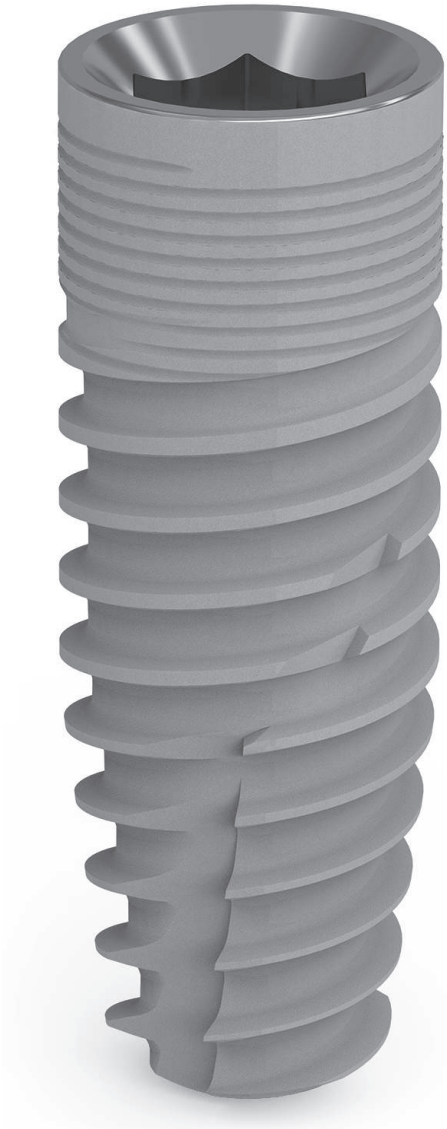
ZiNiC® MTX

Conical implants with internal hex connection



Ziacom®

ZiNiC® MTX

Conical implants with internal hex connection

Ziacom®

Important information

Please read carefully before using Ziacom® products

General information

This document contains basic information on the use of original Ziacom® dental implant systems, hereafter referred to as "Ziacom® dental implants" or simply "Ziacom® products". This document has been created as a quick guide for clinicians responsible for treatment, hereafter the "user", and therefore, is neither an alternative nor a substitute for specialised training or professional clinical experience.

Ziacom® products must be used according to a suitable treatment plan and in strict compliance with the manufacturer's surgical and prosthetic protocols. Carefully read the product-specific surgical and prosthetic protocols and the instructions for use and maintenance before using any Ziacom® product. You can find this information on our website, www.ziacom.com, or request it from your nearest authorised Ziacom® distributor.

Liability, safety and warranty

The instructions for the use and handling of Ziacom® products are based on internationally published literature, current clinical standards and our clinical experience so they should be understood as general guidance. The handling and use of Ziacom® products is the sole responsibility of the user as it is outside the control of Ziacom Medical SL. Ziacom Medical SL, its subsidiaries and/or its authorised distributors disclaim all responsibility, whether explicit or implicit, total or partial, for possible damage or injury caused by poor handling of the product or any other situation not considered in their protocols and manuals for the correct use of their products.

The user must ensure that the Ziacom® product is appropriate for the intended procedure and end purpose. Neither these instructions for use nor the work or handling protocols for the products release the user from this obligation. Ziacom® products must be used, handled and applied by clinicians with the appropriate training and qualifications required according to current legislation in each country.

The total or partial use, handling and/or application of Ziacom® products at any stage of their implementation by personnel who are unqualified or lack the necessary training will automatically void any type of warranty and may cause severe damage to the patient's health.

Ziacom® products are part of their own system, with their own design characteristics and work protocols, including dental implants, abutments or prosthetic components and surgical or prosthetic instruments. The use of Ziacom® products in combination with elements or components from other manufacturers could result in treatment failure, damage to tissues or bone structures, inadequate aesthetic outcomes and severe damage to the patient's health. Therefore, only original Ziacom® products should be used.

The clinician in charge of the treatment is solely responsible for ensuring the use of original Ziacom® products and that they are used according to the corresponding instructions for use and handling protocols throughout the implant procedure. The use of any other non-original Ziacom® components, instruments or products, whether alone or in combination with any original Ziacom® products, will immediately void the warranty of the original Ziacom® products.

See the Ziacom Medical SL Warranty Programme (available on the website or by contacting Ziacom Medical SL, its subsidiaries or authorised distributors).

Warning. Not all Ziacom® products are available in all counties. Check availability in your country.

Together for **health**

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The Company

Together for **health**

Ziacom® has been working for more than 20 years to improve the **oral health** and well-being of patients around the world by **designing and manufacturing innovative,** high-quality dental implant, prosthetic component, surgical instrument and biomaterial solutions.

The company was founded in 2004 with **100% Spanish capital** and began its activity as a manufacturer of dental implants and attachments for several European companies before later launching its own **brand of implant systems** in 2006.

In 2015. Ziacom® introduced its **diversification strategy** with the development of **new business lines** and new product lines and the launch of a **new portfolio**, which helped the company achieve a **15% share of the Spanish market** in 2016 with the sale of more than 230.000 implants.

In 2022. the company began an **ambitious growth plan** with new goals of **international expansion**, broadening and **diversification** of its portfolio **of products and services** and a change in corporate identity.

Ziacom® quality

Commitment to **quality and innovation** has been part of the values and the essence of Ziacom® since the beginning.

That is why we use state-of-the-art technology in **every stage of our products' production cycle**, from **design and manufacture** to **quality assurance, cleaning and packaging**. All of our products are also manufactured using only **high-quality raw materials** after applying **strict controls to select** our main suppliers.

Ziacom Medical S.L. is a **licensed manufacturer of medical devices** and an **AEMPS (Spanish Agency of Medicines and Medical Devices)** 6425-PS marketing authorisation holder. Our **quality management system is certified** in accordance with the requirements of ISO standards 9001:2015 and 13485:2018. and is also GMP 21 CFR 820 compliant.

Ziacom GUARANTEE LIFETIME Dental **implants**

Ziacom GUARANTEE 15 YEARS Prosthetic **abutments**

Thanks to our ceaseless endeavours to offer our clients unsurpassable quality, all our implants have a **lifetime guarantee**.

See the General Conditions for Accessing the Warranty for Ziacom® products.

Grade 5 ELI (extra-low interstitial) titanium

Zinic® MTX / Zinic® SX implants by Ziacom® are made using **Grade 5 ELI titanium (medical grade) Ti 6Al 4V** which provides improved mechanical properties.

Ziacom
Titanio Grado 5
de uso sanitario
Ti 6Al 4V

Thanks to the **Grade 5 ELI titanium,** our implants meet the requirements of standards ASTM F136 and ISO 5832-3 and comply with the requirements of EU Regulation 2017/745, attaining the corresponding CE marking from notified body 0051.

IMQ CERTIFIED · IMQ CERTIFIED · IQNET · IMQ GMP · CE · CE 0051

FDA Approved*

*See approved models

Ziacom® dental implants are all sterilised using beta-ray radiation at 25 kGy, apart from the DSQ orthodontic implants, which are supplied **non-sterile**.

IMPORTANT
All the products (except dental implants) listed in this Ziacom® catalogue are supplied non-sterile and must be sterilised before use.

Non sterile

Investment in innovation and training

In order to always offer the very best solutions for the **well-being of every patient**, and thanks to the experience and dedication of our **highly-qualified professionals** and **innovative Technological Centre**, our R&D&I team works incessantly in the field of **research and innovation** to **improve** our products and develop **new solutions** to meet the demands and needs of both patients and dentists.

We also invest in **research** and **ongoing training** as a way of providing **scientific support to the sector** and we firmly believe in training **young professionals** to best ensure **advances in the dentistry field**.

We therefore work closely with **training centres, universities and scientific bodies** to create a practical and specialised teaching environment to promote and strengthen their knowledge, abilities and professional growth.

In order to enhance our investment in the training and **development of dental professionals**, we have **specific areas at our facilities for hands-on training** and **practicals**, **state-of-the-art** training equipment and also a **physical and virtual showroom** where professionals can see all our dental solutions first hand.

Ziacom® across the globe

We are committed to making oral health available to patients all over the world and have a solid **internal growth and expansion plan** to increase the company's **international presence** in those **areas where our products are already well-established** and to **expand into new areas**.

In order to achieve this, we offer our **international associates** a **trusting and collaborative** partnership by adapting to their **local needs** and providing solutions that are specific to each market.

As part of our commitment to meet the specific **quality, regulatory and legal requirements of each country**, for both the registration and distribution of our products, we have **specific certifications** from each of the countries in which we trade.

Regional headquarters

Ziacom Medical SL

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Calle Búhos, 2 - 28320 Pinto
Phone: +34 91 723 33 06
info@ziacom.com

Subsidiaries

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info.pt@ziacom.com

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Miami, FL 33131 - USA
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info.usa@ziacom.com

Please see the up-to-date list of Ziacom® distributors at **www.ziacom.com** or email us at **export@ziacom.com**

ZiNiC®MTX

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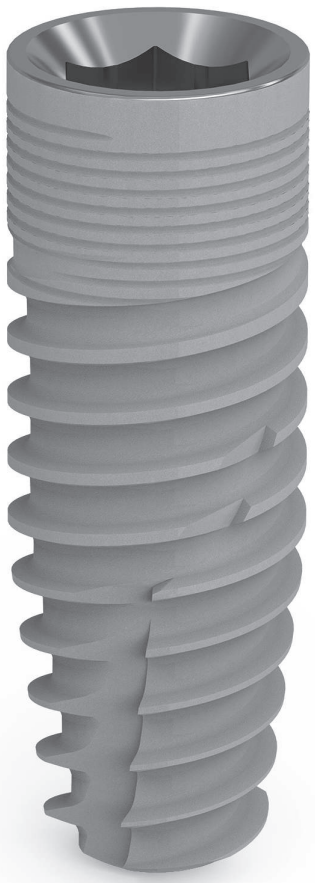
Conical implants with internal hex connection



ZiNic®MTX implant

Characteristics

CONNECTION

- Internal hex connection.
- 1.5 mm deep prosthesis hex: improves distribution of longitudinal forces.
- Tapered bevel: reduces leakage.
- Tapered friction: reduces micro-movement.
- Platform switching: soft tissue modelling and emergence profile shaping.

CORTICAL ZONE

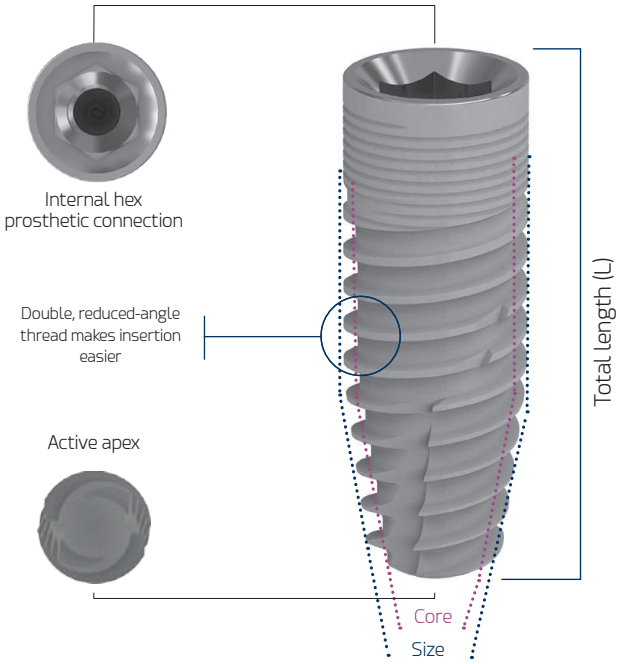
- Microthread design: preserves marginal bone.
- Microthread extension: improves load distribution.
- Macrodesign: optimal cortical compression.

BODY

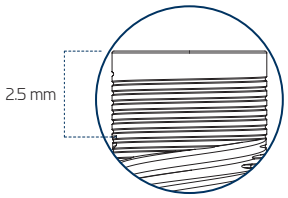
- Reduced-angle active threads: improve stability during insertion and increase BIC (bone-to-implant contact).
- Double threaded: quick insertion and shorter surgical time.
- Self-tapping active apex: facilitates insertion with underdrilling.
- Transverse apical windows: collect remnants of bone during insertion.
- Optimised morphology: high primary stability.
- Atraumatic apex: no damage to anatomical structures.

CONICAL DESIGN

- Facilitates shaping in low density bone.
- Indicated for immediate loading.
- Indicated for cases of apical convergence and/or collapse.



Dimensions of the implant collar



Advantages

- Provides greater stability and reduces micro-movements.
- Precise and solid fit between implant and prosthesis, thus minimising the risk of loosening and ensuring a stable able to receive the dental prosthesis.
- Improved absorption and distribution of forces.
- Improved aesthetic than external connection.
- Effortless restoration.
- Reduced risk of bacterial microleakage.
- Reduced marginal ridge resorption.

Diameters and lengths

		LENGTH (L)						
Ø DIAMETER	Ø PLATFORM	6	7	8.5	10	11.5	13	14.5
NP 3.30	3.20							
RP 3.60	3.50							
RP 4.00								
RP 4.40								
WP 4.80	4.50							

Dimensions in mm.

Surface treatments

Titansure surface

Implants inserted following surface treatment are known to benefit from improved osseointegration by increasing the bone-to-implant contact area. This is partly due to the implant's chemical composition and topographical characteristics.

With its **Titansure surface treatment**, Ziacom® achieves contaminant-free surface topography and optimal average macro- and microporosity values, which are key specifications for achieving prompt and proper osseointegration and, in turn, extremely reliable and predictable implants.

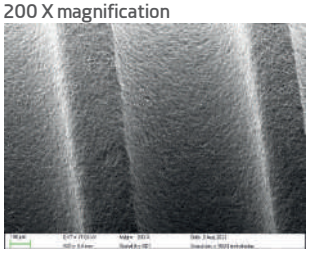
ANALYSIS OF THE TITANSURE SURFACE TREATMENT

Titansure is an SLA surface treatment created through a subtraction process involving sandblasting with white aluminium oxide and double acid-etching with hydrofluoric acid and a sulphuric/phosphoric acid mix. .

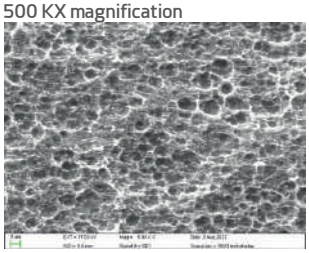
Surface morphology analysis

The implant surface topography was assessed using a scanning electron microscope (Zeiss EVO MA 10 SEM), with which the rough and porous surface was viewed, with numerous cavities with fine, sharp edges.

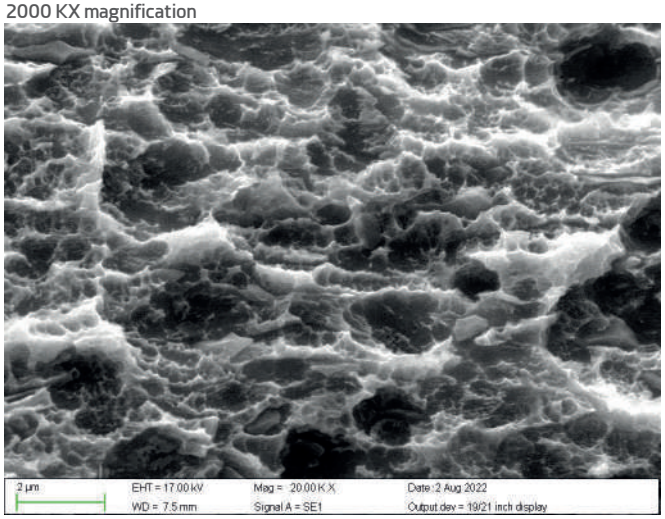
200 X magnification



500 KX magnification

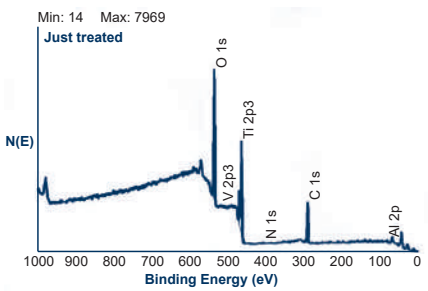


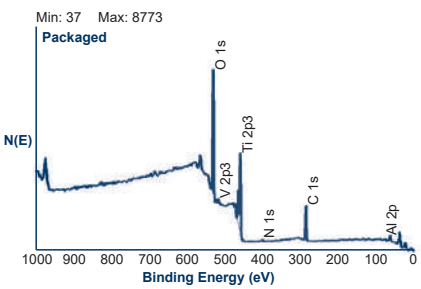
2000 KX magnification



Surface elemental analysis

The chemical analysis of the XPS surface was performed using a Perkin Elmer PHI 5600 ESCA spectrometer, yielding these results.





Compositional analysis of implant surface

	O	Ti	C	N	Al	M
Newly treated	46.0	16.6	31.8	1.0	4.3	0.2
Packaged and sterile	45.6	16.7	32.8	0.7	4.0	0.2

Values shown in atomic percentage

Surface roughness analysis

The Sa and Sdr quantitative values present, calculated in areas of 90 x 120 micrometres are:

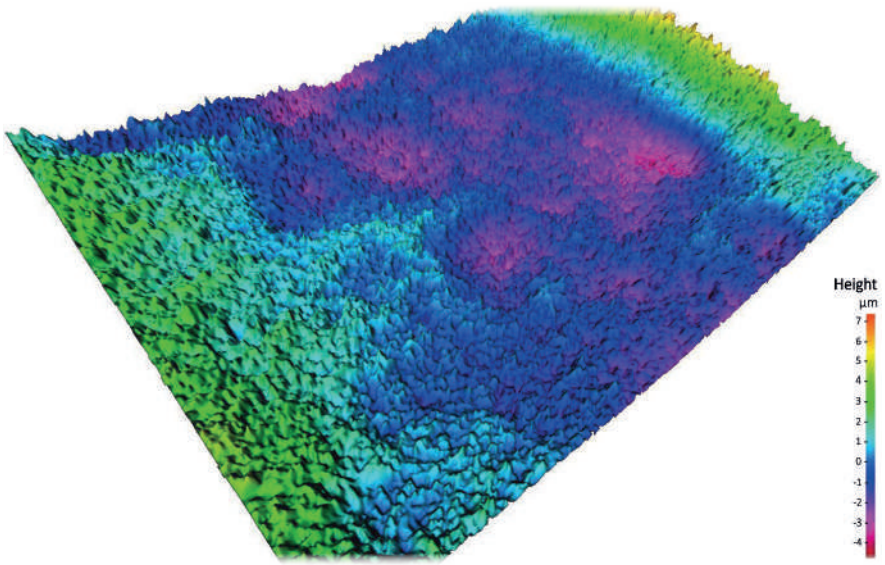
- Sa = 0.80 ± 0.02 micrometres.
- Sdr = 36 ± 2%.

Ra (µm) (SD)	Rq (µm) (SD)	Rp (µm) (SD)	Rv (µm) (SD)
1.09 (± 0.19)	1.12 (± 0.15)	3.04 (± 0.72)	2.96 (± 0.41)

The 3D surface roughness (Sa), 3D root mean square height (Sq), maximum 3D peak height (Sp) and maximum 3D pit depth of the selected area (Sv) were also recorded.

Sa (µm) (SD)	Sq (µm) (SD)	Sp (µm) (SD)	Sv (µm) (SD)
0.80 (± 0.02)	1.01 (± 0.38)	4.56 (± 0.45)	4.00 (± 0.51)

Satisfactory values that are within the range considered appropriate to promote osseointegration on the surfaces of dental implants.



The article has been taken into account as a reference:

On Implant Surfaces, a Review of Current Knowledge and Opinions, by Wennerberg Albrektsson, Int. J. Implantes Orales Maxilofaciales, 2009, 24, 63-74.

OPTIMAL OSSEOINTEGRATION

The **Titansure** surface has a three-dimensional surface structure with high peaks and broad troughs, which is known to be highly effective at promoting the coagulation cascade and the release of growth factors through platelet activation [Kim, H.; Choi, S.H.; Ryu, J.J.; Koh, S.Y.; Park, J.H.; Lee, I.S. The biocompatibility of SLA-treated titanium implants. Biomed. Mater. 2008, 3, 025011.].

This type of surface may have an osteogenic effect thanks to its different topographical features at a micrometer and nanometer level, which has a very similar morphology to the osteoclastic bone resorption cavities [Le Guehennec, L.; Goyenvalle, E.; Lopez-Heredia, M.A.; Weiss, P.; Amouriq, Y.; Layrolle, P. Histomorphometric analysis of the osseointegration of four different implant surfaces in the femoral epiphyses of rabbits. Clin. Oral Implants Res. 2008, 19, 1103–1110].

For more information on the surface treatment, please see the literature available at **www.ziacom.es/biblioteca**

Surface treatments

Titansure Active surface treatment

Ziacom® presents the **Titansure Active** surface treatment with bone bioactive liquid (BBL) as the latest innovation for the presentation of our dental implants. The **Titansure Active** surface treatment is a combination of Titansure with BBL (Bone Bioactive Liquid) technology, a patent acquired by Ziacom® and developed by the Biointelligent Technology Systems S.L research group led by Professor Maher Al-Atari Abou-Asi.

"BBL (Bone Bioactive Liquid) technology consists of a saline solution containing calcium chloride (CaCl2) and magnesium chloride (MgCl2-6H20) with a net negative charge and creates the ideal conditions for post-implant cell adhesion in the region with bone damage. What is more, surface treatment with BBL provides a significant increase in the density of hydroxyl groups on the surface of implants, thus improving their hydration considerably compared with other surfaces. This hydrophilic implant surface is precisely what enables active ion interaction with blood plasma and bone-forming cells long before the first mature osteogenic cells can attach to the surface. Finally, this yields improved intercellular communication and a greater final bone-to-implant contact area in a significantly shorter time, thereby markedly reducing the postoperative inflammatory process."

Dr. Prof. Maher Al Atari

SURFACE STUDIES OF BBL-TREATED IMPLANTS

In vitro research

Dental pulp pluripotent-like stem cell (DPPSC) and dental pulp mesenchymal stem cell (DPMSC) cultures were prepared on titanium discs sandblasted with aluminium oxide and acid etched in an osteoblast differentiation medium.

The samples were divided into two treatment groups:

- **Group A.** Titanium discs - Traditional, untreated surface
- **Group B.** Titanium discs - BBL-treated surface.

The surfaces were examined using energy-dispersive X-ray microanalysis (EDXMA) to determine the composition of surface elements.

Comparison of different elements in the two groups		
	Untreated surface	Treated surface **Titansure Active**
Carbon	32.22 ± 5.89	32.89 ± 1.76
Oxygen	14.34 ± 1.23	13.97 ± 1.45
Phosphorus	3.96 ± 2.8	3.89 ± 1.87
Calcium	5.86 ± 3.8	9.53 ± 4.04
Titanium	39.76 ± 1.65	41.34 ± 1.89
Ca/P	1.678	2.347

In vivo research

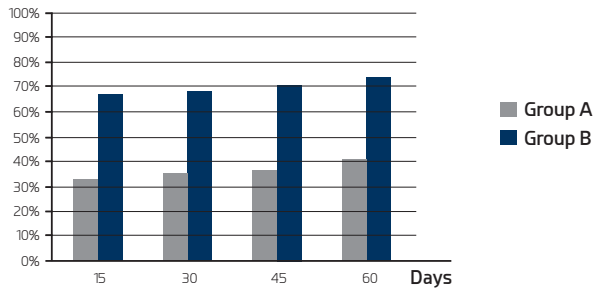
A study was conducted in the tibiae of 10 adult New Zealand rabbits after inserting four implants per rabbit (two in each tibia).

The subjects were assigned to two treatment groups with implants:

- **Group A.** Implants with a traditional, untreated surface
- **Group B.** Implants with a traditional, BBL-treated surface.

In general, group B had higher BIC (bone-to-implant contact) values than group A.

Histomorphometric analysis - Bone-to-implant contact (BIC)		
Time of measurement	Group A Untreated surface (control) mean + SD	Group B Treated surface **Titansure Active** mean + SD
15 days	33.7 ± 2.3%	68.92 ± 0.3%
30 days	35.8 ± 1.8%	69.35 ± 2.2%
45 days	37.9 ± 1.2%	70.34 ± 1.1%
60 days	41.2 ± 0.8%	73.89 ± 1.9%



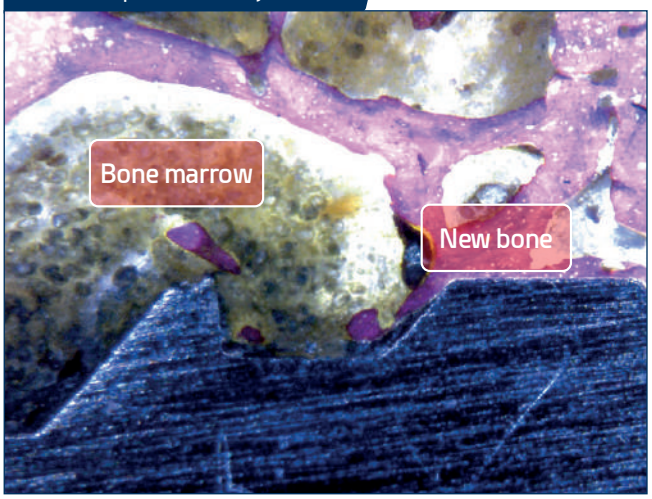
Conclusions

Within the scope of this study, the histomorphometric analysis demonstrated that the group B implants achieved quicker and more effective osseointegration than control group A. Nevertheless, an assessment of bone growth in the medullary portion of the subjects' tibiae revealed the new surface's potential for osteoinduction.

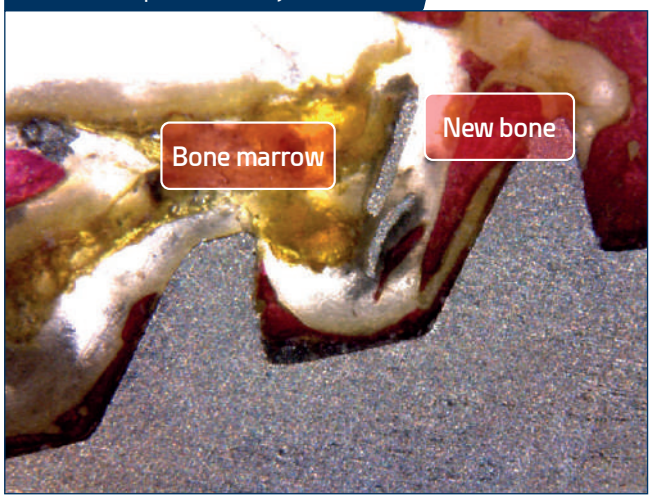
As explained by Dr. Sérgio Alexandre Gehrke, the histologist in charge of the study: "Within the limits of the study, data from the histomorphometric analysis of the implants with a treated surface (78.92 + 0.3%) highlighted a much quicker and more effective osseointegration compared to the control group (53.8 + 2.3% of BIC). Assessment of bone growth in the medullary portion of the rabbit tibiae showed the new test surface's potential for osteoinduction."

EVOLUTION OF OSSEOINTEGRATION

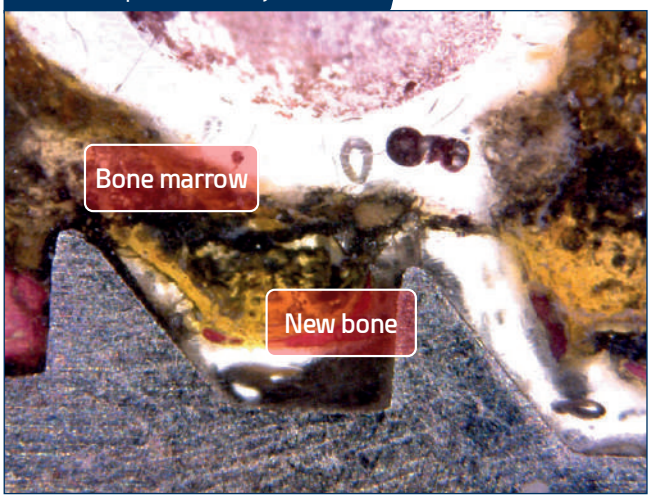
Untreated implant after 15 days



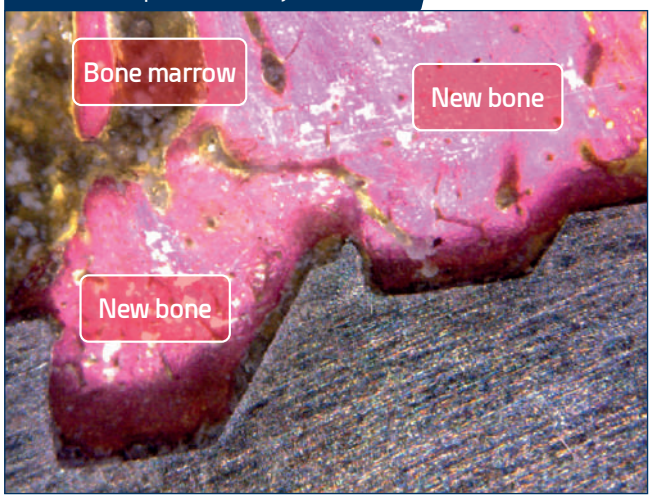
BBL-treated implant after 15 days



Untreated implant after 60 days



BBL-treated implant after 60 days



NOTE
The images are of Ziacom® implants manufactured specifically for use in the study of BBL-treated implants

Product presentation

Packaging tailored to the type of surface

Ziacom® offers two different types of product packaging depending on the type of implant surface:

Blister packaging
Available for implants with **Titansure** surface. The blisters are heat-sealed and include identification labels for product traceability. There is a flap for easy opening in the surgery while preventing accidental opening.

Bottle packaging
Available for implants with **Titansure Active** surface. The sealed bottle contains bone bioactive liquid (BBL) to ensure the perfect preservation of the implant's properties. The bottles include identification labels for product traceability.

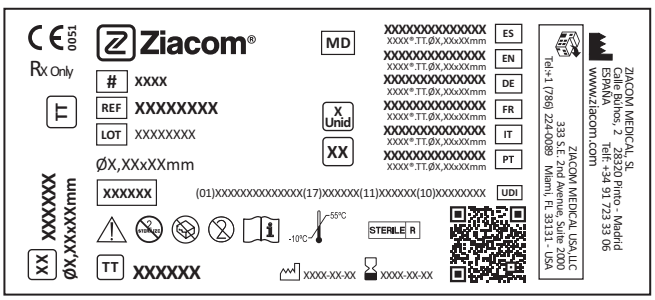
Titansure

Titansure Active

IMPORTANT
Do not open the sterile container until just before inserting the implant.

Outer identification label

Ziacom® implants are supplied in a sealed cardboard box that includes a product identification label with a description of their main characteristics.



Description of the symbology used

CE xxxx	CE marking (MDR) and notified body number.		Do not use if package is damaged.
MD	Medical device symbol.		Single-use product.
#	Model code.		Consult instructions for use.
REF	Product name.		Product use-by date.
LOT	Product batch number.		Date of manufacture.
UDI	Unique device identifier.		Manufacturer.
STERILE R	Sterilised by radiation.	TT	Titansure surface treatment.
	Temperature limit.	TTA	Titansure Active surface treatment.
	Caution, consult attached documentation.	Rx Only	Prescription only.
	Do not resterilise.		Product distributor.

For full details on the product presentation and instructions for use (IFU), go to **www.ziacom.es/ifus** or scan the QR code on the box.

ZPlus Mount option

Options for the Zinic® MTX implant include the ZPlus mount, a multi-functional abutment made in grade 5 ELI titanium (medical grade), which allows easy handling of the implant during the surgical procedure and incorporates several usage functions. Additionally, the concept of the ZPlus Mount is based on reducing treatment costs, as it works equally well as as an implant mount, impression abutment, or abutment for provisional cemented or screwed restorations.

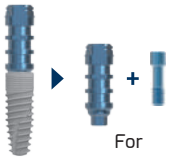
The ZPlus Mount is available in the Zinic® SX, Zinic® MTX, ZM4, ZM4 MT and ZM1 ranges.

As indicated, the ZPlus Mount can be used as a provisional abutment. In such cases, the ZPlus should be sculpted extra-orally and adjusted on an analogue – preferably a lab model or clamp. Check also the structural integrity of the mount and screw, to ensure that they have not suffered any warping or damage due to excessive insertion torque or forced removal manoeuvre. Additionally, verify on an analogue that the ZPlus fixation screw is well fitted and that the connection is secure.

IMPORTANT:
Always follow the surgical protocol when placing the implant. This will protect the mount and screw from possible damage which could prevent its being used later as an impression or provisional abutment. Use each ZPlus only with the implant to which it belongs. To avoid mix-ups, keep the ZPlus and screw with the patient's ID, listing the corresponding reference and batch number. The ZPlus has 3 flat sides. After finishing the implant placement procedure, ensure that one of these faces into the vestibular cavity.

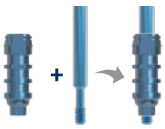
Uses of the ZPlus mount

As an implant carrier

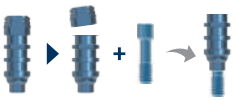


For recovery

As an impression transfer



As a provisional abutment for cemented or screwed restorations



Cut

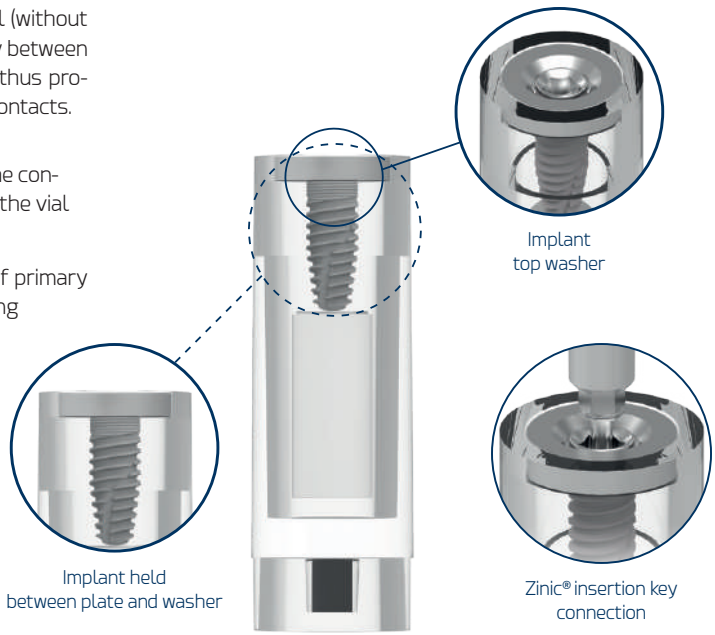
View of implant + Mount

Ziacom® No Mount

The Zinic® MTX implant is supplied in the Ziacom® No Mount vial (without implant holder), where a plastic vial holds the implant vertically between a plate below and a washer above (both made from titanium), thus providing stability while preventing any movements or unwanted contacts.

This packaging means that the pressure is applied directly to the connection so the implant can be safely and easily withdrawn from the vial and transferred to the surgical site.

In this way the Ziacom® No Mount implant eliminates the risk of primary stability reduction associated with over-instrumentation, avoiding implant manipulation during the Mount disassembly process, and also reduces the difficulty of placing the implant in posterior segments with reduced buccal opening.



Implant top washer

Implant held between plate and washer

Zinic® insertion key connection

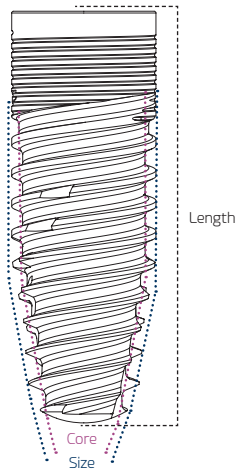
No Mount

Zinic® MTX references

Specifications of Zinic® MTX with ZPlus - Titansure

IMPLANT

Ø Size (mm)	Ø Core (mm)	Length (mm)	Ref. Titansure
3.30	2.80/1.70	8.5	ZSX3385M
		10.0	ZSX3310M
		11.5	ZSX3311M
		13.0	ZSX3313M
		14.5	ZSX3314M
3.60	3.10/1.80	8.5	ZSX3685M
		10.0	ZSX3610M
		11.5	ZSX3611M
		13.0	ZSX3613M
		14.5	ZSX3614M
4.00	3.40/2.10	6.0	ZSX4006M
		7.0	ZSX4007M
		8.5	ZSX4085M
		10.0	ZSX4010M
		11.5	ZSX4011M
		13.0	ZSX4013M
		14.5	ZSX4014M
4.40	3.80/2.30	6.0	ZSX4406M
		7.0	ZSX4407M
		8.5	ZSX4485M
		10.0	ZSX4410M
		11.5	ZSX4411M
		13.0	ZSX4413M
		14.5	ZSX4414M
4.80	4.10/2.40	6.0	ZSX4806M
		7.0	ZSX4807M
		8.5	ZSX4885M
		10.0	ZSX4810M
		11.5	ZSX4811M
		13.0	ZSX4813M



Cover screw*

Platf.	Length (L)	Reference
	4.20	ZNPT
	4.20	ZRPT
	4.20	ZWPT

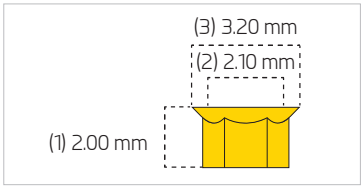
Anodised NP RP WP

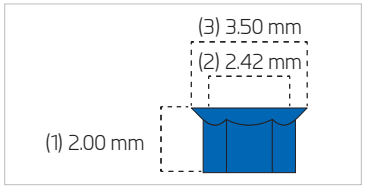
* Screw included with each implant.

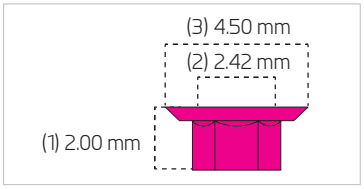
Metric

Metrics 1.60 (NP) and 1.80 (RP/WP).

Platform







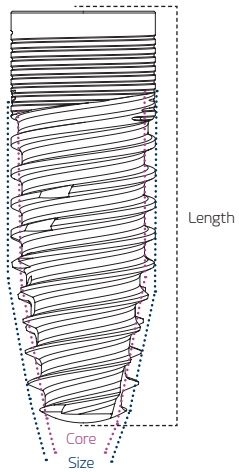
(1) Internal hex depth. (2) Distance between faces of the internal hex. (3) Diameter of working platform.

References Zinic® MTX with Ziacom® No Mount - Titansure/Titansure Active*

IMPLANT

Ø Size (mm)	Ø Core (mm)	Length (mm)	Ref. Titansure	Ref. Titansure Active*
3.30	2.80/1.70	8.5	ZSX3385MF	ZSX3385MFA
		10.0	ZSX3310MF	ZSX3310MFA
		11.5	ZSX3311MF	ZSX3311MFA
		13.0	ZSX3313MF	ZSX3313MFA
		14.5	ZSX3314MF	ZSX3314MFA
3.60	3.10/1.80	8.5	ZSX3685MF	ZSX3685MFA
		10.0	ZSX3610MF	ZSX3610MFA
		11.5	ZSX3611MF	ZSX3611MFA
		13.0	ZSX3613MF	ZSX3613MFA
		14.5	ZSX3614MF	ZSX3614MFA
4.00	3.40/2.10	6.0	ZSX4006MF	ZSX4006MFA
		7.0	ZSX4007MF	ZSX4007MFA
		8.5	ZSX4085MF	ZSX4085MFA
		10.0	ZSX4010MF	ZSX4010MFA
		11.5	ZSX4011MF	ZSX4011MFA
		13.0	ZSX4013MF	ZSX4013MFA
		14.5	ZSX4014MF	ZSX4014MFA
4.40	3.80/2.30	6.0	.ZSX4406MF	ZSX4406MFA
		7.0	ZSX4407MF	ZSX4407MFA
		8.5	ZSX4485MF	ZSX4485MFA
		10.0	ZSX4410MF	ZSX4410MFA
		11.5	ZSX4411MF	ZSX4411MFA
		13.0	ZSX4413MF	ZSX4413MFA
		14.5	ZSX4414MF	ZSX4414MFA
4.80	4.10/2.40	6.0	ZSX4806MF	ZSX4806MFA
		7.0	ZSX4807MF	ZSX4807MFA
		8.5	ZSX4885MF	ZSX4885MFA
		10.0	ZSX4810MF	ZSX4810MFA
		11.5	ZSX4811MF	ZSX4811MFA
		13.0	ZSX4813MF	ZSX4813MFA

*Check availability according to each country



Cover screw*

Platf.	Length (L)	Reference
	4.20	ZNPT
	4.20	ZRPT
	4.20	ZWPT

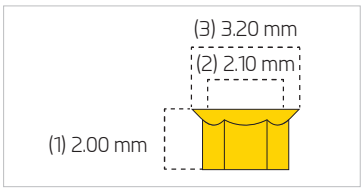
Anodised NP RP WP

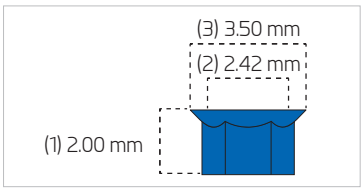
* Screw included with each implant.

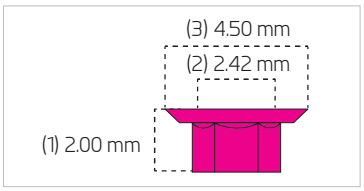
Metric

Metrics 1.60 (NP) and 1.80 (RP/WP).

Platform







(1) Internal hex depth. (2) Distance between faces of the internal hex. (3) Diameter of working platform.

Recommendations for use

All implant procedures the natural biomechanical stability of the oral cavity and allow the natural emergence of the dental crown through the soft tissue. The implantologist must assess the quantity and quality of bone currently in the implant area and consider the need for prior or simultaneous bone regeneration, as appropriate.

Ziacom® has a wide range of implants available to cover every restoration possibility. The circles on the dental chart shown represent the implant diameters and platforms recommended for each tooth position.

These recommendations are valid for the replacement of teeth with single restorations, bridges, hybrid work or overdentures.

Remember to maintain minimum distances between adjacent implants and between implants and teeth in order to preserve interdental papilla, bone vascularisation and natural emergence profiles.

Selection of the appropriate implant for each case is the sole responsibility of the implantologist. Ziacom® advises all clinicians to take into account the warnings based on scientific evidence which can be found in the product catalogues and our website.

CLARIFICATIONS ON DRILLING MEASUREMENTS AND TECHNIQUES

- **IMPLANT SIZE:** identifies the diameter and length of the implant.
- **IMPLANT BODY:** diameter of the implant core.
- **DRILL SIZE:** diameter and length of the drill bit.
- **DRILLING TECHNIQUE:** We have developed various drilling protocols to enable you to deal with different situations that arise in a schematic way when performing implant surgery.

Dental chart

ZiNiC®MTX

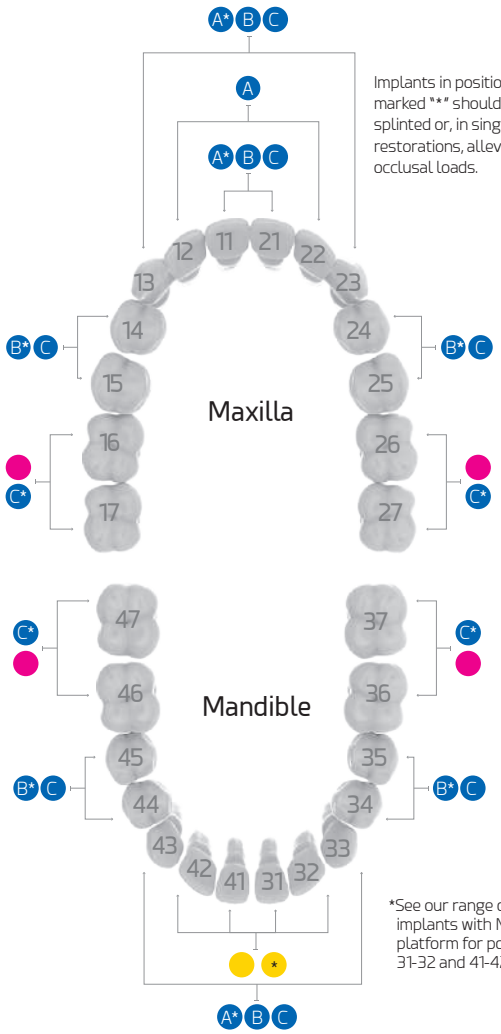
Implant diameter(1)

NP	A RP	B RP	C RP	WP
Ø3.30 mm	Ø3.60 mm	Ø4.00 mm	Ø4.40 mm	Ø4.80 mm

(1) Diameters available for analogue platforms.

Prosthetic Platform

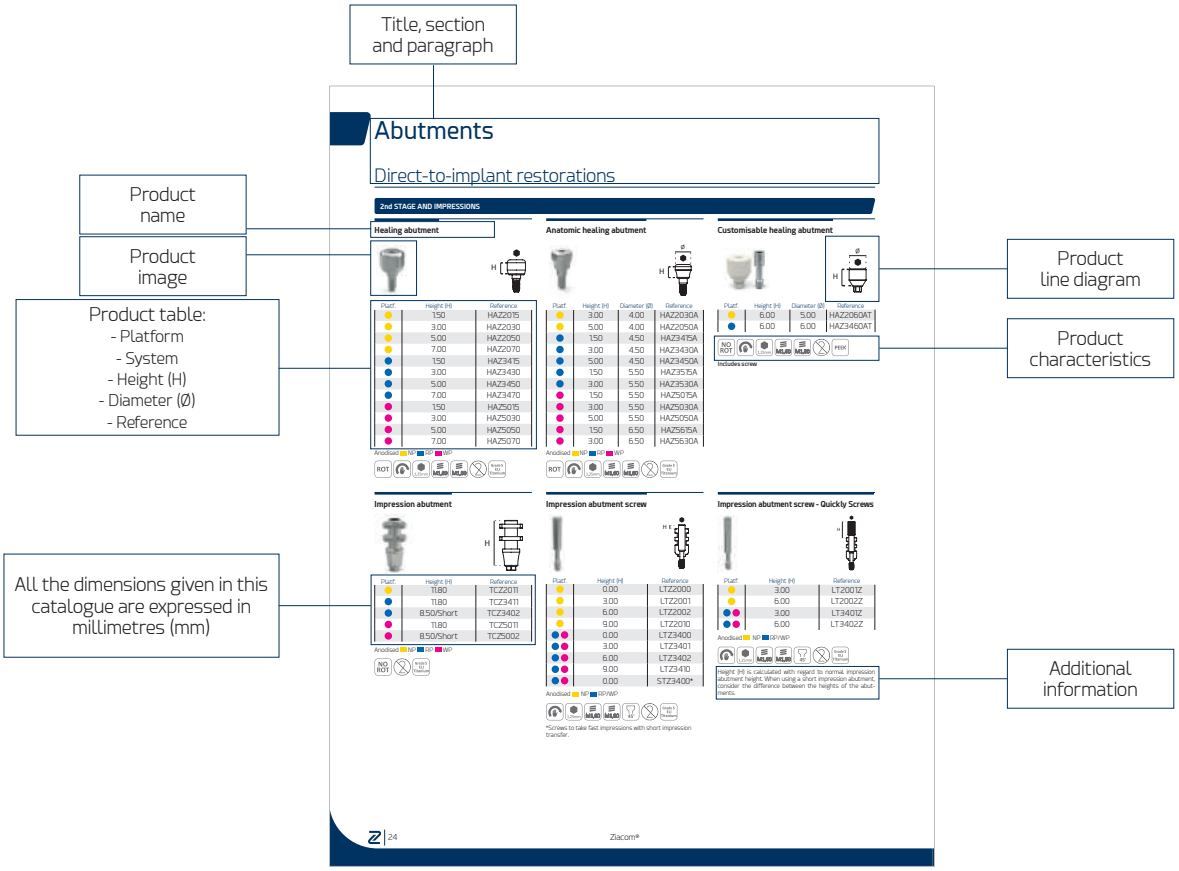
NP	RP	WP
Ø3.20 mm	Ø3.50 mm	Ø4.50 mm



IMPORTANT
Short, 6.00mm and 7.00mm implants are ONLY recommended for use in combination with normal length splinted implants (≥ 10.00 mm.

For more information on implant size selection, see the literature available at **www.ziacom.com/biblioteca**

Product data sheet



Symbology

Symbol	Meaning
ROT	Rotatory element
NO ROT	Non-rotatory element
	Use with manual torque (see table on p. 42)
XX Ncm	Maximum operating torque
Ncm 10 20 30 40 50 60 70	Ratchet torque range
Galaxy	Galaxy connection
1,25mm	Screw connection
Kirator	Kirator connection
N Nature	Nature connection
Basic	Basic connection
XDrive	XDrive connection

Symbol	Meaning
	Tx30 connection
MX,XX	Size in millimetres
45°	45° screw support
90°	90° screw support
	Use in rotation with a CA
XX Rpm	Maximum rotation speed
XX USES	Maximum number of uses
	Single-use product
Grade 5 ELI Titanium	Made from grade 5 ELI (extra-low interstitial) titanium
Grade 2 Titanium	Made from grade 2 titanium
Stainless Steel	Made from stainless steel

Symbol	Meaning
Steel	Made from steel
Co-Cr +castable	Made from cobalt-chromium + castable plastic
Cobalt Chromium	Made from cobalt-chromium
PEEK	Made from PEEK
Full castable	Made from castable plastic
Plastic	Made from plastic
XX°	Recommended sterilisation temperature
Non sterile	Unsterilised product
	Use with abundant irrigation
XX°	Maximum angle

ZiNiC®MTX

Abutments

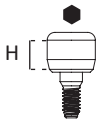
Direct-to-implant reconstructions

Abutments

Direct-to-implant restorations

2nd STAGE AND IMPRESSIONS

Healing abutment



Platf.	Height (H)	Reference
●	1.50	HAZ2015
●	3.00	HAZ2030
●	5.00	HAZ2050
●	7.00	HAZ2070
●	1.50	HAZ3415
●	3.00	HAZ3430
●	5.00	HAZ3450
●	7.00	HAZ3470
●	1.50	HAZ5015
●	3.00	HAZ5030
●	5.00	HAZ5050
●	7.00	HAZ5070

Anodised ■ NP ■ RP ■ WP

ROT · 1,25mm · M1,60 · M1,80 · Grade 5 ELI Titanium

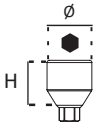
Anatomic healing abutment

Platf.	Height (H)	Diameter (Ø)	Reference
●	3.00	4.00	HAZ2030A
●	5.00	4.00	HAZ2050A
●	1.50	4.50	HAZ3415A
●	3.00	4.50	HAZ3430A
●	5.00	4.50	HAZ3450A
●	1.50	5.50	HAZ3515A
●	3.00	5.50	HAZ3530A
●	1.50	5.50	HAZ5015A
●	3.00	5.50	HAZ5030A
●	5.00	5.50	HAZ5050A
●	1.50	6.50	HAZ5615A
●	3.00	6.50	HAZ5630A

Anodised ■ NP ■ RP ■ WP

ROT · 1,25mm · M1,60 · M1,80 · Grade 5 ELI Titanium

Customisable healing abutment

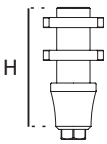


Platf.	Height (H)	Diameter (Ø)	Reference
●	6.00	5.00	HAZ2060AT
●	6.00	6.00	HAZ3460AT

NO ROT · 1,25mm · M1,60 · M1,80 · PEEK

Includes screw

Impression abutment

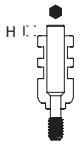


Platf.	Height (H)	Reference
●	11.80	TCZ2011
●	11.80	TCZ3411
●	8.50/Short	TCZ3402
●	11.80	TCZ5011
●	8.50/Short	TCZ5002

Anodised ■ NP ■ RP ■ WP

NO ROT · Grade 5 ELI Titanium

Impression abutment screw



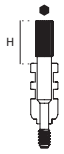
Platf.	Height (H)	Reference
●	0.00	LTZ2000
●	3.00	LTZ2001
●	6.00	LTZ2002
●	9.00	LTZ2010
● ●	0.00	LTZ3400
● ●	3.00	LTZ3401
● ●	6.00	LTZ3402
● ●	9.00	LTZ3410
● ●	0.00	STZ3400*

Anodised ■ NP ■ RP/WP

1,25mm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

*Screws to take fast impressions with short impression transfer.

Impression abutment screw - Quickly Screws



Platf.	Height (H)	Reference
●	3.00	LT2001Z
●	6.00	LT2002Z
● ●	3.00	LT3401Z
● ●	6.00	LT3402Z

Anodised ■ NP ■ RP/WP

1,25mm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

Height (H) is calculated with regard to normal impression abutment height. When using a short impression abutment, consider the difference between the heights of the abutments.

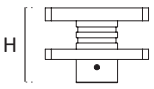
Pick-up impression abutment

Platf.	Height (H)	Reference
●	3.00	PUZ2001
●	3.00	PUZ3401
●	3.00	PUZ5001

Anodised ● NP ● RP ● WP

ROT | 1,25mm | M1,60 | M1,80 | Grade 5 ELI Titanium

Pick-up impression transfer

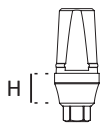


Platf.	Height (H)	Reference
● ● ●	7.25	CPU3410

ROT | Plastic

Pack of 4 units. DO NOT sterilise in an autoclave. Drillable.

Z2Plus Snap-On impression abutment



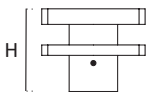
Platf.	Height (H)	Reference
●	3.00	Z2NPZC10
●	1.50	Z2RPZC10
●	1.50	Z2WPZC10

Anodised ● NP ● RP ● WP

NO ROT | Grade 5 ELI Titanium

IMPORTANT
Use the laboratory screw to tighten this impression abutment.

Z2Plus Snap-On impression transfer

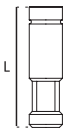


Platf.	Height (H)	Reference
● ●	8.00	ZPU3400
●	8.00	ZPU5000

NO ROT | Plastic

Pack of 4 units. DO NOT sterilise in an autoclave. Drillable.

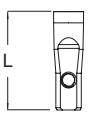
Implant analogue



Platf.	Length (L)	Reference
●	12.00	IAZ2000
●	12.00	IAZ3400
●	12.00	IAZ5000

NO ROT | Stainless Steel

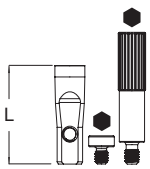
3D implant analogue - Individual



Platf.	Length (L)	Reference
●	13.00	IAZ2008D
●	13.00	IAZ3408D
●	13.00	IAZ5008D

NO ROT | Stainless Steel

3D implant analogue - Pack



Platf.	Length (L)	Reference
●	13.00	IAZ2008DC*
●	13.00	IAZ3408DC*
●	13.00	IAZ5008DC*

NO ROT | 1,25mm | M1,80 | M2,00 | Stainless Steel

*Includes base screw Ref. DSIADI and lateral screw Ref. DSIADT for analogue connection.

Screws - 3D analogue

Type	Length (L)	Reference
Base screw (1)*	-	DSIADI
Lateral screw (2)*	15.00	DSIADT

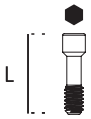
NO ROT | 1,25mm | M1,80 | M2,00 | Stainless Steel

*Pack of 4 units.

Abutments

FIXING ELEMENTS

Clinical screw

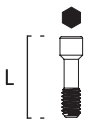


Platf.	Length (L)	Reference
●	8.00	DSZ2000
● ●	7.85	DSZ3400

Anodised ● NP ● RP/WP

30 Ncm | 1,25mm | M1,60 | M1,80 | 45° | Grade 5 ELI Titanium

Kiran clinical screw



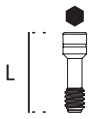
For ZiaCam Ti-Base or metal structures

Platf.	Length (L)	Reference
●	8.00	DSZ2010
● ●	7.85	DSZ3410

30 Ncm | 1,25mm | M1,60 | M1,80 | 45° | Grade 5 ELI Titanium

Special Kiran screw with surface treatment.

Laboratory screw

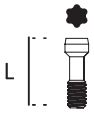


Platf.	Length (L)	Reference
●	7.35	LBZ2000
● ●	7.40	LBZ3400

10 Ncm | 1,25mm | M1,60 | M1,80 | 45° | Grade 5 ELI Titanium

NOT suitable for use as the final clinical screw.

Kiran Tx30 clinical screw



For ZiaCam Tx30 abutments and Ti-Base

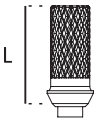
Platf.	Length (L)	Reference
●	7.10	DSZ2010TX
● ●	6.80	DSZ3410TX

30 Ncm | M1,60 | M1,80 | 45° | Grade 5 ELI Titanium

Special Kiran Tx30 screw with surface treatment.
Use only with Tx30 screwdrivers.

PROVISIONAL

Provisional abutment



Rotatory

Platf.	Length (L)	Reference
●	9.50	RUZT2010
●	9.50	RUZT3410
●	9.50	RUZT5010

Anodised ● NP ● RP ● WP

ROT | Grade 5 ELI Titanium

Non-rotatory

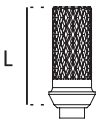
Platf.	Length (L)	Reference
●	9.50	NUZT2010
●	9.50	NUZT3410
●	9.50	NUZT5010

Anodised ● NP ● RP ● WP

NO ROT | Grade 5 ELI Titanium

Provisional abutment

Aesthetic and immediate loading abutments



Rotatory

Platf.	Length (L)	Reference
●	9.50	RUZP2010
●	9.50	RUZP3410
●	9.50	RUZP5010

ROT | PEEK

Non-rotatory

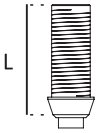
Platf.	Length (L)	Reference
●	9.50	NUZP2010
●	9.50	NUZP3410
●	9.50	NUZP5010

NO ROT | PEEK

SCREWED

UCLA

UCLA



Rotatory

Platf.	Length (L)	Reference
●	10.70	RUZ2000
●	10.70	RUZ3400
●	10.70	RUZ5000

ROT · Full castable

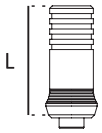
Non-rotatory

Platf.	Length (L)	Reference
●	10.70	NUZ2000
●	10.70	NUZ3400
●	10.70	NUZ5000

NO ROT · Full castable

MACHINED BASE UCLA

Machined base abutment
+ Castable abutment



Rotatory

Platf.	Length (L)	Reference
●	10.60	BRUZ20
●	10.60	BRUZ34
●	10.60	BRUZ50

ROT · Co-Cr +castable

Non-rotatory

Platf.	Length (L)	Reference
●	10.60	BNUZ20
●	10.60	BNUZ34
●	10.60	BNUZ50

NO ROT · Co-Cr +castable

Abutments

SCREWED

Tx30 VARIABLE ROTATION ABUTMENT

Tx30 mechanised base abutment
+ 2 castable abutments (15° and 20°)

Rotatory

Platf.	15° Length (L)	20° Length (L)	Reference
●	11.40	11.20	BRUZ20TX
●	11.40	11.20	BRUZ34TX
●	11.40	11.20	BRUZ50TX

ROT · 30 Ncm · M1,60 · M1,80 · 45° · Co-Cr +castable · 15° · 20°

Non-rotatory

Platf.	15° Length (L)	20° Length (L)	Reference
●	11.40	11.20	BNUZ20TX
●	11.40	11.20	BNUZ34TX
●	11.40	11.20	BNUZ50TX

NO ROT · 30 Ncm · M1,60 · M1,80 · 45° · Co-Cr +castable · 15° · 20°

Tx30 mechanised base abutment
+ 2 castable abutments (20° and 25°)

Rotatory

Platf.	20° Length (L)	25° Length (L)	Reference
●	11.20	11.00	BRUZ20TX1
●	11.20	11.00	BRUZ34TX1
●	11.20	11.00	BRUZ50TX1

ROT · 30 Ncm · M1,60 · M1,80 · 45° · Co-Cr +castable · 20° · 25°

Non-rotatory

Platf.	20° Length (L)	25° Length (L)	Reference
●	11.20	11.00	BNUZ20TX1
●	11.20	11.00	BNUZ34TX1
●	11.20	11.00	BNUZ50TX1

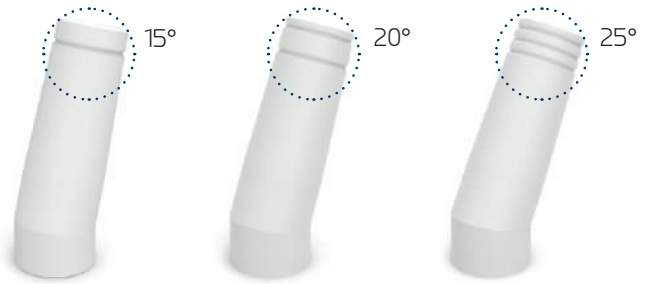
NO ROT · 30 Ncm · M1,60 · M1,80 · 45° · Co-Cr +castable · 20° · 25°

Includes special Kiran Tx30 screw with surface treatment Ref. DSZ2010TX (NP)/DSZ3410TX (RP/WP) for all Tx30 Variable Rotation abutments.

TX30 VARIABLE ROTATION ABUTMENT

The Tx30 variable rotation abutment comprises a Cr-Co machined base that accepts 15°, 20° or 25° angled castable abutments and a Kiran clinical screw with a special Tx30 connection.

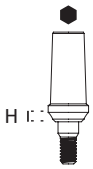
The Cr-Co base ensures a perfect fit and seal with the implant connection and the different angles of the castable abutments can be used to choose the best position for the correct emergence of the restoration screw access channel.



Identifying grooves for the castable angles

CEMENTED

Straight Abutment

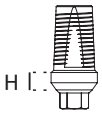


Platf.	Height (H)	Reference
●	1.50	STAZ2015
●	2.50	STAZ2025
●	3.50	STAZ2035
●	1.50	STAZ3415
●	2.50	STAZ3425
●	3.50	STAZ3435
●	1.50	STAZ5015
●	2.50	STAZ5025
●	3.50	STAZ5035

Anodised ■ NP ■ RP ■ WP

ROT | 30 Ncm | 1,25mm | M1,60 | M1,80 | Grade 5 ELI Titanium

Straight Abutment



Platf.	Height (H)	Reference
●	1.50	STZ2015
●	2.50	STZ2025
●	3.50	STZ2035
●	1.50	STZ3415
●	2.50	STZ3425
●	3.50	STZ3435
●	1.50	STZ5015
●	2.50	STZ5025
●	3.50	STZ5035

Anodised ■ NP ■ RP ■ WP

NO ROT | Grade 5 ELI Titanium

15º angled abutment

Platf.	Height (H)	Reference
●	1.50	A1Z2015
●	2.50	A2Z2015
●	1.50	A1Z3415
●	2.50	A2Z3415
●	1.50	A1Z5015
●	2.50	A2Z5015

Anodised ■ NP ■ RP ■ WP

NO ROT | Grade 5 ELI Titanium

25º angled abutment

Platf.	Height (H)	Reference
●	1.50	A1Z2025
●	2.50	A2Z2025
●	1.50	A1Z3425
●	2.50	A2Z3425
●	1.50	A1Z5025
●	2.50	A2Z5025

Anodised ■ NP ■ RP ■ WP

NO ROT | Grade 5 ELI Titanium

Abutments

Direct-to-implant restorations

OVERDENTURES

Kirator

Kirator abutment with applicator

Kirator abutment

Platf.	Height (H)	Reference
●	1.00	LOZ2001
●	2.00	LOZ2002
●	3.00	LOZ2003
●	4.00	LOZ2004
●	5.00	LOZ2005
●	6.00	LOZ2006
●	1.00	LOZ3401
●	2.00	LOZ3402
●	3.00	LOZ3403
●	4.00	LOZ3404
●	5.00	LOZ3405
●	6.00	LOZ3406
●	1.00	LOZ5001
●	2.00	LOZ5002
●	3.00	LOZ5003
●	4.00	LOZ5004

Golden surface treatment.

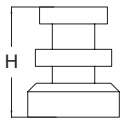
Insertion key Ref. LOSD01/LOSD02.

ROT | 30 Ncm | Kirator | M1,60 | M1,80 | Grade 5 ELI Titanium

Includes the Kirator abutment with sterilisable polyoxymethylene applicator (Tecaform AH-POM-C).

Related abutments

Kirator impression transfer

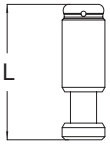


System	Height (H)	Reference
Kirator	6.50	TCRK3400

ROT | Plastic

Pack of 4 units. DO NOT sterilise in an autoclave. Drillable.

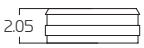
Kirator analogue



System	Length (L)	Reference
Kirator	13.00	IATORK01

ROT | Stainless Steel

Kirator processing kit



Titanium housing

System	Reference
Kirator processing kit	TP8520

Kirator processing kit consisting of: Titanium housing with black relined cap, spacer and purple, clear and pink plastic caps.

Sterilise the metal coping in an autoclave. Plastic caps and the disc should be cold sterilised. See Instructions for Cleaning and Sterilising on the Ziacom® website.

System	Retention (kg)	Reference
Kirator	● Light/1.20 kg	TPK100
	● Standard/1.80 kg	TPK200
	● Strong/2.70 kg	TPK300

Pack of 4 plastic Kirator retainer caps.

ROT | Grade 5 ELI Titanium | Plastic

NOT autoclavable – use cold steriliser. Maximum divergence of 22° between implants.

Kirator divergence processing kit

Titanium housing

System	Reference
Kirator processing kit	TP8520D

Kirator divergence processing kit comprising: Titanium housing with black relined cap, spacer and purple, transparent and pink plastic caps.

Sterilise the metal coping in an autoclave. Plastic caps and the disc should be cold sterilised. See Instructions for Cleaning and Sterilising on the Ziacom® website.

System	Retention (kg)	Reference
Kirator	● Light/1.20 kg	TPK110
	● Standard/1.80 kg	TPK220
	● Strong/2.70 kg	TPK330

Pack of 4 plastic Kirator retainer caps - Divergent.

ROT | Grade 5 ELI Titanium | Plastic

NOT autoclavable – use cold steriliser. Maximum divergence of 44° between implants.

Example sequence

ZM-Equator

ZM-Equator abutment with applicator

ZM-Equator abutment

Platf.	Height (H)	Reference
●	1.00	ZMZ2001
●	2.00	ZMZ2002
●	3.00	ZMZ2003
●	4.00	ZMZ2004
●	5.00	ZMZ2005
●	6.00	ZMZ2006
●	1.00	ZMZ3401
●	2.00	ZMZ3402
●	3.00	ZMZ3403
●	4.00	ZMZ3404
●	5.00	ZMZ3405
●	6.00	ZMZ3406
●	1.00	ZMZ5001
●	2.00	ZMZ5002
●	3.00	ZMZ5003
●	4.00	ZMZ5004

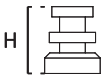
Golden surface treatment.

ROT | 30 Ncm | 1,25mm | M1,60 | M1,80 | Grade 5 ELI Titanium

Includes ZM-Equator abutment with sterilisable polyoxymethylene plastic applicator (Tecaform AH-POM-C).

Related abutments

ZM-Equator impression transfer

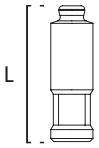


System	Height (H)	Reference
ZM-Equator	6.50	TCRK3410

ROT | Plastic

Pack of 4 units. DO NOT sterilise in an autoclave. Drillable.

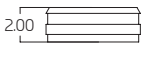
ZM-Equator analogue



System	Length (L)	Reference
ZM-Equator	13.20	IAZM01

ROT | Stainless Steel

ZM-Equator processing kit



Titanium housing

System	Reference
ZM-Equator processing kit	ZM8520

ZM-Equator processing kit consisting of: Titanium housing with black relined cap, spacer and three plastic caps in purple, transparent and pink.

Sterilise the metal coping in an autoclave. Plastic caps and the disc should be cold sterilised. See Instructions for Cleaning and Sterilising on the Ziacom® website.

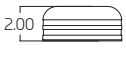
System	Retention (kg)	Reference
ZM-Equator	Light/1.20 kg	TZM100
	Standard/1.80 kg	TZM200
	Strong/2.70 kg	TZM300

Pack of 4 plastic ZM-Equator retainer caps.

ROT | Grade 5 ELI Titanium | Plastic

NOT autoclavable – use cold steriliser. Maximum divergence of 22° between implants.

ZM-Equator divergence processing kit



Titanium housing

System	Reference
ZM-Equator processing kit	ZM8520D

ZM-Equator divergence processing kit comprising: Titanium housing with black relined cap, spacer and three plastic caps in purple, transparent and pink.

Sterilise the metal coping in an autoclave. Plastic caps and the disc should be cold sterilised. See Instructions for Cleaning and Sterilising on the Ziacom® website.

System	Retention (kg)	Reference
ZM-Equator	Light/1.20 kg	TZM100
	Standard/1.80 kg	TZM200
	Strong/2.70 kg	TZM300

Pack of 4 plastic ZM-Equator retainer caps - Divergent.

ROT | Grade 5 ELI Titanium | Plastic

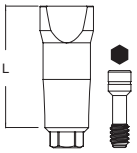
NOT autoclavable – use cold steriliser. Maximum divergence of 44° between implants.

Example sequence

Abutments

DIGITAL CAD-CAM

ZiaCam scanbody to implant



See the literature available at **www.ziacom.com/biblioteca** for more information on the use of zirconium restoration interfaces or the use of abutments in the "Prosthetic procedure" manual.

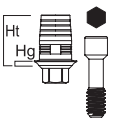
Platf.	Length (L)	Reference
●	10.00	FNSYZ208T
●	10.00	FNSYZ348T
●	10.00	FNSYZ508T

NO ROT · 1,25mm · M1,60 · M1,80 · Grade 5 ELI Titanium

Indicated for clinical and laboratory use.

All ZiaCam scanbodies to implant abutments include a screw reference LBZ2000 (NP)/LBZ3400 (RP/WP).

ZiaCam Ti-Base



Rotatory

Platf.	Height (Hg/Ht)	Reference
●	0.50/5.00	FRUZ201
●	1.50/6.00	FRUZ202
●	0.50/5.00	FRUZ341
●	1.50/6.00	FRUZ342
●	0.50/5.00	FRUZ501
●	1.50/6.00	FRUZ502

ROT · 30 Ncm · 1,25mm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

Non-rotatory

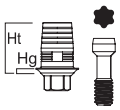
Platf.	Height (Hg/Ht)	Reference
●	0.50/5.00	FNUZ201
●	1.50/6.00	FNUZ202
●	0.50/5.00	FNUZ341
●	1.50/6.00	FNUZ342
●	0.50/5.00	FNUZ501
●	1.50/6.00	FNUZ502

NO ROT · 30 Ncm · 1,25mm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

All ZiaCam Ti-Base abutments come with a special Kiran screw with surface treatment Ref. DSZ2010 (NP)/DSZ3410 (RP/WP).

(1) Gingival heights of 1.50 mm have a maximum angle of 20° (all other heights have a maximum of 30°).

ZiaCam Tx30 Ti-Base



Rotatory

Platf.	Height (Hg/Ht)	Reference
●	0.50/6.00	FRUZ20TX1
●	1.50/7.00	FRUZ20TX2
●	0.50/6.00	FRUZ34TX1
●	1.50/7.00	FRUZ34TX2
●	0.50/6.00	FRUZ50TX1
●	1.50/7.00	FRUZ50TX2

ROT · 30 Ncm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

30° · 20° (1)

Non-rotatory

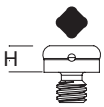
Platf.	Height (Hg/Ht)	Reference
●	0.50/6.00	FNUZ20TX1
●	1.50/7.00	FNUZ20TX2
●	0.50/6.00	FNUZ34TX1
●	1.50/7.00	FNUZ34TX2
●	0.50/6.00	FNUZ50TX1
●	1.50/7.00	FNUZ50TX2

NO ROT · 30 Ncm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

30° · 20° (1)

All ZiaCam Tx30 Ti-Base abutments come with a special Kiran Tx30 screw with surface treatment Ref. DSZ2010TX (NP)/DSZ3410TX (RP/WP).

Kirator. Toolbar abutment



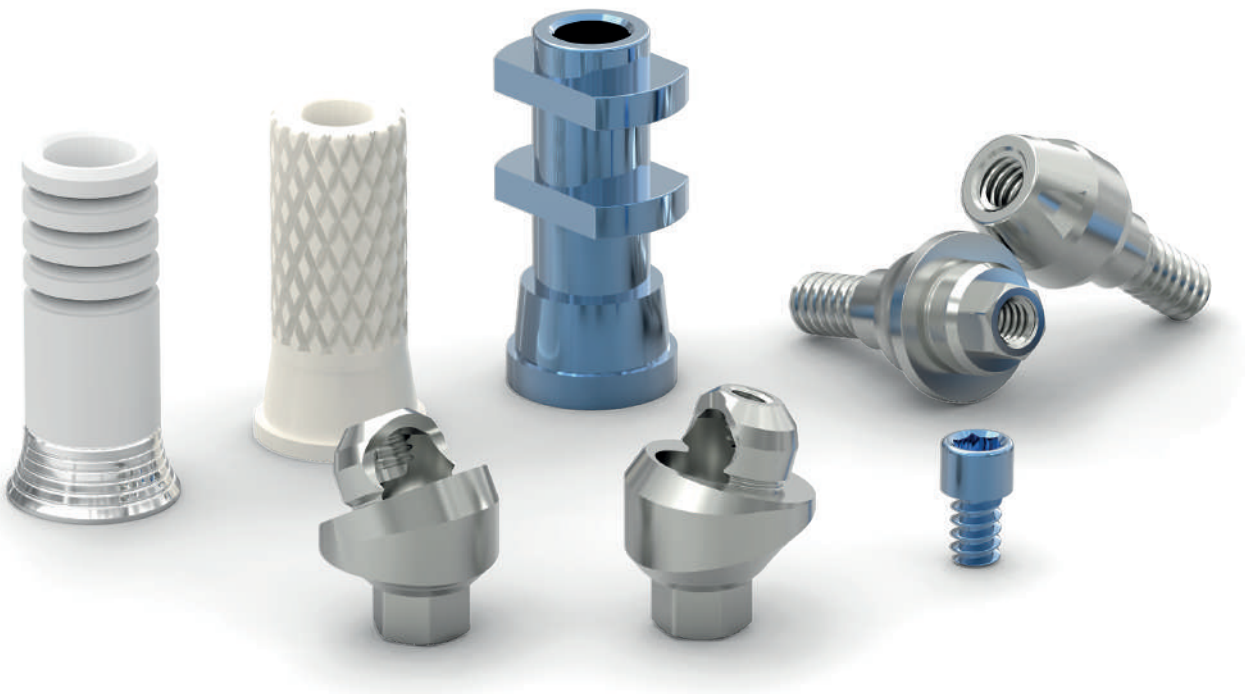
Platf.	Height (H)	Reference
Universal	1.80	LOTB100

Golden surface treatment.

ROT · Grade 5 ELI Titanium

Abutments

Restorations using transepithelials



Abutments

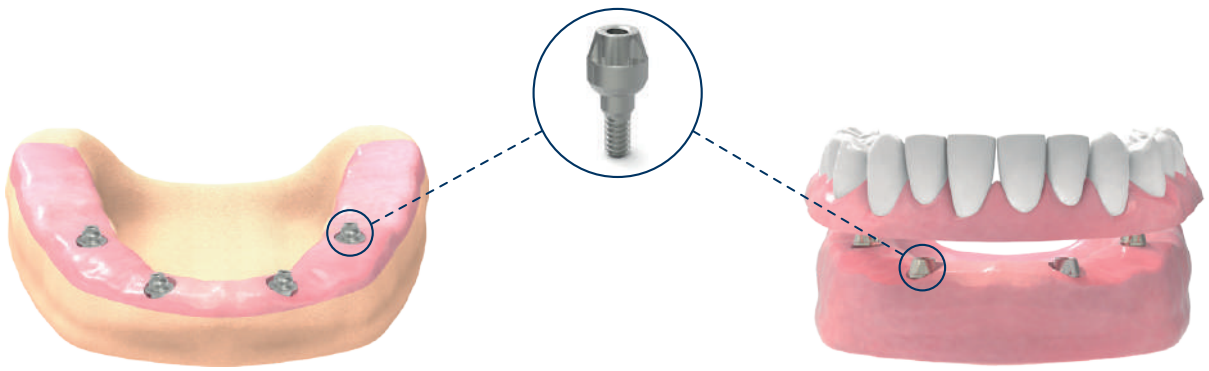
Restorations using transepithelials

Transepithelial abutments

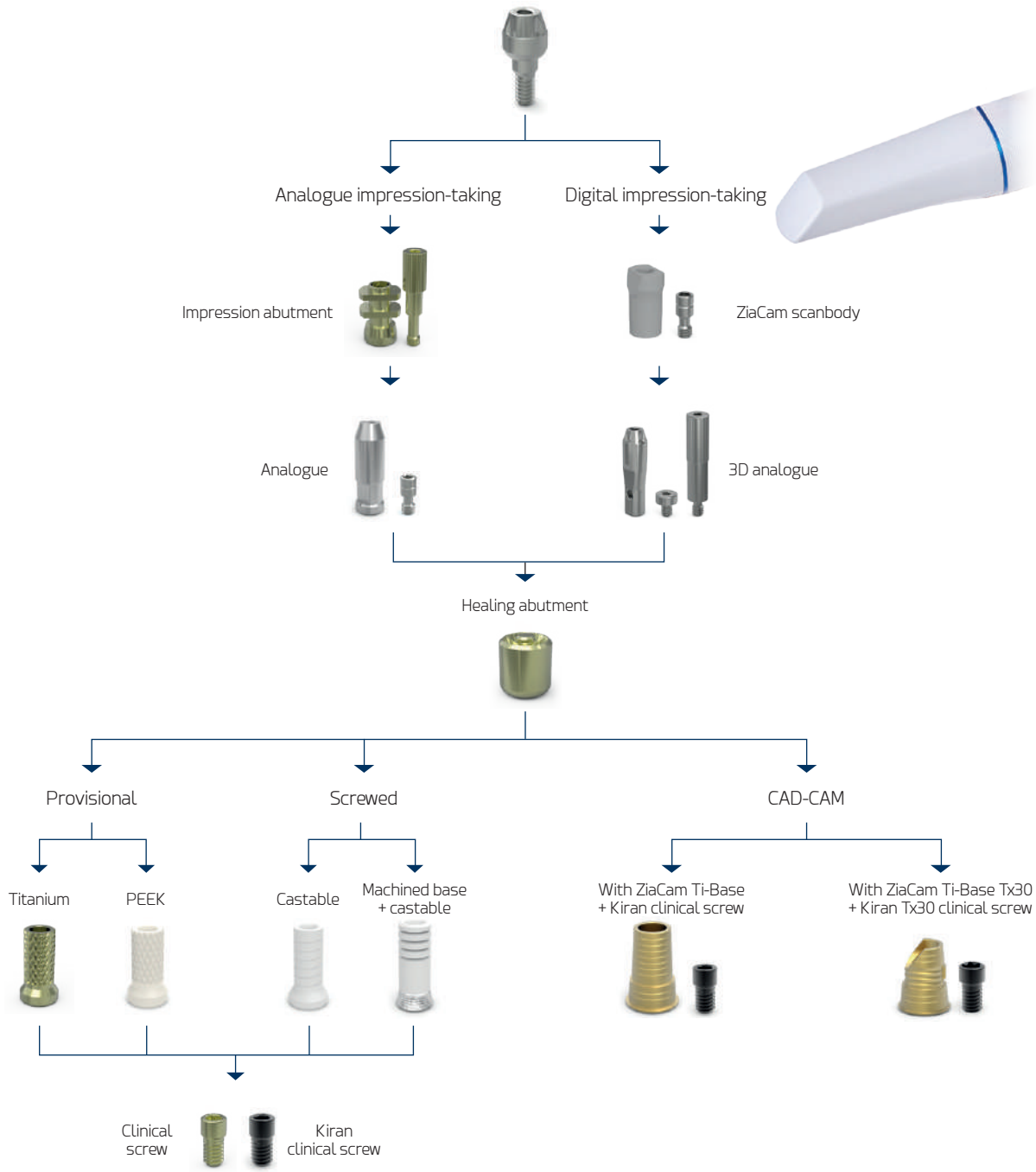
- Allows the peri-implant tissue to form from the initial 8 weeks.
- One abutment-one time allows gingival adhesion to the surface without the need for repeated detachments.
- Avoids loss of bone and soft tissues as there is no mechanical rupture of the peri-implant interface.
- The prosthetic working area is above the gingival level, making the soft tissue adhesive behaviour more predictable, maintaining a good seal.
- Less formation of micro-gaps at the implant-prosthesis junction.
- Increased crestal bone preservation.
- Prosthetic try-ins and definitive placement without anaesthesia.
- If the recommended torques are exceeded, the screw suffers the fracture at transepithelial level and not inside the implant.

Abutment heights

- Greater abutment height means more marginal bone is preserved in cement-retained prostheses.
- Higher abutments (≥2mm) provide better soft tissue adaptation.
- Short abutments (< 2 mm) can compromise the soft tissues, resulting in greater crestal bone loss.
- Marginal bone loss will differ depending on the clinical decision on the abutment height. Generally, prosthetic abutments ≥2mm will lead to better preservation of crestal bone.



Basic | Example of usage sequence



For more information on the use of abutments, see the "Prosthetic procedure manual" available at **www.ziacom.com/biblioteca**

Abutments

Basic abutment

Platf.	Height (H)	Reference
●	1.00	BASICZ201
●	2.00	BASICZ202
●	3.00	BASICZ203
●	4.00	BASICZ204
●	5.00	BASICZ205
●	1.00	BASICZ401
●	2.00	BASICZ402
●	3.00	BASICZ403
●	4.00	BASICZ404
●	5.00	BASICZ405
●	1.00	BASICZ501
●	2.00	BASICZ502
●	3.00	BASICZ503
●	4.00	BASICZ504

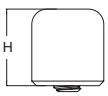
Insertion key Ref. MABA100/MABA110.

ROT · 30 Ncm · Basic · M1,60 · M1,80 · Grade 5 ELI Titanium

Includes the Basic abutment with sterilisable polyoxymethylene applicator (Tecaform AH-POM-C). 18° cone angle. 36° angle between abutments.

Basic abutment with applicator

Basic healing abutment

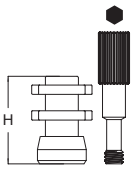


System	Height (H)	Reference
Basic	5.00	BAHAEX34

Anodised surface

ROT · 1,25mm · M1,80 · Grade 5 ELI Titanium

Basic impression abutment



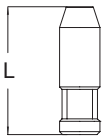
System	Height (H)	Reference
Basic	8.00	BATC134

Anodised surface

ROT · 1,25mm · M1,80 · Grade 5 ELI Titanium

All Basic impression abutments come with a screw.

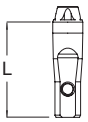
Basic analogue



System	Length (L)	Reference
Basic	13.00	BAIAEX34

ROT · Stainless Steel

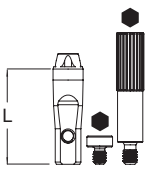
Basic 3D analogue - Individual



System	Length (L)	Reference
Basic	13.00	BAIA348D

NO ROT · Stainless Steel

Basic 3D analogue - Pack

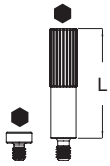


System	Length (L)	Reference
Basic	13.00	BAIA348DC*

NO ROT · 1,25mm · M1,80 · M2,00 · Stainless Steel

*Includes base screw Ref. DSIADI and lateral screw Ref. DSIADT for analogue connection.

Screws - 3D analogue



Type	Length (L)	Reference
Base screw (1)*	-	DSIADI
Lateral screw (2)*	15.00	DSIADT

NO ROT · 1,25mm · M1,80 · M2,00 · Stainless Steel

*Pack of 4 units.

Basic clinical screw


System	Length (L)	Reference
Basic	4.30	BDSEI3400

Anodised surface

25 Ncm · 1,25mm · M1,80 · 45° · Grade 5 ELI Titanium

Kiran Basic clinical screw


System	Length (L)	Reference
Basic	4.30	BDSEI3410

25 Ncm · 1,25mm · M1,80 · 45° · Grade 5 ELI Titanium

Special Kiran screw with surface treatment.

Basic laboratory screw


System	Length (L)	Reference
Basic	5.50	BDSEI3401

1,25mm · M1,80 · 45° · Grade 5 ELI Titanium

NOT suitable for use as the final clinical screw.

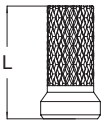
Kiran Tx30 Basic clinical screw


System	Length (L)	Reference
Basic	4.10	BDSEI34TX

25 Ncm · M1,80 · 45° · Grade 5 ELI Titanium

Special Kiran Tx30 screw with surface treatment.

Basic provisional abutment

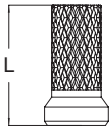



System	Length (L)	Reference
Basic	8.50	BARUT10

Anodised surface

ROT · Grade 5 ELI Titanium

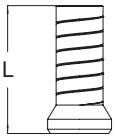
Basic provisional abutment

System	Length (L)	Reference
Basic	8.50	BARUP34

ROT · PEEK

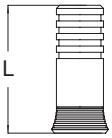
Basic UCLA

System	Length (L)	Reference
Basic	9.00	BARUEX34

ROT · Full castable

Machined base abutment Basic + Castable abutment

System	Length (L)	Reference
Basic	11.00	BBRU34

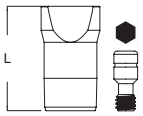
ROT · Co-Cr +castable

Basic

Abutments

DIGITAL CAD-CAM

ZiaCam scanbody to Basic abutment



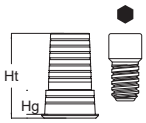
System	Length (L)	Reference
Basic	8.70	FNSYB18T

ROT · 1,25mm · M1,80 · 45° · Grade 5 ELI Titanium

Indicated for clinical and laboratory use.

All ZiaCam scanbodies to Basic abutments include a screw Ref. BDSEI3401.

ZiaCam Ti-Base to Basic

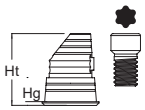


System	Height (Hg/Ht)	Reference
Basic	0.30/6.70	BFRU341

ROT · 25 Ncm · 1,25mm · M1,80 · 45° · Grade 5 ELI Titanium

All Ti-Base ZiaCam to Basic abutments come with a special Kiran screw with surface treatment Ref. BDSEI3410.

ZiaCam Ti-Base Tx30 to Basic



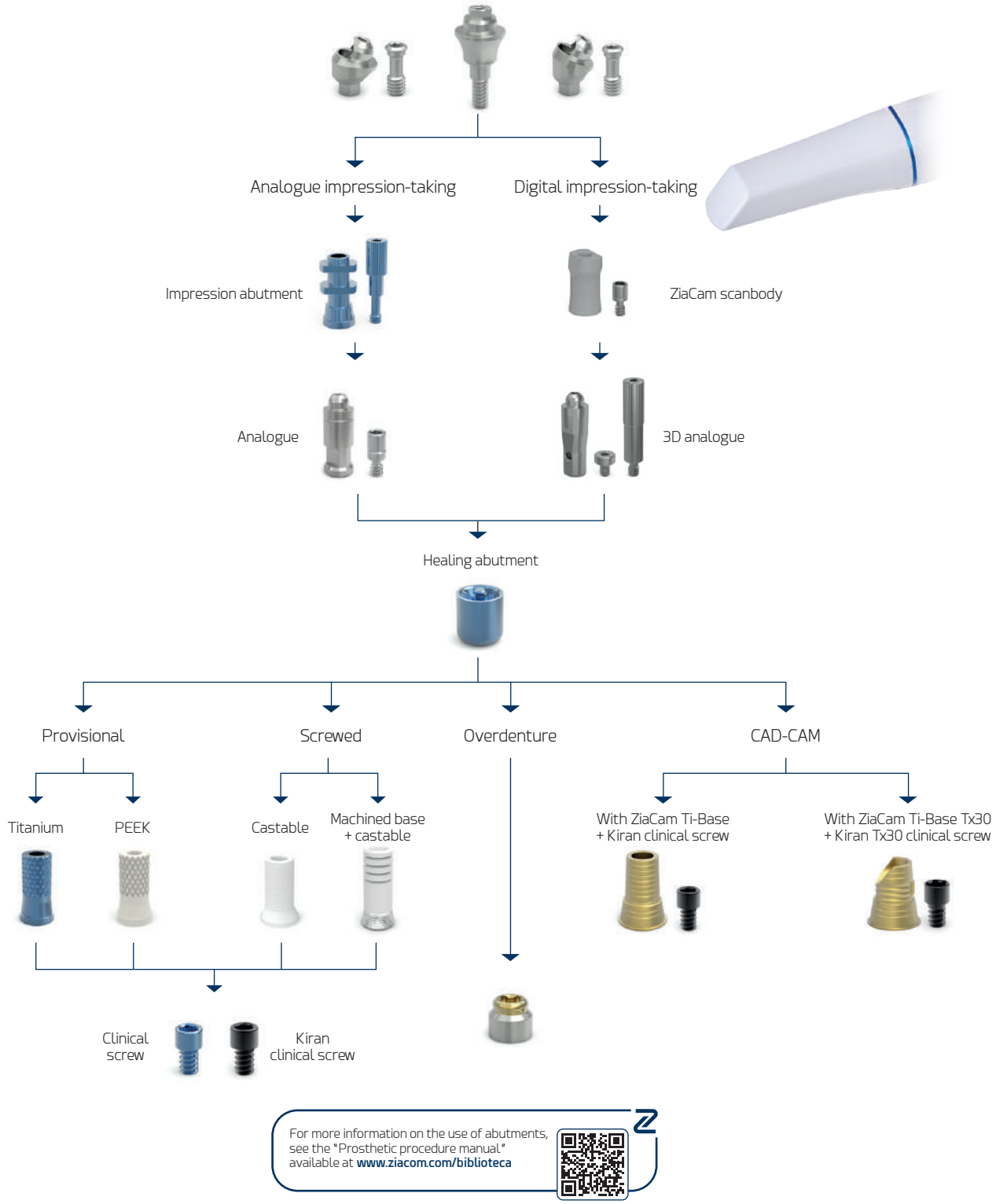
System	Height (Hg/Ht)	Reference
Basic	0.30/5.70	BFRU341TX

ROT · 25 Ncm · M1,80 · 45° · Grade 5 ELI Titanium · 30°

All ZiaCam Ti-Base Tx30 to Basic abutments come with a special Kiran Tx30 screw with surface treatment Ref. BDSEI34TX.

Restorations using transepithelials.

XDrive | Example of usage sequence



For more information on the use of abutments, see the "Prosthetic procedure manual" available at **www.ziacom.com/biblioteca**

Abutments

XDrive straight abutment

Platf.	Height (H)	Reference
●	1.00	XST00Z10
●	2.00	XST00Z20
●	3.00	XST00Z30
●	4.00	XST00Z40
●	5.00	XST00Z50
●	1.00	XST10Z10
●	2.00	XST10Z20
●	3.00	XST10Z30
●	4.00	XST10Z40
●	5.00	XST10Z50
●	1.00	XST20Z10
●	2.00	XST20Z20
●	3.00	XST20Z30
●	4.00	XST20Z40
●	5.00	XST20Z50

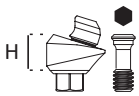
Insertion key Ref. MABA200/MABA210.

ROT · 30 Ncm · XDrive · M1,60 · M1,80 · Grade 5 ELI Titanium

Includes XDrive abutment with sterilisable polyoxymethylene applicator (Tecaform AH-POM-C). 21° cone angle. 42° angle between abutments.

XDrive abutment with applicator

XDrive 17° angled abutment



Platf.	Height (H)	Reference
●	2.00	XA200Z17
●	3.00	XA300Z17
●	4.00	XA400Z17
●	5.00	XA500Z17
●	2.00	XA210Z17
●	3.00	XA310Z17
●	4.00	XA410Z17
●	5.00	XA510Z17
●	2.00	XA220Z17
●	3.00	XA320Z17
●	4.00	XA420Z17
●	5.00	XA520Z17

NO ROT · 30 Ncm · 1,25mm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

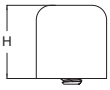
All XDrive angled abutments come with a titanium positioner and screw.

XDrive 30° angled abutment

Platf.	Height (H)	Reference
●	3.00	XA300Z30
●	4.00	XA400Z30
●	5.00	XA500Z30
●	3.00	XA310Z30
●	4.00	XA410Z30
●	5.00	XA510Z30
●	3.00	XA320Z30
●	4.00	XA420Z30
●	5.00	XA520Z30

NO ROT · 30 Ncm · 1,25mm · M1,60 · M1,80 · 45° · Grade 5 ELI Titanium

XDrive healing abutment

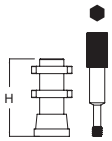


System	Height (H)	Reference
XDrive	5.00	XH103400

Anodised surface

ROT · 1,25mm · M1,40 · Grade 5 ELI Titanium

XDrive impression abutment



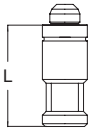
System	Height (H)	Reference
XDrive	10.50	XT103411

Anodised surface

ROT · 1,25mm · M1,40 · Grade 5 ELI Titanium

Includes screw.

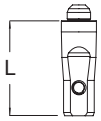
XDrive analogue



System	Length (L)	Reference
XDrive	13.00	XIA103400

ROT · Stainless Steel

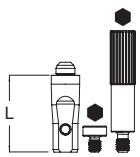
XDrive 3D analogue - Individual



System	Length (L)	Reference
XDrive	13.00	XIA3408D

NO ROT · Stainless Steel

XDrive 3D analogue - Pack

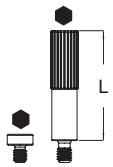


System	Length (L)	Reference
XDrive	13.00	XIA3408DC*

NO ROT · 1,25mm · M1,80 · M2,00 · Stainless Steel

*Includes base screw Ref. DSIADI and lateral screw Ref. DSIADT for analogue connection.

Screws - 3D analogue

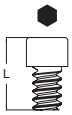


Type	Length (L)	Reference
Base screw (1)*	-	DSIADI
Lateral screw (2)*	15.00	DSIADT

NO ROT · 1,25mm · M1,80 · M2,00 · Stainless Steel

*Pack of 4 units.

XDrive clinical screw

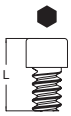


System	Length (L)	Reference
XDrive	3.50	XDS103410

Anodised surface

20 Ncm · 1,25mm · M1,40 · 90° · Grade 5 ELI Titanium

Kiran XDrive clinical screw

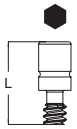


System	Length (L)	Reference
XDrive	3.50	XDS103411

20 Ncm · 1,25mm · M1,40 · 90° · Grade 5 ELI Titanium

Special Kiran screw with surface treatment.

XDrive laboratory screw

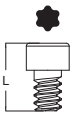


System	Length (L)	Reference
XDrive	5.10	XLB103410

1,25mm · M1,40 · 90° · Grade 5 ELI Titanium

NOT suitable for use as the final clinical screw.

Kiran Tx30 XDrive clinical screw



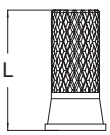
For ZiaCam Ti-Base or metal structures

System	Length (L)	Reference
XDrive	3.50	XDS3411TX

20 Ncm · M1,40 · 90° · Grade 5 ELI Titanium

Kiran Tx30 special screw with surface treatment.

XDrive provisional abutment

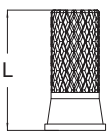


System	Length (L)	Reference
XDrive	9.50	XST3410

Anodised surface

ROT · Grade 5 ELI Titanium

XDrive provisional abutment

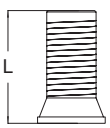


System	Length (L)	Reference
XDrive	9.50	XSP3410

ROT · PEEK

XDrive

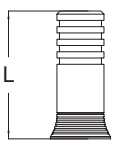
XDrive UCLA abutment



System	Length (L)	Reference
XDrive	8.00	XRU103400

ROT · Full castable

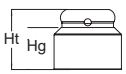
Machined base abutment XDrive + Castable abutment



System	Length (L)	Reference
XDrive	11.00	XBRU34

ROT · Co-Cr +castable

Kirator XDrive abutment



System	Height (Hg/Ht)	Reference
XDrive	3.00/4.30	XL03400

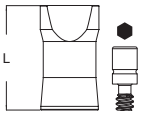
Kirator abutment with gold surface treatment.

ROT · 20 Ncm · Kirator · M1,40 · Grade 5 ELI Titanium

Abutments

DIGITAL CAD-CAM

ZiaCam scanbody to XDrive abutment

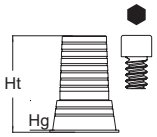


System	Length (L)	Reference
XDrive	8.70	FNSYX18T

Indicated for clinical and laboratory use.

All ZiaCam scanbodies to XDrive abutments include a screw Ref. XLB103410.

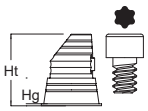
ZiaCam XDrive Ti-Base



System	Height (Hg/Ht)	Reference
XDrive	0.15/6.70	XFRU341

Includes special Kiran screw with surface treatment Ref. XDS103411.

ZiaCam Ti-Base Tx30 XDrive



System	Height (Hg/Ht)	Reference
XDrive	0.15/5.70	XFRU341TX

Includes special Kiran Tx30 screw with surface treatment Ref. XDS3411TX.

Table of abutment torques

Element/Abutment	Instrument/Tool	Torque
Cover screws/Healing abutments	Hex screwdriver 1.25 mm	Manual
Impression abutment screws	Hex screwdriver 1.25 mm	Manual
Laboratory screws	Hex screwdriver 1.25 mm	Manual
Direct-to-implant clinical screws	Hex screwdriver 1.25 mm	30 Ncm
Kiran direct-to-implant clinical screws	Hex screwdriver 1.25 mm	30 Ncm
Nature abutments	Insertion keys: MANA100/MANA110/MANA120	30 Ncm
Clinical screws on Nature	Hex screwdriver 1.25 mm	30 Ncm
Kiran clinical screws on Nature	Hex screwdriver 1.25 mm	30 Ncm
Basic abutments	Insertion keys: MABA100/MABA110/MABA120	30 Ncm
XDrive abutments	Insertion keys: MABA200/MABA210/MABA220	30 Ncm
Clinical screws on Basic	Hex screwdriver 1.25 mm	25 Ncm
Kiran clinical screws on Basic	Hex screwdriver 1.25 mm	25 Ncm
Clinical screws on XDrive	Hex screwdriver 1.25 mm	20 Ncm
Kiran clinical screws on XDrive	Hex screwdriver 1.25 mm	20 Ncm
ZiaCam scanbody + screw	Hex screwdriver 1.25 mm	Manual
Kirator abutments	Insertion keys: LOSD01/LOSD02	30 Ncm
Tx30 abutment/screw (variable rotation)	Torx. screwdriver Tx30	30 Ncm

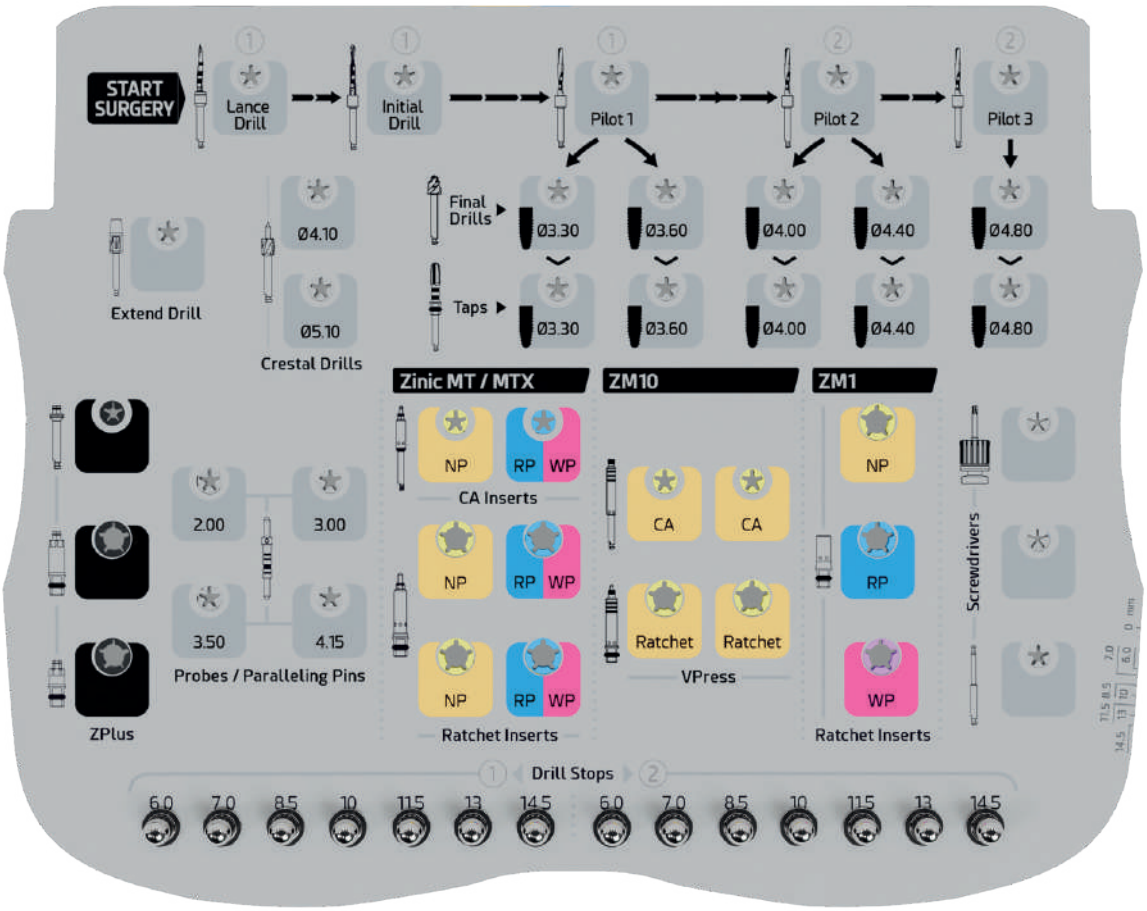
WARNING
Exceeding the recommended tightening torque for screws and abutments compromises the prosthetic restoration and could damage the implant structure.

For immediate loading: DO NOT tighten manually, attach with the final torque. When using a screwdriver or adaptor for a contra-angle handpiece (CA), do not exceed a maximum speed of 25 rpm.

Surgical instruments

Surgical instruments

Universal Box surgical box



■ Universal Box contents available

Platf.	Contents	Reference
●●●	Empty	BOX450U
	Complete	BOX450UC

134°

Material: Radel.

Ensure boxes do not touch the walls of the autoclave to avoid damage.

Surgical kit contents

REF	Description	BOX450UC
SID001M	Lance drill. Ø2.00 mm. Millimeter.	●
OSPD20M	Pilot Drill Ø1.60/2.00 mm. Millimeter.	●
OTD201C	Pilot Drill P1. Millimeter.	●
OTD301C	Pilot Drill P2. Millimeter.	●
OTD401C	Pilot Drill P3. Millimeter.	●
OTD203C	Final surgical drill. F1	●
OTD303C	Final surgical drill. F2	●
OTD403C	Final surgical drill. F3	●
OTD503C	Final surgical drill. F4	●
OTD603C	Final surgical drill. F5	●
CLD34	Crestal surgical drill. Ø4.10 mm.	●
CLD50	Crestal surgical drill. Ø5.10 mm.	●
ZMPD160	Calibrated drill stop. 1. H6 mm.	●
ZMPD170	Calibrated drill stop. 1. H7 mm.	●
ZMPD185	Calibrated drill stop. 1. H8.5 mm.	●
ZMPD110	Calibrated drill stop. 1. H10 mm.	●
ZMPD115	Calibrated drill stop. 1. H11.5 mm.	●
ZMPD113	Calibrated drill stop. 1. H13 mm.	●
ZMPD114	Calibrated drill stop. 1. H14.5 mm.	●
ZMPD260	Calibrated drill stop. 2. H6 mm.	●
ZMPD270	Calibrated drill stop. 2. H7 mm.	●
ZMPD285	Calibrated drill stop. 2. H8.5 mm.	●
ZMPD210	Calibrated drill stop. 2. H10 mm.	●
ZMPD215	Calibrated drill stop. 2. H11.5 mm.	●
ZMPD213	Calibrated drill stop. 2. H13 mm.	●
ZMPD214	Calibrated drill stop. 2. H14.5 mm.	●
MTAP33MC	Surgical tap. Ø3.30 mm. Millimeter.	●
MTAP36MC	Surgical tap. Ø3.60 mm. Millimeter.	●
MTAP40MC	Surgical tap. Ø4.00 mm. Millimeter.	●
MTAP44MC	Surgical tap. Ø4.40 mm. Millimeter.	●
MTAP48MC	Surgical tap. Ø4.80 mm Millimeter.	●
MUR101MT	Probe/Paralleling pin Initial. Millimeter.	●
MUR201MT	Probe/Paralleling pin P1. Millimeter.	●
MUR301MT	Probe/Paralleling pin P2. Millimeter.	●
MUR401MT	Probe/Paralleling pin P3. Millimeter.	●
DEXT10	Drill extender	●
MESD	Screwdriver tip, Ø 1.25 mm Long.	●
LMSD	1.25 mm surgical screwdriver. Long.	●
SMSD	1.25 mm surgical screwdriver. Short.	●
TORK50	Regulable torque wrench	●

PLEASE NOTE
The surgical kit box does not include the insertion keys or ZPlus block key. These must be ordered separately, according to the implant system used, Zinic® MTX / ZM10 / ZM1.

Surgical instruments

SURGICAL DRILLS

Lance drill

Platf.	Diameter (Ø)	Length (L)	Reference
●●●	2.00	16.30	SID001M

Millimeter: 6/7/8.5/10/11.5/13/14.5

60 USES · Stainless Steel

Initial pilot drill

Platf.	Diameter (Ø)	Length (L)	Reference
●●●	1.60/2.00	17.50	OSPD20M

Millimeter: 6/7/8.5/10/11.5/13/14.5

60 USES · Stainless Steel

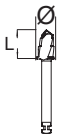
Pilot drill

Platf.	Type	Diameter (Ø)	Length (L)	Reference
●	Pilot 1	2.20/3.00	17.50	OTD201C
●	Pilot 2	2.70/3.60	17.50	OTD301C
●	Pilot 3	2.90/4.25	17.50	OTD401C

Millimeter: 6/7/8.5/10/11.5/13/14.5

60 USES · Stainless Steel

Final drill



Platf.	Type	Diameter (Ø)	Length (L)	Reference
	Final 1	3.40	6.50	OTD203C
●	Final 2	3.90	6.50	OTD303C
●	Final 3	4.10	6.50	OTD403C
●	Final 4	4.30	6.50	OTD503C
	Final 5	4.95	6.50	OTD603C

60 USES · Stainless Steel

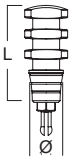
Crestal surgical drill

Platf.	Diameter (Ø)	Reference
Universal	4.10	CLD34
	5.10	CLD50

60 USES · Stainless Steel

PIN

Paralleling pin



Platf.	Diameter (Ø)	Length (L)	Reference
●	3.95	11.00	PMT1
● ●	4.50	11.00	PMT2

Anodised ■ NP ■ RP/WP

Grade 5 ELI Titanium

STOPS

Calibrated drill stop

Platf.	Type	Length (L) Implant	Reference
	1	6.00	ZMPD160
		7.00	ZMPD170
		8.50	ZMPD185
		10.00	ZMPD110
		11.50	ZMPD115
		13.00	ZMPD113
●		14.50	ZMPD114
●	2	6.00	ZMPD260
●		7.00	ZMPD270
		8.50	ZMPD285
		10.00	ZMPD210
		11.50	ZMPD215
		13.00	ZMPD213
		14.50	ZMPD214
Pack *	--	--	KZMPD100

* Complete pack of 14 calibrated stops.

Grade 5 ELI Titanium

TAPS

Surgical tap. CA/Manual

Platf.	Diameter (Ø)	Reference
	3.30	MTAP33MC
●	3.60	MTAP36MC
●	4.00 *	MTAP40MC
●	4.40 *	MTAP44MC
	4.80 *	MTAP48MC

Millimeter: 8.5/10/11.5/13/14.5

*Millimeter: 6/7/8.5/10/11.5/13/14.5

Stainless Steel

See surgical drilling protocol for more information on using tap.

PROBES

Probe/Paralleling pin

Platf.	Type	Diameters (Ø1-Ø2)	Length (L)	Reference
●	Initial	1.60/2.00	27.00	MUR101MT
●	Pilot 1	2.20/3.00	27.00	MUR201MT
●	Pilot 2	2.70/3.60	27.00	MUR301MT
●	Pilot 3	2.90/4.25	27.00	MUR401MT

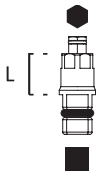
Millimeter: 6/7/8.5/10/11.5/13/14.5

Grade 5 ELI Titanium

Surgical instruments

KEYS

ZPlus insertion key. Ratchet



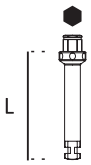
Platf.	Length (L)	Reference
ZPlus	3.10/Mini	XSMIN *
	5.60/Short	TSMIN*
	10.60/Long	TLMIN*

Hexagonal 2.4 mm / Square 4x4 mm

Stainless Steel

*Ref. XSMIN/TSMIN/TLMIN are NOT included in the surgical box.

ZPlus insertion key. CA



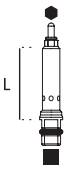
Platf.	Length (L)	Reference
ZPlus	15.90	01MMIN*
	23.90	02MMIN *

Hexagonal 2.4 mm

Stainless Steel

*Ref. 01MMIN/02MMIN are NOT included in the surgical box.

Zinic® Insertion key. Ratchet



Platf.	Length (L)	Reference
	5.00/Short	SMZ *
	15.00/Long	LMZ *
	5.00/Short	SMZ1 *
	15.00/Long	LMZ1 *

Hexagonal NP 2.10 mm

Hexagonal RP/WP 2.42 mm

Square 4x4 mm

Stainless Steel

*Ref. SMZ/LMZ/SMZ1/LMZ1 are NOT included in the surgical box.

Zinic® Insertion key. CA

Platf.	Length (L)	Reference
	19.50/Short	MMZ *
	27.50/Long	MMZA *
	19.50/Short	MMZ1 *
	27.50/Long	MMZ1A *

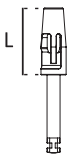
Hexagonal NP 2.10 mm

Hexagonal RP/WP 2.42 mm

Stainless Steel

*Ref. MMZ/MMZA/MMZ1/MMZ1A are NOT included in the surgical box.

Drill extender



Platf.	Length (L)	Reference
Universal	12.00	DEXT10

Stainless Steel

SCREWDRIVERS

Screwdriver tip. CA

Platf.	Length (L)	Reference
Universal	20.00/Short	MESD01 *
	25.00/Long	MESD

Hexagonal 1.25 mm

1,25mm | Stainless Steel

*Ref. MESD01 is NOT included in the surgical box.

Surgical screwdriver. Manual

Platf.	Length (L)	Reference
Universal	2.80/Mini	XSMSD *
	9.50/Short	SMSD
	14.50/Long	LMSD
	27.00/Extralong	XLMSD *

Hexagonal 1.25 mm

1,25mm | Stainless Steel

*Ref. XSMSD/XLMSD are NOT included in the surgical box.

ZPlus block key

Platf.	Length (L)	Reference
ZPlus	90.00	01MOHW

Hexagonal 2.4 mm

Stainless Steel

RATCHET

Regulable torque wrench

Platf.	Length (L)	Reference
Universal	86.80	TORK50

Square 4x4 mm

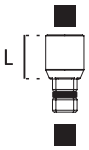
Nm 10 20 30 40 50 60 70 | Stainless Steel

Surgical instruments

Complementary instruments

ADAPTORS

Ratchet extension



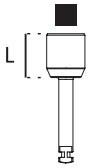
Platf.	Length (L)	Reference
Universal	7.20	LAEX

Square 4x4 mm

Stainless Steel

NOT included in the surgical box.

Ratchet to CA adaptor



Platf.	Length (L)	Reference
Universal	7.20	MAEX

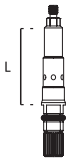
Square 4x4 mm

Stainless Steel

NOT included in the surgical box.

IMPLANT MOUNT

Implant mounts. Ratchet



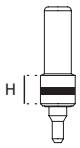
Platf.	Length (L)	Reference
●	15.70	MOUNT1
●●	15.70	MOUNT2

Stainless Steel

NOT included in the surgical box.

LABORATORY TEST KIT

Laboratory test kit



Platf.	Height (H)	Reference
●	3.65	ZLAB20
●●	3.65	ZLAB34

ROT

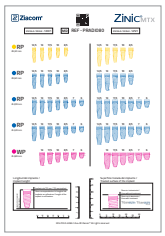
Grade 5 ELI Titanium

This product does not supersede the need for careful planning of each clinical case.

NOT included in the surgical box.

RADIOGRAPHIC TEMPLATE

Zinic® MTX radiographic template



Platf.	Model	Reference
●●●	Zinic® MTX	PRADIO80

Scales 1:1 and 1:1.25

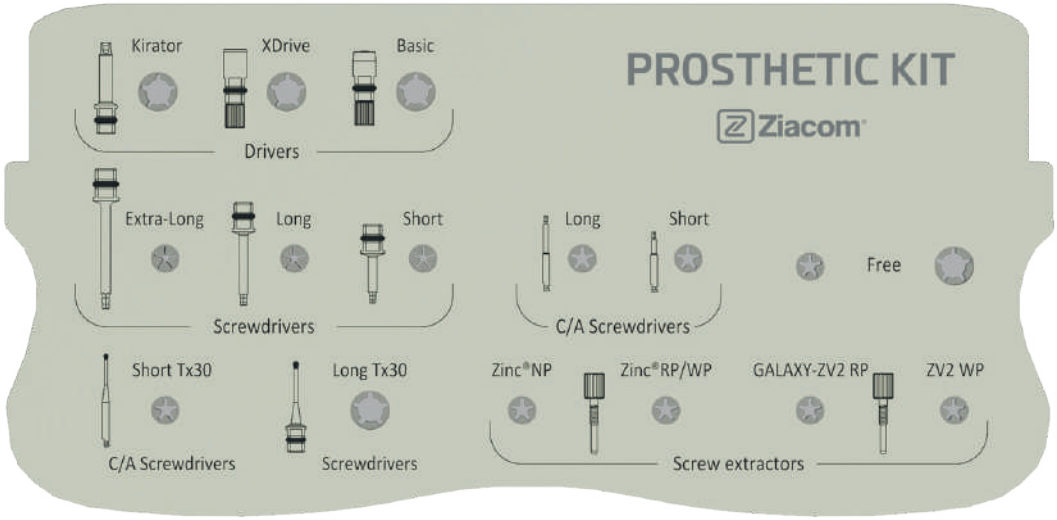
Material: transparent acetate. Non-sterilisable material

See the literature available at **www.ziacom.com/biblioteca**

Prosthetic instruments

Prosthetic instruments

Prosthetic box



Contents of prosthetic boxes available

Contents	Reference
Empty	BOXPN
Basic	BOXPSN
Complete	BOXPCN

134°

Material: Radel.

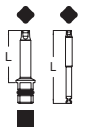
Ensure boxes do not touch the walls of the autoclave to avoid damage.

Contents of prosthetic boxes

REF	Description	BOXPSN	BOXPCN
LOSD01	Kirator insertion key.	●	●
MABA100	Basic insertion key. Short.	●	●
MABA200	XDrive insertion key. Short.	●	●
MADW10	Screwdriver handle. 4x4.	●	●
SMSD1	Screwdriver tip. 1.25 mm. Short.	●	●
LMSD1	Screwdriver tip. 1.25 mm. Long.	●	●
XLMSD1	Screwdriver tip. 1.25 mm. Extra long.		●
MESD	Screwdriver tip. 1.25 mm. Long.	●	●
MESD01	Screwdriver tip. 1.25 mm. Short.	●	●
MESDTX	Tx30 screwdriver tip. Long.	●	●
LMSD1TX	Tx30 screwdriver tip. Long.	●	●
EDSZ20	ZPlus extractor screw. NP		●
EDSZ34	ZPlus extractor screw. RP/WP.		●
EDSG34*	Abutment extractor screw. RP		●
EDSG50*	Abutment extractor screw. WP		●
TORK50	Regulable torque wrench	●	●

*** Product not included in the Zinic® MTX system.**

Kirator insertion key



System	Length (L)	Reference
Kirator	13.60/Ratchet/Manual	LOSD01
	20.00/CA	LOSD02 *

◆ Square 2.11 mm / ■ Square 4x4 mm

Kirator · Stainless Steel

*Ref. LOSD02 is NOT included in the prosthetic box.

Basic insertion key. Ratchet

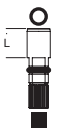
System	Length (L)	Reference
Basic	5.00/Short	MABA100
	13.00/Long	MABA110 *

✱ Basic / ■ Square 4x4 mm

Basic · Grade 5 ELI Titanium · Stainless Steel

*Ref. MABA110 is NOT included in the prosthetic box.

XDrive insertion key Ratchet



System	Length (L)	Reference
XDrive	6.00/Short	MABA200
	13.00/Long	MABA210*

○ XDrive / ■ Square 4x4 mm

XDrive · Grade 5 ELI Titanium · Stainless Steel

*Ref. MABA210 is NOT included in the prosthetic box.

Nature insertion key. Ratchet

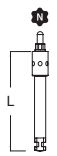
System	Length (L)	Reference
Nature	5.00/Short	MANA100*
	15.00/Long	MANA110*

Ⓝ Nature / ■ Square 4x4 mm

Nature · Stainless Steel

*Ref. MANA100/MANA110 are NOT included in the prosthetic box.

Nature insertion key. CA



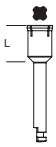
System	Length (L)	Reference
Nature	20.50	MANA120*

Ⓝ Nature

Nature · Stainless Steel

*Ref. MABA210 is NOT included in the prosthetic box.

Basic insertion key. CA



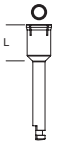
System	Length (L)	Reference
Basic	7.00	MABA120*

✱ Basic

Basic · Stainless Steel

*Ref. MABA210 is NOT included in the prosthetic box.

XDrive insertion key CA



System	Length (L)	Reference
XDrive	7.00	MABA220*

○ XDrive

XDrive · Stainless Steel

*Ref. MABA220 is NOT included in the prosthetics box.

Prosthetic instruments

SCREWDRIVERS

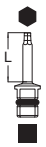
Screwdriver adapter handle

Platf.	Length (L)	Reference
Universal	12.90	MADW10

■ Square 4x4 mm

Stainless Steel

Screwdriver tip. Ratchet



Platf.	Length (L)	Reference
Universal	9.50/Short	SMSD1
	14.50/Long	LMSD1
	27.00/Extralong	XLMSD1

■ Square 4x4 mm

1,25mm | Stainless Steel

Screwdriver tip. CA

Platf.	Length (L)	Reference
Universal	20.00/Short	MESD01
	25.00/Long	MESD

1,25mm | Stainless Steel

Tx30 screwdriver tip. CA

System	Length (L)	Reference
Tx30	26.00/Short	MESD01TX *
	32.00/Long	MESDTX

Stainless Steel

Do not exceed 30 Ncm as it could cause severe damage to the screwdriver and screw

* Ref. MESD01TX is NOT included in the prosthetics box.

Tx30 screwdriver tip. Ratchet

System	Length (L)	Reference
Tx30	12.00/Short	SMSD1TX *
	18.00/Long	LMSD1TX

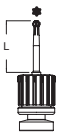
■ Square 4x4 mm

Stainless Steel

Do not exceed 30 Ncm as it could cause severe damage to the screwdriver and screw

*Ref. SMSD1TX is NOT included in the prosthetic box.

Tx30 prosthetic screwdriver. Manual



System	Length (L)	Reference
Tx30	12.00/Short	SMSDTX *
	18.00/Long	LMSDTX *
	27.00/Extralong	XLMSDTX*

Stainless Steel

Do not exceed 30 Ncm as it could cause severe damage to the screwdriver and screw

*Ref. SMSDTX/LMSDTX/XLMSDTX are NOT included in the prosthetics box.

EXTRACTOR SCREW

ZPlus extractor screw

Platf.	Length (L)	Reference
●	25.00	EDSZ20
●●	23.70	EDSZ34

Anodised ■ NP ■ RP/WP

1,25mm | M1,60 | M1,80 | Grade 5 ELI Titanium

Galaxy/ZV2 abutment extractor screw

Platf.	Length (L)	Reference
■	25.00	EDSG34 *
■	26.80	EDSG50 *

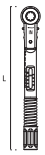
Anodised ■ RP ■ WP

1,25mm | M1,60 | M2,00 | Grade 5 ELI Titanium

*Product not included in the Zinic® MTX system.

RATCHET

Regulable torque wrench



Platf.	Length (L)	Reference
Universal	86.80	TORK50

■ Square 4x4 mm

Nom. 10 20 30 40 50 60 | Stainless Steel

Complementary instruments

CA to ratchet adaptor

Platf.	Length (L)	Reference
Universal	12.00	MC10Z

■ Square 4x4 mm

Stainless Steel

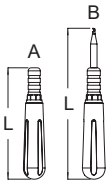
NOT included in the prosthetic box.

Retentive joints instruments

Platf.	Dimensions	Reference
Universal	2x1	RREI0030

Pack of 10 units.

Extractor + Retainer inserter handle

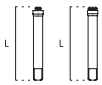


Platf.	A Length (L)	B Length (L)	Reference
Kirator ZM-Equator	81.50	110.40	MBEI3610

Plastic Stainless Steel

NOT included in the prosthetic box.

Retention inserter



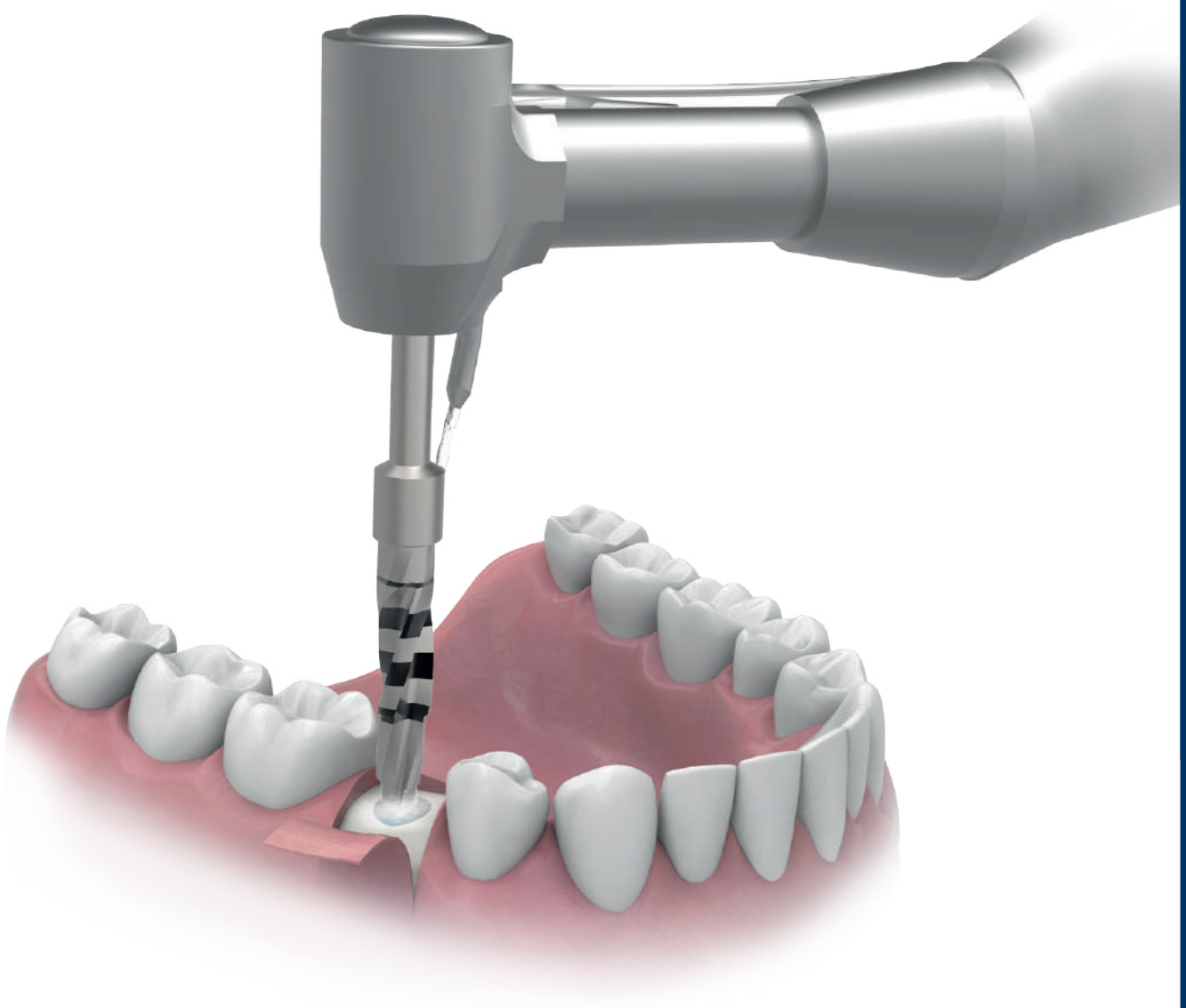
Platf.	Length (L)	Reference
Kirator	32.00	MBEI3602
ZM-Equator	32.00	MBEI3603

Stainless Steel

Kirator / ZM-Equator plastic cap insertion tool.
NOT included in the prosthetic box.

ZiNiC®MTX

Surgical protocols

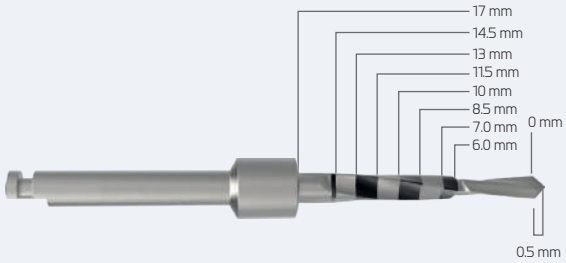


Surgical protocol

Features of the Zinic® MTX drilling system

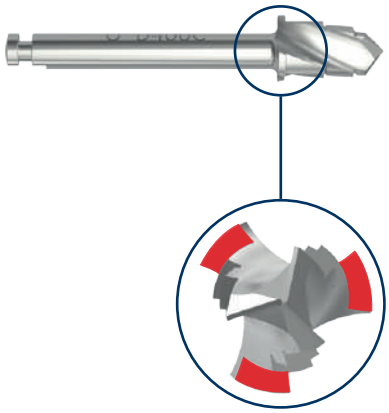
Ziacom® drill system

Ziacom® implant system drills are made from stainless steel. A laser marking on the bur's shank identifies its inner and outer diameters and its length, while the horizontal laser marked bands on the active section corresponds to the different lengths of the implants (millimeter drills). The drill tip is 0.5mm long and this is not included in the different laser-marked lengths.



Ziacom® final drills

Its use is essential and mandatory in order to achieve an ideal finish of the prepared implant bed for smooth, safe and precision insertion. In this way, overtorquing of the implant can be avoided while it is placed into its final position.



FINAL DRILL STOP

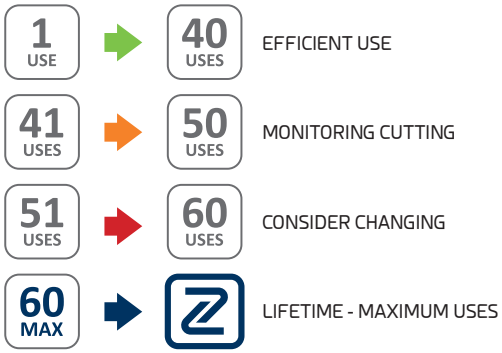
A stop, consisting of three blades (see red areas marked on image) has been incorporated into the design of the final drills, between the active area and the shank, to limit the penetration of the drill.

IMPORTANT
Take care not to drill beyond the stop, as this modifies the coronal anatomy of the surgical site.

ZIACOM® DRILLS EFFICIENCY GUARANTEE

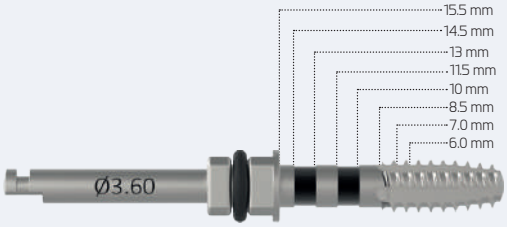
Surgical drills for Zinic® MTX implants from Ziacom® (**cortical drills, lance drill, initial drill, pilot drills and final drills**), have a **lifetime of up to 60 uses**. It is advisable to monitor the cutting status at all times, especially when reaching around 41 to 50 uses, since after 50 uses it is necessary to consider changing the drills before reaching 60 uses.

Bear in mind that, depending on the size of the implant, bone density and your surgical protocol, not all of the various drills will be used equally – it is recommended that you monitor the number of uses for each instrument.



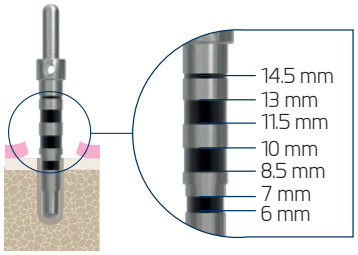
Ziacom® taps

Taps are available for contra-angle handpieces. The laser marking on the tap's shank identifies its diameter, while the horizontal laser marked bands on the active section corresponds to the different lengths.



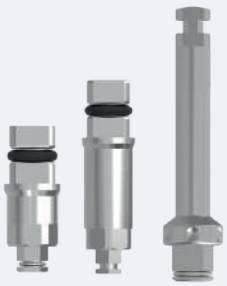
Probe

Check the depth of the surgical site, especially when not using drill stops. To check the surgical bed axis, the paralleling pin pins are available in different diameters according to the drilling sequence.



Short and long insertion keys for ratchets and contra-angle handpieces

The insertion keys for contra-angle handpieces or ratchets have been designed for transporting implants from their No-Mount vial to the surgical site ready for insertion.



ZPlus

Zinic®

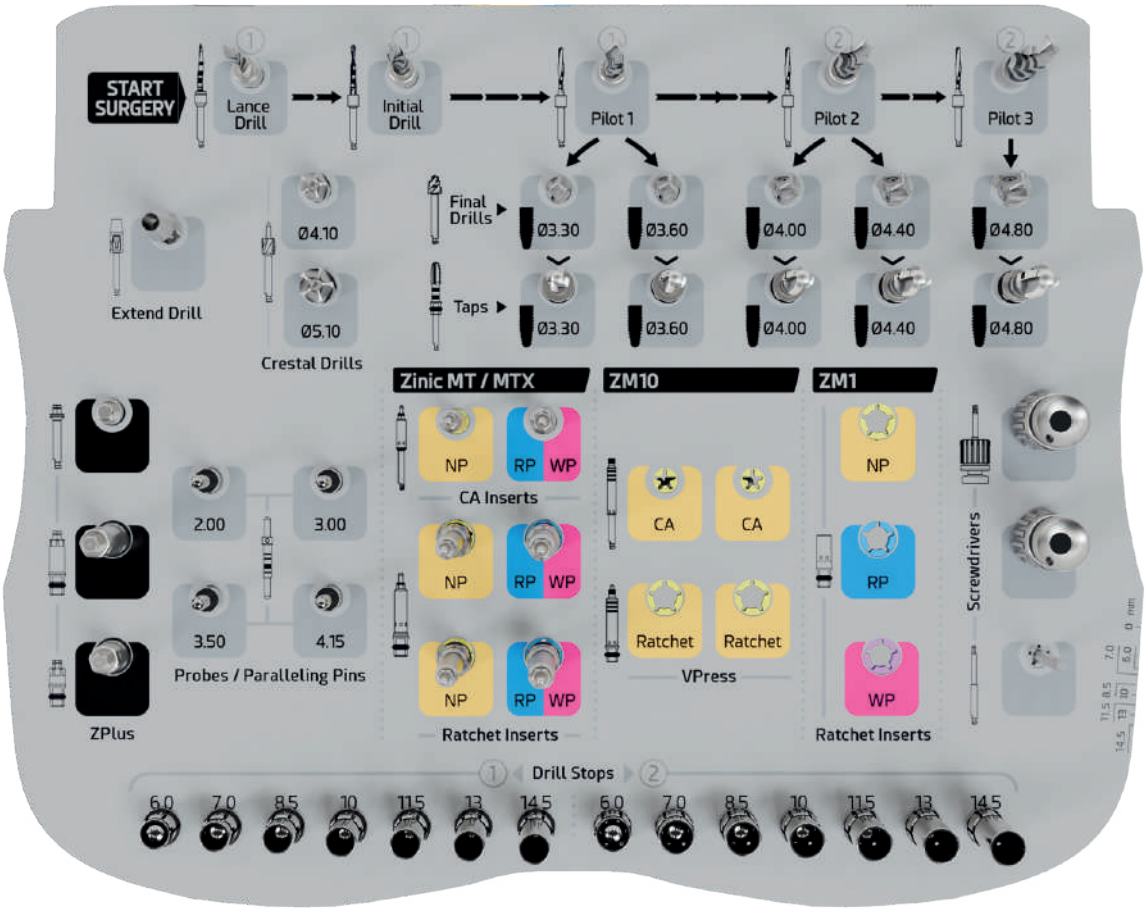
Drill stops

These are a surgical accessory that attach to drills and facilitate the work as they determine the depth of the osteotomy, providing extra assurance when preparing the surgical site.

Surgical protocol

Features of the Zinic® MTX drilling system

Internal view of the Universal Box surgical box



Recommendations on the maximum implant insertion torque

50 Ncm

The recommended insertion torque ranges between **35** and **50 Ncm** on a case-by-case basis.

To avoid deforming the insertion key and/or implant connection, insertions performed with a contra-angle handpiece (CA) must respect the recommended maximum rpm (25 rpm) and maximum torque (50 Ncm).

If the implant cannot be fully inserted using the recommended maximum torque, withdraw the implant, repeat the drilling and then re-insert it.

Check the final insertion torque with the adjustable dynamometric ratchet Ref. TORK50 or a contra-angle handpiece.

Exceeding the maximum torque (50 Ncm) when inserting the implant may result in:

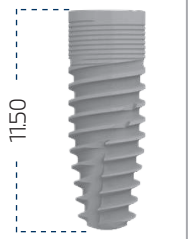
- Irreversible deformations in the implant's internal connection.
- Irreversible deformations in the implant insertion instruments.
- Difficulty or impossibility in dismounting the instrument/implant assembly.

Zinic® MTX implant

It is important to note that the drilling protocol for Zinic® MTX implants using stepped drills varies significantly based on the implant diameter and the type of bone at the surgical site and therefore it is important to pay special attention to these two aspects.

ZiNiC® MT

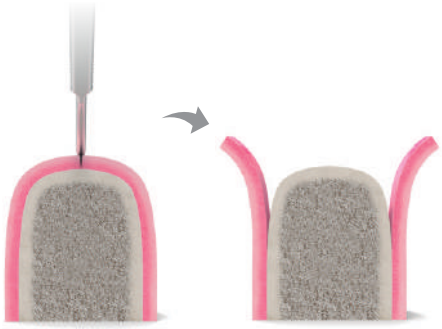
- **EXAMPLE:**
  Zinic® MTX implant
  Ø4.00x11.50mm
  RP (Ø4.00mm)
  Platform Ø 3.50mm



High-density drilling protocol steps (D1 - D2*)

PRELIMINARY STEP | Opening the gum

Make an incision and raise the flap.



STEP 1 | Lance drill

Start the implant site drilling sequence using the Lance Drill Ref. SID001M. Be aware of the laser marking on the drill to indicate the length, or use drill stop Ref. ZMPD115. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

STEP 2 | Initial Drill

Continue the drilling sequence using Initial Drill Ref. OSPD20M until the total length of the chosen implant is reached. Be aware of the laser marking on the drill that indicates the length, or use the drill stop Ref. ZMPD115. Monitor the direction and inclination of the drilling, exerting pressure intermittently, always in a vertical direction, taking care not to generate excessive pressure on the bone. If necessary, use drill extender Ref. DEXT10.

STEP 3 | Initial Drill Probe/Paralleling pin

Check the depth of the surgical site and the insertion axis by inserting the Initial Drill Probe/Paralleling pin Ref. MUR101MT. Repeat this step as many times as necessary during the surgery.

Surgical protocol

STEP 4 | Pilot Drill 1

Continue the drilling sequence using Pilot Drill 1 Ref. OTD201C, until the full length of the chosen implant is reached. Be aware of the laser marking on the drill to indicate the length, or use drill stop Ref. ZMPD115. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

900 Rpm

NOTE
Once this step has been completed, to fit an implant with diameter:
- **Ø3.30 mm** > Final Drill 1 Ref. OTD203C + Tap MTAP33MC
- **Ø3.60 mm** > Final Drill 2 Ref. OTD303C + Tap MTAP36MC

STEP 5 | Pilot Probe/Paralleling pin 1

Check the depth of the surgical site and the insertion axis by inserting the Pilot Probe/Paralleling pin 1 Ref. MUR201MT. Repeat this step as many times as necessary during the surgery.

STEP 6 | Pilot Drill 2

Continue the drilling sequence using Pilot Drill 2 Ref. OTD301C, until the full length of the chosen implant is reached. Be aware of the laser marking on the drill to indicate the length, or use drill stop Ref. ZMPD115. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

900 Rpm

NOTE
Once this step has been completed, to fit an implant with diameter:
- **Ø4.00 mm** > Final Drill 3 Ref. OTD403C + Tap MTAP40MC
- **Ø4.40 mm** > Final Drill 4 Ref. OTD503C + Tap MTAP44MC

STEP 7 | Pilot Probe/Paralleling pin 2

Check the depth of the surgical site and the insertion axis by inserting the Pilot Probe/Paralleling pin 2 Ref. MUR301MT. Repeat this step as many times as necessary during the surgery.

STEP 8 | Final Drill 3

Continue the drilling sequence using Final Drill 3 Ref. OTD403C, up to the length corresponding to the cortical bone thickness, according to individual clinical case. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

500 Rpm

STEP 9 | Surgical tap Ø4.00

Place the Ø4.00mm surgical tap, Ref. MTAP40MC in the surgical site. Apply firm pressure and start to turn slowly. Once threads engage, continue to screw the tap in without pressure to the planned depth. If excessive resistance is met, turn 90º anti-clockwise after each complete turn. To remove the tap, turn it anti-clockwise. While using the tap, it is recommended that you pass it along the entire length of the implant.

25 Rpm

Important notes: Type D2* Bone Density

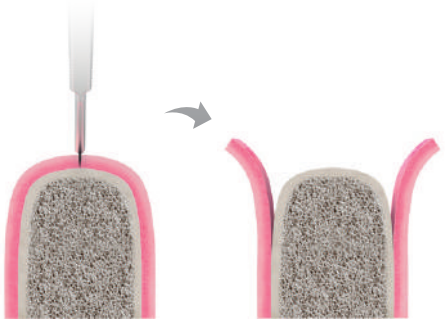
In the case of type D2 bone density, the surgical drilling protocol indicated for type D1 bone density should be followed, leaving out the use of the Surgical Tap on any of the implant diameters. Nevertheless, it is up to the discretion of the professional to decide on full or partial use the Surgical Tap, based on their clinical experience and the identification of the density of the existing bone at the site. This is particularly relevant in cases where the bone density varies significantly along the whole length of the osteotomy for the implant.

Surgical protocol

Low-density drilling protocol steps (D3 - D4**)

PRELIMINARY STEP | Opening the gum

Make an incision and raise the flap.



STEP 1 | Lance Drill

Start the implant site drilling sequence using the Lance Drill Ref. SID001M. Be aware of the laser marking on the drill to indicate the length, or use drill stop Ref. ZMPD115. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

STEP 2 | Initial drill

Continue the drilling sequence using Initial Drill Ref. OSPD20M until the total length of the chosen implant is reached. Be aware of the laser marking on the drill that indicates the length, or use the drill stop Ref. ZMPD115. Monitor the direction and inclination of the drilling, exerting pressure intermittently, always in a vertical direction, taking care not to generate excessive pressure on the bone. If necessary, use drill extender Ref. DEXT10.

NOTE
Once this step has been completed, to fit an implant with diameter:
- **Ø3.30 mm** > Final Drill 1 Ref. OTD203C
- **Ø3.30 mm** > Final Drill 2 Ref. OTD303C

STEP 3 | Initial Drill Probe/Paralleling pin

Check the depth of the surgical site and the insertion axis by inserting the Initial Drill Probe/Paralleling pin Ref. MUR101MT. Repeat this step as many times as necessary during the surgery.

STEP 4 | Pilot drill 1

Continue the drilling sequence using Pilot Drill 1 Ref. OTD201C, until the full length of the chosen implant is reached. Be aware of the laser marking on the drill to indicate the length, or use drill stop Ref. ZMPD115. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

NOTE
Once this step has been completed, to fit an implant with diameter:
- **Ø3.30 mm** > Final Drill 3 Ref. OTD403C
- **Ø4.40 mm** > Final Drill 4 Ref. OTD503C

STEP 5 | Pilot Probe/Paralleling pin 1

Check the depth of the surgical site and the insertion axis by inserting the Pilot Probe/Paralleling pin pin 1 Ref. MUR201MT. Repeat this step as many times as necessary during the surgery.

STEP 7 | Final Drill 3

Continue the drilling sequence using Pilot Drill 3 Ref. OTD403C up to the length corresponding to the cortical bone thickness, according to individual clinical case. Control the direction and angle of drilling by applying intermittent pressure vertically, taking care not to exert too much pressure on the bone. If necessary, use drill extender Ref. DEXT10.

Important notes: Type D4** Bone Density

In the case of type D4 bone density, the surgical drilling protocol indicated for type D3 bone density should be followed, leaving out the use of the last Final Drill for all implant diameters. Nevertheless, it is up to the discretion of the professional to decide to use the last Final Drill fully or partially, based on their clinical experience and the identification of the density of the existing bone at the site. This is particularly relevant in cases where the bone density varies significantly along the length of the osteotomy for the implant.

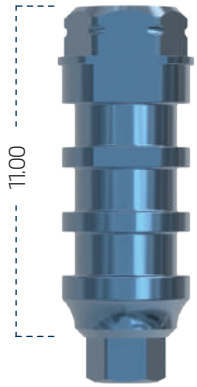
Surgical protocol

Implant placement with ZPlus Mount | **Titansure**

ZPlus Mount

Surface treatment

Titansure



STEP 1 | Unpacking the implant

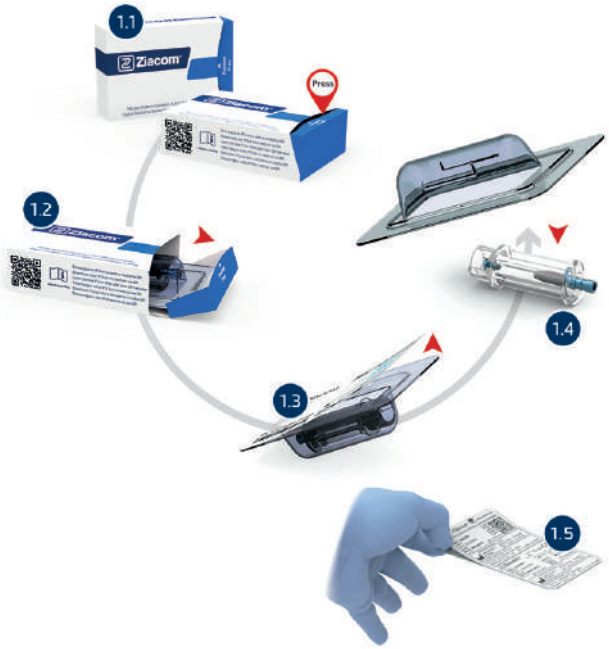
1.1 Press the word "PRESS" and open the carton.

1.2 Remove the top of the carton and take out the blister pack.

1.3 Carefully remove the seal from the blister pack.

1.4 Turn the vial containing the implant out onto a sterile cloth in the operating area.

1.5 Remember to remove the label from the implant and to stick it onto the patient's implant card and medical record to ensure that the product is traceable.



STEP 2 | Choosing the right insertion instrument

Based on the specific clinical situation and access to the surgical site, one of three different instruments can be selected to insert the implant:

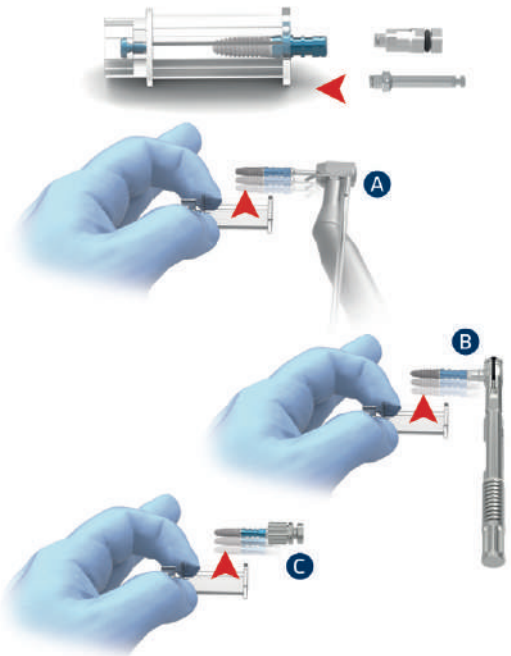
A **Contra-angle:** use the ZPlus insertion key. CA insertion key of the desired length **Ref. 01MMIN / 02MMIN** and insert it into the contra-angle.

B **Torque wrench Ref. TORK50:** use the ZPlus insertion key. Ratchet/Manual of the desired length **Ref. XSMIN / TSMIN / TLMIN** and insert it into the ratchet set to function "IN", which is identified with an arrow.

C **Screw insertion key handle 4x4 Ref. MADW10:** use the ZPlus insertion key. Ratchet/Manual of the desired length **Ref. XSMIN / TSMIN / TLMIN** and insert it into the screwdriver handle.

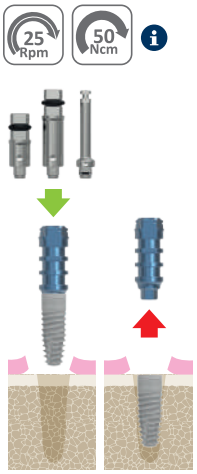
STEP 3 | Removing the implant from its vial

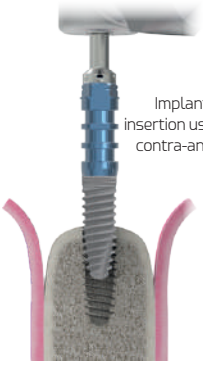
Hold the vial containing the implant in one hand and insert the selected ZPlus insertion key with the other hand. Remove the implant-mount assembly by lifting it vertically out of the vial.



Zinic® MTX implant insertion with ZPlus Mount

STEP 4 | Inserting the implant



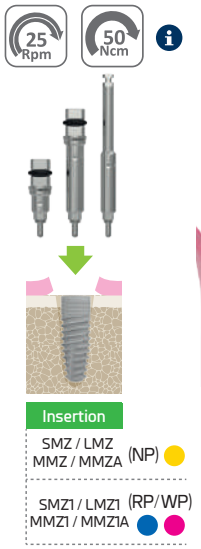


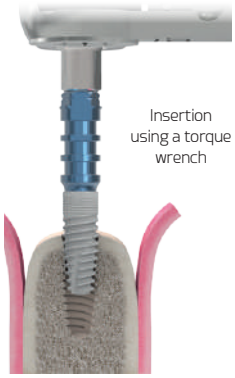
Insert the implant into the surgical site, controlling both the direction and angle of the implant. When inserting the implant with a contra-angle, use a maximum speed of 25 rpm. The recommended insertion torque ranges from 35 to 50 Ncm, according to each case, and is not limited to a single torque.

If resistance is met during insertion, turn the implant slightly anti-clockwise and then continue to insert after waiting a few seconds. Repeat this process as many times as necessary.

The Ziacom® surgical protocol establishes crestal positioning of the implant platform.

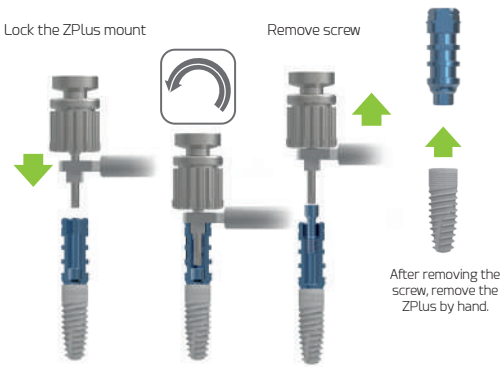
The ZPlus has 3 flat sides. After inserting the implant, make sure that one of these flat sides faces the vestibular direction.





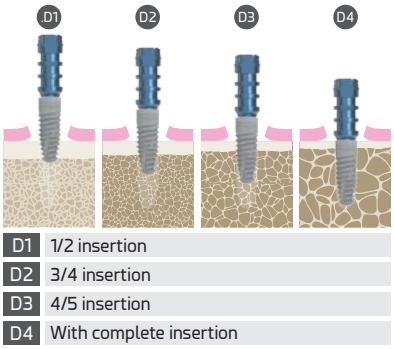
STEP 5A | Extracting the ZPlus Mount

Lock the ZPlus mount using block key **Ref. 01MOHW** and remove the screw using manual surgical screwdriver **Ref. SMSD / LMSD**. After removing the screw, remove the ZPlus by hand.



STEP 5B | Extracting the ZPlus Mount

In order to prevent the ZPlus mount from warping or cold welding with the implant, the point of insertion at which the mount should be extracted will depend on the type of bone.



IMPORTANT

The maximum insertion torque for the dental implants is **50 Ncm**. Exceeding the maximum insertion torque for the implants may cause severe damage to the dental implant, its connection, the Mount and the clinical screw included. Check the specifications in the surgical protocol for removal of the Mount, according to the type of implant connection and the bone type.

Surgical protocol

STEP 5C | Extracting the ZPlus Mount

Step 1

After removing the clinical screw, insert the extractor screw.

Step 2

Turn the screwdriver clockwise until the extractor screw makes contact with the implant and then turn an extra quarter turn to unlock the mount

Step 3

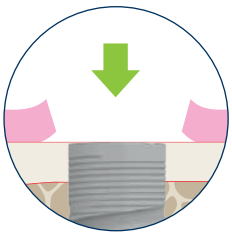
After unlocking the mount, remove the extractor screw

In the event of jamming or cold welding between the ZPlus and the implant after insertion, do not handle the mount with instruments in a way that could reduce primary stability. Only use the Ziacom® extractor screw **Ref. EDSZ34 (RP/WP)**.

On inserting the extractor screw using manual surgical screwdriver **Ref. SMSD / LMSD** and manual torque, in a clockwise direction, the apex makes contact with the implant, unlocking the mount and releasing it for removal.

STEP 6 | Crestal placement of the implant

The Ziacom® Zinic® MTX implant platform should be placed at bone ridge level.



RECOMMENDED ridge position

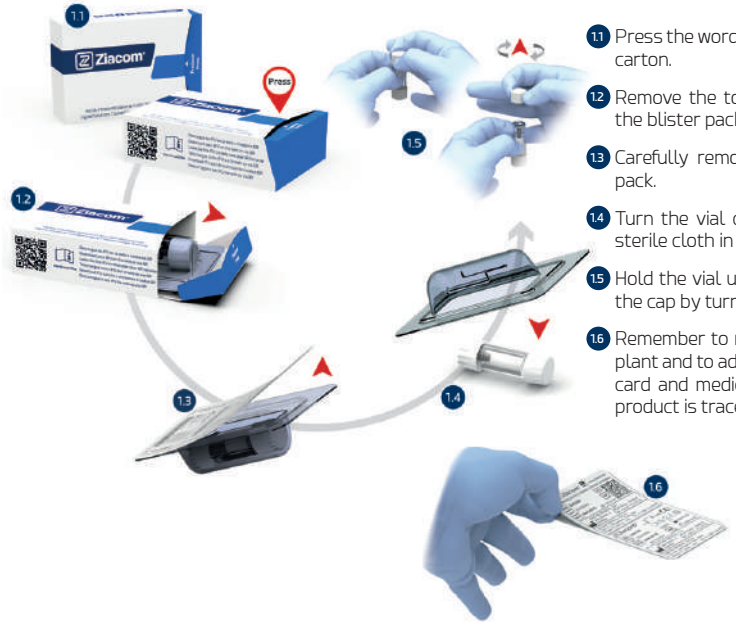
Implant insertion with Ziacom® **Titansure No Mount**

Ziacom® No Mount

Surface treatment

Titansure

STEP 1 | Unpacking the implant



1.1 Press the word "PRESS" and open the implant carton.

1.2 Remove the top of the carton and take out the blister pack.

1.3 Carefully remove the seal from the blister pack.

1.4 Turn the vial containing the implant onto a sterile cloth in the operating area.

1.5 Hold the vial upright with one hand. Remove the cap by turning and lifting it.

1.6 Remember to remove the label from the implant and to adhere it to the patient's implant card and medical record to ensure that the product is traceable.

STEP 2 | Choosing the right insertion instrument

Based on the specific clinical situation and access to the surgical site, one of three different instruments can be selected to insert the implant:

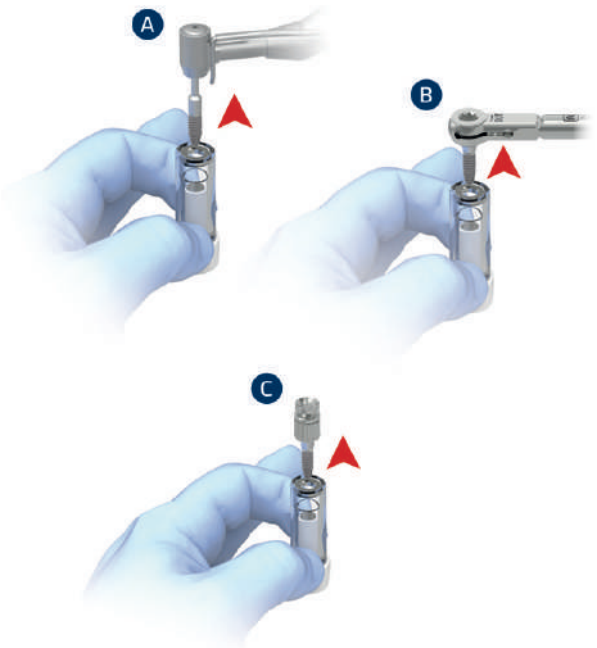
A **Contra-angle:** select the Zinic® CA **Ref.MMZ1** insert it into the contra-angle.

B **Torque wrench Ref. TORK50:** use the Zinic® insertion key. Ratchet/Manual of the desired length Ref. **SMZ1 / LMZ1** and insert it into the ratchet set to function "IN", which is identified with an arrow.

C **Screwdriver handle 4x4 Ref. MADW10:** select the Zinic® Ratchet/Manual of the desired length **Ref. SMZ1 / LMZ1** and insert it into the screwdriver handle.

STEP 3 | Removing the implant from its vial

Hold the vial containing the implant upright in one hand and insert the selected insertion key into the implant with the other hand. Remove the implant by lifting it vertically out of the vial.



Surgical protocol

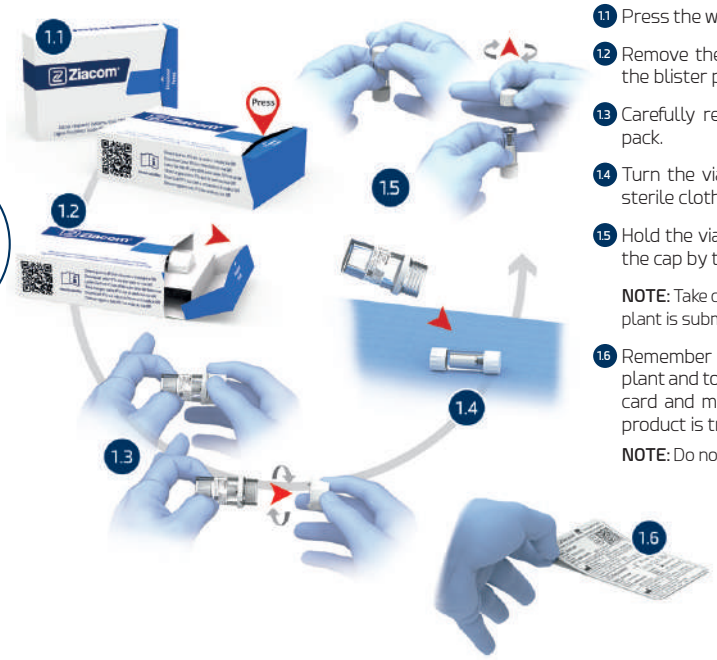
Implant insertion with Ziacom® No Mount | **Titansure Active***

Ziacom® No Mount

Surface treatment

Titansure Active

STEP 1 | Unpacking the implant



1.1 Press the word "PRESS" and open the carton.

1.2 Remove the top of the carton and take out the blister pack.

1.3 Carefully remove the seal from the blister pack.

1.4 Turn the vial containing the implant onto a sterile cloth in the operating area.

1.5 Hold the vial upright with one hand. Remove the cap by turning and lifting it.

NOTE: Take care when opening the vial as the implant is submerged in a bioactive liquid.

1.6 Remember to remove the label from the implant and to adhere it to the patient's implant card and medical record to ensure that the product is traceable.

NOTE: Do not reuse any leftover liquid.

STEP 2 | Choosing the right insertion instrument

Based on the specific clinical situation and access to the surgical site, one of three different instruments can be selected to insert the implant:

A **Contra-angle:** select the Zinic® CA **Ref. MMZ1** insert it into the contra-angle.

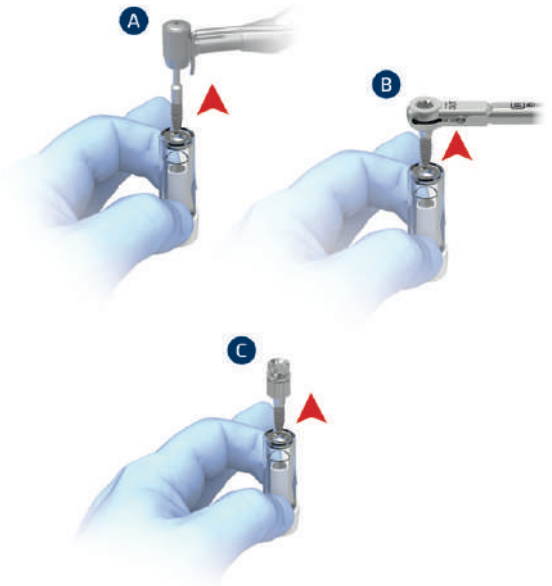
B **Torque wrench Ref. TORK50:** use the Zinic® insertion key. Ratchet/Manual of the desired length **Ref. SMZ1 / LMZ1** and insert it into the ratchet set to function "IN", which is identified with an arrow.

C **Screwdriver handle 4x4 Ref. MADW10:** select the Zinic® Ratchet/Manual of the desired length **Ref. SMZ1 / LMZ1** and insert it into the screwdriver handle.

STEP 3 | Removing the implant from its vial

Hold the vial containing the implant upright in one hand and insert the selected insertion key into the implant with the other hand. Remove the implant by lifting it vertically out of the vial.

NOTE
Take care not to spill the bioactive liquid.



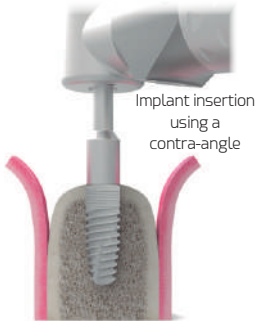
*Check availability according to each country.

Zinic® MTX No Mount implant insertion

STEP 4 | Inserting the implant

Ziacom® implants are available without a mount. This blister pack format allows dentists to comfortably remove the implant from the vial and place it in the surgical site using a direct instrument in one single step, thereby saving time during the operation. The No-Mount implant facilitates instrumentation in reduced spaces and allows better visibility of the surgical site.

The new Zinic® direct-to-implant insertion keys with Ref. **SMZ/LMZ/MMZ/MMZA** (NP) and **SMZ1/LMZ1/MMZ1/MMZ1A** (RP/WP) have a centring device on their clamping part to avoid damaging the connection, and a washer on the active end to allow the implant to be quickly and safely moved to the surgical site.

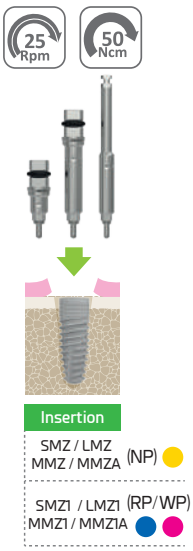


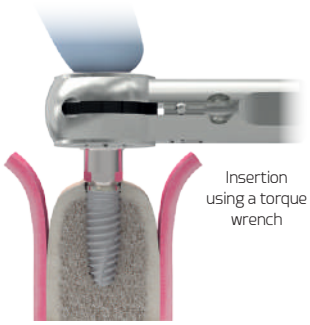
Implant insertion using a contra-angle

Insert the implant into the surgical site, controlling both the direction and angle of the implant. When inserting the implant with a contra-angle, use a maximum speed of 25 rpm. The recommended insertion torque ranges from 35 to 50 Ncm, according to each case, and is not limited to a single torque.

If resistance is met during insertion, turn the implant slightly anti-clockwise and then continue to insert after waiting a few seconds. Repeat this process as many times as necessary.

The Ziacom® surgical protocol establishes crestal positioning of the implant platform.





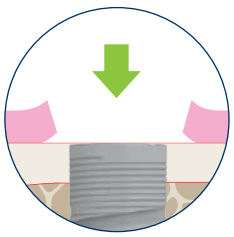
Insertion using a torque wrench

IMPORTANT

The maximum insertion torque for the dental implants is **50 Ncm**. Exceeding the maximum insertion torque indicated for the implants may cause severe damage to the dental implant and its connection. Check the specifications in the surgical protocol according to the type of implant connection and the bone type.

STEP 5 | Crestal placement of the implant

The Ziacom® Zinic® MTX implant platform should be placed at bone ridge level.

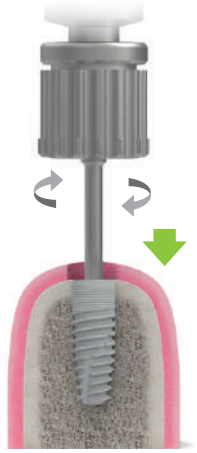


RECOMMENDED ridge position

Surgical protocol

Soft tissue conditioning

STEP 1 | Placing the cover screw



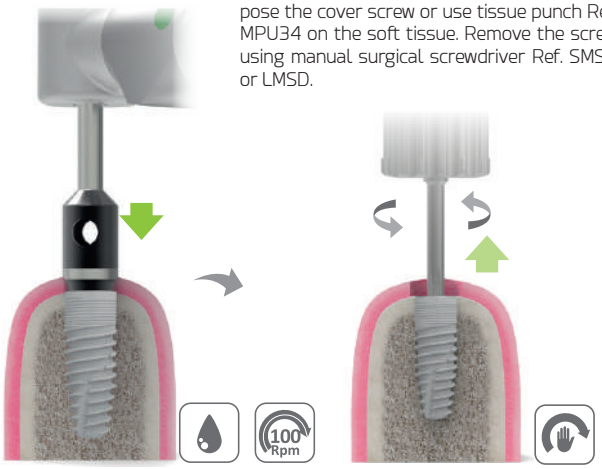
Remove the cover screw anti-clockwise using manual surgical screwdriver Ref. SMSD / LMSD. Move the cover screw towards the implant while taking care not to drop it and cause its accidental ingestion. Insert the screw into the implant until it locks, applying manual torque in a clockwise direction. Placement of the cover screw during the first surgical phase requires that, after the osseointegration period, the second surgical phase should be performed or the implant should be exposed to fit the chosen abutment.

Based on each individual case, you can choose not to place a cover screw but instead to directly attach a healing abutment.

STEP 2 | Closing the soft tissue

Close and suture the soft tissue, carefully lining up the flaps.

STEP 3 | Exposing and extracting the cover screw



Locate the implant and make an incision to expose the cover screw or use tissue punch Ref. MPU34 on the soft tissue. Remove the screw using manual surgical screwdriver Ref. SMSD or LMSD.

STEP 4 | Placing the healing abutment

Insert the chosen healing abutment using manual surgical screwdriver Ref. SMSD or LMSD.

The choice of healing abutment will depend on each individual case. It should match the implant platform and also the height of the gingival tissue in order to prevent occlusion of the abutment. If the abutment is too tall, it may subject the implant to premature loading, compromising the osseointegration process.

Bone types

Misch classification (1988)

TYPE **D1** BONE

- Dense cortical and dense trabecular bone.
- > 1250 HU

TYPE **D2** BONE

- Porous cortical and dense trabecular bone.
- 850 - 1250 HU

TYPE **D3** BONE

- Porous cortical and fine trabecular bone.
- 350 - 850 HU

TYPE **D4** BONE

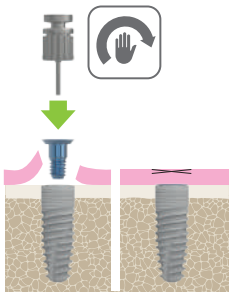
- Thin crestal cortical and fine trabecular bone.
- 150 - 350 HU

HU = Hounsfield Units

IMPORTANT
In order to simplify the surgical drilling protocols, we have created quick drilling guides, in which the criteria for bone types are amalgamated, with types D1-D2 considered "High-Density" bone, and D3-D4 bone types as "Low-Density" bone.

Handling of cover screw

Place the cover screw in the screwdriver. Move the cover screw towards the implant while taking care not to drop it and cause its accidental ingestion. Insert it into the implant applying manual torque in a clockwise direction.



Considerations for temporisation and immediate loading

Immediate temporisation and immediate loading are procedures that involve the placement of the prosthesis within 72 hours after implant surgery. The fundamental difference between these procedures is whether or not the prosthesis will have a functional load.

Adequate primary stability of the implant at the time of insertion is crucial to consider placing a provisional or immediately loaded prosthesis. This stability can be objectively measured by the insertion torque, which must be equal to or greater than 40-45 Ncm or by analysing the resonance frequency (ISQ value), which should be greater than or equal to 70.

IMMEDIATE TEMPORISATION

Immediate temporisation involves thorough monitoring of occlusion, both in central (closed) position, and during lateral or dynamic movements that occur during mastication. By freeing the provisional from any contact in these situations, the transfer of forces to the implant is prevented.

The main objectives of immediate temporisation are:

- Immediate closure of edentulous spaces in aesthetic areas.
- Guided regeneration of the gingival emergence profile due to the presence of the provisional crown or bridge.

IMMEDIATE LOADING

The principle of immediate loading involves the controlled transfer of contact from the moment of placement of the restoration while the restoration is in occlusion; therefore we distinguish between:

- Progressive immediate loading, using an acrylic provisional restoration as the initial restoration (released in dynamic occlusion).
- Definitive immediate loading, with rigid material and active occlusion from day one.

Both processes involve risks to the success of the osseointegration of the implant, so it is up to the practitioner, based on clinical experience and the case in question, whether or not to place an immediate provisional restoration and/or immediate loading.

Surgical protocol

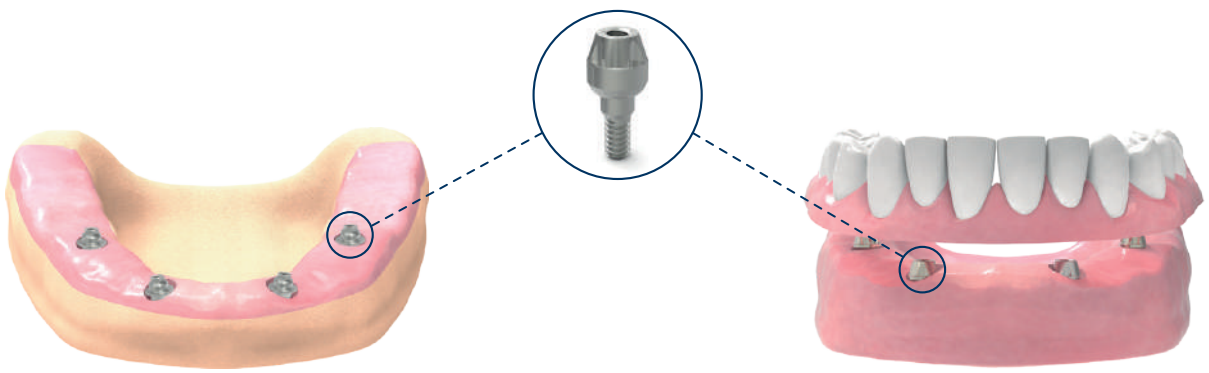
Restorations using transepithelials

Transepithelial abutments

- Allows the peri-implant tissue to form from the initial 8 weeks.
- One abutment-one time allows gingival adhesion to its surface as repeated detachments are not necessary.
- Avoids loss of bone and soft tissues as there is no mechanical rupture of the peri-implant interface.
- The prosthetic working area is above the gingival level, making the soft tissue adhesive behaviour more predictable, maintaining a good seal.
- Less formation of micro-gaps at the implant-prosthesis junction.
- Increased crestal bone preservation.
- Prosthetic try-ins and definitive placement without anaesthesia.
- If the recommended torques are exceeded, the screw suffers the fracture at transepithelial level and not inside the implant.

Abutment heights

- Greater abutment height means more marginal bone is preserved in cement-retained prostheses.
- Higher abutments (≥ 2mm) provide better soft tissue adaptation.
- Short abutments (< 2 mm) can compromise the soft tissues, resulting in greater crestal bone loss.
- Marginal bone loss will differ depending on the clinical decision on the abutment height. Generally, prosthetic abutments ≥ 2mm will lead to better preservation of crestal bone.

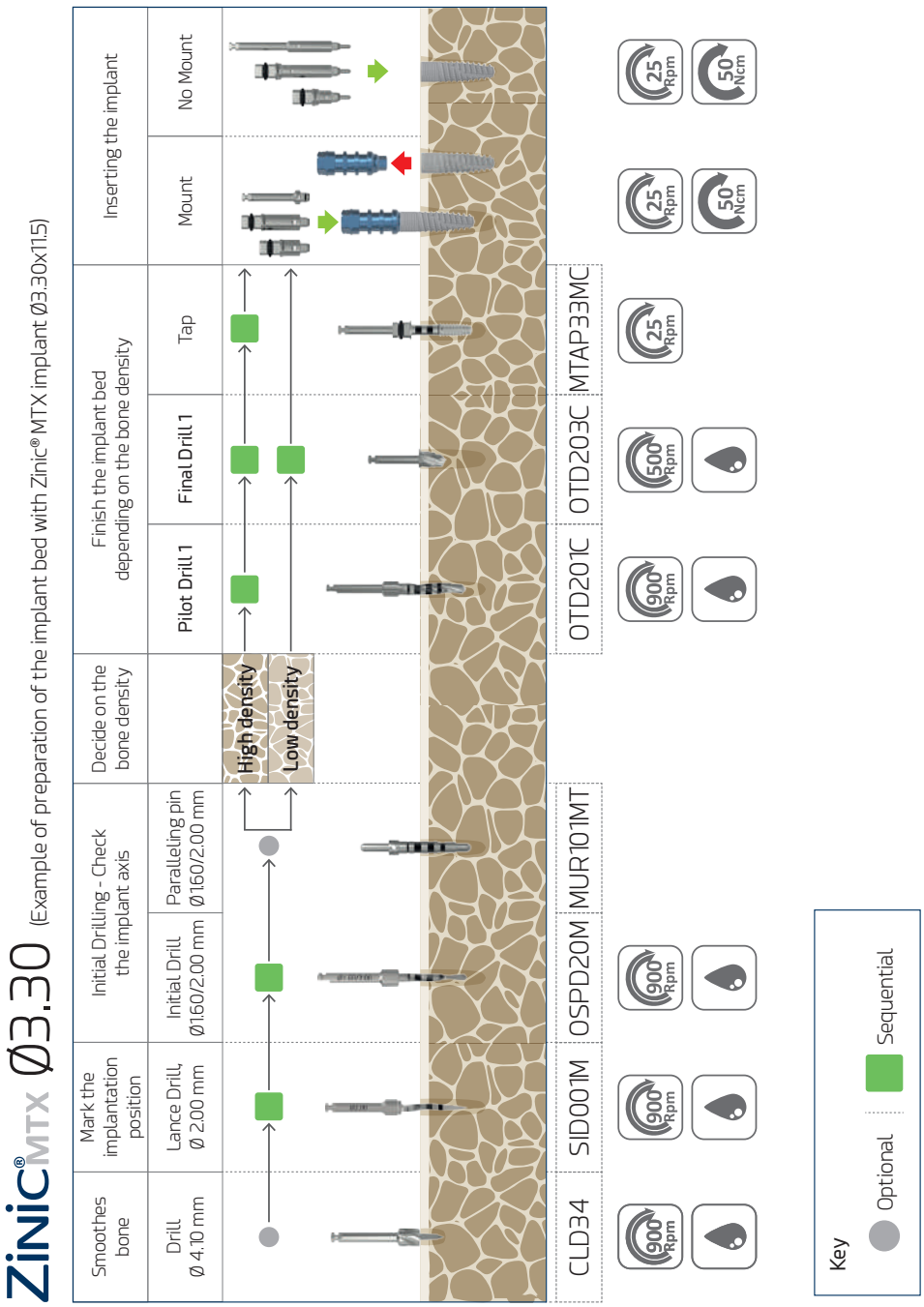


These surgical guides have been designed with a simplified surgical protocol to perform simple and efficient drilling of the surgical site.

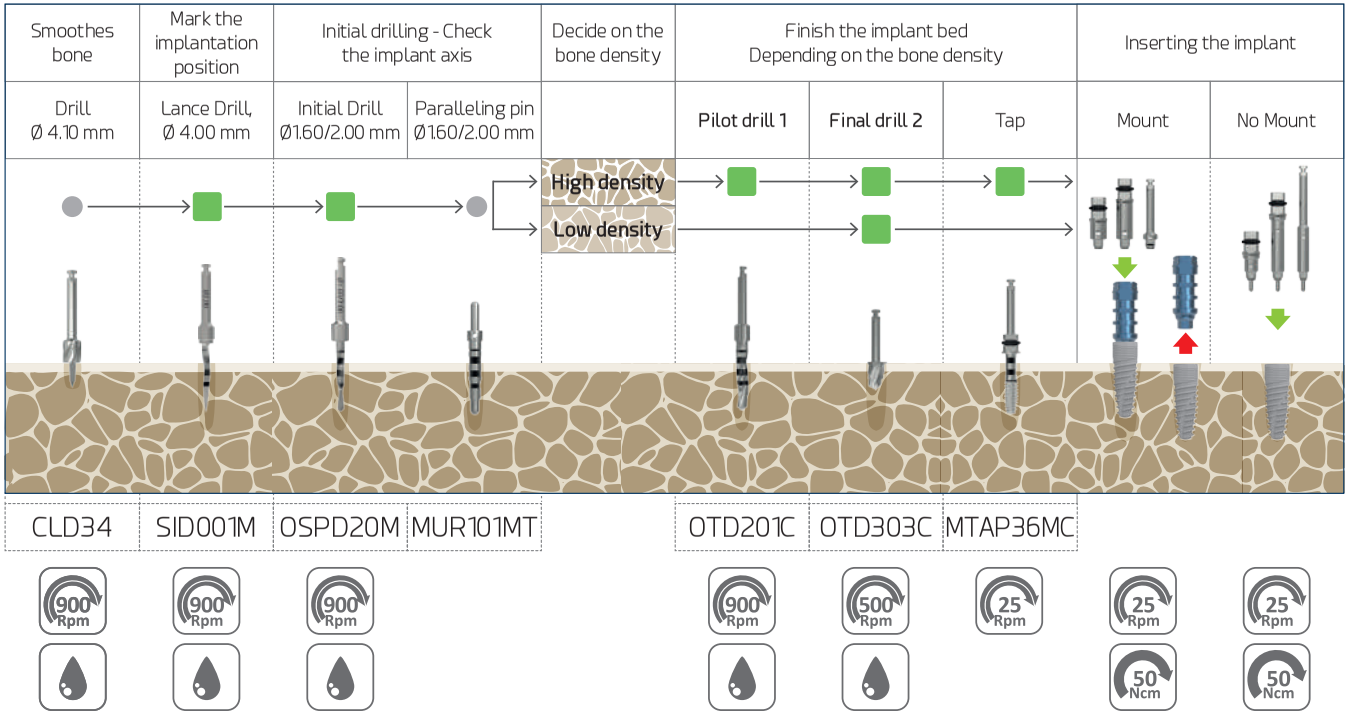
ZPlus / Ziacom® No-Mount - Drilling Protocol

Rotation | Irrigation required | Ø Drill diameter | Torque

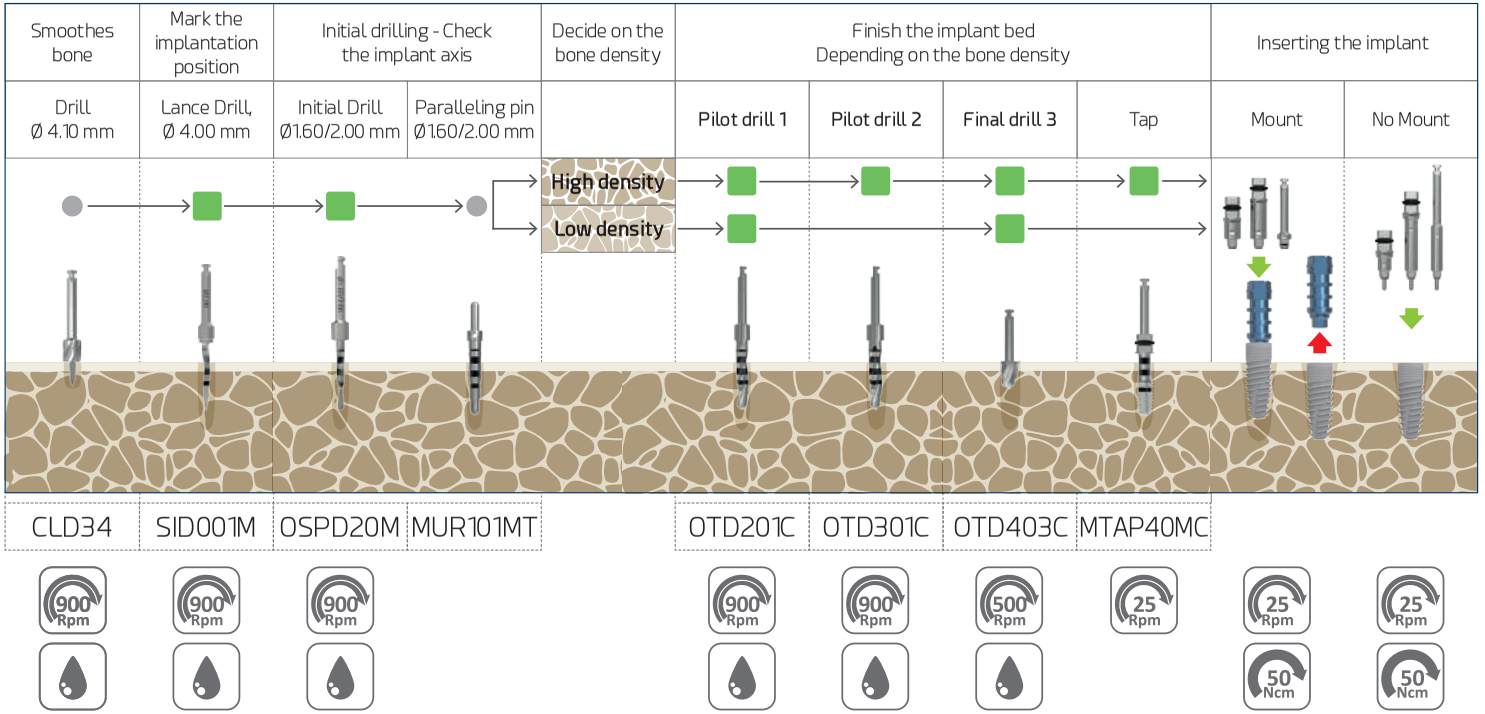
Detailed speeds are recommended



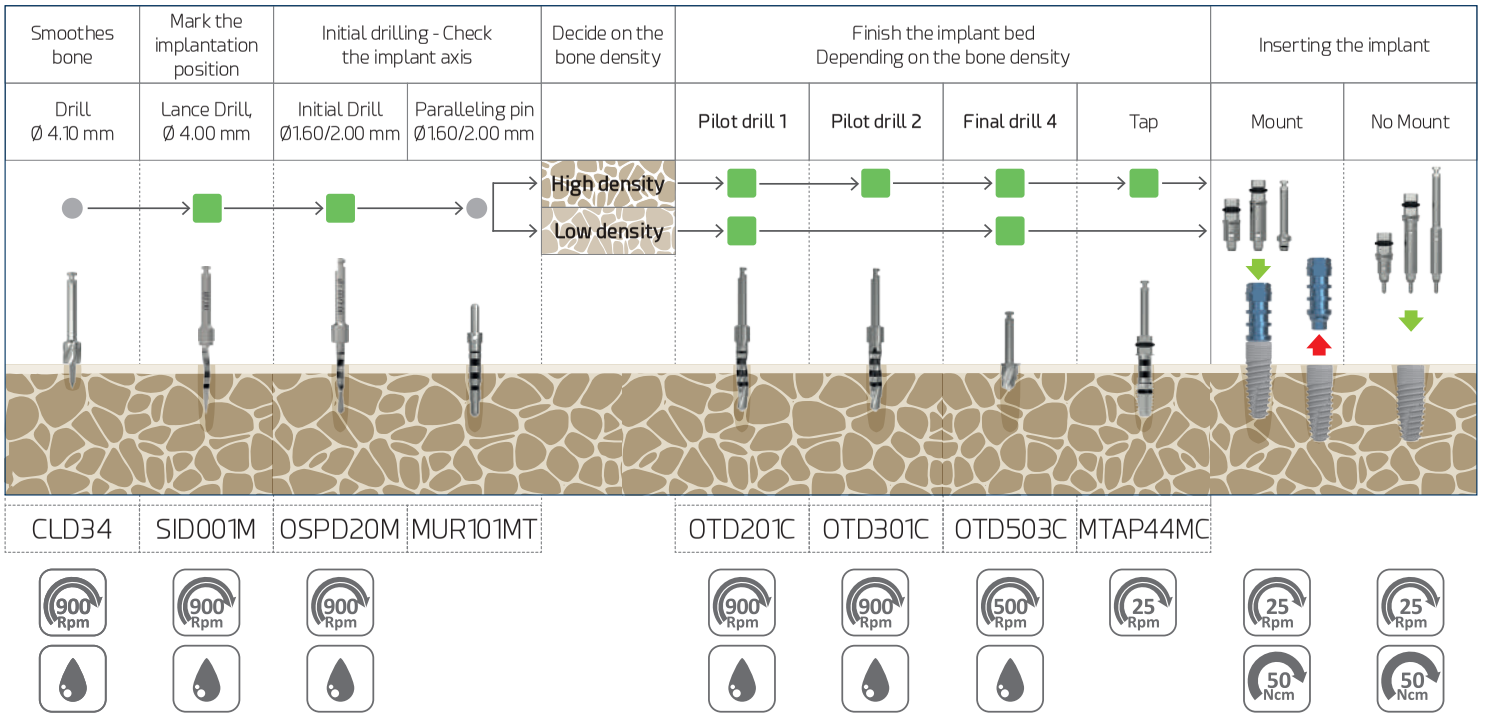
ZiNiC® MTX Ø3.60 (Example of preparation of the implant bed with Zinic® MTX implant Ø3.60x11.5)



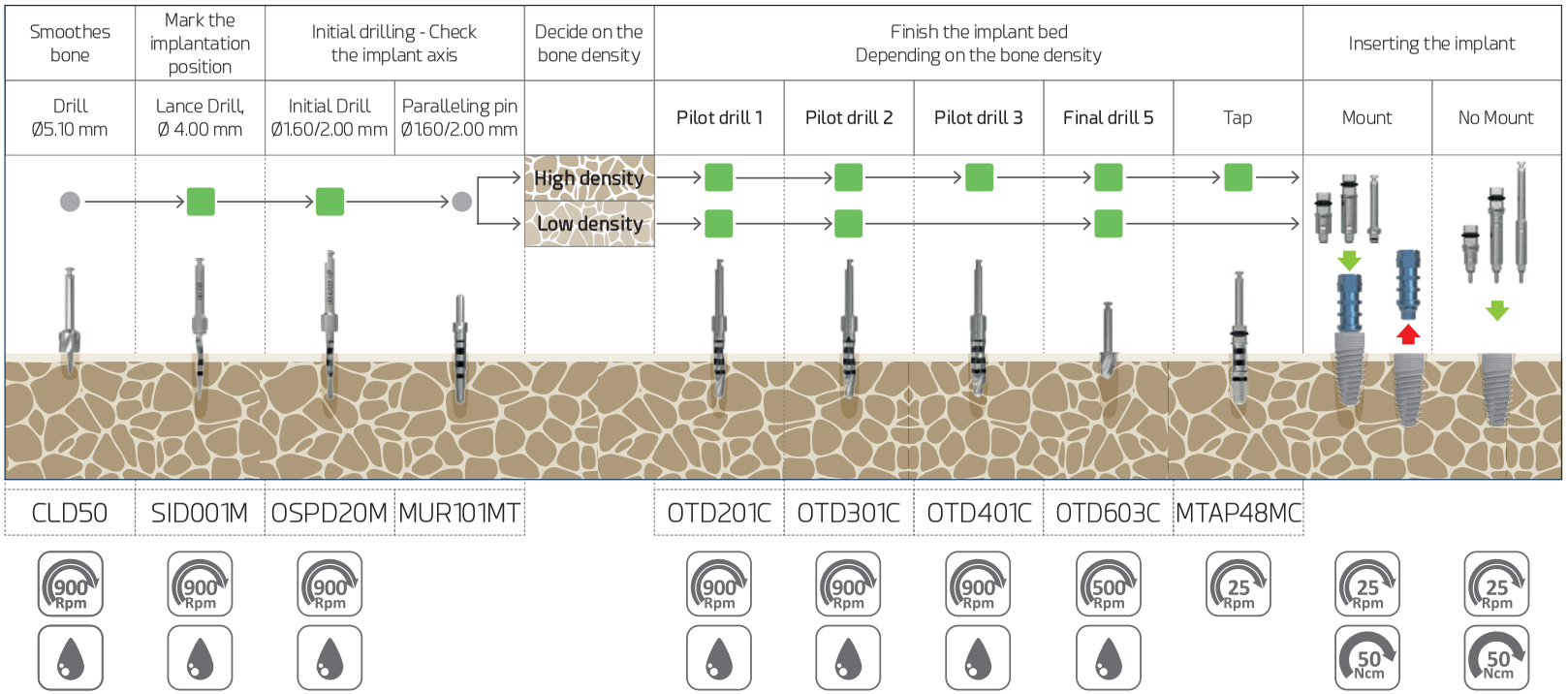
Zinic® MTX Ø4.00 (Example of preparation of the implant bed with Zinic® MTX implant Ø4.00x11.5)



ZiNiC® MTX Ø4.40 (Example of preparation of the implant bed with Zinic® MTX implant Ø4.40x11.5)



ZiNiC® MTX Ø4.80 (Example of preparation of the implant bed with Zinic® MTX implant Ø4.80x11.5)



Simplified surgical protocol

General recommendations

Points to consider during the procedure

1. Surgical drills must be inserted into the contra-angle handpiece with the motor stopped, ensuring that they are seated and rotate properly before starting drilling. Treat drills with the utmost care; the slightest damage to the tips could compromise their effective operation.

2. Damaged instruments must be disposed of according to local regulations.

3. Implantologists should keep one of the identification labels supplied with the product in the patient's records so that the product can be traced correctly.

4. Each instrument must only be used for the specific use recommended by the manufacturer.

Before using the Ziacom® Zinic® MTX system, make sure to consult the surgical and prosthetic protocols published in this catalogue, as well as the other documents available in the "Reference literature" section of our website **www.ziacom.com/biblioteca** which set out the procedures, protocols and instructions for use.

Cleaning, disinfection and sterilisation

Cleaning, disinfection and sterilisation

The protocols described in this section must only be carried out by personnel qualified to clean, disinfect and sterilise the dental materials specified herein.

Cleaning and disinfection instructions

Applicable for surgical and prosthetic instruments and boxes.

Disassembly

1. Disassemble* the instruments that need to be cleaned and disinfected, such as manual ratchets, drills or drill stops.
2. Remove all the different components from the surgical or prosthetic kit box for correct cleaning.

Cleaning and disinfection

For disinfection of instruments and surgical kit boxes:

1. Submerge the instruments in a detergent/disinfectant solution** suitable for dental instruments to help eliminate any adhered biological residues. If an ultrasound bath is available***, confirm that the detergent/disinfectant solution is indicated for use with this type of equipment.
2. Manually remove any biological residues with a non-metallic brush and pH-neutral detergent.
3. Rinse with copious water.
4. When cleaning surgical and prosthetic kit boxes, always use a pH-neutral detergent and non-abrasive tools to avoid damaging the surface of the boxes.
5. Dry the materials with disposable, lint-free, cellulose cloths or compressed air.

For disinfection of plastic caps and the protective disk:

1. Submerge for 10 minutes in a neat benzalkonium chloride solution.
2. Rinse with distilled water.
3. Dry the caps and disk prior to use.

Inspection

1. Check that the instruments are perfectly clean; if not, repeat the cleaning and disinfection steps.
2. Discard any instruments with imperfections and replace them before the next surgery.
3. Check that the instruments and surgical and prosthetic kit boxes are perfectly dry before reassembling the parts and proceeding with sterilisation.

* See the assembly and disassembly manuals at **www.ziacom.com/biblioteca**

** Follow the instructions from the disinfectant's manufacturer to determine the correct concentrations and times.

** Follow the instructions from the ultrasound bath's manufacturer to determine the correct temperature, concentration and times.

Sterilisation instructions for steam autoclaves

Applicable to orthodontic implants, abutments, kit, surgical and prosthetic boxes, pins, fixing screws and mesh membranes.

1. Place the material in individual sterilisation pouches and seal the pouches. For joint sterilisation, place the instruments in their surgical kit box, place the box in a sterilisation pouch and seal the pouch.
2. Place the pouches to be sterilised in the autoclave.
3. Sterilise in a steam autoclave at 134°C/273°F (max. 137°C/276°F) for 4 min (minimum) at 2 atm. Dynamometric torque wrenches must be sterilised in 3 vacuum cycles at 132°C/270°F for at least ≥ 4 minutes and vacuum dried for at least 20 minutes.

For the United States only: The validated and recommended sterilisation cycle for the US must be performed in a steam autoclave at 132ºC/270°F for at least 15 minutes with a drying time of at least 15–30 minutes.

IMPORTANT
Make sure the drying stage is allowed to run to completion, otherwise the products may be damp.
Check the sterilisation equipment if the materials or sterilisation pouches are damp at the end of the sterilisation cycle.
Perform the necessary maintenance actions on the autoclave according to the established periodicity and following the manufacturer's instructions.

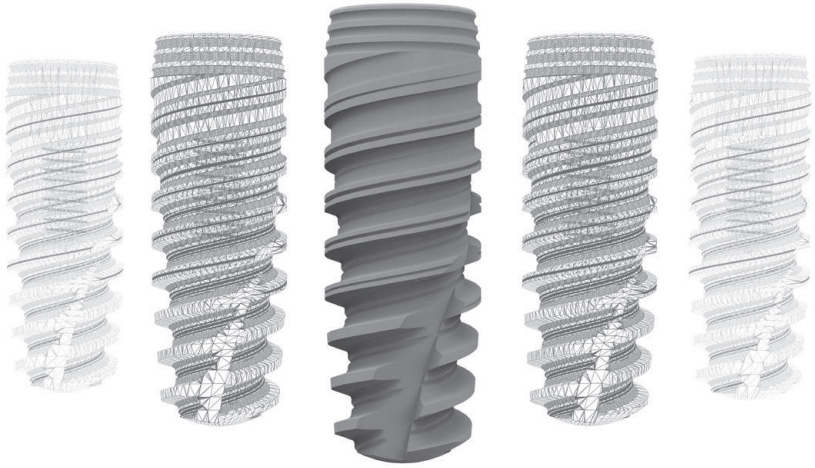
Storage of Ziacom® products

- Store the products in their original packaging in a clean, dry place until they are to be used.
- After sterilisation, keep the products in the sealed sterilisation pouches in a clean, dry location.
- Never exceed the use by date indicated by the manufacturer of the sterilisation pouches.
- Always follow the instructions of the manufacturer of the sterilisation pouches.

General recommendations

- Never use damaged or dirty material; never reuse single-use products. The user is responsible for following the instructions described in this document correctly.
- Pay attention to piercing or sharp elements. Gloves should be worn when cleaning the materials to avoid accidents during handling.
- Follow the safety instructions indicated by the manufacturer of the disinfectant.
- The product's sterility cannot be guaranteed if the sterilisation pouch is open, damaged or damp.
- Respect all stages of the sterilisation process. If the materials or sterilisation pouches contain traces of water or moisture, check the autoclave and repeat the sterilisation.
- Orthodontic abutments and implants are supplied UNSTERILISED and must always be sterilised before use.
- Instruments and surgical and prosthetic kit boxes are supplied UNSTERILISED and must always be sterilised before use and cleaned and disinfected after use.
- Sterilisation, cleaning and disinfection processes gradually deteriorate the instruments. Inspect the instruments thoroughly to detect any signs of deterioration.
- Avoid contact between products made from different materials (steel, titanium, etc.) during the cleaning, disinfection and sterilisation processes.
- Ziacom Medical SL recommends these instructions are implemented for the correct maintenance and safety of their products; accordingly, the company refuses any liability for any damage to the products that could arise if the user applies alternative cleaning, disinfection and sterilisation procedures.

See the latest version of the cleaning, disfection and sterilisation instructions at **www.ziacom.com/biblioteca**



Ziacom®

See the updated general conditions of sale at **www.ziacom.es**.

Check the availability of each product in your country.

See the latest version of the catalogues at **www.ziacom.es**.

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