

#### I. GENERAL INSTRUCTIONS FOR USE

- PRESENTATION AND STORAGE

GT-Medical products are supplied clean, packaged and shrink-wrapped. The product is NOT sterile upon delivery and should therefore be sterilised before being used in the mouth.

The product should be stored in its original packaging in a clean, dry place at room temperature. Under no circumstances should products be re-sterilised for reuse.

- INTENDED USE

GT-Medical products can be used for dental restorations in partially or completely edentulous patients. Descriptions of each product are given in the SPECIFIC INSTRUCTIONS FOR USE section.

- USERS

Products supplied by GT-MEDICAL should only be used by dentists/implant specialists who are experienced in their use. The person performing the treatment is solely responsible for handling/use of the product. GT-MEDICAL S.L. only guarantees the safety and efficacy of its products when these are used by properly trained professionals.

The person using the product is responsible for ensuring the product is traceable at all times. Make a note in the patient's medical records of the product used, its name and batch number and inform GT-MEDICAL of any anomaly.

#### - PATIENTS

Products supplied by GT-MEDICAL are to be used in patients requiring full mouth restorations (due to being partially or completely edentulous). Such restorations may involve single-tooth prostheses, multiple-tooth prostheses or overdentures.

#### - WARNINGS

Under no circumstances should the product be removed from the packaging provided unless the product is to be used. Prior to removing the product from the packaging, check that the product has not been damaged and that it matches the description given on the label. Check the integrity of the product prior to use.



Packaging defects can affect decontamination and cleaning properties. If the packaging is damaged, the product should be returned for replacement.

GT-MEDICAL products are for SINGLE USE only. Reusing products may impair their functional properties due to wear and/or fracture, which may affect the patient's health and cause infection in the patient's tissues due to possible cross-contamination.

GT-MEDICAL S.L. Is not responsible for damages arising from any attempt to reuse products labelled as single-use.

GT-MEDICAL products are NOT sterile upon delivery and should therefore be sterilised prior to use in the mouth according to the guidelines given in the STERILISATION section.

Allergies: the materials used are biocompatible. Nevertheless, some people may be allergic to them or to any of the product's components.

Provisional PEEK abutments should not be left in the mouth for longer than 180 days. They must therefore be removed within this time frame.

In the event of serious incidents with any of the medical devices covered by these instructions for use, please notify the manufacturer (contact phone number: 913806575) and the competent authority of the Member State of the European Union (EU) where the user and/or patient is located immediately.

- PRECAUTIONARY MEASURES

The following precautionary measures should be taken before or during treatment:

Make sure that all parts, components, attachments and instruments are complete, ready for use and available in sufficient quantities before each surgery.

Position the patient in such a way to minimise the risk of aspiration. Secure all items used in the patient's mouth to prevent aspiration and swallowing.

Despite all the precautions and measures taken during the manufacture and packaging of these products, there is a residual risk due to medical malpractice and each patient's individual conditions. Please follow the guidelines given in the instructions for use and assess each patient' eligibility for surgery before starting the procedure in order to minimise these risks.

- SIDE EFFECTS AND CONTRAINDICATIONS

No side effects that are directly related to GT-MEDICAL products have been described. Use of these products is contraindicated if the patient is not fit for dental implant placement surgery.



The use of these products in contraindicated in patients who are allergic or hypersensitive to any of the materials used to manufacture the abutments and attachments supplied by GT-MEDICAL.

- STERILISATION

All products must be sterilised in accordance with UNE-EN ISO 17665-1 prior to being used in the mouth. This standard recommends steam sterilisation for fifteen minutes at 121°C, with the product sealed in a suitable sterilisation pouch since the packaging in which the product is supplied is not suitable for sterilisation.

- PRODUCT DISPOSAL

Once GT-Medical products have reached the end of their useful lifetime, they must be disposed of in accordance with the competent authority's legislation and guidelines and environmental requirements, considering the different potential levels of contamination. Special attention must be paid to physical and infectious health hazards (contamination with potentially infectious substances of human origin).

- ADDITIONAL INFORMATION

See the Summary of Safety and Clinical Performance (SSCP) in the database EUDAMED - European Database on Medical Devices.



II. SPECIFIC INSTRUCTIONS FOR USE

# Analog

#### DESCRIPTION

An analog is an exact replica of the implant platform and connection that is placed in the patient.

#### MATERIAL

They are made from high-quality stainless steel. The implant connection has been carefully designed from the original measurements, offering a milling tolerance that is never greater than +/- 0.01 mm.

#### USE AND GEOMETRY

There are two types of analog, depending on the intended use. Both types have two flat faces to prevent rotation but different attachment systems:

Conventional or Traditional Analog for plaster models: this has a protrusion that allows axial locking to prevent movement, thus ensuring firm, long-lasting placement. Once the impression has been received from the clinic, the dental technician should screw the analog into the impression coping abutment placed in the tray in order to then cast and create the laboratory model. The process to fabricate the dental prosthesis can then be started.

Digital Analog for 3D-printed resin models: the analog is locked using a slightly tapered pin that allows accurate axial positioning. Once the model has been printed, the analog must be inserted into the model. Optional: A perpendicular pin may be used to ensure correct placement.

# NOTE:

The tapered pin is not included in the pack.



# **GT-MEDICAL LIBRARIES**

Digital analogs can be used with the GT-Medical libraries enabled for this purpose. To ensure correct orientation of the assembly formed by the analog, the laboratory model and the prosthetic structure, it is very important to position the Scan Body so that its flat surface faces towards the buccal direction. In other words, it should face the direction where the insertion canal for the tapered pin is to be positioned.



# CALIBRATION TEMPLATE

In order to ensure that the digital analog fits perfectly on the 3D-printed laboratory model, the Calibration Template provided with 4 fit tolerances may be used. The fit selected will depend on the printer available. A printed model should first be made to instantly determine if the fit selected is appropriate.

# **Cr-Co Base Abutment**

#### DESCRIPTION

A Cr-Co base abutment is a part milling from cobalt-chromium that is placed between the implant and the prosthetic structure and either welded or cemented in place.

It is used to ensure a perfect fit and passivity at the prosthesis-implant interface. Once positioned on the coronal part of the implant, it will act as an initial base for designing the shape of the final structure.

The Cr-Co Base abutment is available with two geometries, an anti-rotational geometry for single-tooth prostheses and a rotational geometry for multi-tooth prostheses.

This attachment is used in CAD/CAM libraries so that the prosthetic structure can be designed digitally.



# MATERIAL

The GT-Medical overcast abutmentbase is made from cobalt-chromium with a mirrorpolished finish to prevent the adhesion of dental plaque.



#### ASSEMBLY

The base can be joined to the implant using the corresponding Prime Series Screw for straight channels or the Prime Series DINALOCK Screw for angled channels.

However, the base is joined to the prosthetic structure using cement or welding.

# GEOMETRY

The geometry of the base is divided into 4 parts:

Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.

Gingival shoulder, found at a height of about 1 mm with a micro-polished finish to allow perimetral growth of the gingival mucosa.

If the base is welded to the prosthetic structure, the gingival shoulder provides a firm support to allow micro-spot welding around the entire perimeter.

Base body, which has a height of 3.6 mm and is provided with some retention grooves to facilitate cement bonding.

The base has two flat faces to prevent the abutment from rotating within the prosthetic structure. These surfaces face the implant connection and the flat face of the scan body. Screw seat, which has a tolerance of +/- 0.5 degrees, to prevent micro-movements that could potentially cause the screw to loosen.

# CAD/CAM

By using the GT-Medical implant library enabled for this purpose, it is possible to design the prosthetic structure digitally, using either straight or angled screw channels.

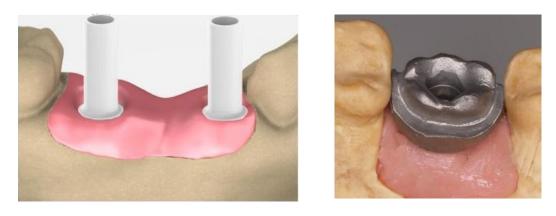
# **Castable Abutment**

# DESCRIPTION

A burnout abutment is a burnout plastic part that is joined to the implant using a screw in order to produce a screw-retained fixed prosthesis.

Burnout abutments used to model the final metal structure are subjected to a laboratory process known as burnout, whereby the plastic is destroyed so that it never forms part of the final prosthesis. Once this process has been completed, the metal will act as the base for the crown or permanent structure.







# MATERIAL

The GT-Medical burnout abutment is made from burnout plastic and is available in white.

# ASSEMBLY AND GEOMETRY

The burnout abutment is joined to the implant using the corresponding implant screw. However, the burnout abutment is joined to the prosthetic structure using a casting process.

Its external geometry is divided into 3 parts:

- Implant or abutment connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.

- Gingival shoulder, found at a height of about 1 mm.

- Coping, which is easily adjustable as required for the restoration.

# USE

Burnout abutments have been designed to prevent bubble formation during the casting process.

Based on the type of implant or impression coping abutment used, these abutments are available for single-tooth (non-rotational) and multi-tooth (rotational) restorations. The burnout abutment must be screwed into the analog or interface impression coping abutment on the laboratory model using the corresponding screw.



# **Provisional Cylinder**

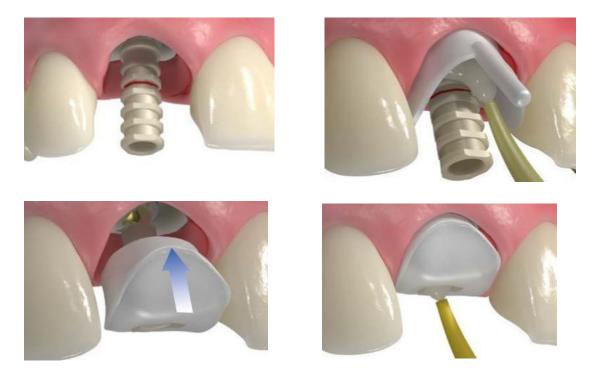
#### DESCRIPTION

A provisional cylinder is a part that is screwed to the implant and has a contact surface with retaining rings to ensure adhesion.

This attachment acts as a joint for provisional restorations on dental implants and its role tends to be more aesthetic than functional.

The process known as IMMEDIATE LOADING involves the placement of the provisional prosthesis during the period between implant placement and complete osseointegration. The time during which the provisional prosthesis is left in the patient's mouth depends on the dentist's prescription, with a estimated duration of three months.

This part is available in two geometries, an anti-rotational geometry for single-tooth prostheses and a rotational geometry for multi-tooth prostheses, both made from titanium or PEEK.



#### MATERIAL

The GT-Medical Provisional Cylinder is made from grade 5 titanium with a mirrorpolished finish to prevent the adhesion of dental plaque. It can also be made from PEEK for biomedical use.



# GEOMETRY

The connection surface between the GT-Medical provisional cylinder and the implant or abutment has been carefully milled from the original measurements of the corresponding implant or abutment, offering milling tolerance that is never greater than +/- 0.01 mm. Provisional cylinders are available for both single-tooth (non-rotational) or multi-tooth (rotational) restorations.

The transepithelial surface has a unique height that varies according to the implant or abutment model used and allows perimetral growth of the gingival mucosa.

The maximum diameter of the GT-Medical Provisional Cylinder has a unique measurement and varies according to the implant or abutment on which it is to be placed.

The contact surface with the prosthesis has some very pronounced retaining rings and also two flat faces to prevent rotation.

All GT-Medical Provisional Cylinders are provided with a housing for the screw used to attach it to the implant.

# NOTE:

The fixation screw is not included and should be selected separately, depending on the implant in which it is to be used.

# Connector

# DESCRIPTION

The connector is an interface that is joined to the implant using the corresponding screw and to the prosthetic structure with cement.

It is used to ensure a perfect fit and passivity at the prosthesis-implant interface. Once positioned on the coronal part of the implant, it will act as an initial base for designing the shape of the final structure.

This part is available with two geometries, an anti-rotational geometry for single-tooth prostheses and a rotational geometry for multi-tooth prostheses.

This attachment is used in CAD/CAM libraries so that the prosthetic structure can be designed digitally.





#### MATERIAL

The GT-Medical Connector is made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque.

#### ASSEMBLY

The Connector can be joined to the implant using the GT-Medical Universal Series Screw for straight channels or the Universal Series DINALOCK Screw for angled channels. However, the Connector is joined to the prosthetic structure using cement.

# GEOMETRY

The geometry of the Connector is divided into 4 parts:

Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.

Cementation body: this has a grooved cylindrical surface to facilitate cement adhesion. It is available with cementation height "S", corresponding to 3.8 mm, and cementation height "L" for those cases where the implant is very deep, with a length of 5.3 mm.

It has six flat faces to prevent the Connector from rotating within the prosthetic structure. These are positioned to face the implant connection and the flat face of the scan body.

Gingival shoulder, which has a height of about 0.5 mm with a micro-polished finish to allow perimetral growth of the gingival mucosa. For those cases where the implant is very deep, other gingival heights are available, ranging from 0 to 4.5 mm.

Screw seat, which has a tolerance of +/- 0.5 degrees, to prevent micro-movements that could potentially cause the screw to loosen.

# CAD/CAM

By using the GT-Medical implant library enabled for this purpose, it is possible to design the prosthetic structure digitally, using either straight or angled screw channels.

# **Angled Connector**

# DESCRIPTION

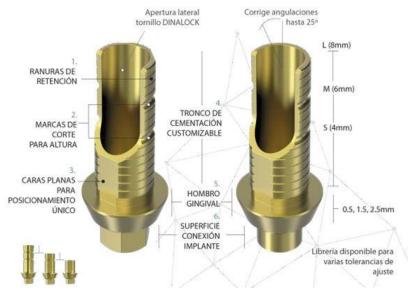
The angled connector is an interface that is joined to the implant using the corresponding dynamic screw for angled channels and to the prosthetic structure with cement. It is used for zirconia prostheses.

It is used to ensure a perfect fit and passivity at the prosthesis-implant interface. Once positioned on the coronal part of the implant, it will act as an initial base for designing the shape of the final structure.



It has a customisable cementation body with some cut marks, making it possible to choose between two cementation heights and several gingival heights.

This part is available with two geometries, an anti-rotational geometry for single-tooth prostheses and a rotational geometry for multi-tooth prostheses.



This attachment is used in CAD/CAM libraries to create the design.

# MATERIAL

The GT-Medical Angled Connector is made from grade 5 titanium with a mirror-polished finish to prevent adhesion of dental plaque. It is also gold-anodised to improve the aesthetic finish of the final prosthesis.

# ASSEMBLY

The Angled Connector can be joined to the implant using the GT-Medical Prime Series DINALOCK Screw for angled channels.

However, the Angled Connector is joined to the prosthetic structure using cement.

# GEOMETRY

The geometry of the Angled Connector is divided into 4 parts:

- Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.
- Customisable cementation body: this has a grooved cylindrical surface to facilitate cement adhesion. It is available in height "L", but if a shorter length is required, it can be cut at marks "M" and "S". It has asymmetrical flat faces to prevent the Angled Connector from rotating within the prosthetic structure. These are positioned to face the implant connection and the flat face of the scan body.



- Gingival shoulder, which has a height of about 0.5 to 2.5 mm with a micropolished finish to allow perimetral growth of the gingival mucosa.
- Screw seat, which has a tolerance of +/- 0.5 degrees, to prevent micromovements that could potentially cause the screw to loosen. Lateral opening, to allow the DINALOCK Screw and its corresponding driver to be inserted, allowing angles of up to 25° to be corrected.

# CAD/CAM

By using the GT-Medical implant library enabled for this purpose, it is possible to design the prosthetic structure digitally, using angled screw channels.

# Straight Connector

# DESCRIPTION

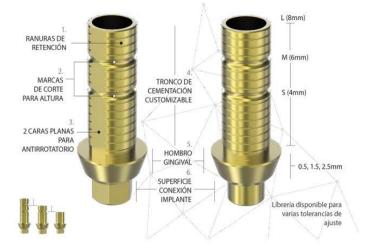
The straight connector is an interface that is joined to the implant using the corresponding screw for straight channels and to the prosthetic structure with cement. It is used for zirconia prostheses.

It is used to ensure a perfect fit and passivity at the prosthesis-implant interface. Once positioned on the coronal part of the implant, it will act as an initial base for designing the shape of the final structure.

It has a customisable cementation body with some cut marks, making it possible to choose between two cementation heights and several gingival heights.

This part is available with two geometries, an anti-rotational geometry for single-tooth prostheses and a rotational geometry for multi-tooth prostheses.

This attachment is used in CAD/CAM libraries to create the design.



# MATERIAL

The GT-Medical Straight Connector is made from grade 5 titanium with a mirrorpolished finish to prevent adhesion of dental plaque. It is also gold-anodised to improve the aesthetic finish of the final prosthesis.



#### ASSEMBLY

The Straight Connector can be joined to the implant using the GT-Medical Prime Series Screw for straight channels.

However, the Straight Connector is joined to the prosthetic structure using cement.

#### GEOMETRY

The geometry of the Straight Connector is divided into 3 parts:

Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.

Customisable cementation body: this has a grooved cylindrical surface to facilitate cement adhesion. It is available in height "L" for those cases where the implant is very deep. If a shorter cementation height is required, it can be cut at marks "M" and "S".

It has two flat faces to prevent the Straight Titanium Base from rotating within the prosthetic structure. These are positioned to face the implant connection and the flat face of the scan body.

Gingival shoulder, which has a height of about 0.5 to 2.5 mm with a micro-polished finish to allow perimetral growth of the gingival mucosa.

Screw seat, which has a tolerance of +/- 0.5 degrees, to prevent micro-movements that could potentially cause the screw to loosen.

# CAD/CAM

By using the GT-Medical implant library enabled for this purpose, it is possible to design the prosthetic structure digitally, using straight screw channels.

# Isogrip® Kit, Isogrip® and Isogrip® cylinder

# DESCRIPTION

The Isogrip<sup>®</sup> kit is a CLICK & GRIP system for immediate loading of any type of implant on a transepithelial abutment. This system makes it possible to make screw channels in their exact position, thereby saving time and obtaining screw-retained and implantsupported dentures.



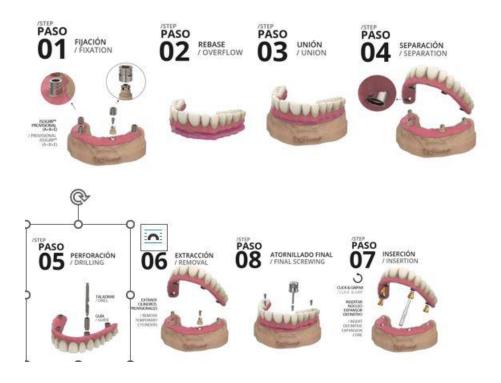


#### MATERIAL

The Isogrip kit comprises several parts, made from grade 5 titanium with a mirror-polished finish to prevent adhesion of dental plaque, and from PEEK for biomedical use.

# USE

Thanks to the Isogrip<sup>®</sup> kit, we can perform immediate loading of any type of implant on a transepithelial abutment, thereby reducing the time required to produce screw-retained and implant-supported dentures. Sequence of use:





#### GEOMETRY

The abutment connection surface has been carefully designed from the original measurements of the transepithelial abutment, offering a milling tolerance that is never greater than +/- 0.01 mm.

The maximum diameter of the relining cylinder is 4.8 mm and the height is 4 mm.

# COMPOSITION

The Isogrip<sup>®</sup> kit comprises four items: Outer Cylinder Fixation Screw Activation Screw and Permanent Expander Core Provisional Expander Core

# NOTES:

All components are included in the same pack. Available in two sizes according to the height of relining cylinder

# **Angled Conical Abutment Kit**

#### DESCRIPTION

The angled conical abutment kit is a part that acts as an interface that is screwed to the implant. It forms a sealed area at the implant connection and a proper passive fit between the prosthesis and the abutment. Its function is to act as a "stress breaker", correct angles and lack of parallelism between implants by balancing the height between implants. It is available in several gingival heights and with 17<sup>o</sup> and 30<sup>o</sup> angles. Its connection is conical and therefore it can only be used with multi-tooth prostheses.





### MATERIAL

The Conical Abutment Kit for Multi-Unit<sup>®</sup> is made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque.

#### **INSERTION**

The angled conical abutment is inserted using the mount and secured using the connection screw to the implant. Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm

#### ASSEMBLY

The abutment is joined to the prosthetic structure using the Multi-Unit<sup>®</sup> screw.

#### GEOMETRY

The external geometry of the angled conical abutment is divided into 3 parts: Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + -0.01 mm.

Transepithelial surface, which has a height that varies between 1 mm and 5 mm according to the implant model, with two available angles, 17<sup>o</sup> and 30<sup>o</sup>. Prosthesis connection surface, which has the same dimensions as the Multi-Unit<sup>®</sup> connection.

#### NOTE:

The pack includes the transepithelial abutment and the implant connection screw. The mount and prosthesis connection screw are not included.

# Pilo + Pack Kit

# DESCRIPTION

The Pilo + Pack kit comprises two components:

The Pilo abutment is a part that is screwed into the implant to later support a removable prosthesis. This attachment is available in different gingival heights, depending on the depth of the implant in relation to the gum surface.

The processing pack includes the females that act as a joint between the Pilo abutment and the prosthetic structure. They are available in different colours, depending on the retention hardness and friction required.

This Locator<sup>®</sup> retention system in implant-supported removable dental prostheses also allows angles of up to 20<sup>o</sup> between divergent implants to be corrected, and makes it possible to interchange frictions supplied in the processing pack.





#### MATERIAL

The GT-Medical Pilo Abutment is made from grade 5 titanium with a TiN finish to prevent adhesion of dental plaque and ensure optimal sliding with the retention pack.

#### **COMPOSITION**

The Pilo + Pack Kit includes the Pilo Abutment and the Processing Pack, which contains: Reliner housing Sealing washer

Retention inserts in 4 different hardnesses

#### ASSEMBLY AND GEOMETRY

The Pilo abutment and the prosthetic structure are joined using the processing pack. The Pilo abutment and the implant are joined using the abutment screw. Its external geometry is divided into 3 parts:

Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + / -0.01 mm, and a stem with the thread of the corresponding implant. Transepithelial surface, which has a height that varies between 1 mm and 6 mm according to the implant model; it has a micro-polished finish that promotes perimetral growth of gingival mucosa.

Retention surface, which has a toric surface to ensure correct positioning of the processing pack and which is 100% compatible with Locator<sup>®</sup>.

Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm



# **Processing Pack**

# DESCRIPTION

The processing pack comprises several items required to fabricate the prosthetic structure of an overdenture:

Reliner housing, sealing washer or relief disc.

4 females in different colours according to the retention hardness and friction required, which can be interchanged.

Blue (1.5 lbs), pink (3 lbs), white or clear (5 lbs) and red to correct angles.

This attachment is used to join the Pilo abutment and the prosthetic structure of a denture.



The GT-Medical Processing Pack comprises several items required to fabricate the prosthetic structure of an overdenture: Reliner housing Sealing washer Retention inserts in 4 different hardnesses

# NOTES:

We also have colour-coded replacement packs for each retention hardness. The contents of these replacement packs include 4 retention inserts in the same colour, depending on the friction required.

# **Conical and transepithelial abutment**

# DESCRIPTION

The Conical and transepithelial abutment is an intermediate part that acts as an interface screwed to the implant.



It forms a sealed area at the implant connection and a proper passive fit between the prosthesis and the abutment.

It acts as a converter to a conical connection and allows the implant to be lifted over the epithelium, giving it the desired height between the available gingival heights. The conical abutment is intended for multi-tooth prostheses. However, the transepithelial component is recommended for prostheses involving a single implant (single-tooth).



# MATERIAL

The GT-Medical conical and transepithelial abutment is made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque.

# **INSERTION**

The conical transepithelial abutment is inserted using the 2-mm socket wrench. It is joined to the implant using the threaded stem of the transepithelial abutment. Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm

# ASSEMBLY AND GEOMETRY

The conical or transepithelial multiunit abutment is joined to the prosthetic structure using the Multi-Unit RP screw. The external geometry of the transepithelial abutment is divided into 3 parts:

Implant connection surface, which has been carefully milled from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm. Plus a stem with the same size thread as the corresponding implant.

Transepithelial surface, which has a height that varies between 1 mm and 6 mm according to the implant model; it has a micro-polished finish that promotes perimetral growth of ginigval mucosa.



Prosthesis connection surface, which has the same dimensions as the Multi-Unit<sup>®</sup> connection.

# Scan Abutment

#### DESCRIPTION

A scan abutment is a part that is used for the denture fabrication process using CAD/CAM technology.

CAM technology is responsible for fabricating the dental prosthesis using a computer numerical control (CNC) milling technique or 3D printing.

CAD technology is responsible for designing the dental prosthesis using computer software. To start the design process, a 3D file is required that contains: the patient's mouth measurements, and also the position of the dental implants inside the mouth.

To create a 3D file of the patient's mouth with the position of the implants, a desktop dental scanner or intraoral scanner is used. The use of a scan abutment is essential in both cases. This part is screwed into the implant analog or the implant itself during the scanning process. It is used to pinpoint the position of the implants inside the patient's mouth.

The scan abutment has the same function as the impression coping abutment - to pinpoint the position of the implant. The difference between a scan abutment and an impression coping abutment is that, with the impression coping abutment, the position is captured using silicone, while with the scan abutment, the position is captured using a 3D scanner.





# CUERPO DE ESCANÉO

# COMPOSITION

The GT-Medical Scan Abutment comprises:

A scan body made of PEEK that promotes correct scanning by the scanner. This has a cylindrical shape and is 12 mm in height. It has a vertical flat face for angular positioning and a horizontal flat face for axial positioning.

A base from cobalt-chromium with a mirror-polished finish to ensure radio-opacity to check and confirm correct positioning. Its surface has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + /- 0.01 mm.

A captive screw made from grade 5 titanium inside a cavity between the base and the PEEK body. This screw allows the abutment to be joined to the implant.

# CAD/CAM

Scan Abutments must be used with the GT-Medical libraries enabled according to the type of restoration and implant platform. To ensure correct orientation of the assembly formed by the analog, the laboratory model and the prosthetic structure, it is very important to position the Scan Abutment so that its flat surface faces **towards the buccal direction**.

Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm



# Straight Abutment

#### DESCRIPTION

The straight abutment is a milled part screwed to the implant that has a surface that can be cut to the desired height. It is available in different gingival heights.

This attachment acts as a metal core with a retention area for cement and another area to join it to the implant in order to be able to make an implant-cemented crown.



#### MATERIAL

The Straight Abutment is made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque.

#### ASSEMBLY

The customisable Straight Abutment is joined to the prosthetic structure using cement, while it is joined to the implant using the corresponding screw.

# GEOMETRY

The external geometry of the abutment is divided into 3 parts:

Implant connection surface: carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + / -0.01 mm. This allows a perfect fit and passivity.

Gingival surface: its height varies between 1 mm and 7 mm according to the abutment model. The emergence diameter is variable depending on the tooth to be restored.

Customisable surface: the body of the abutment can be cut to the prosthetic height required to be cemented.

#### NOTE:

The prosthesis connection screw is not included.



# **Overcast abutment**

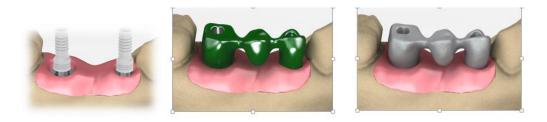
#### DESCRIPTION

The overcast abutment a part comprising a burnout plastic component and a cobalt-chromium milling base.

It is joined to the prosthetic structure using a casting process.

This attachment is used to ensure a perfect fit and passivity at the prosthesisimplant interface. Once positioned on the coronal part of the implant, it will act as an initial base for modelling the shape of the final structure.

The overcast abutment available with two geometries, an anti-rotational geometry for single-tooth prostheses and a rotational geometry for multi-tooth prostheses.





# MATERIAL

The GT-Medical Overcast abutmentcomprises two components: An abutment made of burnout plastic that is 12 mm high. A castable base made from cobalt-chromium with a mirror-polished finish.

#### ASSEMBLY

The castable base and the prosthetic structure are joined by casting.



### GEOMETRY

The geometry of the castable base is divided into the following parts:

- Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.
- Gingival shoulder, found at a height of about 1 mm with a micro-polished finish to allow perimetral growth of the gingival mucosa.
- Screw seat, which has a tolerance of +/- 0.5 degrees, to prevent micromovements that could potentially cause the screw to loosen.

# Impression coping abutment

#### DESCRIPTION

The impression coping abutment is used for taking impressions of the patient's mouth and is screwed in using the impression coping abutment Screw.

It is used to transfer the position and design of the implant or abutment to the master model on which the dental prosthesis will be made in the laboratory by creating a plaster mould that reproduces the shape of the patient's mouth and the position of the implants in the mouth.

The impression can be taken in two ways:

- Open tray: Screw the open-tray impression abutment to the implant. Make
  a small opening in the plastic tray at the site of the abutment using a bur.
  Take the impression using silicone. Once set, unscrew and lift the tray off.
  This will then be sent to the laboratory with the abutment in the tray. Then
  screw the analog to the impression abutment and cast.
- Closed tray: Screw the closed-tray impression abutment to the implant. Take the impression using the tray. Once the silicone has set, remove the tray to reveal a negative of the abutment. Unscrew the abutment. Both the tray and impression coping abutement are sent to the laboratory but separately. Insert impression coping abutment into the tray. Screw analogs and proceed to cast.



#### CUBETA ABIERTA



Tornillo de poste no incluido.

#### CUBETA CERRADA



2. TORNILLO SIN ALTURA ADICIONAL. TOTALMENTE ENRASADO.

POSTE MONOBLOQUE (TORNILLO INCORPORADO).

Tornillo de poste no incluido. Sólo para prótesis múltiples.

#### MATERIAL

The GT-Medical Impression coping abutment is made from stainless steel with a mirror-polished finish.

#### GEOMETRY

The implant connection surface has been designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + / -0.01 mm.

The body of the impression coping abutment has a retentive shape and is 12 mm high. It has several vertical flat faces for correct angular positioning and one horizontal flat face for correct height positioning.

Depending on the design of the impression coping abutment, it may be used for either open tray or closed tray methods and selecting the corresponding screw.

#### NOTE:

The impression coping abutment screw must be ordered separately; however, the monoblock abutment does not require a screw.

# **Healing** Cap

#### DESCRIPTION

The healing cap acts as a protector of the implant or transepithelial abutment connection. It is placed on the crest module to prevent tissue from growing inside.



It is joined to the implant using a fixation screw. This attachment is available in two materials, PEEK or titanium.



# MATERIAL

The GT-Medical Healing Cap is available in grade 5 titanium or PEEK.

# GEOMETRY

The implant connection surface has been designed from the original measurements of the corresponding implant a milling tolerance that is never greater than + / -0.01 mm.

The transepithelial surface has a height that varies according to the implant model; it has a micro-polished finish that promotes perimetral growth of ginigval mucosa.

The diameter of the healing cap is adjusted to the implant or transepithelial abutment on which it is placed.

All healing caps are provided with a housing for the screw used to attach it to the implant.

# NOTE:

The fixation screw is not included and should be selected separately, depending on the implant in which it is to be used.



# **Prosthetic Screw**

# DESCRIPTION

The prosthetic screw forms a permanent part of a patient's prosthesis.

It is used to join the prosthesis or attachment to the implant, preventing soft tissues from growing inside. These screws are used both in the clinic and in the laboratory to anchor parts.

The screw will have the same metric size as the inside of the implant and will have the right length to ensure correct positioning. It has a driver recess that may have different shapes, depending on the implant system in which it is to be used.

It is recommended that the screw be tightened with a specific torque, based on the metric size of each screw and the specifications of the original implant.



# MATERIAL

GT-Medical Screws are made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque. GT-Medical DINALOCK screws have a DLC coating to improve their hardness and provide excellent protection against abrasion.

# GEOMETRY

The surface between the screw and the abutment has been carefully designed to ensure an optimal fit. The driver recess may have different shapes, depending on the implant system in which the screws are to be used.



#### USE

The torque used to tighten GT-Medical screws complies with the specifications of the original implant. Based on the geometry of the screw channel:

The prosthetic screw is designed for straight channels.

The DINALOCK screw is indicated for use in prostheses with angled channels designed using the GT-Medical Libraries enabled for this purpose.

Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm

# **Healing Screw**

# DESCRIPTION

The healing screw is screwed into the dental implant.

Its main function is to extend the body of the implant over the soft tissue during the second surgical phase of implant placement. This allows gingival sealing to prevent the gum from covering the implant connection by moulding it in order to take subsequent impression of the patient and place the prosthesis on the implant.

This attachment comes in several gingival heights, depending on the depth of the implant, and different emergence profiles, depending on the tooth to be restored.

It is important to use components with the same emergence profile throughout the restoration process as this will allow the components to be easily seated without pinching the soft tissue and will maximise dental aesthetics.





#### MATERIAL

The GT-Medical Healing Screw is made from grade 5 titanium with a mirrorpolished finish to prevent adhesion of dental plaque and to promote perimetral growth of gingival mucosa.

#### GEOMETRY

The GT-Medical Healing Screw-implant connection surface has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + / -0.01 mm, and a stem with the thread of the corresponding implant.

The transepithelial surface has a height that varies between 1 mm and 5 mm according to the implant model. The emergence diameter is variable depending on the tooth to be restored.

The screwdriver may be of various types, depending on which implant system is used.

Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm

# Impression coping abutment Screw

#### DESCRIPTION

The impression coping abutment screw is used to take impressions with the abutment.

It will have the same metric size as the inside of the implant and will have the right length to ensure correct positioning.

To take open-tray impressions, a longer impression coping abutment screw is used that extends beyond the tray. However, for closed-tray impressions, a short impression coping abutment screw is used.

The screw has a driver recess that may have different shapes, depending on the implant system in which it is to be used.





#### MATERIAL

The GT-Medical Impression impression coping abutment Screw is made from stainless steel with a mirror-polished finish.

#### **GEOMETRY**

There are two types of screw based on their use:

For Open-Tray impressions, the screws have an extra height so that they extend beyond the impression coping abutment. They have a non-slip, knurled top surface to facilitate initial manual tightening (optional) and a driver recess for secondary tightening using a screwdriver.

For Closed-Tray impressions, the screws are flush with the impression coping abutment. They have a driver recess for tightening using a screwdriver. They also have a longitudinal slot for tightening using a flat-head screwdriver. Recommended torgue according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm



# **Octa® Transepithelial Abutment**

# DESCRIPTION

The Octa B transepithelial abutment is an intermediate part that acts as an interface screwed to the implant. It forms a sealed area at the implant connection and a proper passive fit between the prosthesis and the transepithelial abutment.

#### USE

It is recommended for multi-tooth implant-supported restorations due to its rotational geometry.



#### MATERIAL

The GT-Medical Octa<sup>®</sup> Transepithelial Abutment is made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque.

#### **INSERTION**

It is inserted using the Octagonal socket wrench. It is joined to the implant using the threaded stem of the transepithelial abutment.

# ASSEMBLY AND GEOMETRY

The Octa<sup>®</sup> Transepithelial Abutment is joined to the prosthetic structure using the corresponding screw.

The external geometry of the Octa<sup>®</sup> Transepithelial Abutment is divided into 2 parts:

Implant connection surface: carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + / - 0.01 mm.

Prosthesis connection surface, which has the same dimensions as the original



connection.

# Double Octagonal Transepithelial Abutment

#### DESCRIPTION

The Double Octagonal transepithelial abutment is an intermediate part that acts as an interface screwed to the implant. It forms a sealed area at the implant connection and a proper passive fit between the prosthesis and the transepithelial abutment.

#### USE

It is recommended for single -tooth implant-supported restorations due to its geometry.



#### MATERIAL

The GT-Medical Octa<sup>®</sup> Transepithelial Abutment is made from grade 5 titanium with a mirror-polished finish to prevent the adhesion of dental plaque.

#### **INSERTION**

The Double Octagonal Transepithelial Abutment is placed in the mouth and inserted using the Torx 6 driver. It is joined to the implant using the captive screw found inside.

# ASSEMBLY AND GEOMETRY

The Double Octagonal Transepithelial Abutment is joined to the prosthetic structure using the corresponding screw.

The external geometry of the transepithelial abutment is divided into 2 parts:

- Implant connection surface, carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than + / 0.01 mm.
- Prosthesis connection surface, which has the same dimensions as the original connection. The Double Octagonal Transepithelial Abutment is joined to the prosthetic structure using the corresponding screw.



# Straight Transepithelial Abutment

# DESCRIPTION

The Transepithelial Abutment is an intermediate part that acts as an interface screwed to the implant. It forms a sealed area at the implant connection and a proper passive fit between the prosthesis and the abutment. It acts as a converter to a conical, hexagonal or octagonal connection and allows the implant to be lifted over the epithelium, giving it the desired height between the available gingival heights.

#### MATERIAL

The GT-Medical Transepithelial Abutment is made from grade 5 titanium with a mirrorpolished finish to prevent the adhesion of dental plaque.

# **INSERTION**

The transepithelial abutment is inserted using the recommended hexagonal (2.0 mm; 2.7 mm) or octagonal socket wrench. It is joined to the implant using the threaded stem of the transepithelial abutment. Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm

# ASSEMBLY AND GEOMETRY

The transepithelial abutment is joined to the prosthetic structure using the corresponding GT-Medical prosthetic screw. The external geometry of the transepithelial abutment is divided into 3 parts:

Implant connection surface, which has been carefully milled from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm. Plus a stem with the same size thread as the corresponding implant.

Transepithelial surface, which has a height that varies according to the implant model; it has a micro-polished finish that promotes perimetral growth of ginigval mucosa.

Prosthesis connection surface, which has the right dimensions to ensure a perfect fit, based on the geometry to which it is converted.

# Cementable Abutment Kit

# DESCRIPTION

The cementable abutment kit is an interface that is joined to the implant using the corresponding screw and to the prosthetic structure with cement.

It is used to ensure a perfect fit and passivity at the prosthesis-implant interface. Once positioned on the coronal part of the implant, it will act as an initial base for designing the shape of the final structure.

This attachment is used in CAD/CAM libraries so that the prosthetic structure can be designed digitally.



#### MATERIAL

The GT-Medical cementable abutment kit is made from grade 5 titanium with a mirrorpolished finish to prevent the adhesion of dental plaque.

#### ASSEMBLY

The connector is joined to the implant using the GT-Medical screw. Recommended torque according to metric size of screw:

. M1.4: -> At abutment level (10/15 Ncm); At implant level (Not more than 20 Ncm)

- . M1.6: -> 20-25 Ncm
- . M1.8: -> 25-30 Ncm
- . M2.0: -> 30-32 Ncm
- . M2.5: -> 35 Ncm

However, the Connector is joined to the prosthetic structure using cement.

# GEOMETRY

The geometry of the cementable abutment kit is divided into:

Implant connection surface, which has been carefully designed from the original measurements of the corresponding implant, offering a milling tolerance that is never greater than +/- 0.01 mm.

Cementation body, which has a cylindrical surface.

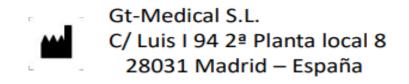
Gingival shoulder, which has a variable height, according to the tooth in question, with a micro-polished finish to allow perimetral growth of the gingival mucosa.

Screw seat, which has a tolerance of +/- 0.5 degrees, to prevent micro-movements that could potentially cause the screw to loosen.



According to ISO 15223-1:2021 standard:

SÍMBOLO	DESCRIPCIÓN
<b></b>	Manufacturer
~~	Manufacturing date
REF	Product reference
LOT	Lot number
8	Don´t reuse
NON	Non-sterile product
T I I I I I I I I I I I I I I I I I I I	See instructions for use
	Don't reuse if package is damaged
CE	CE marking for class I Medical Device
<b>CE</b> 0051	CE marking for Class II Medical Device. It shows the number of the notified body that authorizes its commercialization.
UDI	Unique device identification
MD	Medical Device Identification
	Contains hazardous substances



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