

Conical implants with external hex connection







Conical implants with external hex connection





# 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 quick guide for clinicians responsible for treatment, hereafter the "user", and, therefore, is neither an alternative nor a substitute for specialized training or professional clinical experience.

Ziacom® products must be used according to a suitable treatment plan and adhering strictly to the surgical and prosthetic protocols established by the manufacturer. Read the product-specific surgical and prosthetic protocols as well as the instructions for use and maintenance before using each 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 guarantee.

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 guiding information. 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, their affiliates and/ or their 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<sup>®</sup> 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<sup>®</sup> products must be used, handled and applied by professionals 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<sup>®</sup> 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<sup>®</sup> components, instruments or products, whether alone or in combination with any original Ziacom<sup>®</sup> products, will immediately void the warranty of the original Ziacom<sup>®</sup> products.

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

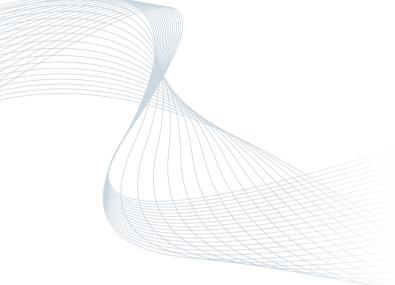
Warning. Not all Ziacom<sup>®</sup> products are available in all counties. Check availability in your country.

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# Together for | Z



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# The Company

# Together for **health**

Ziacom<sup>®</sup> has been working for more than 15 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 launching its own **brand of implant systems** in 2006.

In 2015, Ziacom<sup>®</sup> 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 started up on an **ambitious growth plan** with new goals of **international expansion**, broadening and **diversification** of its portfolio **of products and services** and a Corporate Identity restyle.

# Ziacom<sup>®</sup> quality

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

The reason why we used 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 SL is a **licensed manufacturer of medical devices** and an AEMPS (Spanish Agency for 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.



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

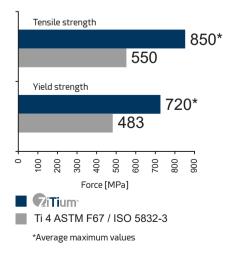
See the General Conditions for Accessing the Guarantee for Ziacom® products.

# Zitium<sup>®</sup> titanium

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Ziacom<sup>®</sup> ZM4MT implants are manufactured using extra-high-strength grade 4 Zitium<sup>®</sup> titanium which gives them considerably improved yield strength and mechanical properties.

### Properties of Zitium® titanium



Thanks to **Zitium**<sup>®</sup> titanium, our implants meet the requirements of ASTM F67 and ISO 5832-3 and are certified in accordance with Council Directive 93/42/EEC and its amendment Directive 2007/47/EC by notified body 0051.



Ziacom<sup>®</sup> implants are all sterilised using beta ray radiation at 25 kGy, apart from the DSQ orthodontic implants, which are supplied **unsterilised**.

**IMPORTANT** All the products (except dental implants) listed in this Ziacom<sup>®</sup> catalogue are supplied unsterilised and must be sterilised before use.





# 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 ensure the best **advances in 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<sup>®</sup> around the world

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 we our products are already available** and to add **new growth 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 headquarter**

### Ziacom Medical SL

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

### Subsidiaries

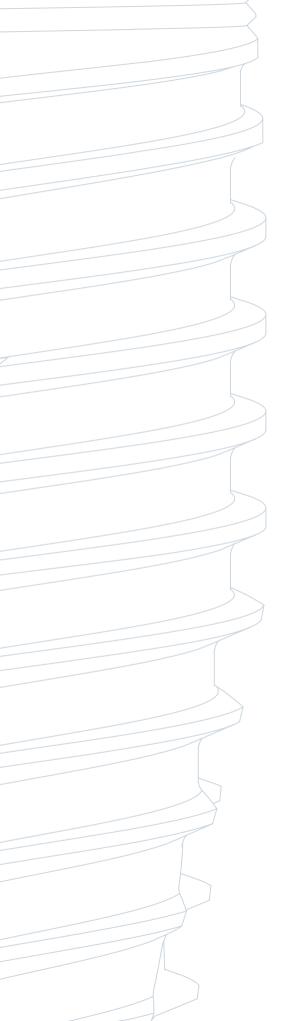
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### Ziacom Medical USA LLC

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









# ZM4<sub>MT</sub> implants

# Characteristics

### CONNECTION

- External hex connection: simple and versatile.
- Screw channel with upper guide: facilitates screw insertion.

### CORTICAL ZONE

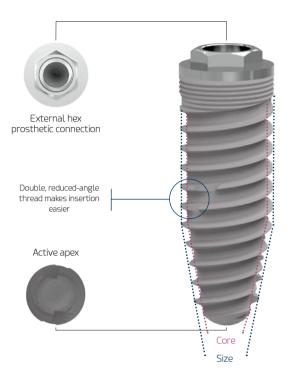
- 0.4 mm machined ring: allows the prosthetic gap to be raised with respect to the bone crest in average/thick biotypes; avoids exposing the treated surface of irregular crests.
- Microthread design: preserves marginal bone.
- Microthread extension: improves load distribution.
- Macrodesign: optimal cortical compression.

### BODY

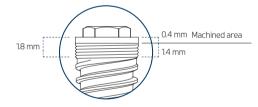
- Reduced-angle active threads: improve stability during insertion and increase BIC (bone-to-implant contact).
- Double threaded: quick insertion and shorter surgical time.
- Self-tapping active apex: facilitates insertion with underdrilling.
- Transverse apical windows: collect remnants of bone during 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.









# Diameters and lengths

					LENGTH (L)			
ØDIAMETER	Ø PLATFORM	6	7	8.5	10	11.5	13	14.5
NP 3.30	3.30							
RP 3.60								
RP 4.00	4.10			E MANDO	E ALILIAND	ENNIN	Annan	
RP 4.40				ETTIMO	ETAINING	ENIMAN	EANNUM	
WP 4.80	5.00				E			

Dimensions in mm.

New product. Check availability.

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# ZM4<sub>MT</sub> implants

# 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.

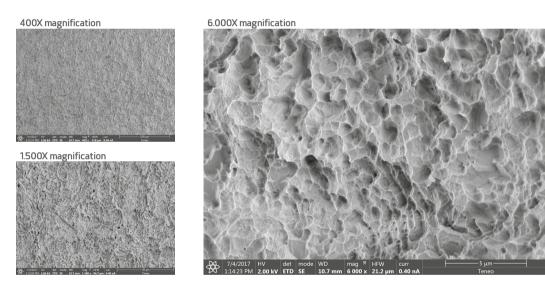
With our **Tibansure** surface treatment, at Ziacom Medical we have obtained a contaminant-free surface topography and optimal average macroand microporosity values, which are key specifications for achieving prompt and proper osseointegration and, in turn, extremely reliable and predictable implants.

### TITANSURE SURFACE ANALYSIS

**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.

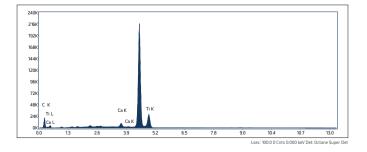
### Surface morphology analysis

With the aid of a scanning electron microscope (FEI TENEO, Thermo Fisher Scientific Inc., Waltham, MA, USA), we can see the rough, porous surface creating numerous cavities with thin, sharp edges.



### Surface elemental analysis

We used an energy-dispersive X-ray spectrometer (Octane Super, Edax-Ametek, Mahwah, NJ, USA) to analyse the chemical composition at the surface.



Compositional analysis of implant surface

ELEMENT	WEIGHT (%)
СК	9.32 (10.23)
AI K	-
Ti K	89.53 (11.77)
	NI 1 1 1 1 1 1

No aluminum was detected

Results are expressed as the mean and standard deviation of the mass percentage (WEIGHT (%)).



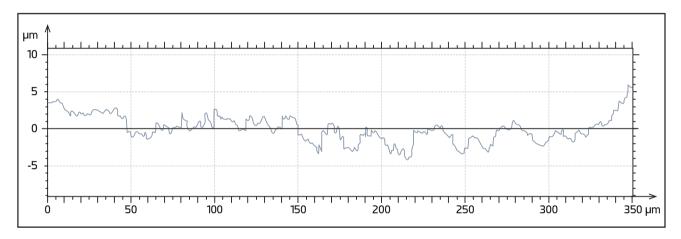
### Surface roughness analysis

The roughness study was conducted with a Sensofar S NEOX interferometric-confocal microscope (Sensofar Medical, Terrasa, Spain) and SensoMAP Premium 7.4 software. The quantitative roughness profile parameters applied were: average roughness (Ra), root-mean-square roughness (Rq), maximum profile peak height roughness (Rp) and maximum profile valley depth roughness (Rv).

Ra (µm) (SD)	Rq (µm) (SD)	Rp (µm) (SD)	Rv (µm) (SD)
0.82 (0.10)	0.97 (0.08)	1.84 (0.04)	2.21 (0.01)

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)
0.76 (0.01)	0.97 (0.01)	4.20 (0.12)	4.62 (0.20)



### The data were extracted from:

Rizo-Gorrita, M.; Fernandez-Asian, I.; Garcia-de-Frenza, A.; Vazquez-Pachon, C.; Serrera-Figallo, M.; Torres-Lagares, D.; Gutierrez-Perez, J. Influence of Three Dental Implant Surfaces on Cell Viability and Bone Behavior. An In Vitro and a Histometric Study in a Rabbit Model. Appl. Sci. 2020. 10(14), 4790

### 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].



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# ZM4<sub>MT</sub> implants

# Product presentation

### Blister packaging

Available for implants with **Tibansure** 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.



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

### Outer identification label

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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 MDD CE certification and notified body
- MD Name of the medical device
- LOT Number of product batch
- Patient information website
- UDI Unique device identification
- Sterilised using radiation
- Temperature restriction
- Caution, consult accompanying documents
- 🛞 Do not resterilise

- Do not use if the packaging is damaged
   Non-reusable product
- Consult the instructions for use
- Expiry date of the product
- Date of manufacture
- Product manufacturer
- TT Titansure surface treatment
- TTA Titansure Active surface treatment
- **RxOnly** Caution: federal law prohibits dispensing without prescription

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





### ZPlus Mount

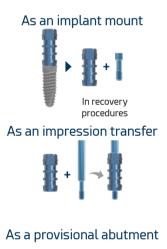
ZM4MT implants are supplied with the **ZPlus** Mount, a multi-functional abutment made in grade 5 ELI titanium (sanitary grade), which allows easy handling of the implant during the procedure. Additionally, the **ZPlus** mount concept is based on reducing treatment costs, as it works equally well as an implant mount, impression abutment, or provisional abutment for cement-screwed.

The ZPlus mount is available for the following implant ranges Zinic®, Zinic® MT, ZM4. ZM4 MT and ZM1.

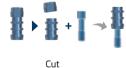
As we said, the **ZPlus** mount may be used as a provisional abutment, in which case it should be sculpted extra-orally and adjusted on an analogue, preferably a lab model or clamp. Check also the structural integrity of the mount and screw, to ensure that they have not suffered any deformation or damage due to excessive insertion torque or forced removal manoeuvre. Additionally, verify on an analogue that the **ZPlus** fixing screw is well fitted and that the connection is secure.

### IMPORTANT

Always follow the surgical protocol when inserting the implant. This will protect the mount and screw from possible damage which could prevent it being used later as an impression abutment and/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, detailing the corresponding reference and batch number. The **ZPlus** has 3 flat sides. After finishing the implant procedure, ensure that one of the flat sides faces into the vestibular cavity.



**ZPlus** Mount - Uses





11,00 mm



View of ZM4 MT implant + Mount

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# ZM4<sub>MT</sub> implants

# ZM4 MT references

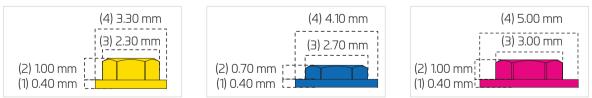
### Specifications of ZM4 MT with ZPlus - Titansure

IMPLANT							
	Ø (mm)	Ø Core (mm)	Length (mm)	Ref. Titansure			
			8.5	ZM43385M			
ZM4 <sub>MT</sub>	3.30		10.0	ZM43310M			
4		2.80/1.70	11.5	ZM43311M			
Σ			13.0	ZM43313M			
N			14.5	ZM43314M			
			8.5	ZM43685M			
			10.0	ZM43610M	-		
	3.60	3.10/1.80	11.5	ZM43611M			
			13.0	ZM43613M	Ŧ		
			14.5	ZM43614M			
			6.0	ZM44006M			
			7.0	ZM44007M			
	4.00	3.40/2.10	8.5	ZM44085M			
			10.0	ZM44010M			
			11.5	ZM44011M	Ŧ		
			13.0	ZM44013M			
			14.5	ZM44014M			
			6.0	ZM44406M			
			7.0	ZM44407M			
			8.5	ZM44485M	-		
	4.40	3.80/2.30	10.0	ZM44410M			
			11.5	ZM44411M			
			13.0	ZM44413M			
			14.5	ZM44414M			
			6.0	ZM44806M			
			7.0	ZM44807M	101		
	1.00	4 10/2 40	8.5	ZM44885M			
	4.80	4.10/2.40	10.0	ZM44810M			
			11.5	ZM44811M	-		
			13.0	ZM44813M			



\* Screw included with each implant.

### Platform



(1) Untreated machined zone. (2) External hex height. (3) Distance between faces of the external hex. (4) Diameter of working platform.

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# Recommendations for Use

All implant treatments must respect 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 reconstruction possibility. The squares on the odontogram 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<sup>®</sup> 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.
- BUR 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.

### Periodontal chart ΖМ4мт Implant diameter<sup>(1)</sup> NP A RP BRP C RP WP Ø3.30 mm Ø3.60 mm Ø4.00 mm Ø4.40 mm Ø4.80 mm (1) Diameters available for analogue platforms. Implant crown diameter NP RP WP Ø3.30 mm Ø4.10 mm Ø5.00 mm A\* B C - Implants in positions А marked "\*" should be splinted or, in single restorations, alleviated of occlusal loads. A\* B 11 21 13 Maxilla 26 C\* 36 Mandible BC \*See our range of implants with NP platform for

### IMPORTANT

Short 6.00 mm and 7.00 mm implants are ONLY recommended for use in combination with normal length ( $\geq$  10.00 mm) splinted implants.

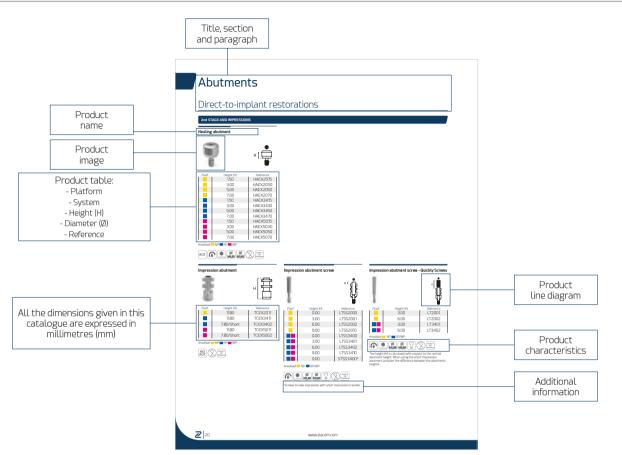
A\* B C



positions 31-32 and 41-42.

# How to use this catalogue

# Product sheet



# Symbology

Symbol Meaning	Symbol	Meaning	Symbol	Meaning
<b>ROT</b> Rotatory element		Tx30 connection	Co-Cr +castable	Made from cobalt chromium + castable plastic
NO ROT Non-rotatory element	MX,XX	Size in millimeters	Cobalt Chromium	Made from cobalt chromium
Use with manual torque (see table on page 37)		45° screw support	PEEK	Made from PEEK
Maximum operating torque	90°	90° screw support	Full	Made from castable plastic
Ratchet torque range	$\bigcirc$	Use in rotation with a CA	Plastic	Made from plastic
Galaxy connection	Rpm	Maximum rotation speed	XX° SSS	Recommended sterilisation temperature
Screw connection	XX USES	Maximum number of uses	Non sterile	Unsterilised product
Kirator connection	(2)	Single-use product		Use with abundant irrigation
Basic connection	Grade 5 ELI Titanium	Made from grade 5 ELI (extra-low interstitial) titanium	∑xx₀	Maximum angle
XDrive connection	Stainless Steel	Made from stainless steel		

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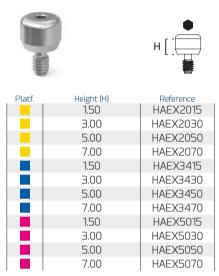




# Direct-to-implant restorations

### 2nd STAGE AND IMPRESSIONS

### Healing abutment



Anodised NP 🔤 RP 🗰 WP



### Impression abutment



Platf.

	H
Height (H)	Reference
11.80	TCEX2011
11.80	TCEX3411

1.00	100/10/11
11.80	TCEX3411
7.80/Short	TCEX3402
11.80	TCEX5011
7.80/Short	TCEX5002

Heigh

Anodised NP 🗖 RP 📕 WP



1.			
Platf.	Height (H)	Reference	
	0.00	LTSS2000	
	Э.00	LTSS2001	
	6.00	LTSS2002	
	9.00	LTSS2010	
	0.00	LTSS3400	
	3.00	LTSS3401	
	6.00	LTSS3402	
	9.00	LTSS3410	
	0.00	STSS3400*	

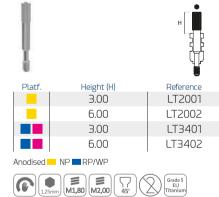
Impression abutment screw

Anodised NP RP/WP



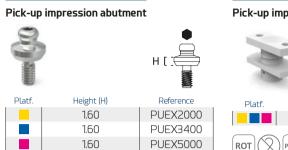
\*Screws to take impression with short impression transfer.

### Impression abutment screw - Quickly Screws



The height (H) is calculated with respect to the normal abutment height. When using the short impression abutment consider the difference between the abutments heights.

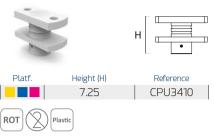




### Anodised NP 🔳 RP 📕 WP



### Pick-up impression transfer



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

Н

### Z2Plus Snap-On impression abutment



Platr.	Height (H)	Reference
	1.50	Z2NPEX10
	1.50	Z2RPEX10
	1.50	Z2WPEX10

Anodised 🔜 NP 📰 RP 📰 WP

# NO ROT

**IMPORTANT** Use the laboratory screw to tighten this impression abutment.

### Z2Plus Snap-On impression transfer





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

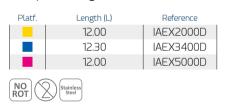
### Implant analogue



Platt.	Length (L)	Reference
	12.00	IAEX2000
	12.30	IAEX3400
	12.00	IAEX5000

### 3D implant analogue

NO ROT



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### FASTENING COMPONENTS

### Clinical screw



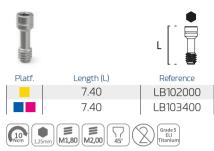
### Kiran clinical screw





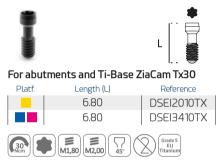
Special Kiran screw with surface treatment.

### Laboratory screw



NOT suitable for use as the final clinical screw.

### Kiran Tx30 clinical screw



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

### Provisional

### **Provisional abutment**







**Provisional abutment** 

Aesthetic and immediate loading abutments



Platf.	Length (L)	Reference
	9.50	RUEXT2010
	9.50	RUEXT3410
	9.50	RUEXT5010
Anodised	NP 🗖 RP 📕 WP	

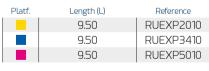


### Non-rotatory

Platf.	Length (L)	Reference
	9.50	NUEXT2010
	9.50	NUEXT3410
	9.50	NUEXT5010

### Anodised NP 🔤 RP 🔤 WP







### Non-rotatory

Platf.	Length (L)	Reference
	9.50	NUEXP2010
	9.50	NUEXP3410
	9.50	NUEXP5010
NO	PEEK	

Ziacom®





### SCREW-RETAINED UCLA UCLA MACHINED BASE Mechanised base abutment UCLA + Castable abutment L Rotatory Rotatory Platf. Length (L) Reference 11.00 RUEX2000 Platf. Length (L) Reference 11.00 RUEX3400 10.60 BRUEX20 11.00 RUEX5000 10.60 BRUEX34



### Non-rotatory

Platf.	Length (L)	Reference
	11.00	NUEX2000
	11.00	NUEX3400
	11.00	NUEX5000
NOROT	Full	

	10.00	
	10.60	
ROT	Co-Cr +castable	

### Non-rotatory

Platf.	Length (L)	Reference
	10.60	BNUEX20
	10.60	BNUEX34
	10.60	BNUEX50
	Co-Cr +castable	

BRUEX50

### SCREW-RETAINED

### Tx30 VARIABLE ROTATION ABUTMENT

### Tx30 mechanised base abutment

+ 2 castable abutments (15° and 20°)



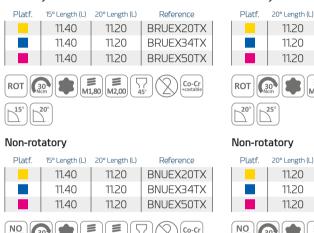




Tx30 mechanised base abutment

+ 2 castable abutments (15° and 20°)

### Rotatory



### Rotatory





### 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 burnout abutments can be used to choose the best position for the correct emergence of the restoration screw access channel.





### CEMENT-RETAINED Straight Abutment Straight Abutment нг:⊏ н Height (H) Platf. Reference Height (H) Platf. Reference 1.50 STAEX2015 1.50 STEX2015 2.50 STAEX2025 2.50 STEX2025 3.50 STAEX2035 STEX2035 3.50 1.50 STAEX3415 1.50 STEX3415 2.50 STAEX3425 2.50 STEX3425 3.50 STAEX3435 3.50 STEX3435 1.50 STAEX5015 1.50 STEX5015 2.50 STAEX5025 2.50 STEX5025 3.50 STAEX5035 3.50 STEX5035 RP 🗖 WP Anodised 🔜 NP 🔜 RP 💻 WP Anodised NP (1,25mm) (1,80) (1,80) Grade 5 ELI Titanium Grade 5 ELI Titanium

ΗĹ

Reference

A1EX2015

A2EX2015

A1EX3415

A2EX3415

A1EX5015

A2EX5015

### 15° angled abutment

		1		1	
	1	/		9	l
	4			K.	
1	P	-	5		



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e	9		(	
1			1	

25° angled abutment



Platf.	Height (H)	Reference
	1.50	A1EX2025
	2.50	A2EX2025
	1.50	A1EX3425
	2.50	A2EX3425
	1.50	A1EX5025
	2.50	A2EX5025
Anodised	NP 🗖 RP 🗖 WP	
	Grade 5 ELI Titanium	



# Direct-to-implant restorations

### OVERDENTURES

26

Kirato	r	Related abutments			
	1	Kirator impression transfe	r	Kirator analogue	
		) D			
		System Height (H) Kirator 6.50 ROT Plastic	Reference		ength (L) Reference 13.00 IATORK01
Ų 👘		Pack of 4 units. DO NOT sterilise in an	autoclave. Sculptable.		
U	•	Kirator processing kit		Kirator divergence	processing kit
Kirator abutment with applicator	н [ 🗍			-	
			2.05	•	2.05
Kirator abutment	Reference	-	Titanium housing	-	Titanium housing
1.00	LOEX2001	Gurter	Deferrer	Gusta	Deferrer
2.00	LOEX2002	System Kirator processing kit	Reference TP8520	System Kirator proces	
3.00	LOEX2003				
4.00	LOEX2004	Kirator processing kit consisting of: black relined cap, spacer and purple			lack relined cap, spacer and
5.00	LOEX2005	plastic caps.		purple, transparent and	
6.00	LOEX2006	Sterilise the metal coping using the a and spacers should be cold disinfected			g using the autoclave. Plastic caps old disinfected. See Cleaning and
2.00	LOEX3401	Disinfection Instructions on the Ziaco	m® website.	Disinfection Instructions	on the Ziacom® website.
3.00	LOEX3403	System Retention (Kg)	Reference	System Ret	ention (Kg) Reference
4.00	LOEX3404	Soft/1.20 kg	TPK100	Soft	
5.00	LOEX3405	Kirator Standard/1.80 k			dard/1.80 kg TPK220
6.00	LOEX3406	Strong/2.70 kg	0		ng/2.70 kg TPK330
1.00	LOEX5001	Pack of 4 plastic Kirator retainer cap		Pack of 4 plastic Kirator	
2.00	LOEX5002	ROT Grade 5 ELI Plastic		ROT Grade 5	
3.00	LOEX5003	ROT		ROT Pla	STIC
4.00	LOEX5004	DO NOT sterilise in an autoclave, perf			toclave, perform cold disinfection.
olden surface treatment.		Maximum divergence of 22° between		Maximum divergence of 4	14° between implants.
nsertion key Ref. LOSD01/LOSD02	2.				
ROT (March Constraint) (March Co	h sterilisable polyoxy-	Example sequence	•	3 · [	

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Kirator divergent processing pack references TPK110/ TPK220/TPK330 are subject to availability.



# ZM-Equator

ZM-Equator abutment with applicator

Platf.

ROT 30

ZM-Equator abutment

Height (H)

1.00

2.00

3.00

4.00

5.00

6.00

1.00

2.00

3.00

4.00

5.00

6.00

1.00

2.00

3.00

4.00

**S**)(**S** 

M1,80 M2,00

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

Golden surface treatment.

Reference

ZMEX2001

ZMEX2002

ZMEX2003

ZMEX2004

ZMEX2005

ZMEX2006

ZMEX3401

ZMEX3402

ZMEX3403

ZMEX3404

ZMEX3405

ZMEX3406

ZMEX5001

ZMEX5002

ZMEX5003 ZMEX5004

> rade ELI

Related abutments

## ZM-Equator impression transfer

System Height (H) Reference ZM-Equator 6.50 TCRK3410



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

### ZM-Equator processing kit



SystemReferenceZM-Equator processing kitZM8520

2.00

Titanium housing

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

Sterilise the metal coping using the autoclave. Plastic caps and spacers should be cold disinfected. See Cleaning and Disinfection Instructions on the Ziacom® website.

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

Pack of 4 plastic ZM-Equator retainer caps.



DO NOT sterilise in an autoclave, perform cold disinfection. Maximum divergence of 22° between implants.

### Example sequence

# rence System (3410 ZM-Equator ROT Steinless)

**Kirator analogue** 

Length (L) Reference 13,20 IAZMO1

# ZM-Equator divergence processing kit 2.00 Titanium housing Titanium housing System Reference ZM-Equator processing kit ZM8520D ZM-Equator divergence processing kit comprising: ZM8520D ZM-Equator divergence processing kit comprising: Titanium housing with black relined cap, spacer and purple, transparent and pink plastic caps. Storilise the metal coping using the autorlave Plastic caps.

Sterilise the metal coping using the autoclave. Plastic caps and spacers should be cold disinfected. See Cleaning and Disinfection Instructions on the Ziacom® website.

Retention (Kg)	Reference
Soft/1.20 kg	TZM100
Standard/1.80 kg	TZM200
Strong/2.70 kg	TZM300
	Soft/1.20 kg

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



DO NOT sterilise in an autoclave, perform cold disinfection. Maximum divergence of 44° between implants.







### DIGITAL CAD-CAM

### ZiaCam scanbody to implant





For more information on the recommendations for the use of interfaces in zirconia restorations see the literature available at www.ziacom.com/biblioteca or the use of abutments see the "Prosthetic procedure manual.



Hg

Indicated for the clinic.

Anodised

ROT

All ZiaCam scanbody to implant abutments include a screw Ref. LB102000 (NP)/LB103400 (RP/WP).

Height (Hg/Ht)

0.50/5.00

1.50/6.00

0.50/5.00

1.50/6.00

0.50/5.00

1.50/6.00

S) ( S

M1,80 M2,00

### Ti-Base ZiaCam



Rotatory

Platf.

ROT



Reference

FRUEX201

FRUEX202

FRUEX341

FRUEX342

FRUEX501

FRUEX502

Grade ! ELI Titaniu

45°

### Tx30 ZiaCam Ti-Base



### Rotatory

### Platf Height (Hg/Ht) Reference FRUEX20TX1 0.50/6.00 FRUEX20TX2 1.50/7.00 0.50/6.00 FRUEX34TX1 1.50/7.00 FRUEX34TX2 0.50/6.00 FRUEX50TX1 1.50/7.00 FRUEX50TX2 Grade S ELI itaniu ROT M1,80 M2,00



### Non-rotatory



All Ti-Base ZiaCam Tx30 abutments come with a special Kiran Tx30 screw with surface treatment Ref. DSEI2010TX (NP)/DSEI3410TX (RP/WP).

### Kirator abutment.Toolbar







Platf. Height (H) Universal 1.80 Gold-coloured surface treatment.

Reference LOTB100



X)	Grade 5 ELI Titanium	

2)	Grade 5 ELI Titanium	

Non-rotatory

Platf.	Height (Hg/Ht)	Reference	
	0.50/5.00	FNUEX201	
	1.50/6.00	FNUEX202	
	0.50/5.00	FNUEX341	
	1.50/6.00	FNUEX342	
	0.50/5.00	FNUEX501	
	1.50/6.00	FNUEX502	
NO ROT L25mm M1,80 M2,00 45°			

All Ti-Base ZiaCam abutments come with a special Kiran screw with surface treatment Ref. DSEI2010 (NP)/ DSEI3410 (RP/WP).

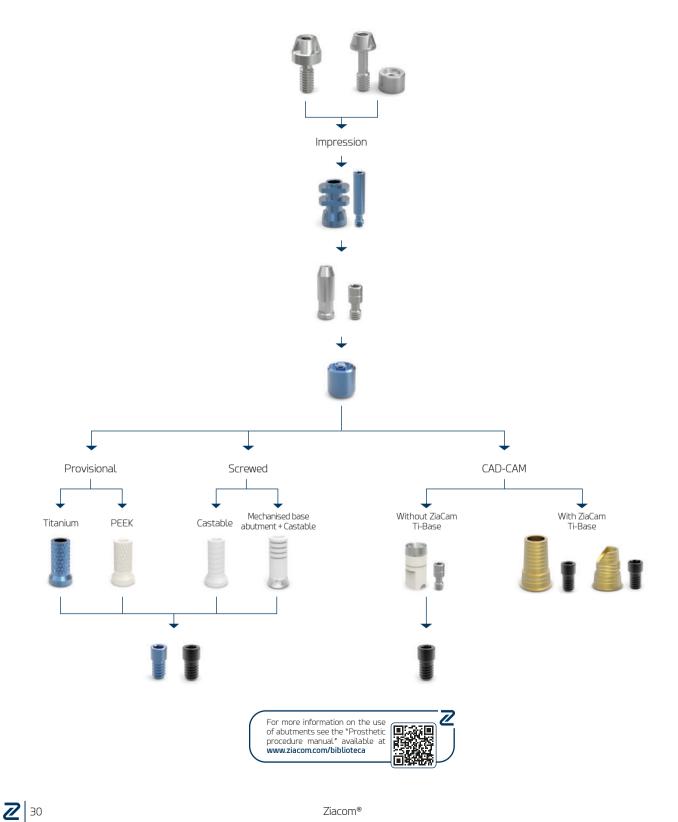
28

# Abutments Restorations using transepithelials

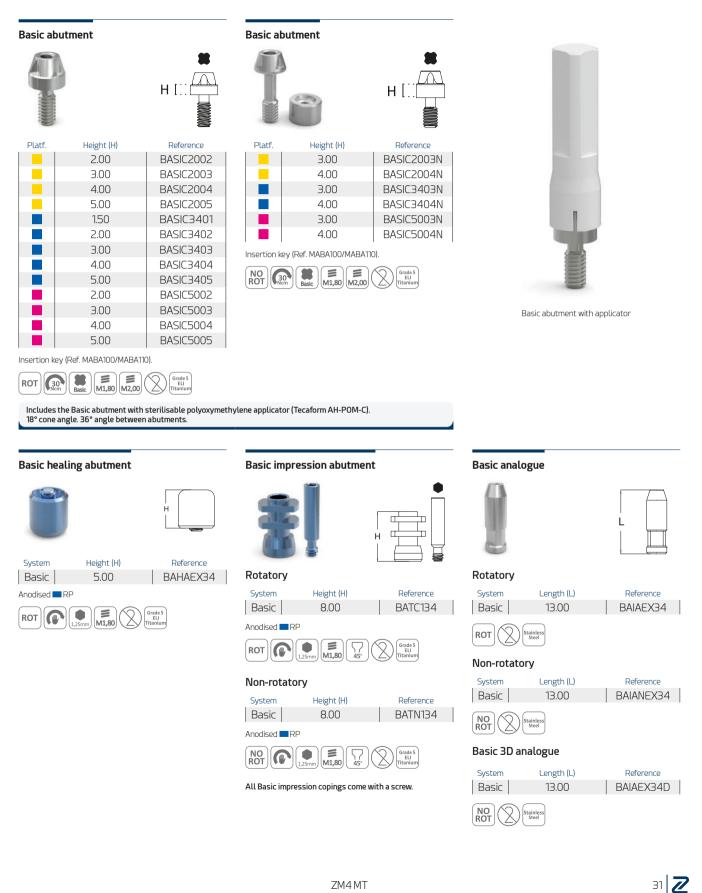


# Restorations using transepithelials.

### Basic | Demonstrative sequence of use







Basic clinie	cal screw	
System Basic	Length (L) 4.30	Reference BDSEI3400
Anodised R		DDSEI3400
Grade S L25mm M180 45°		

### Kiran Tx30 Basic clinical screw



Kiran Basic clinical screw



Special Kiran screw with surface treatment.

Basic laboratory screw				
System	Length (L)	Reference		
Basic	5.50	BDSEI3401		
Grade 5 L25mm M1,80 45° C Grade 5 ELI Titanium				

NOT suitable for use as the final clinical screw.

Special Kiran Tx30 screw with surface treatment.

### **Basic provisional abutment**

1 avenue	l	
System	Length (L)	Reference
Basic	8.50	BARUT10
Anodised RP		

### **Basic provisional abutment**



Т

Reference

Reference

BANUP34

BARUP34

### Rotatory

System Length (L) Basic 8.50



### Non-rotatory



Abutment base mec. Basic + Abutment calcinable

-	_	
-	-	
-	-	
-	-	
12	1	
1250	100	
(87		

### Rotatory





### Non-rotatory



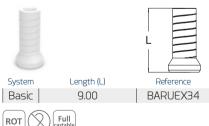
Co-Cr

Reference BBNU34

Т



www.ziacom.com







### DIGITAL CAD-CAM

### ZiaCam scanbody to Basic abutment



### Rotatory





Indicated for clinical use.

All ZiaCam scanbody to Basic abutments include a screw (Ref. BDSEI3401).

### ZiaCam to Basic Ti-Base





### Rotatory



### Non-rotatory



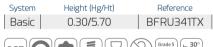
All ZiaCam to Basic Ti-Bases come with a Kiran special screw with surface treatment (Ref. BDSEI3410).

### ZiaCam Tx30 to Basic Ti-Base





### Rotatory





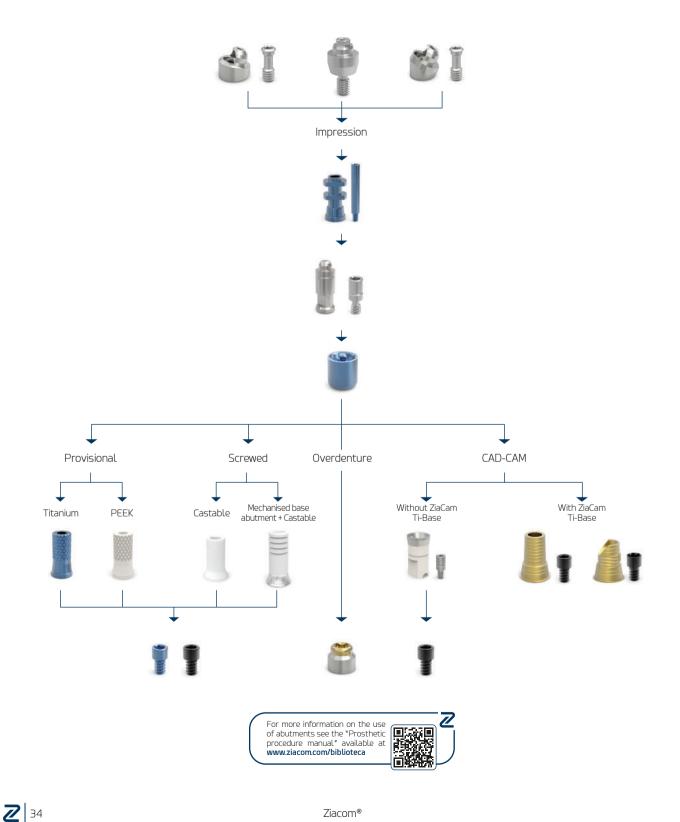
### Non-rotatory

System	Height (Hg/Ht)	Reference
Basic	0.30/5.70	BFNU341TX
		Grade 5 ELI Titanium

All ZiaCam Tx30 to Basic Ti-Bases come with a Kiran Tx30 special screw with surface treatment (Ref. BDSEI34TX).

# Restorations using transepithelials

### • XDrive | Demonstrative sequence of use





## XDrive straight abutment 0 Н Height (H) Reference Platf.

	1.00	XS1 1034 10
	2.00	XST103420
	Э.00	XST103430
	4.00	XST103440
	5.00	XST103450

Insertion tool Reference MABA200/MABA210



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

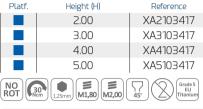
21° cone angle. 42° angle between abutments.



XDrive abutment with applicator

### XDrive 17° angled abutment





## XDrive 30° angled abutment



Platf.	Height (H)	Reference
	Э.00	XA3103430
	4.00	XA4103430
	5.00	XA5103430
NOROT		45°

All angled XDrive abutments come with a stainless steel positioner and screw.

### XDrive healing abutment



System Reference XDrive 5.00 XH103400 Anodised 🔳 RP M ROT M1,40

### XDrive impression abutment



System

XDrive

Height (H) 10.50





### XDrive analogue



System

XDrive

ROT

	$\square$
Ļ	

Length (L) Reference

XIA103400

## XDrive 3D analogue

ainles Steel



13.00



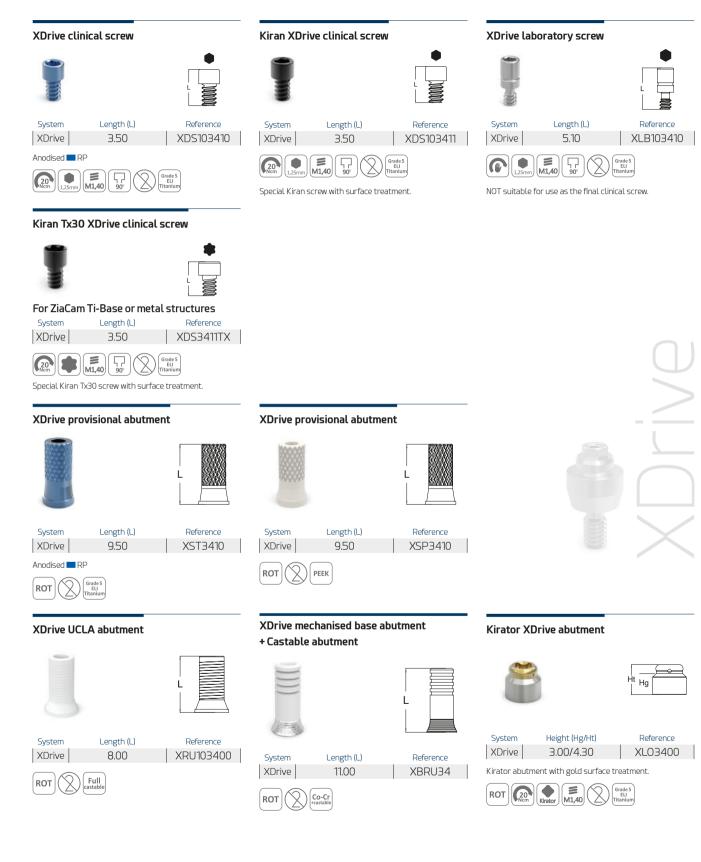


Reference

XT103411

# Abutments

2 36



#### www.ziacom.com



### DIGITAL CAD-CAM

#### ZiaCam scanbody to XDrive abutment



Indicated for clinical use.

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

### ZiaCam XDrive Ti-Base



System	Height (Hg/Ht)	Reference
XDrive	0.15/6.70	XFRU341
ROT 2		Grade 5 ELI Ittanium

ZiaCam Tx30 XDrive Ti-Base

System

XDrive





M ROT M1,40

Includes Kiran Tx30 special screw with surface treatmen-Ref. XDS3411TX.

Reference

XFRU341TX

Height (Hg/Ht)

0.15/5.70

Includes Kiran special screw with surface treatment Ref. XDS103411.

## 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
Direct-to-implant Kiran clinical screws	Hex screwdriver 1.25 mm	30 Ncm
Basic/XDrive abutments	Insertion keys: MABA100/MABA110/MABA200/MABA210	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
ZM-Equator abutments	Hex screwdriver 1.25 mm	30 Ncm
Tx30 abutment/screw (variable rotation)	Tx30 Torx screwdriver	30 Ncm

#### WARNING

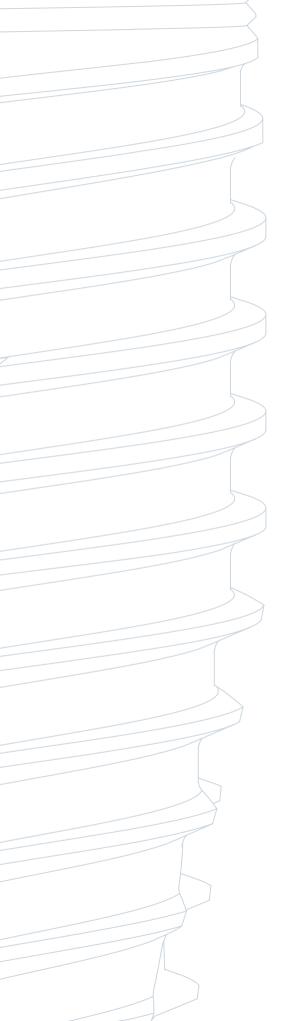
Exceeding the recommended tightening torque for screws and abutments compromises the prosthetic restoration and could damage the implant structure.

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.

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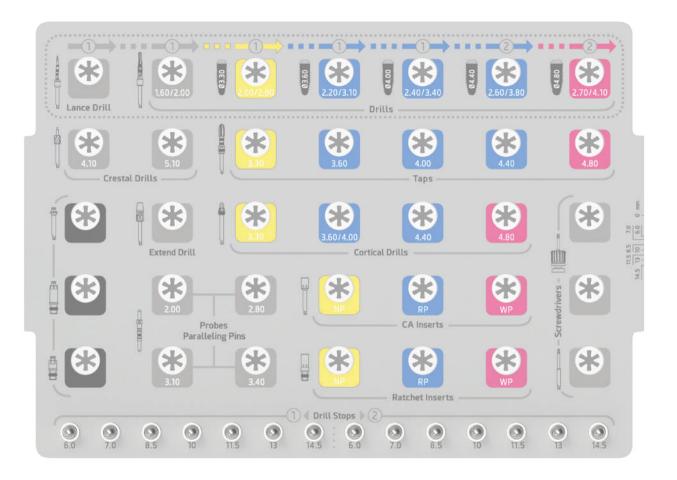






# Surgical instruments

# ZM4 MT · ZM1 surgical box



### ZM4 MT · ZM1 kits available

Platf.	Contents	Reference
	Empty	B0X431
	Basic, manual/CA Surgical ratchet Basic, manual/CA Dynamometric ratchet	BOX4104SM
		BOX4104SMK
	Complete. Surgical ratchet	BOX4104CM
	Complete. Dynamometric ratchet	BOX4104CMK

134° \$\$\$

2 40

#### Material: Radel.

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





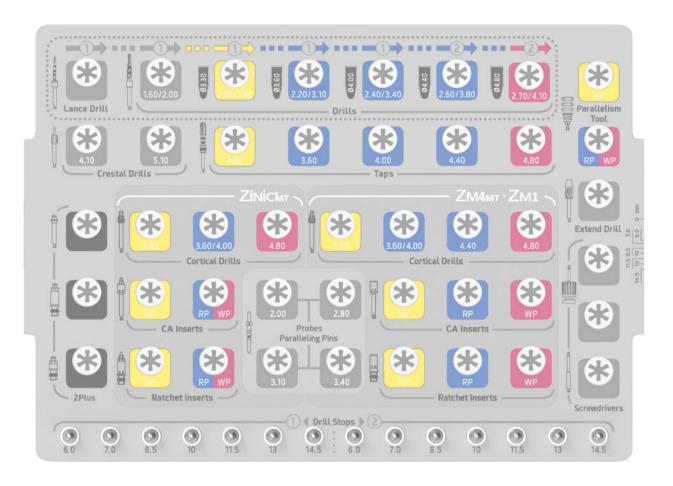
## Surgical box contents

SID001M U OSPD20M F OSTD28M S OSTD31M S OSTD34M S OSTD34M S OSTD41M S MTD20 0 OTD01CA 0 OTD01CA 0 OTD02CA 0 OTD03CA 0 CLD34 0	Description Lance drill. Ø2.00 mm. Millimeter. CA. Pilot drill. Ø1.60/2.00 mm. Millimeter. CA. Stepped surgical drill. Ø2.00/2.50/2.80 mm. Millimeter. CA. Stepped surgical drill. Ø2.20/2.70/3.10 mm. Millimeter. CA. Stepped surgical drill. Ø2.40/2.90/3.40 mm. Millimeter. CA. Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA. Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA. Cortical drill. Ø3.30 mm. CA. Cortical drill. Ø4.00 mm. CA. Cortical drill. Ø4.80 mm CA. Cortical drill. Ø4.10 mm. CA.			BOX4104CM	BOX4104CMK
OSPD2OM         F           OSTD28M         S           OSTD31M         S           OSTD34M         S           OSTD38M         S           OSTD41M         S           OSTD41M         S           OSTD41M         S           OSTD41M         S           OSTD41M         S           OTD01CA         S           OTD02CA         S           OTD03CA         S           CLD34         S	Pilot drill. Ø1.60/2.00 mm. Millimeter. CA.         Stepped surgical drill. Ø2.00/2.50/2.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.20/2.70/3.10 mm. Millimeter. CA.         Stepped surgical drill. Ø2.40/2.90/3.40 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA.         Cortical drill. Ø3.30 mm. CA.         Cortical drill. Ø3.60/Ø4.00 mm. CA.         Cortical drill. Ø4.40 mm. CA.         Cortical drill. Ø4.80 mm CA.		• • • • • •		
OSTD28M S OSTD31M S OSTD34M S OSTD38M S OSTD41M S MTD20 C OTD01CA C OTD02CA C OTD02CA C OTD03CA C	Stepped surgical drill. Ø2.00/2.50/2.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.20/2.70/3.10 mm. Millimeter. CA.         Stepped surgical drill. Ø2.40/2.90/3.40 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA.         Cortical drill. Ø3.30 mm. CA.         Cortical drill. Ø3.60/Ø4.00 mm. CA.         Cortical drill. Ø4.40 mm. CA.         Cortical drill. Ø4.80 mm CA.		• • • • •		
OSTD31M STD34M STD34M STD34M STD34M STD34M STD34M STD41M STD20 CTD01CA CTD02CA CTD02CA CTD03CA CLD34 STD34M	Stepped surgical drill. Ø2.20/2.70/3.10 mm. Millimeter. CA.         Stepped surgical drill. Ø2.40/2.90/3.40 mm. Millimeter. CA.         Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.         Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA.         Cortical drill. Ø3.30 mm. CA.         Cortical drill. Ø3.60/Ø4.00 mm. CA.         Cortical drill. Ø4.40 mm. CA.         Cortical drill. Ø4.40 mm. CA.	• • • • • •	• • • • •	•	•
OSTD34M OSTD38M OSTD41M MTD20 OTD01CA OTD02CA OTD03CA CLD34	Stepped surgical drill. Ø2.40/2.90/3.40 mm. Millimeter. CA. Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA. Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA. Cortical drill. Ø3.30 mm. CA. Cortical drill. Ø3.60/Ø4.00 mm. CA. Cortical drill. Ø4.40 mm. CA. Cortical drill. Ø4.80 mm CA.		•	•	•
OSTD38M OSTD41M MTD20 OTD01CA OTD02CA OTD03CA CLD34	Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA. Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA. Cortical drill. Ø3.30 mm. CA. Cortical drill. Ø3.60/Ø4.00 mm. CA. Cortical drill. Ø4.40 mm. CA. Cortical drill. Ø4.80 mm CA.	•	•	•	
OSTD41M S MTD20 C OTD01CA C OTD02CA C OTD03CA C CLD34 C	Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA. Cortical drill. Ø3.30 mm. CA. Cortical drill. Ø3.60/Ø4.00 mm. CA. Cortical drill. Ø4.40 mm. CA. Cortical drill. Ø4.80 mm CA.	•	•	•	-
MTD20 C OTD01CA C OTD02CA C OTD03CA C CLD34 C	Cortical drill. Ø3.30 mm. CA. Cortical drill. Ø3.60/Ø4.00 mm. CA. Cortical drill. Ø4.40 mm. CA. Cortical drill. Ø4.40 mm. CA.	•	•		
OTDO1CA C OTDO2CA C OTDO3CA C CLD34 C	Cortical drill. Ø3.60/Ø4.00 mm. CA. Cortical drill. Ø4.40 mm. CA. Cortical drill. Ø4.80 mm CA.	•	٠	-	_
OTDO2CA O OTDO3CA O CLD34 O	Cortical drill. Ø4.40 mm. CA. Cortical drill. Ø4.80 mm CA.	•			
OTDO3CA CLD34	Cortical drill. Ø4.80 mm CA.			-	
CLD34					
	Createtere drill (1410 mm CA				
CLD50	ci estotome anti, 04. 10 mm. CA.				
	Crestotome drill. Ø5.10 mm. CA.				
	Calibrated drill stop. 1. H6 mm. Grade 5 ELI titanium				
ZMPD170	Calibrated drill stop. 1. H7 mm. Grade 5 ELI titanium				
	Calibrated drill stop. 1. H8.5 mm. Grade 5 ELI titanium				
ZMPD110	Calibrated drill stop. 1. H10 mm. Grade 5 ELI titanium				
ZMPD115	Calibrated drill stop. 1. H11.5 mm. Grade 5 ELI titanium				
ZMPD113	Calibrated drill stop. 1. H13 mm. Grade 5 ELI titanium				
ZMPD114	Calibrated drill stop. 1. H14.5 mm. Grade 5 ELI titanium				
ZMPD260	Calibrated drill stop. 2. H6 mm. Grade 5 ELI titanium				
ZMPD270	Calibrated drill stop. 2. H7 mm. Grade 5 ELI titanium				
ZMPD285	Calibrated drill stop. 2. H8.5 mm. Grade 5 ELI titanium				
ZMPD210	Calibrated drill stop. 2. H10 mm. Grade 5 ELI titanium				
ZMPD215	Calibrated drill stop. 2. H11.5 mm. Grade 5 ELI titanium				
ZMPD213	Calibrated drill stop. 2. H13 mm. Grade 5 ELI titanium				
ZMPD214	Calibrated drill stop. 2. H14.5 mm. Grade 5 ELI titanium				
МТАРЗЗМС	Surgical tap. Ø3.30 mm. Millimeter. Ratchet				
МТАРЗ6МС	Surgical tap. Ø3.60 mm. Millimeter. Ratchet				
MTAP40MC	Surgical tap. Ø4.00 mm. Millimeter. Ratchet				
MTAP44MC	Surgical tap. Ø4.40 mm. Millimeter. Ratchet				
MTAP48MC	Surgical tap. Ø4.80 mm Millimeter. Ratchet				
MUR10MT	Probe/Paralleling pins. Ø1.60/2.00 mm. Millimeter. Manual. Grade 5 ELI titanium				
MUR20MT	Probe/Paralleling pins. Ø1.80/2.50 mm. Millimeter. Manual. Grade 5 ELI titanium				
MUR30MT	Probe/Paralleling pins. Ø2.15/3.30 mm. Millimeter. Manual. Grade 5 ELI titanium				
MUR40MT	Probe/Paralleling pins. Ø2.50/3.70 mm. Millimeter. Manual. Grade 5 ELI titanium				
TSMIN 2	ZPlus insertion key. Short. Ratchet				
TLMIN 2	ZPlus insertion key. Long. Ratchet				
	ZPlus insertion key. Short. CA.	•			
-	ZM4 insertion key. Ratchet	•			
	ZM4 insertion key. Ratchet	•			
	ZM4 insertion key. Ratchet		•		
	ZM4 insertion key. CA.	•			•
-	ZM4 insertion key. CA.	•	•		•
	ZM4 insertion key. CA.	•	•		•
-	Drill extender	•	•		•
_	Ø1.25 mm screwdriver tip. CA	•	•		•
	Surgical screwdriver, Ø 125 mm, Long. Manual	•	•	•	•
	Surgical screwdriver, Ø 1.25 mm, Short. Manual	•	•		•
_	ZPlus insertion key. Manual	•	•	•	•
	Implant ratchet. Manual	•	-	•	-
	Adjustable torque wrench. 10/20/30/40/50/60/70 Ncm. Manual	-	•	-	•

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# Surgical instruments

Zinic® MT· ZM4 MT · ZM1 surgical box



### Zinic<sup>®</sup> MT · ZM4 MT · ZM1 boxes available

Platf.	Contents	Reference
	Empty	B0X421
	Basic, manual/CA Surgical ratchet	BOX411SM
	Basic, manual/CA Dynamometric ratchet	BOX411SMK
	Complete. Surgical ratchet	BOX411CM
	Complete. Dynamometric ratchet	BOX411CMK

#### 134° \$\$\$

2 42

Material: Radel.

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

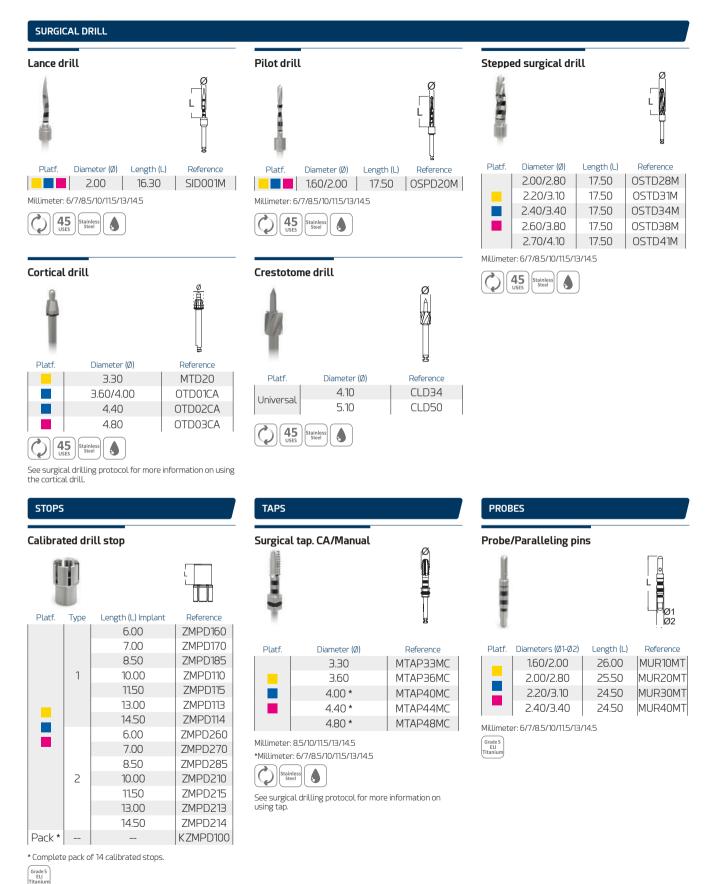




### Surgical box contents

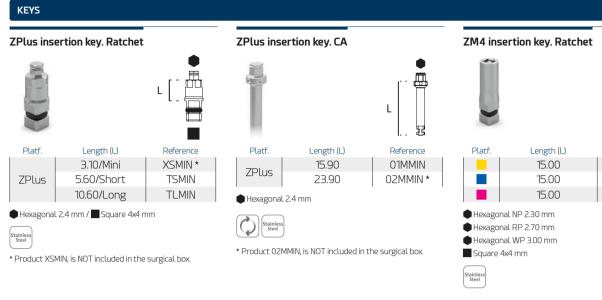
_	box contents	BOX411SM	BOX411SMK	BOX411CM	ROX411CMK
REF	Description				_
ID001M	Lance drill. Millimeter. CA.	•	•		
SPD20M	Pilot drill. Ø160/2.00 mm. Millimeter. CA.	•	•		
STD28M	Stepped surgical drill. Ø2.00/2.50/2.80 mm. Millimeter. CA.	•	•		
STD31M	Stepped surgical drill. Ø2.20/2.70/3.10 mm. Millimeter. CA.	•	•		
STD34M	Stepped surgical drill. Ø2.40/2.90/3.40 mm. Millimeter. CA.	•	•		
STD38M	Stepped surgical drill. Ø2.60/3.30/3.80 mm. Millimeter. CA.	•	•		
STD41M	Stepped surgical drill. Ø2.70/3.50/4.10 mm. Millimeter. CA.	•	•		
TD01CZ	Cortical drill. Ø3.30 mm. CA.	•	•		
TD01ST	Cortical drill. Ø3.60/Ø4.00 mm. CA.	•	•		
TD02ST	Cortical drill. Ø4.80 mm CA.	•	•		
/ITD20	Cortical drill. Ø3.30 mm. CA.	•	•		
TD01CA	Cortical drill. Ø3.60/Ø4.00 mm. CA.	•	•		
TD02CA	Cortical drill. Ø4.40 mm. CA.	•	•		
TD03CA	Cortical drill. Ø4.80 mm CA.	•			
LD34	Crestotome drill. Ø4.10 mm. CA.				
LD50	Crestotome drill. Ø5.10 mm. CA.				
MT1	Paralleling pins. Manual. Grade 5 ELI titanium				
MT2	Paralleling pins. Manual. Grade 5 ELI titanium		_		
MPD160	Calibrated drill stop. 1. H6 mm. Grade 5 ELI titanium				
MPD170	Calibrated drill stop. 1. H7 mm. Grade 5 ELI titanium				
MPD185	Calibrated drill stop. 1. H8.5 mm. Grade 5 ELI titanium				
MPD110	Calibrated drill stop. 1. H10 mm. Grade 5 ELI titanium				
MPD115	Calibrated drill stop. 1. H11.5 mm. Grade 5 ELI titanium				
MPD113	Calibrated drill stop. 1. H13 mm. Grade 5 ELI titanium				
MPD114	Calibrated drill stop. 1. H14.5 mm. Grade 5 ELI titanium				
MPD260	Calibrated drill stop. 2. H6 mm. Grade 5 ELI titanium				
MPD270	Calibrated drill stop. 2. H7 mm. Grade 5 ELI titanium				
MPD285	Calibrated drill stop. 2. H8.5 mm. Grade 5 ELI titanium				
MPD210	Calibrated drill stop. 2. H10 mm. Grade 5 ELI titanium				
MPD215	Calibrated drill stop. 2. H11.5 mm. Grade 5 ELI titanium				
MPD213	Calibrated drill stop. 2. H13 mm. Grade 5 ELI titanium				
MPD214	Calibrated drill stop. 2. H14.5 mm. Grade 5 ELI titanium				
ТАРЗЗМС	Surgical tap. Ø3.30 mm. Millimeter. Ratchet	•	•		
	Surgical tap. Ø3.60 mm. Millimeter. Ratchet	•	•	•	
	Surgical tap. Ø4.00 mm. Millimeter. Ratchet	•	•		
	Surgical tap. Ø4.40 mm. Millimeter. Ratchet	•	•	•	
	Surgical tap. Ø4.80 mm Millimeter. Ratchet		Ĭ	•	
	Probe/Paralleling pins. Ø1.60/2.00 mm. Millimeter. Manual. Grade 5 ELI titanium		-	•	
	Probe/Paralleling pins. Ø 1.80/2.50 mm. Millimeter. Manual. Grade 5 ELI titanium			•	
IUR30MT	Probe/Paralleling pins. Ø 100/2150 mm. Millimeter. Manual. Grade 5 ELI titanium			•	
IUR40MT	Probe/Paralleling pins. Ø2.50/3.70 mm. Millimeter. Manual. Grade 5 ELI titanium			•	
SMIN	ZPlus insertion key. Short. Ratchet	•	•	•	
LMIN	ZPlus insertion key. Long. Ratchet	•	•	•	
1MMIN	ZPlus insertion key. Short. CA.			•	
MZ	Zinder den key. Snot e CA. Zinic® insertion key. Long. Ratchet	•	•	•	
MZ1	Zinic Insertion key. Short. Ratchet		-	•	
1MZ	Zinice insertion key. Short. CA.		•		
	Zinic* insertion key. Short. CA.	•	•		-
IMZ1		•	•		
MEX20	ZM4 insertion key. Ratchet	•	•		
MEX34	ZM4 insertion key. Ratchet	•	•		
MEX50	ZM4 insertion key. Ratchet	•	•		
IMEX20	ZM4 insertion key. CA.	•	•		
MEX34	ZM4 insertion key. CA.	•	•		
MEX50	ZM4 insertion key. CA.	•	•		
EXT10	Drill extender	•	٠		(
IESD	Ø1.25 mm screwdriver tip. CA.	•	•		(
MSD	Surgical screwdriver, Ø 1.25 mm, Long. Manual	•			(
MSD	Surgical screwdriver, Ø 1.25 mm, Short. Manual				
1MOHW	ZPlus insertion key. Manual	•			(
ATC50	Implant ratchet. Manual				
	Adjustable torque wrench. 10/20/30/40/50/60/70 Ncm				

# Surgical instruments



**2** 44





#### ZM4 insertion key. CA



Plat	tf. l	ength (L)	Reference	e
		7.50	MMEX2	20
		7.50	MMEXE	34
		7.50	MMEXE	50

L

둼

Hexagonal NP 2.30 r	nm
Hexagonal RP 2.70 r	nm

Hexagonal WP 3.00 mm



### Drill extender



Platf.

Universal

tainles Steel



12.00

# 뮲 Reference DEXT10

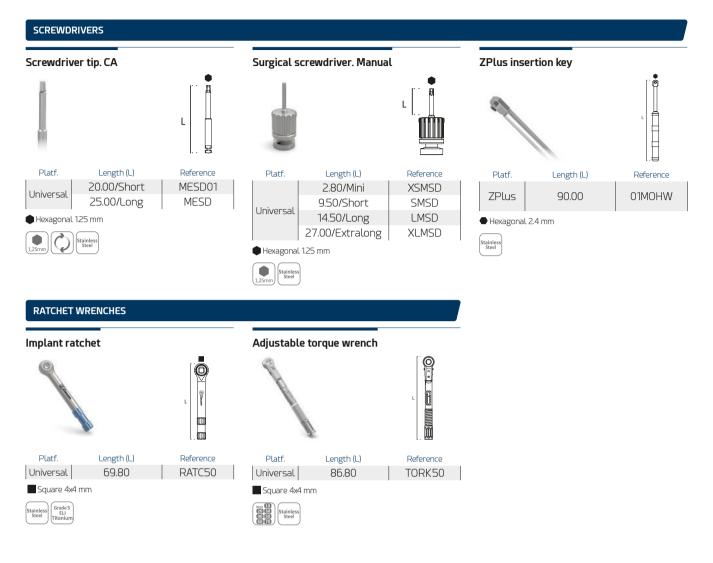
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Reference	
SMEX20	
SMEX34	
SMEX50	

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# Surgical box







# Complementary instruments



Platf.

Scales 1:1 and 1:1.25

Model

ZM4MT

Material: transparent acetate. Non-sterilisable material

Reference

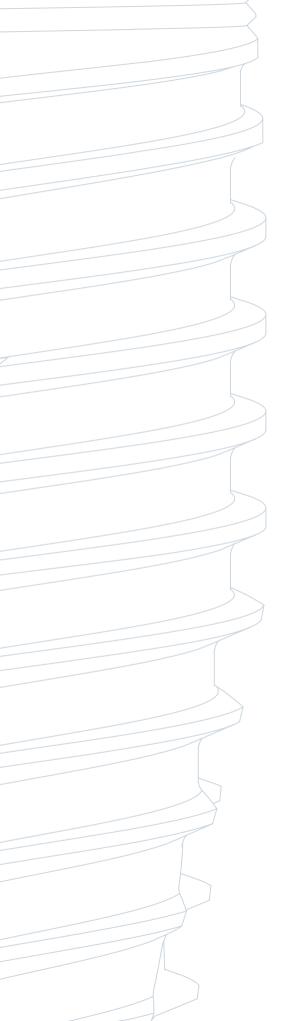
PRADIO100

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See the literature available at

www.ziacom.com/biblioteca

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# Prosthetic instruments

# Prosthetic box



#### Contents of prosthetic boxes available

Contents	Reference
Empty	BOXPN
Basic	BOXPSN
Complete	BOXPCN

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Material: Radel.

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



#### Contents of prosthetic boxes

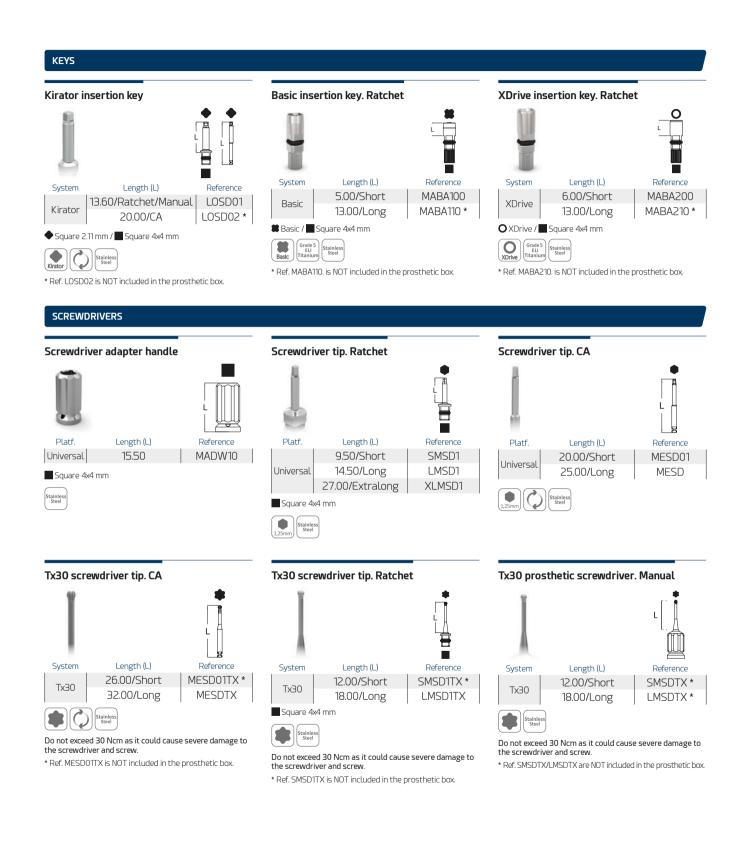
REF	Description	BOXPS	BOXP(
LOSD01	Kirator insert key. Ratchet		
MABA100	Basic insert key. Short. Ratchet. Grade 5 ELI titanium		
MABA200	XDrive insert key. Short. Ratchet. Grade 5 ELI titanium		
MADW10	Screwdriver adapter handle. 4x4. Manual		
SMSD1	Screwdriver tip. Ø1.25 mm. Short. Ratchet		
LMSD1	Screwdriver tip. Ø1.25 mm. Long. Ratchet		
XLMSD1	Screwdriver tip. Ø1.25 mm. Extralong. Ratchet		
MESD	Screwdriver tip. Ø1.25 mm. Long. CA.		
MESD01	Screwdriver tip. Ø1.25 mm. Short. CA.		
MESDTX	Tx30 screwdriver tip. Long. CA.		
LMSD1TX	Tx30 screwdriver tip. Long. Ratchet		
EDSZ20 *	ZPlus extractor screw. Zinic®. NP. Grade 5 ELI titanium		
EDSZ34 *	ZPlus extractor screw. Zinic®. RP/WP. Grade 5 ELI titanium		
EDSG34 *	Abutment extractor screw. Galaxy/ZV2. RP. Grade 5 ELI titanium		
EDSG50 *	Abutment extractor screw. ZV2. WP. Grade 5 ELI titanium		
TORK50	Regulable torque wrench. 10/20/30/40/50/60/70 Ncm		

S S

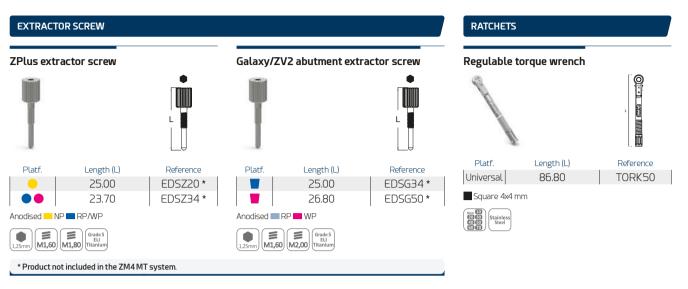
\* Product not included in the ZM4 MT system.



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# **Prosthetic instruments**



# Complementary instruments



Extractor + Retainer inserter handle			
1			
Platf.	A Length (L)	B Length (L)	Reference
Kirator ZM-Equator	81.50	110,40	MBEI3610

Stainles Steel Plastic

Retainer inserter





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



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

# **Retentive joints instruments**

NOT included in the prosthetic box.



Platf.	Measure	Reference
Universal	2x1	RREI0030

Pack of 10 units.



# Simplified surgical protocol



# Simplified surgical protocol

# Characteristics of the ZM4 MT drilling system

## Ziacom<sup>®</sup> drill system

Ziacom<sup>®</sup> 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 (drills graduated in mm). The bur tip is 0.5 mm long and is not included in the laser marked measurements.

# ■ 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 pins are available in different diameters according to the drilling sequence.

# Short and long insertion tools for ratchets and contra-angle handpieces

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



ZPlus



17 mm 14.5 mm 13 mm

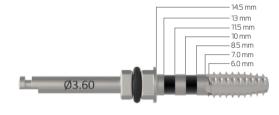
11.5 mm

- 8.5 mm - 7,0 mm 0 mm - 6.0 mm |

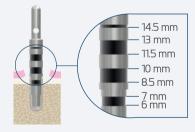
0.5 mm

- 10 mm - 8.5 mm

ZM4 MT



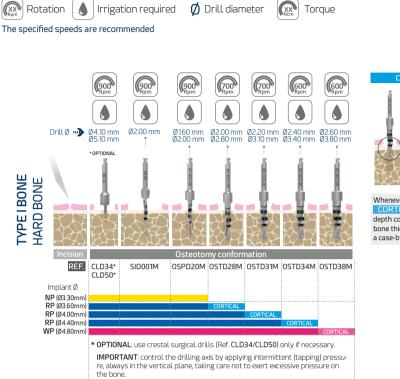
Ø1.60/2.00

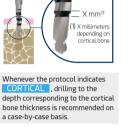


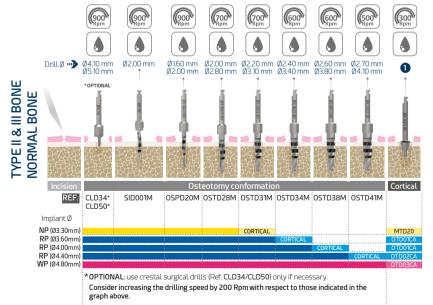




# Drilling protocol - ZPlus









Cortical drill usage will be compulsory whenever this is indicated in the protocol and will depend on bone type.

# Simplified surgical protocol

# Drilling protocol - ZPlus

Rotation Irrigation required Ø Drill diameter Torque XX The specified speeds are recommended 25 Rpm ((700 (500 A A A Drill Ø 🕪 Ø4,10 mm Ø5,10 mm Ø2,00 mm Ø1,60 mm Ø2.00 mm Ø2,00 mm Ø2,20 mm Ø2,40 mm Ø2,60 mm Ø2,70 mm Ø2,80 mm Ø3,10 mm Ø3,40 mm Ø3,80 mm Ø4,10 mm ิก X mm<sup>(1</sup> I) X millimeters depending on cortical bone TYPE I BONE HARD BONE Whenever the protocol indicates CORTICAL , drilling to the depth corresponding to the cortical bone thickness is recommended on a case-by-case basis. Cortical Tap CORTICAL DRILL AND REF. CLD34\* CLD50\* SID001M OSPD20M OSTD28M OSTD31M OSTD34M OSTD38M OSTD41M SURGICAL TAP USAGE Implant Ø 0 2 MTD20 OTD01CA NP (Ø3.30mm) МТАРЗЗМО RP (Ø3.60mm) RP (Ø4.00mm) RP (Ø4.40mm) MTAP36M WP (Ø4.80mm) \* OPTIONAL: use crestal surgical drills (Ref. CLD34/CLD50) only if necessary. Consider increasing the drilling speed by 200 Rpm with respect to those indicated in the graph above. IMPORTANT: control the drilling axis by applying intermittent (tapping) pressure, always in the vertical plane, taking care not to exert excessive pressure on the bone

Cortical drill usage will be compulsory whenever this is indicated in the protocol and will depend on bone type.

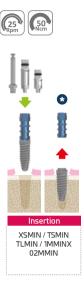


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# Implant insertion - ZPlus

## Insertion



## Removing the mount ③

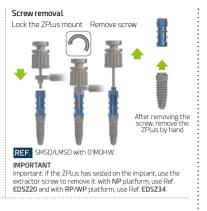
Insertion point at which to remove the mount according to bone type

 Type I
 1/2 insertion

 Type II
 3/4 insertion

 Type III
 4/5 insertion

 Type IV
 Complete insertion



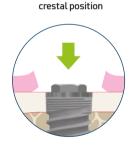
# Direct insertion



It has direct insertion keys to the implant ref: SMEX20/SMEX34/SMEX50, for ratchet/manual and MMEX20/MMEX34/ MMEX50 for CA, to adjust the implant end-position.

# Crestal placement

The Ziacom® implant platform should be placed at bone crest level.



RECOMMENDED

# Bone types

Lekholm and Zarb classification (1985)



TYPE IV BONE - SOFT BONE

• Thin cortical layer surrounding a lowdensity trabecular bone.



#### TYPE II & III BONE - MEDIUM BONE

 Type II: thick layer of compact bone surrounding a dense trabecular bone.

 Type III: thin cortical layer surrounding a dense trabecular bone.



TYPE I BONE - HARD BONE

 Composed almost entirely of homogeneous compact bone.

# Simplified surgical protocol

# General recommendations

### Consider during intervention



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.



Each instrument should only be used for the specific use recommended by the manufacturer

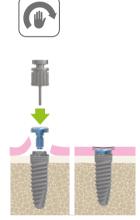


Damaged instruments must be disposed of according to local regulations.

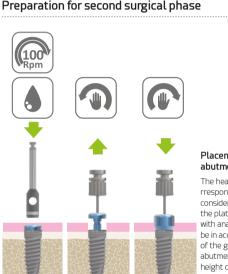


Implantologists should keep one of the identification labels supplied with the product in the patient's file so that it may be traced correctly

#### Handling of cover screw



Remove the cover screw from its vial using the hex screwdriver in a counter-clockwise direction. Move the cover screw towards the implant while taking care not to drop it and cause its accidental ingestion. Insert the cover screw into the implant and tighten it using manual torque in a clockwise direction



#### Placement of healing abutment

The healing abutment should correspond to the implant platform, considering the option of applying the platform switch technique with anatomical abutments and be in accordance with the height of the gingival tissue to avoid abutment occlusion. Excessive height could expose the implant to premature loading, compromising the osseointegration process.

### **IMPORTANT WARNINGS**

#### About implant insertion

Excessive compression of the bone can lead to failure of implant osseointegration.

Failure to follow the steps described in the surgical sequence may result in:

- Lack of primary stability due to loss of supporting bone
- Difficulties during implant insertion.

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

- Irreversible deformation of the implant's internal/external connection.
- Irreversible deformation of the implant insertion instrument.
- Difficulty disassembling the instrument/ implant assembly

### Maximum insertion torgue and speed

The recommended insertion torque ranges from **35** to **50 Ncm**, according to each case, and is not limited to a single torque



25

The implant should be inserted with controlled torque based on the bone density and quality of the implant placement site:

Without partial or complete disassembly of the implant Mount, in type III and IV bone, respectively, with recommended torgue of 35 to 50 Ncm to avoid deformation of the Mount or cold welding between the Mount and the implant

With partial or complete disassembly of the implant Mount and using a direct-to-implant key, in type I and II bone, respectively, with recommended torque of 35 to 50 Ncm to avoid deformation of the connection and excessive bone compression.

Insertion instrument or CA screwdrivers: use a maximum speed of:



### ZM4 MT implants

The Ziacom® surgical protocol establishes the crestal position of the implant platform

To avoid cortical stress and deformation of the key and/or implant connection, and also to avoid galling between the implant and the Mount, the recommended maximum speed (**25 Rpm**) and maximum torque (50 Ncm) must be respected when inserting with a contra-angle (CA) handpiece.

When using a ratchet, it is necessary to monitor resistance during insertion. If there is any resistance, the implant should be removed by turning it twice (to release the bone from the tension created and free the thread) and then, after a few seconds, the implant should be inserted again, repeating this process as many times as is necessary.

Always 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 explained the procedures, protocols and instructions for use before using the ZM4 MT system by Ziacom®.



# 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 here in.

# Cleaning and disinfection instructions

Applicable for instruments, surgical and prosthetic boxes and plastic retainer caps.

## Disassembly

- 1. Dismount\* the appropriate instruments, for example manual ratchets, drills or drill stops.
- 2. Remove the various components from the surgical or prosthetic box for correct cleaning.

## Cleaning and disinfection

For disinfecting instruments and surgical boxes:

- 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 the surgical and prosthetic boxes, always use a pH-neutral detergent and non-abrasive utensils to avoid damaging the surface of the boxes.
- 5. Dry the materials with disposable cellulose, lint-free clothes or compressed air.

For disinfecting plastic caps and spacers:

- 1. Submerge in a neat benzalkonium chloride solution for 10 minutes.
- 2. Rinse with distilled water.
- 3. Dry the caps and spacer before 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 procedure.
- 3. Check that the instruments and the surgical and prosthetic boxes are perfectly dry before reassembling the parts and proceeding to their sterilisation.
  - \* See the assembly 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 autoclave

Applicable to orthodontic implants, abutments, and surgical and prosthetic instruments and boxes.

- 1. Introduce each material separately in individual sterilisation bags, then seal the bags. For joint sterilisation, place the instruments in their surgical box, introduce the box into a sterilisation bag and seal the bag.
- 2. Place the bags 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) and at 2 atm. Torque wrenches must be sterilised in 3 vacuum cycles at 132°C/270°F for a minimum of 1.5 minutes and vacuum-dried for a minimum of 20 minutes.

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

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#### IMPORTANT

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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 bags 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.



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# Storage of Ziacom® products

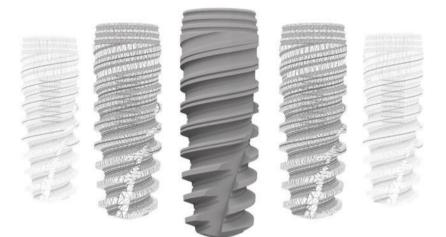
- Store the products in their original packaging and in a clean, dry location until they are used.
- After sterilisation, keep the products in the sealed sterilisation bags and in a clean, dry location.
- Never exceed the use by date indicated by the manufacturer of the sterilisation bags.
- Always follow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

# 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.
- The 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 agent.
- The product's sterility cannot be guaranteed if the sterilisation bag is open, damaged or damp.
- Respect all stages of the sterilisation process. If the materials or sterilisation bags 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 boxes are supplied UNSTERILISED and must always be sterilised before use and cleaned and disinfected after use.
- The 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 **www.ziacom.com/biblioteca** for the latest version of the cleaning, disinfection and sterilisation instructions.







See the latest version of the general conditions of sale on our website www.ziacom.com.

Check the availability of each product in your country.

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See the latest version of the catalogues available at www.ziacom.com.





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