

· Phibo® 1.25 mm driver.

.*Single tray.

·*Impression material.

·*Impression material adhesive.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· TSA® implant analog.

· ProUnic Plus™ Duplits™ for Phibo® TSA® implants.

· Duplits™ ProUnic Plus™ Short or Long extensions for Phibo® TSA® implants.

· ProUnic® Aesthetic Duplits™ for Phibo® TSA® implants.

· Phibo® 1.25 mm driver.

· Phibo® 1.00 mm driver.

OPERATING PROCEDURE

CLINIC

- Remove the healing abutment.

- Select the impression taking technique (open or closed tray) and, therefore, the type of metal impression carrier. Attach the 1.25mm driver to the retention screw. Pass it through the carrier until it protrudes at the bottom end.

- Attach the carrier and screw assembly to the implant head and manually tighten the retention screw.

- Check the stability of the carrier by moving it clockwise and counterclockwise.

- Check the adjustment of the carrier on the implant using a periapical radiograph.

- Air dry the carrier.

- Apply the impression material around the carrier.

- Insert the tray into the mouth with the rest of the impression material and wait for it to set.

- Open-tray technique: Remove the set screw and drag the tray with the carrier body.

- Closed-tray technique: Remove the tray directly once the impression material has set and remove the impression carrier from the implant.

- Place the healing abutment.

Materials required for laboratory:

- Impression record.

- Impression carrier with retention screw.

- Implant analog.

- Bite registration.

- Opposing arch model.

LABORATORY

- Open-tray technique: Place the implant analog on the body of the carrier retained in the impression material and secure it with the long retention screw.

- Closed-tray technique: Attach the implant analog to the carrier using the short screw. Insert the assembly into the tray by matching the flat faces, apply light pressure until you hear the retention click.

- Pour gingival mask into the soft tissue area and wait for it to set.

- Pour plaster into the rest of the tray to get the final working model.

- Open-tray technique: Once the plaster has hardened, remove the retention screw and detach the model.

- Closed-tray technique: Once the plaster has hardened, separate the model from the tray and remove the metal impression carrier by loosening the retention screw.

- Condition and place the model on the semi-adjustable articulator. Use the records taken before surgery.

Examine:

- Implant position (angulation and parallelism).

· Available spaces and dimensions. A laboratory aid is the distance-to-implant indicator.

Phibo TSA® or planning gauges. Its design helps check the available space by determining the ideal distance that should exist between the center of the implant towards the mesial and distal contact points, and the future restoration with respect to the adjacent crown or implant.

· Soft tissue height from the implant shoulder to the free gingival margin, for emergence profile preparation.

- Type of opposing arch.

With the information obtained, choose the optimal abutments to fabricate the prosthesis and the necessary attachments to manufacture the prosthesis in the laboratory.

IMPRESSION TAKING. DUAL- PRESS™ CARRIER

FEATURES

- Dual-Press™ titanium abutment.

- Machined plastic impression carrier and temporary unit on the Dual-Press™ Abutment.

USE

The abutment (as support) and Dual-Press™ plastic assembly are used for:

· Transferring the implant to the working model.

· Making a temporary prosthesis.

INDICATIONS

· Temporary crowns or bridges (fabricated on Dual-Press™ Plastic Carrier)

. When you want to create an emergence profile with a temporary prosthesis and you have not been able to plan the type of abutment for the permanent prosthesis.

- When the closed-tray technique cannot be used with other transfer attachments, due to the position and parallelism of the implants.

- In cases with convergent non-parallelism between adjacent implants, where the placement of the metal carrier is not possible, and the Dual-Press™ carrier modeling allows for impression taking on the implant.

RELATIVE CONTRAINDICATIONS

In all cases where the use of ProUnic Plus™ Abutment is indicated and planned.

RECOMMENDATIONS

Before relining the temporary prosthesis, perform mechanical retentions on the plastic to increase the retention of the polymerizable resin.

ATTACHMENTS AND MATERIAL

CLINIC

· Dual-Press™ abutment for Phibo® TSA® Implants

· Dual-Press™ impression carrier for Phibo® TSA® implants

· Phibo® 1.25 mm driver.

*Standard or customized tray.

·*Impression material.

·*Impression material adhesive.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· Dual-Press™ abutment for Phibo® TSA® Implants.

· TSA® implant analog.

· ProUnic Plus™, transmucosal, aesthetic Duplits™ and Phibo® TSA® implant extensions.

· Phibo® 1.25 mm driver.

· Phibo® 1.00 mm driver.

OPERATING PROCEDURE

CLINIC

- Remove the healing abutment.

- Attach the 1.25 mm fixed driver to the conical head of the retention screw. Pass the screw through the abutment body, turning it with the driver to pass the internal thread of the abutment body until the screw protrudes at the lower end.

- Thread the screw and abutment assembly to the implant, matching the abutment edges to the hexagons of the implant.

- Screw by hand until the end of the thread is reached.

- Position the Dual-Press™ impression carrier on the titanium abutment by applying occlusal-gingival pressure until you hear a click, Non-Stop ™ System. Check that the hexagons of the Dual-Press™ impression carrier and abutment have engaged by turning them clockwise and counterclockwise.

- Reduce the occlusal height of the carrier if necessary by cutting the first and second "T" with a disc or bur, leaving the third "T" as retention for the impression material.

In case of convergent non-parallelism between adjacent implants that would prevent the placement of carriers due to contact, trim as necessary on both plastic carriers without affecting the abutment connection base.

- Air dry the Dual-Press™ impression carrier.

- Apply liquid impression material around the carrier and below the “T”.

- Insert the tray into your mouth with the impression material.

- Once the material has set, remove the tray by dragging the Dual-Press™ impression carrier.

- Remove the Dual-Press™ abutment from the Phibo® TSA® implant.

- Place the healing abutment by manual torque.

Materials required for laboratory:

- Impression record.

- Dual-Press™ abutment with Phibo® TSA® implant retention screw.

- Dual-Press™ impression carrier for Phibo® TSA® implants.

- TSA® implant analog.

- Bite registration.

- Opposing arch model.

LABORATORY

- Screw a Dual-Press™ Abutment to the implant analog and insert the assembly to the Dual-Press™

carrier retained in the impression material until you hear the activation of retention system.

- Verify the final position on the implant shoulder.

- Pour gingival mask into the soft tissue area.

- Pour plaster into the rest of the tray to get the working model.

- Remove the model from the tray and remove the Dual-Press™ Abutment from the TSA® implant analog.

- Cut out and condition the model.

- Mount the models in semi-adjustable articulator, using the records taken before surgery.

- With the data obtained, examine:

· Implant and abutment position (angulation and parallelism).

· Available spaces and dimensions. A laboratory aid is the Phibo TSA distance-to-implant indicator or planning gauges. Its design helps check the available space by determining the ideal distance that should exist between the center of the implant towards the mesial and distal contact points, and the future restoration with respect to the adjacent crown or implant.

· - Soft tissue height from the implant shoulder to the free gingival margin, for emergence profile preparation.

· Type of opposing arch.

- With the information obtained, choose the optimal abutments to fabricate the prosthesis.

PROUNIC PLUS™

FEATURES

ProUnic Plus™ abutment and Transmucosal machined titanium abutments. Supplied together with the Abutment retention screw. Screw tighten with a torque of 35 N·cm.

INDICATIONS

As a base abutment to support:

· Plastic protective cap.

· Single crowns in general, manufactured with the conventional Anti-rotation and wax-up castable abutment technique, using an Anti-Rotation Castable Abutment.

· Partial intercalary or free-end fixed restorations, fabricated with the conventional rotation and wax-up castable abutment technique, using a Rotation Castable Abutment.

· Full fixed restorations on 6 - 8 implants in the mandible, fabricated with the conventional rotation and wax-up castable abutment technique, using a Rotation Castable Abutment.

· Total fixed restorations on 8 implants in the maxilla, fabricated with the conventional rotation and

wax-up castable abutment technique, using a Rotation Castable Abutment.

· Full removable restorations through a mucosa-implant-supported ball-retained overdenture attached to implants, 2-4 in the mandibular area and 4 to 6 in the maxillary area, manufactured with the conventional wax-up castable abutment technique, using a Rotation Castable Abutment.

· When, due to clinical or aesthetic circumstances, the patient's treatment protocol includes the removal of the crown or bridge for maintenance or a change of prosthesis.

· When an easier recovery of the prosthesis is necessary.

CONTRAINDICATIONS

· When the entry hole of the retention screw in the crown or bridge falls in areas of aesthetic compromise, due to implant inclination.

- In case of angulation between implants exceeding 10º for Series 3 and 14º for Series 4, in partial or full restorations, the Aesthetic Rotation Abutment will be used instead.

- When there are complications to fabricate the structure.

- In cases where the occlusal height from the implant is less than 5 mm, the Aesthetic Anti-rotation Abutment is used for single units or the Aesthetic Rotation Abutment is used for bridges.

PRECAUTIONS

Accuracy of implant placement

PROUNIC PLUS™ TRANSMUCOSAL ABUTMENT LEVELING AND EMERGENCE OPTIONS

· Transmucosal abutments of 1, 2 and 3 mm in height.

FEATURES

· Machined titanium. Smooth transition are in

transmucosal abutments.

· Three heights of mucosal transition area, which enables three options to level the emergence height of the crown.

· Configuration of the prosthesis from the smooth transition area in the transmucosal abutments and from the implant shoulder in the ProUnic Plus™ Abutment, using the same components to fabricate the prosthesis, in all cases.

INDICATIONS

· Level the emergence profile of the crown to the adjacent natural teeth and soft tissue thickness.

· Other indications for the ProUnic Plus™ Abutment.

ATTACHMENTS AND MATERIAL

CLINIC

· ProUnic Plus™ and/or Transmucosal abutments for Phibo® TSA® implants.

· ProUnic Plus™ carrier for Phibo® TSA® implants.

· ProUnic Plus™ Abutment impression carrier for Phibo® TSA® implants.

· ProUnic Plus™ abutment protective cap for Phibo® TSA® implants

· Phibo® 1.25 mm manual driver.

· Phibo® 1.25mm ratchet driver bit

· Phibo® torque ratchet.

·*Scanning probe.

·*Impression material.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· ProUnic Plus™ analog for Phibo® TSA® implants.

· TSA® Implant Analog + ProUnic Plus™ Duplits™ for Phibo® TSA® implants

· ProUnic Plus™ anti-rotation screw-retained castable abutment for Phibo® TSA® implants.

· ProUnic Plus™ rotation screw-retained castable abutment for Phibo® TSA® implants.

· ProUnic Plus™ clinical screw for Phibo® TSA® implants.

· ProUnic laboratory screw for Phibo® TSA® implants.

OPERATING PROCEDURE

CLINIC

PLACING THE PROUNIC PLUS™ ABUTMENT ON THE IMPLANT

- Remove the healing abutment.

- Select the appropriate ProUnic Plus™ abutment. Use ProUnic Plus™ Abutment Duplits™ to choose the appropriate one for the thickness of the gingival tissue and occlusal emergence plane.

- Fix the ProUnic Plus™ retention screw with a 1.25mm manual driver and pass it through the coronal hole in the abutment until it protrudes at the end.

- Insert the assembly into the ProUnic Plus™ abutment carrier and retain it by mechanical

friction by applying light pressure.

- Position the ProUnic Plus™ abutment on the implant by engaging the hexagons, adjusting them with small turns. Tighten the screw manually.

- Remove the ProUnic Plus™ Abutment carrier.

- Tighten ProUnic Plus™ abutment screw by applying a force of 25 N·cm using the torque wrench and the 1.25 mm ratchet tip.

- If an impression is not taken in the same clinical session, fix the ProUnic™ Abutment protection cap by applying occlusal-gingival pressure and rotate it to engage the hexagons until you hear a click, NonStop™ system. Check the fit with the outer cone of the implant.

IMPRESSION TAKING AND WORKING MODEL PREPARATION

See the ProUnic Plus™ impression carrier procedure.

PROSTHESIS FABRICATION IN LABORATORY

Two options are available to fabricate the prosthesis: Conventional prosthesis on castable abutment.

- Place the castable abutment on the Prounic Plus™ analog or Duplit™ + TSA® implant analog.

in the working model. Fix it gently using the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, for the preparation of the restoration emergence profile.

- Model the structure in wax or resin for casting onto the castable abutment.

- Cast the castable abutment.

- Remove the cast structure. Reline the implant shoulder support.

- Test the metal structure, apply ceramic coating without glazing to check for anatomy, color and occlusion, or finish the prosthesis permanently if necessary.

CLINIC

STRUCTURE SAMPLE

- Remove the plastic cap from the ProUnic Plus™ or transmucosal abutment or temporary prosthesis.

- Mount the prosthesis structure on the ProUnic Plus abutment in the mouth and fix it with the permanent clinical screw.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Loosen the permanent clinical screw and remove the structure.

- Remove the Duplit, if applicable.

- Replace the healing abutment, protective cap, or temporary prosthesis.

STRUCTURE FINISHING

- Finish the ceramic coating and glazing.

PLACEMENT OF PERMANENT PROSTHESIS

- Remove the plastic protective cap from the ProUnic or transmucosal abutment or temporary prosthesis.

- Place the permanent crown or bridge on the ProUnic Plus abutment.

- Insert the permanent clinical screw into the prosthesis with the 1.25 mm driver.

- Final inspection of:

· Adjustments to the abutment shoulder or implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.- Tighten the permanent screw with a torque of 35 N.cm.

- Place cotton if there is a too much space and cover with temporary sealing material.

IMPORTANT:

The procedure described on the ProUnic Plus™ Abutment by placing the appropriate abutment and taking the impression on the abutment, can be carried out without prior placement of the permanent abutment, taking the impression directly on the implant and selecting the Prounic Plus™ permanent abutments using the laboratory abutment Duplit™.

PERMANENT SCREW-RETAINED RESTORATIONS. PROUNIC® ADVANCE

FEATURES

ProUnic ®Advance abutments are machined from titanium and plastic. It includes two abutment types:

· ProUnic® Advance abutment, with one abutment per series.

· ProUnic® Advance transmucosal abutment, with three abutments for Series 3 and 4 with transmucosal cylindrical smooth area with a height of 1, 2 and 3mm and one abutment of 1mm for Series 5, which allow to level the emergence height of the crown to adjacent natural teeth and soft tissue thickness.

The connection geometry of the ProUnic Advance transmucosal abutments (shoulder-abutment) to the prosthesis, is identical to that of the implant shoulder and ProUnic® Advance Abutment, allowing us to use the same components to fabricate the prosthesis in all cases. The final fixation torque to the implant is 35 N cm.

The ProUnic® Advance abutment, together with its transmucosal version, has an angulation of 15º in the three series, series 3, series 4 and series 5, recommended to rectify greater non-parallelism.

INDICATIONS

· Base abutment to support single screw-retained crowns, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment to support partial or full, fixed screw-retained restorations, fabricated:

· With the conventional anti-rotation and wax-up castable abutment technique.

· Base abutment to support bar-retained overdenture implants, through conventional casting on the castable abutment or welded bar.

PRECAUTIONS

· The procedure requires precision in the insertion of the implant in the intermediate rehabilitation processes and in the adjustments of the fabricated prosthesis.

CONTRAINDICATIONS

· When the entry hole of the permanent clinical screw in the crown or bridge falls in areas of aesthetic compromise.

ATTACHMENTS AND MATERIAL

CLINIC

· ProUnic® Advance and/or transmucosal abutments for Phibo® TSA® implants

· ProUnic® Advance abutment carrier for Phibo® TSA® implants

· ProUnic® Advance Abutment Duplit for Phibo® TSA® implants

. Phibo® TSA® permanent clinical screw

· TSA® metal impression carrier or Dual-Press™ system.

· Phibo® 1.25 mm manual driver.

· Phibo® 1.25mm ratchet driver bit

· Phibo® torque ratchet.

LABORATORY

· TSA® implant analog for Phibo® TSA® implants

· ProUnic® Advance abutment carrier for Phibo® TSA® implants

· ProUnic® Advance anti-rotation/rotation screw-retained castable abutment for Phibo® TSA® implants.

· ProUnic® Advance laboratory screw for Phibo® TSA® implants.

OPERATING PROCEDURE

CLINIC

IMPRESSION TAKING AND WORKING MODEL PREPARATION

See the Dual-Press™ Abutment or Conventional metal carrier impression procedure.

LABORATORY

PROSTHESIS FABRICATION IN LABORATORY

Conventional prosthesis on castable abutment.

- Place the castable abutment on the Duplit™ + implant analog on the working model. Fix it gently using the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, for the preparation of the restoration emergence profile.

- Model the structure in wax or resin for casting onto the castable abutment.

- Cast the castable abutment.

- Remove the cast structure. Reline the implant shoulder support.

- Test the metal structure, apply ceramic coating without glazing to check for anatomy, color and occlusion, or finish the prosthesis permanently if necessary.

CLINIC

STRUCTURE SAMPLE

- Remove the healing abutment.

- Mount the ProUnic® Advance Abutment Duplit™ in the mouth and place the structure.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Check adjustment using an X-Ray.

- Remove the structure.

- Remove the Duplit™ from the ProUnic® Advance Abutment.

- Replace the healing abutment.

STRUCTURE FINISHING

- Finish the ceramic coating and glazing.

PLACING THE PROUNIC ADVANCE™ ABUTMENT ON THE IMPLANT

- Remove the healing abutment.

- Place the ProUnic Advance ™ abutment with the carrier, by engaging the hexagons and adjusting them with small turns.

The abutment will be retained in the implant through primary fixation.

- Remove the carrier from the ProUnic Advance ™ Abutment by turning it half a turn counterclockwise.

If it is necessary to remove the ProUnic Advance ™ abutment, insert the carrier and turn it half a turn clockwise. In this way the carrier will be fixed to the abutment. Apply the necessary force to remove the abutment.

- Place the permanent structure on the ProUnic Advance™ abutment.

- Screw the structure with the permanent clinical screw using the torque ratchet, at a torque of 35N.cm.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

· Check adjustment using an X-Ray.

- Seal the screw hole by placing cotton and temporary sealing material.

PERMANENT SCREW-RETAINED RESTORATIONS. PROUNIC® AESTHETIC ANTI-ROTATION

FEATURES:

· 2-component abutment: Body and retention screw of the body then formed with the entire abutment, machined from titanium. The fixation torque to the implant is 25 N·cm.

INDICATIONS:

· For handling, fastening and tightening, use a 1.00mm manual or mechanical driver.

· In cases with an occlusal height from the implant of less than 4mm for:

· Single crowns screwed to the abutment, manufactured by metal casting of the base structure, modeled from a machined castable abutment.

CONTRAINDICATIONS

· When the position of the crown retention screw entry hole results in aesthetic compromise.

· When the occlusal height from the implant is greater than 5mm, and the ProUnic Plus™ Abutment is indicated.

ATTACHMENTS AND MATERIAL

CLINIC

· ProUnic® Aesthetic Anti-rotation abutment for Phibo® TSA® implants.

· ProUnic® Aesthetic anti-rotation abutment carrier for Phibo® TSA® implants.

· Attachments for impression taking on Phibo® TSA® implants.

· ProUnic® Aesthetic clinical screw for Phibo® TSA® implants.

· Phibo® 1.00mm manual driver.

· Phibo® 1.00 mm ratchet driver bit.

· Phibo® torque ratchet.

LABORATORY

· TSA® implant analog

· ProUnic® Aesthetic anti-rotation Duplit™ for Phibo® TSA® implants.

· ProUnic® Aesthetic anti-rotation castable abutments for Phibo® TSA® implants.

· ProUnic® Aesthetic anti-rotation clinical screw for Phibo® TSA® implants.

· ProUnic® Aesthetic anti-rotation laboratory screw for Phibo® TSA® implants.

· Phibo® 1.00 mm driver.

OPERATING PROCEDURE

CLINIC

IMPRESSION TAKING AND MOLDING

See the procedure for impression taking with metal or Dual-Press™ attachments on TSA® implants

LABORATORY

Conventional prosthesis on castable abutment.

- Attach the ProUnic® Esthetic anti-rotation abutment Duplit™ to the TSA® implant analog with the 1.00mm manual driver.

- Place the Castable Abutment on the Duplit™ and secure it gently with the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, for the preparation of emergence profile.

- Model the structure in wax or resin for casting onto the castable abutment.

- Cast the castable abutment.

- Remove the cast structure. Reline the implant shoulder support.

- Test the metal structure, apply ceramic coating without glazing to check for anatomy, color and occlusion, or finish the prosthesis permanently if necessary.

CLINIC

STRUCTURE SAMPLE

- Insert the permanent abutment or abutment Duplit™ into the implant.

- Mount the prosthesis structure in the mouth and fix it with the permanent clinical screw.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Remove the permanent clinical screw and the structure.

- Remove the permanent abutment or Duplit™ (if applicable) and replace the healing abutment.

STRUCTURE FINISHING

- Finish the ceramic coating and glazing.

PLACEMENT OF PROUNIC® AESTHETIC ANTI-ROTATION ABUTMENT:

- Remove the healing abutment with the 1.25 mm driver.

- Fix the ProUnic® Aesthetic retention screw with a 1.00mm driver and pass it through the coronal hole in the abutment until it protrudes at the end.

- Insert the assembly into the ProUnic® Aesthetic Anti-rotation Abutment Carrier. Abutment and carrier are secured through mechanical frictional retention by applying slight pressure.

- Place the abutment on the TSA® implant by applying slight pressure and making small turns to adjust the hexagons to the implant connection. Thread the retention screw with the carrier driver.

- Remove carrier from the ProUnic® Aesthetic Abutment.

- Tighten abutment screw by applying a force of 25 N·cm using the torque wrench and the 1.00 mm tip.

PLACEMENT OF THE PROSTHESIS

- Place the permanent prosthesis on the abutment.

- Fix the prosthesis with the permanent clinical screw using the 1.00mm driver and apply a force of 25N·cm with the torque wrench.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Place cotton if there is a too much space and cover with temporary sealing material.

PERMANENT SCREW-RETAINED RESTORATIONS. PROUNIC® AESTHETIC ROTATION.

FEATURES

· Machined titanium. It is fixed to the implant with a torque of 25 N·cm.

INDICATIONS:

· For handling, fastening and tightening, use a 1.00mm manual or mechanical driver.

· When the occlusal height from the implant is less than 5 mm.

- Partial intercalary or free-end fixed prosthesis, using the wax-up castable abutment technique.

· Full fixed screw-retained restorations on 6-8 implants in the mandible, using the wax-up castable abutment technique.

· Full fixed restorations on 8 implants in the maxilla, using the wax-up castable abutment technique.

· Full removable restorations through a mucosa-implant-supported ball-retained overdenture attached to implants, 2-4 in the mandibular area and 4-6 to 6 in the maxillary area, using the conventional wax-up castable abutment technique.

· In cases with angulations between implants exceeding 10º for Series 3 and 14º for Series 4.

CONTRAINDICATIONS

· When the position of the crown retention screw entry hole results in aesthetic compromise.

· When the occlusal height from the implant is greater than 5mm, and the ProUnic Plus™ Abutment is indicated and there are no signs of non-parallelism.

ATTACHMENTS AND MATERIAL

CLINIC

· ProUnic® Aesthetic rotation abutment for Phibo® TSA® implants.

· Attachments for impression taking on Phibo® TSA® implants

· Phibo® 1.00 mm driver

· Phibo® 1.00 mm ratchet driver bit.

· Phibo® torque ratchet.

LABORATORY

· TSA® implant analog

· ProUnic® Aesthetic rotation Duplit™ for Phibo® TSA® implants.

· ProUnic® Aesthetic rotation castable abutment for Phibo® TSA® implants.

· ProUnic® Aesthetic rotation clinical screw for Phibo® TSA® implants

· ProUnic® Aesthetic rotation laboratory screw for Phibo® TSA® implants

· Phibo® 1.00 mm driver

OPERATING PROCEDURE

CLINIC

IMPRESSION TAKING AND MOLDING

See the procedure for impression taking with metal or Dual-Press™ attachments on TSA® implants

LABORATORY

PROSTHESIS FABRICATION

Two options are available to fabricate the conventional prosthesis on castable abutment.

- Attach the ProUnic® Aesthetic Rotation Abutment Duplit™ to the TSA® implant analog.

with the 1.00mm fixed driver.

- Place the Castable abutment on the abutment Duplit™ in the working model, and secure it with the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, for the preparation of the restoration emergence profile.

- Model the structure in wax or resin for casting onto the castable abutment.

- Cast the castable abutment.

- Remove the cast structure. Reline the implant shoulder support with the reamer.

- Test the metal structure, apply ceramic coating without glazing to check for anatomy, color and occlusion, or finish the prosthesis permanently if necessary.

CLINIC

STRUCTURE SAMPLE

- Insert the permanent abutment or abutment Duplit™ into the implant.

- Mount the prosthesis structure on the abutment or its Duplit in the mouth and fix it with the permanent clinical screw.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Remove the permanent clinical screw and the structure.

- Remove the abutment or Duplit™ (if applicable) and replace the healing abutment.

STRUCTURE FINISHING

- Finish the ceramic coating and glazing.

PLACEMENT OF PROUNIC® AESTHETIC ROTATION ABUTMENT:

- Remove the healing abutment with the 1.25 mm driver.

- Attach the ProUnic® Aesthetic abutment with the 1.00 mm driver.

- Take the abutment into the oral cavity, insert it into the implant and thread the abutment until insertion is complete.

- Tighten the abutment using the 1.00mm driver tip and the torque wrench at a torque of 25N·cm.

PLACEMENT OF THE PROSTHESIS

- Place the permanent bridge on the abutment.

- Fix the prosthesis with the permanent clinical screw using the 1.00 mm driver and apply a force of 25N·cm with the torque wrench.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Seal the entry hole in the clinical screw using temporary sealing material.

Permanent cement-retained restorations. Millable Abutment

FEATURES

· Machined titanium abutment with a smooth transition area on the shoulder. It is supplied with the abutment retention screw, fixed at a torque of 35N·cm

- To fabricate the metal base structure of the prosthesis on a millable non-shouldered abutment, use machined castable abutment modeling.

· The fixed prostheses cemented to the milling shouldered abutment are manufactured by casting the base structure into metal, modeled after the titanium abutment itself.

INDICATIONS

· To level the emergence height of the crown to the adjacent natural teeth and soft tissue thickness (4 options).

When the occlusal height from the implant is greater than 6 mm.

· When it is necessary to adjust the height of the opposing arch and parallelize the insertion axis of the prosthesis.

· In fixed restorations with non-parallel implants exceeding 10° for Series 3 implants, 14° for Series 4 implants and 12° for Series 5 implants.

· In single or multiple restorations where, due to the position of the implant, the entry hole of the retention screw in a screw-retained prosthesis compromises the restoration aesthetics.

CONTRAINDICATIONS

· When the occlusal height from the implant is less than 4 mm.

PRECAUTIONS

· Retention with prosthetic cement in cantilever or extension.

· Cemented on screwed components.

ATTACHMENTS AND MATERIAL

CLINIC

· Phibo® 1.25 mm driver.

· Phibo® torque wrench.

-*Implant impression record.

·*Impression material.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· TSA® implant analog

· Phibo® TSA® Millable Abutments

- Phibo® TSA® Non-Shouldered Millable Castable Abutment

· Phibo® 1.25 mm driver.

OPERATING PROCEDURE

CLINIC

IMPRESSION TAKING AND MOLDING

See the procedure for impression taking with metal or Dual-Press™ attachments on TSA® implants

LABORATORY

MILLABLE ABUTMENT SELECTION AND MODELING

- Choose the type of millable abutment depending on:

· Implant non-parallelism.

· Soft tissue height from the implant shoulder to the free gingival margin.

· Emergence profile of the prosthesis.

- Insert the chosen abutment into the implant analog, adjusting the hexagons with small turns and manually tighten the retention screw until the millable abutment is fixed to the TSA® implant analog.

- Check the height of the Millable Abutment in relation to the opposing arc and the parallelism with adjacent teeth and/or abutments.

- Shape the abutment by milling if necessary.

PROSTHESIS FABRICATION

- Seal the entry hole of the retention screw of the millable abutment with wax and prepare the abutment with the spacer.

For millable non-shouldered abutments:

- Fix the Millable Castable Abutment on the abutment, applying light occlusal-gingival pressure until frictional retention is activated.

- Fill the interior space between Castable Abutment and abutment with liquid phase self-curing resin until you reach the full height of the Castable Abutment.

- Remove excess material before setting.

- Once the resin has set, remove the Castable Abutment to check the interior copy of the abutment shape and planes.

- Reposition the Castable abutment on the abutment.

For other Millable Abutments:

- Wax-up the abutment directly after modeling by milling (if indicated), after inserting the appropriate spacer.

- Model the structure for casting with wax or resin.

- Perform the casting on metal.

- Remove the structure casted into the cylinder.

- Reline and adjust the shoulder.

- Apply ceramic coating without glazing, if applicable.

- Make a guide on the model for the position of the Millable Abutment in the mouth.

- Remove the Millable Abutment from the model.

CLINIC

STRUCTURE SAMPLE

- Remove the healing abutment from the implant.

- Place the abutment or abutments on the acrylic resin guide made in the laboratory.

- Attach the abutment to the implant using the acrylic resin positioning guide and thread the retention screw until the abutment is fixed, gently tightening by hand.

- Mount the prosthesis structure on the abutment in the mouth.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Remove the structure from the mouth and assemble it back into the working model.

- Replace the healing abutment.

STRUCTURE FINISHING

- Finish the ceramic coating and glazing.

PLACEMENT OF MILLABLE ABUTMENT

- Remove the healing abutment from the implant.

- Place the abutment or abutments on the acrylic resin guide made in the laboratory.

- Attach the abutment to the implant using the acrylic resin positioning guide and thread the retention screw until the abutment is fixed, gently tightening by hand.

- Tighten the retention screw using the 1.25 mm driver tip and the torque wrench to a torque of 35N·cm.

PROSTHESIS PLACEMENT

- Mount the prosthesis structure on the abutment in the mouth.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Seal the entry hole in the retention screw using temporary sealing material.

- Cement the prosthesis. If you plan to remove the prosthesis for maintenance, use temporary cement.

- Wait until it sets and remove the excess cement.

PERMANENT RESTORATIONS

PHIBO TSA® IMPLANT OVERDENTURE

ABUTMENT OPTIONS AND INDICATIONS

PROUNIC PLUS™ PROUNIC® ADVANCE AND TRANSMUCOSAL ABUTMENTS

- Full removable restorations through a mucosa-implant-supported ball-retained overdenture attached to implants, 2-4 in the mandibular area and 4 to 6 in the maxillary area, manufactured with the conventional wax-up castable abutment technique, using a Rotation Castable Abutment.

Applicable procedures

· Immediate indirect loading.

· Standard.

PROUNIC® AESTHETIC ROTATION ABUTMENT

- Full removable restorations through a mucosa-implant-supported ball-retained overdenture attached to implants, 2-4 in the mandibular area and 4-6 to 6 in the maxillary area, using the conventional wax-up castable abutment technique. Applicable procedures

· Immediate indirect loading.

· Standard.

Applicable procedures

· Standard.

PERMANENT BAR-RETAINED RESTORATIONS. PROUNIC PLUS™ ABUTMENT

ATTACHMENTS AND CLINICAL MATERIALS

· ProUnic Plus™ and/or transmucosal abutments for Phibo® TSA® implants.

· ProUnic Plus™ abutment for Phibo® TSA® implants.

· ProUnic Plus™ impression carrier for Phibo® TSA® implants.

· ProUnic Plus™ abutment protective cap for Phibo® TSA® implants

· Phibo® 1.25 mm driver.

· Phibo® torque ratchet.

.*Implant impression record.

·*Impression material.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· ProUnic Plus™ analog for Phibo® TSA® implants.

· TSA ® Implant Analog + ProUnic Plus™ Duplit™ for Phibo® TSA® implants

· Rotation castable abutment for Phibo® TSA® bridge or screw-retained bar.

· Phibo® TSA® clinical screw.

· Phibo® 1.25 mm driver.

CLINICAL OPERATING PROCEDURE

PLACING THE PROUNIC PLUS™ OR TRANSMUCOSAL ABUTMENT ON THE IMPLANT

- Remove the healing abutment.

- Select the appropriate ProUnic Plus™ abutment. Use the Abutment Duplits™ to choose the appropriate one for the gingival tissue thickness and occlusal emergence plane.

- Fix the ProUnic Plus™ retention screw with a 1.25mm manual driver and pass it through the coronal hole in the abutment until it protrudes at the end.

- Insert the assembly into the ProUnic Plus™ abutment carrier, applying slight pressure to secure them through mechanical friction retention.

- Position the ProUnic Plus™ abutment on the implant by engaging the hexagons, adjusting them with small turns. Tighten the screw manually.

- Remove the ProUnic Plus™ Abutment carrier.

- Tighten ProUnic Plus™ abutment screw by applying a force of 25 N·cm using the torque wrench and the 1.25mm ratchet tip.

- If an impression is not taken in the same clinical session, fix the ProUnic™ Abutment protection cap by applying occlusal-gingival pressure and rotate it to engage the hexagons until you hear a click, NonStop™ system. Check the fit with the outer cone of the implant.

IMPRESSION TAKING AND WORKING MODEL PREPARATION

See the ProUnic Plus™ impression carrier Plus™ Abutment is indicated.

PROSTHESIS FABRICATION IN LABORATORY

Conventional prosthesis on castable abutment.

- Place the castable abutment on the Prounic Plus™ analog or Duplit™ + TSA® implant analog in the working model. Fix it gently using the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, to select an appropriate transmucosal abutment.

- Model the structure in wax or resin for casting onto the castable abutment.

- Shape the bar in wax or attach prefabricated plastic bars to the castable abutment model.

- Cast the castable abutments.

- Remove the cast structure. Reline the implant shoulder support with the reamer.

- Model overdenture structure on the bar and its attachment.

CLINIC

STRUCTURE SAMPLE

- Remove the plastic cap from the ProUnic Plus™ or transmucosal abutment or temporary prosthesis.

- Attach the bar to the implants by manual torque.

- Attach the overdenture on the bar in the mouth.

- Check the fit of the structure.

· Occlusion.

· Adjustments and position in support areas.

- Remove the mouth structure and the bar.

- Replace the protective cap.

STRUCTURE FINISHING

- Shape the overdenture or bar appropriately.

PLACEMENT OF ABUTMENTS AND PERMANENT PROSTHESIS

- Remove the protective cap from the ProUnic Plus™ or transmucosal abutment or temporary prosthesis.

- Attach the bar to the implants using the 1.25mm driver.

- Tighten the bar using the 1.25mm driver tip and the torque wrench at a torque of 35 N·cm.

- Mount the overdenture on the bar in the mouth.

- Make the necessary adjustments.

PERMANENT BAR-RETAINED RESTORATIONS. PROUNIC® AESTHETIC ROTATION ABUTMENT

ATTACHMENTS AND CLINICAL MATERIALS

· ProUnic® Aesthetic rotation abutment for Phibo® TSA® implants.

· Dual-Press™ or metal impression carrier for Phibo® TSA® implants

· Phibo® 1.25 mm driver.

- Phibo® 1.0mm mechanical or manual driver.

· Phibo® torque ratchet.

.*Implant impression record.

·*Impression material.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· TSA® Implant Analog + ProUnic® Aesthetic Rotation Duplit™.

· Rotation castable abutment for Phibo® TSA® bridge or screw-retained bar.

· Phibo® TSA® clinical screw.

· Phibo® 1.25 mm driver.

· Phibo® 1.0mm driver.

OPERATING PROCEDURE

CLINIC

IMPRESSION TAKING AND MOLDING

See the procedure for impression taking with metal or Dual-Press™ attachments on TSA® implants

LABORATORY

PROSTHESIS FABRICATION

Conventional prosthesis on castable abutment.

- Place the Prounic® Aesthetic rotation castable abutment on the Duplit™ + TSA® implant analog in the working model. Fix it gently using the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, for the preparation of the restoration emergence profile.

- Model the structure in wax or resin for casting onto the castable abutment.

- Shape the bar in wax or attach prefabricated plastic bars to the castable abutment model.

- Cast the castable abutments.

- Remove the cast structure. Reline the implant shoulder support with the reamer.

- Model overdenture structure on the bar and its attachment.

CLINIC

STRUCTURE SAMPLE

- Attach the ProUnic® Aesthetic permanent rotation abutment or the ProUnic® Aesthetic Duplit™.

- Place the bar on the implants and fix the bar by manual torque.

- Attach the overdenture on the bar in the mouth.

- Check the fit of the structure.

· Occlusion.

· Adjustments and position in support areas.

- Remove the mouth structure and the bar.

- Replace the protective cap.

STRUCTURE FINISHING

- Shape the overdenture or bar appropriately.

PLACEMENT OF ABUTMENTS AND PERMANENT PROSTHESIS

- Attach the ProUnic® Aesthetic permanent abutment to the implant.
- Place the bar on the implants and fix the bar to the implants with the 1.00mm driver.
- Attach the bar to the implants using the 1.00mm driver.
- Tighten the bar using the 1.00mm driver tip and the torque wrench at a torque of 25N·cm.
- Mount the overdenture on the bar in the mouth.
- Make the necessary adjustments.

PERMANENT RESTORATIONS, OVERDENTURES ON PROUNIC® ADVANCE

ATTACHMENTS AND MATERIALS

CLINIC

· ProUnic Advance™ and/or transmucosal abutments for Phibo® TSA® implants.

· ProUnic Advance™ abutment carrier for Phibo® TSA® implants.

· ProUnic Advance™ abutment Duplit for Phibo® TSA® implants.

. Phibo® TSA® permanent clinical screw

· TSA® impression carrier

· Phibo® 1.25 mm driver.

· Phibo® 1.25 mm ratchet driver bit

· Phibo® torque ratchet.

LABORATORY

· TSA® implant analog

. ProUnic® Advance abutment Duplit for Phibo® TSA® implants

· ProUnic® Advance anti-rotation/rotation screw-retained castable abutment.

· ProUnic Advance ™ laboratory screw

OPERATING PROCEDURE

CLINIC

IMPRESSION TAKING AND WORKING MODEL PREPARATION

See the Dual-Press™ Abutment or Conventional metal carrier impression procedure.

LABORATORY

PROSTHESIS FABRICATION IN LABORATORY

Conventional prosthesis on castable abutment.

- Place the castable abutment on the Duplit™ + implant analog on the working model. Fix it gently using the laboratory screw.

- Check the adjustment of the soft tissue from the implant shoulder to the free gingival margin, for the preparation of the restoration emergence profile.

- Model the structure in wax or resin for casting onto the castable abutment.

- Cast the castable abutment.

- Remove the cast structure. Reline the implant shoulder support.

- Test the metal structure, apply ceramic coating without glazing to check for anatomy, color and occlusion, or finish the prosthesis permanently if necessary.

CLINIC

STRUCTURE SAMPLE

- Remove the healing abutment.

- Mount the ProUnic Advance™ Abutment Duplit™ in the mouth and place the structure.- Check the fit of the structure:

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

· Check adjustment using Rx.

- Remove the structure.

- Remove the Duplit™ from the ProUnic Advance ™ Abutment.

- Replace the healing abutment.

STRUCTURE FINISHING

- Finish the ceramic coating and glazing.

PLACING THE PROUNIC ADVANCE ™ ABUTMENT ON THE IMPLANT

- Remove the healing abutment.

- Place the ProUnic Advance™ abutment with the carrier, by engaging the hexagons and adjusting them with small turns.

The abutment will be retained in the implant through primary fixation.

- Remove the carrier from the ProUnic Advance™ Abutment by turning it half a turn counterclockwise.

If it is necessary to remove the ProUnic Advance™ abutment, insert the carrier and turn it half a turn clockwise. In this way the carrier will be fixed to the abutment. Apply the necessary force to remove the abutment.

- Place the permanent structure on the ProUnic Advance™ abutment.

- Screw the structure with the permanent clinical screw using the torque ratchet, at a torque of 35 N cm.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

· Check adjustment using an X-Ray.

- Seal the screw hole by placing cotton and temporary sealing material.

PERMANENT RETAINED RESTORATIONS. BALL ABUTMENTS.

ATTACHMENTS AND MATERIAL

CLINIC

· Phibo® 1.25 mm driver.

· Phibo® torque ratchet.

.*Implant impression record.

·*Impression material.

*MATERIAL NOT SUPPLIED BY Phibo®

LABORATORY

· TSA® implant analog

· Phibo® TSA® Ball Abutment

· Metal O-ring cap for Phibo® TSA® ball abutment.

· Phibo® 1.25 mm driver.

CLINICAL OPERATING PROCEDURE

IMPRESSION TAKING AND MOLDING

See the procedure for impression taking with metal or Dual-Press™ attachments on TSA® implants

LABORATORY

SELECTION AND PLACEMENT OF BALL ABUTMENT

- Choose the height of the transmucosal area of the Ball Abutment most suitable for reconstruction.

- Place the chosen abutment on the TSA® implant analog.

- Check the abutment height in relation to the opposing arch and the space for the overdenture.

PROSTHESIS FABRICATION

- Model the overdenture structure.

- Fix the metal O-ring cap to the overdenture with temporary material.

CLINIC

STRUCTURE SAMPLE

- Remove the healing abutments.

- Place the structure on the abutments.

- Check the fit of the structure.

· Adjustments of the abutment shoulder to the implant.

· Passivity.

· Relationship with the gingiva.

· Contact points.

· Occlusion.

- Remove the structure and abutments from the mouth.

- Place the healing abutments.

STRUCTURE FINISHING

- Shape the structure if necessary.

- Remove the caps and temporary cement.

- Fix the caps permanently with acrylic resin.

PLACEMENT OF BALL ABUTMENT AND PROSTHESIS

- Remove the healing abutment.

- Attach the ball abutment to the implant using the 1.25mm driver and torque wrench at a torque of 35 N-cm.

- Mount the overdenture on the abutments in the mouth.

- Make the necessary occlusal and soft tissue adjustments.

Important:

· Periodic replacement of the O-ring retention element is required.

· It requires more frequent control of the adaptation of the overdenture to the tissues in order to avoid premature wear of the O-ring.