

**WINSIX**<sup>®</sup>  
PERFORMING IMPLANT SYSTEM

# Surgery

••• SURGICAL PROTOCOL  
Traditional Techniques • Just on 4 Technique



**BIOSAFIN**

**BIOSAFIN**

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## Customer Support and After-Sales Service

BIOSAFIN pays particular attention to the Technical and Commercial Training of its staff in the area. Our dedicated Product Specialists and Company after-sales service, are available to our customers for technical information, updates and whatever is needed in relation to the marketed products.

**WINSIX Implant System**  
registered in 58 Countries around the world



- |                                 |  |                    |
|---------------------------------|--|--------------------|
| 1995 WINSIX®                    | 2010 Teeth Just On 6®                  | 2009 BioBone®      |
| 1998 Free Tense System®         | 2010 Torque Type®                      | 2009 Easy Surgery® |
| 2001 Bioactive Covering®        | 2011 Clip Abutment Bar CAB®            | 2015 Easy Weld®    |
| 2001 Free Lock®                 | 2012 WINClinic®                        | 2015 Easy Light®   |
| 2007 Full Contact Covering FCC® | 2013 Double Conical Connection DCC®    | 2015 Easy Physio®  |
| 2009 Flat Shift System®         | 2013 WINPeek® Abutment                 | 2017 BiAligner®    |
| 2009 Micro Rough Surface MRS®   | 2016 Extreme Abutment Multifunctional® |                    |
| 2010 Extreme Abutment®          | 2016 Linea KAPPA®                      |                    |
| 2010 Teeth Just On 4®           |  |                    |

Listed trademarks are cited in this edition of the WINSIX Product Catalogue, the omission of the ® is intended to be understood.

WINSIX, Free Tense System, Bioactive Covering, Free Lock, Full Contact Covering FCC, Flat Shift System, Micro Rough Surface MRS, Extreme Abutment, Teeth Just On 4, Teeth Just On 6, Torque Type, Clip Abutment Bar CAB, WINClinic, Double Conical Connection DCC, WINPeek Abutment, Extreme Abutment Multifunctional, Linea KAPPA, BiAligner.

# Specialist Company

**BIOSAFIN** specialises in the production and sale of devices and instruments for Implantology and Oral Surgery, organically combined in the WINSIX Implant System and BIOSAFIN ORAL SURGERY Line.

Research and Development is at the heart of our business, aimed at implementing product performance through the development of innovative technological and scientific content, and constantly improving its Quality. The evolutionary path of the WINSIX System finds scientific evidence in the extensive Bibliography, Studies and Publications available.

## Product quality scientifically and clinically tested.

For over 22 years, the WINSIX Implant System has been used with satisfaction by dental centres and professional studios with varying requirements according to type of consumer and workflow.

The certified quality of the products - which all undergo a strict 1:1 production check - and the proposed solutions, always relevant in meeting the needs of patients, provide the dental surgeon with maximum operational peace of mind.

The solid scientific background upon which devices are developed allows the combination of technological innovation and compatibility, avoiding demanding changes in operating times or expensive equipment replacement for the dental Team.

PRODUCT CERTIFICATION:



Certifications for commercialisation WINSIX in USA

## Company certification

**BIOSAFIN** is a Certified Company: **UNI EN ISO 9001: 2015**, which certifies the entire 360° work process, guaranteeing compliance with the quality standards considered to be optimum for the protection of the Product User - the Professional - and the end user - the Patient.

**UNI CEI EN ISO 13485: 2016** specifically relevant to the Quality of Medical Devices.

The quality standards imposed by the Certification are periodically reviewed and re-evaluated.



## Patents: CAB Clip Abutment Bar



International and European Patent  
PCT/EP2011/072448  
EP Patent no. 11425032.7



The patent issued for the CAB by the US authority, confirms its originality and innovative technological content.



The patent issued for the CAB - Clip Abutment Bar by the US authority, confirm its originality and innovative technological content.

## Insurance policies

The WINSIX Implant System devices benefit from TPLI (Third Party Liability Insurance) and CLI (Civil Liability Insurance).

## Qualified Training

BIOSAFIN offers a professional Updating and Training programme in line with corporate quality standards for the correct application of implant devices. The proposed teaching Formats are the result of experience and careful evaluation, differentiated according to the needs of professionals and developed in collaboration with experienced teachers.

REFERENCE CENTRE FOR TRAINING:  
WINSIX Pilot Centre - Vita-Salute San Raffaele University of Milan

Please visit our Training page at [www.biosafin.com](http://www.biosafin.com) in order to locate the calendar of Courses available.

## Patient Information

For correct Patient information about implant related dental care:

[www.implantologiawinsix.com](http://www.implantologiawinsix.com)

# UNICO a single Kit



WINSIX Surgical Kit

## Unified Tools and Procedures

WINSIX offers options for various implant shapes, with 4 different types of connection, which can be handled by a single Surgical Kit. In it, all the drills and the instruments needed for the surgical phase of placement and driving are placed, arranged according to a logical and clear sequence of use.

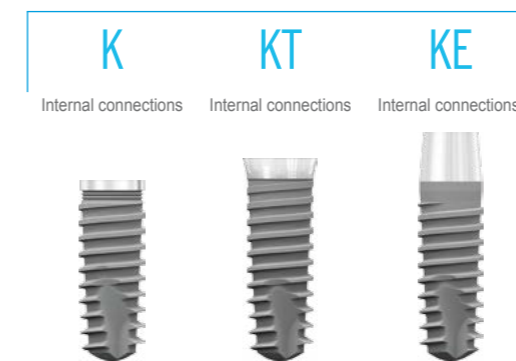
Well-researched, to put the best in the hands of the Dental Surgeon

## Choose freely

- 2 implant shapes
- Many crestal modules
- 4 prosthetic connections
- One surgical procedure

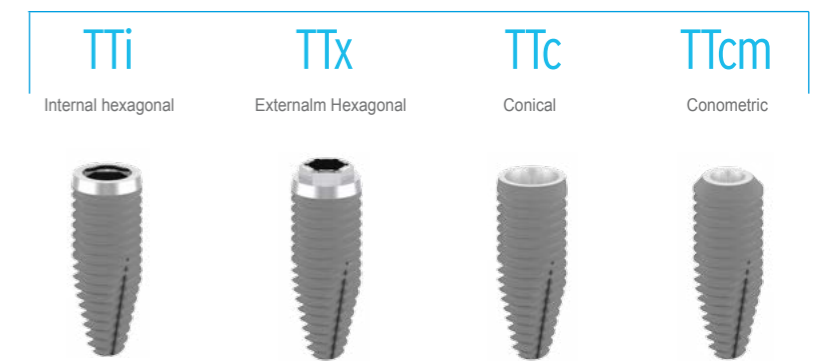
### KAPPA Line

3 different collars for the same implant body



### TORQUE TYPE Line

4 different connections for the same implant body



WINSIX implants are made of commercially pure GRADE 4 Titanium from controlled and certified extraction sites.

The original WINSIX prosthetics accessories are made of GRADE 5 Titanium, also from a controlled and certified extraction sites.

The surgical instruments are manufactured in surgical stainless steel.

# Intervention Design

## with a traditional approach



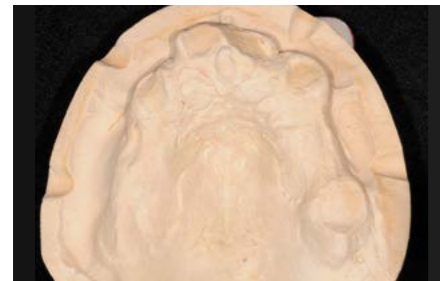
1. OPT



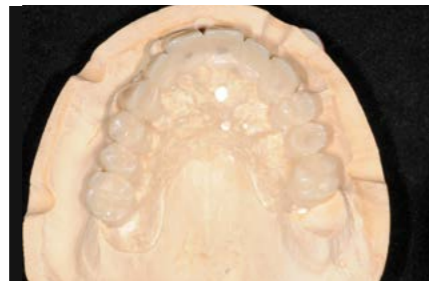
2. Clinical photo of the initial patient status. Buccal view



3. Palatal view



4. Developing the plaster model for diagnostic wax-up



5. Diagnostic wax-up



6. Surgical guide

## Treatment Plan

The success of an implant treatment always depends first and foremost on thorough assessment of various factors that determine the long term success of rehabilitation.

It is crucial to understand the patient's expectations exactly, to examine their health status carefully, along with potential contraindications, and finally to explain in a detailed way what the operating steps times, and the aesthetic-functional results will be. In this phase, a close cooperation among hygienist, surgeon, prostodontist and dental technician is desirable.

Specifically, the following points must be taken into consideration:

- **History:** general health status and clinical history of the patient
- **General diagnosis** with the exclusion of contraindications
- **Assessment of risk factors** for implant treatment (e.g. bruxism, smoking habits, poor attention to oral hygiene etc...)
- **Accurate intra oral assessment** that considers the current dental situation, functionality, possible diseases, the availability and quality of the bone, using diagnostic tools such as CT scans, dental impressions, wax diagnostics.

The latter will provide a surgical guide suited to the prosthetic solution adopted.



1. Orthopantomography of the dental arches



2. WINSIX Visual Card positioned above the x-ray, for careful implant rehabilitation planning

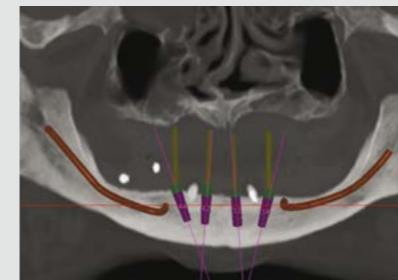
## with software assisted surgery



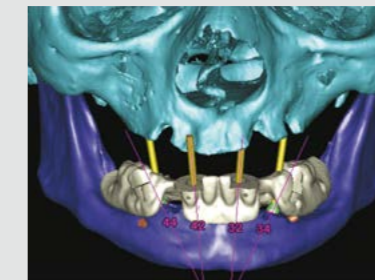
1. Patient history and intraoral assessment



2. Buccal view before intervention, after eliminating 2 residual elements



3. Designing the insertion of the various implants and their inclination via a software assisted procedure



4. Designing the surgical guide



5. Testing the surgical guide before the intervention.

After these assessments, it will be possible to finalise a treatment plan that includes the following items:

- **Prosthetic planning** (including reports of aesthetic parameters for the face and the line of the smile)
- **Surgical planning**
- **Times**
- **Costs**

## General contra-indications

When assessing a dental implant surgery, you must take into consideration the same contraindications that are valid for general surgical interventions.

- Adequate bone volume or inadequate soft tissue
- Congenital problems with blood coagulation, or acquired through a therapy (e.g. anticoagulants, other), wound healing
- Problems with bone regeneration caused by diabetes mellitus, smoking habits, alcohol and drug abuse, metabolic disorders
- Immunosuppressive treatments, like chemotherapy or radiotherapy
- Presence of infections or inflammations in the oral cavity such as periodontitis, gingivitis and others
- Presence of parafunctional dysfunctions like bruxism or others
- Inadequate articulation and occlusion
- Poor oral hygiene
- Poor motivation for oral rehabilitation

## Possible side effects

- Swelling, oedema, local and temporary haematomas
- Limited sensitivity and maxillary functionality for a short period

# Planning Implant Treatments

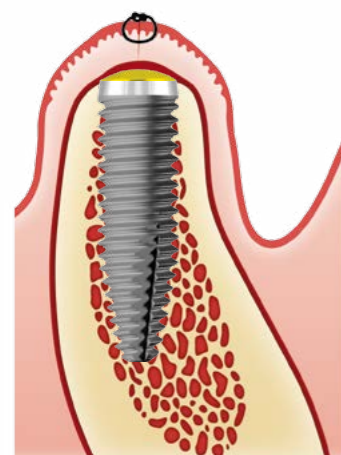
## Surgical Technique

In this initial phase, pre-prosthetic planning and collaborations with dental technicians are vital for achievement of the aesthetic and functional objectives.

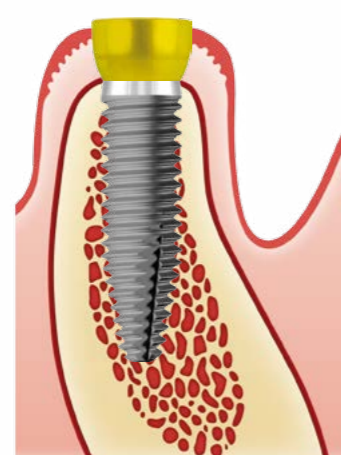
Depending on the functional, aesthetic and temporal needs, rehabilitation can be performed via one of the following two ways:

### Conventional technique:

- On an edentulous ridge, implant insertion and soft tissue closure over the implant, for an average healing period of 3/6 months. Subsequently, reopening of the implant, impression taking and manufacturing the provisional and/ or definitive prosthesis. (ref. 1)
- Conventional 2-stage technique with soft tissue management. (Ref. 2)



1. Closure of the implant and suturing the flap



2. Soft tissue management of a Ti implant



3. Total rehabilitation with a provisional immediate loading

### Immediate Provisional restoration Technique:

In modern implant-prosthetic treatment, the approach to resolving cases via prosthetics that are immediately loaded and functional implants has undergone rapid acceleration.

The reasons for this trend are many, and can basically be summarised in the following points:

- Time saving for prosthetisation, that is, less discomfort for the Patient
- Quality of life improvement
- Positive reaction of soft tissues in the healing phase
- Improved aesthetics
- Significant savings in both biological and economic.

The spread of the Just on 4 technique has followed the same direction, as it allows the rehabilitation of the entire dental arch by inserting only 4 implants, and their immediate rehabilitation at the same time.

### Immediate provisional restoration of a single tooth

In an edentulous site or after an extraction, insertion of an implant and contextual provisional prosthetisation.



1. Abutment inserted immediately, after the implant placement.



2. X-Ray Control



3. Provisional crown and suture

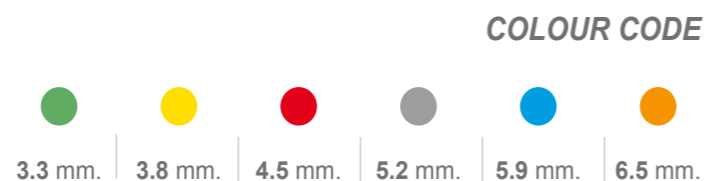


4. Assessment of healing at 30 days

For the management of immediate loading and clinical choices, please refer to the available literature on the subject.

# WINSIX Implants: diameter and length

The product colour coding system is obtained via a surface anodization process that does not fade on contact with the saliva. It is then possible to quickly identify the diameter of the product accessory when the implant is opened.



## KAPPA Line

INTERNAL HEXAGONAL CONNECTION	Ø 3.3	Ø 3.8	Ø 4.5	Ø 5.2	Ø 5.9
<b>K</b>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	-
	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	-
	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	-
	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	-
<b>KT</b>	<i>h 7</i>	<i>h 7</i>	<i>h 7</i>	<i>h 7</i>	<i>h 7</i>
	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>
	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>
	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>
	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	-
<b>KT MACHINED</b>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	-	-
	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	-	-
	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	-	-
	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	-	-
<b>KE</b>	-	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>	-
	-	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	-
	-	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	-
	-	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	-

## Torque Type Line

INTERNAL HEXAGONAL CONNECTION	Ø 3.3	Ø 3.8	Ø 4.5	Ø 5.2	Ø 5.9
<b>TORQUE TYPE I</b>	-	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	-
	-	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	-
	-	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	-
	-	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	-
	-	<i>h 18</i>	<i>h 18</i>	-	-

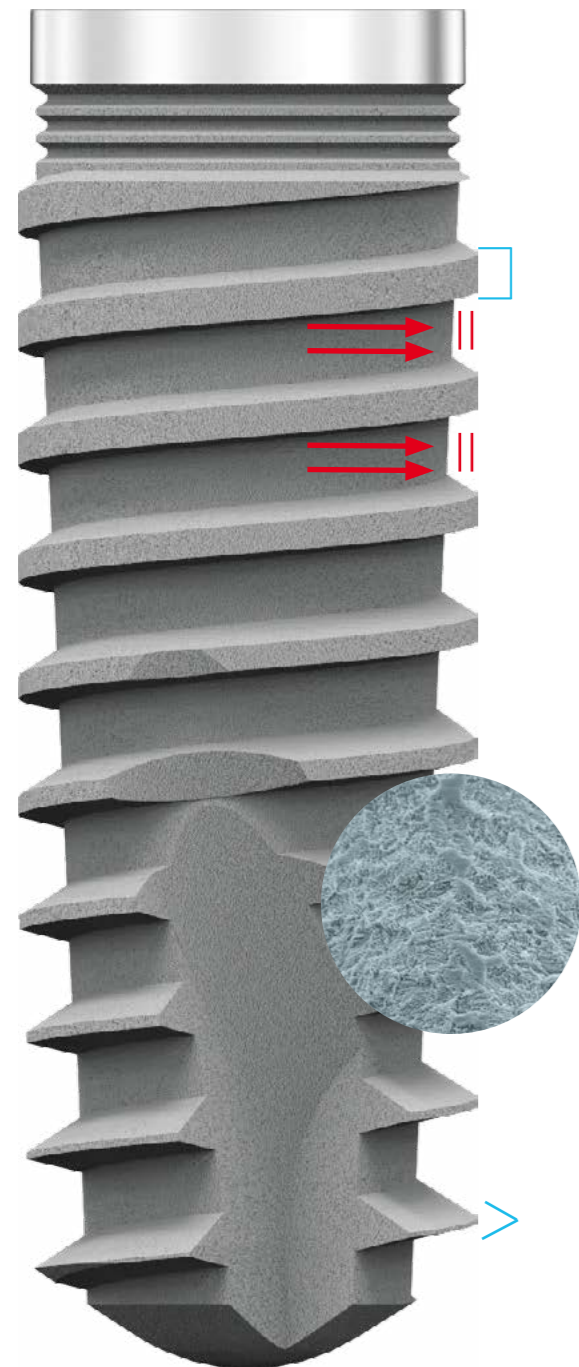
EXTERNAL HEXAGONAL CONNECTIONS	Ø 3.3	Ø 3.8	Ø 4.5	Ø 5.2	Ø 5.9
<b>TORQUE TYPE X</b>	-	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>
	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>
	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>
	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>
	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	-
		<i>h 18</i>	<i>h 18</i>	-	-

CONICAL CONNECTIONS	Ø 3.3	Ø 3.8	Ø 4.5	Ø 5.2	Ø 5.9
<b>TORQUE TYPE C</b>	-	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>
	-	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>
	-	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>
	-	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>
	-	<i>h 15</i>	<i>h 15</i>	<i>h 15</i>	-

MORSE TAPER CONNECTIONS	Ø 3.3	Ø 3.8	Ø 4.5	Ø 5.2	Ø 5.9
<b>TORQUE TYPE CM</b>	-	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>	<i>h 6</i>
	-	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>	<i>h 9</i>
	-	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>	<i>h 11</i>
	-	<i>h 13</i>	<i>h 13</i>	<i>h 13</i>	-



# KAPPA Line Special Characteristics



## macro morphology

### Variable GEOMETRY

The THREAD varies progressively from triangular to square to favour vertical micro expansion.

### Differentiated DEPTH

The THREAD varies progressively in depth to favour horizontal micro expansion.

### Micro Rough Surface

With a rough morphology achieved via a process of subtraction on the implant surface.

discharge grooves

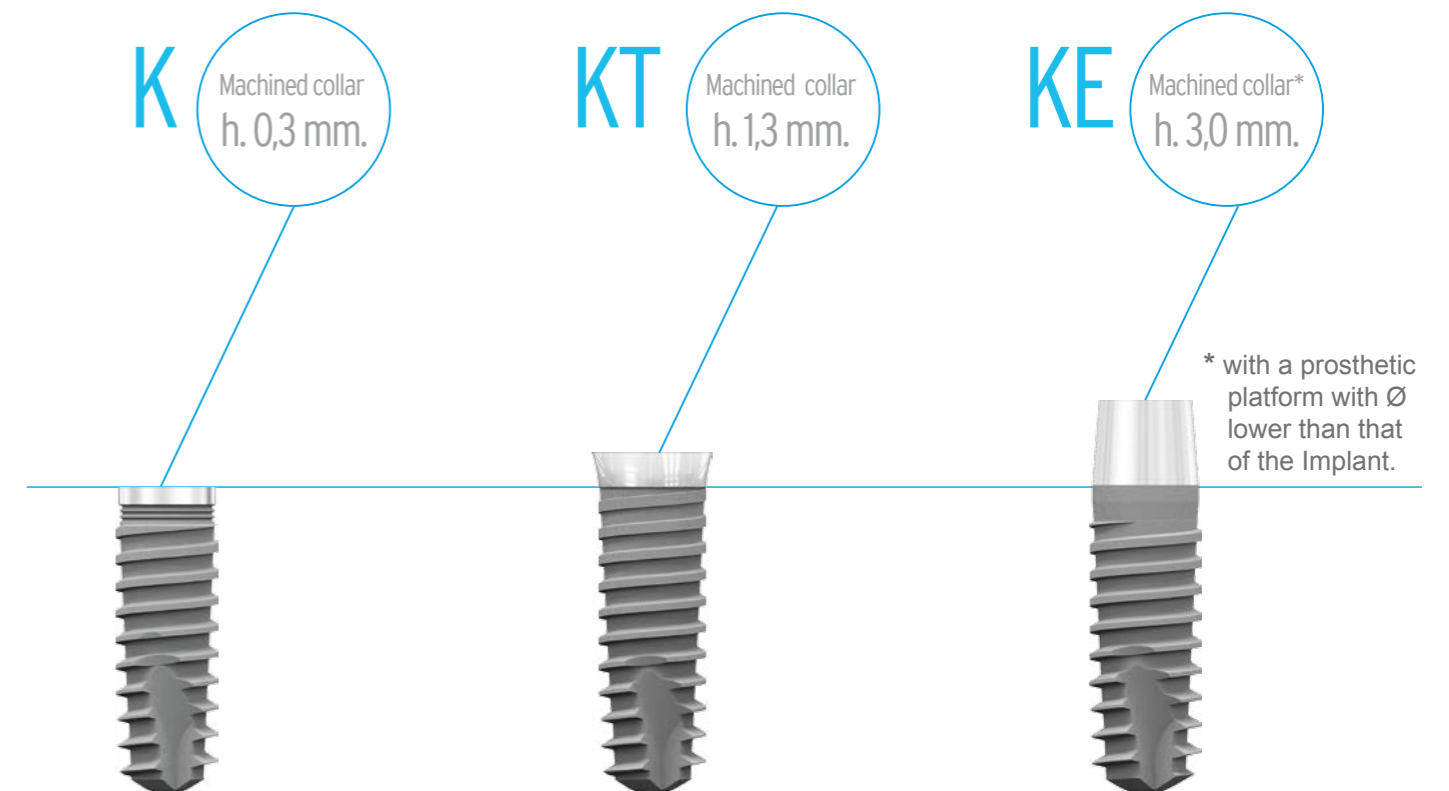
Wide and deep for the deposition of bone frustules and the formation of a clot during the osteointegration stage.



## OPTIMAL STABILITY

in any kind of bone, thanks to threads of variable geometry and varying depths. Also, ideal for immediate loading.

## Same Implant Body: the crestal module differentiates the Implants



### Crestal Module

- With microgrooves for greater bone stability in the coronal area and subsequent excellent aesthetic outcome.

### Crestal Module

- With a platform that swings to the next prosthetic diameter.
- Useful in the distal area to reproduce a prosthetic crown anatomy similar to the natural molar dentition.
- Ideal for prosthetisation directly onto the implant in multi-unit screw-retained prostheses, combining optimal function and lower costs.

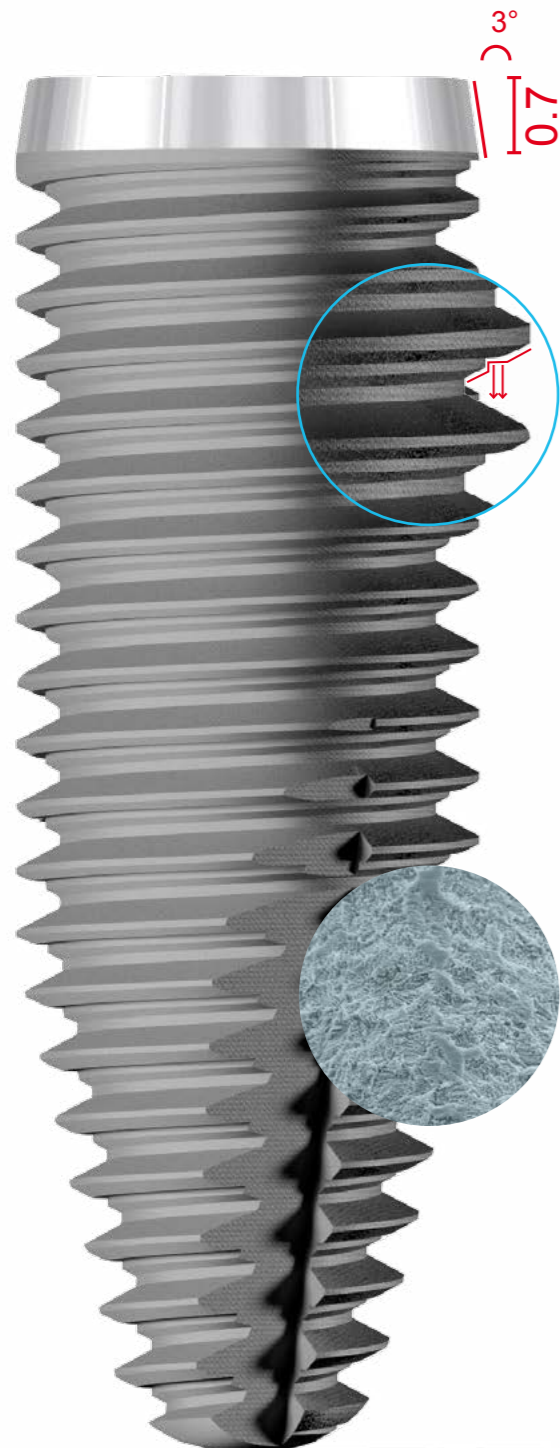
### Crestal Module ideal for:

- Prosthetisation with a closure directly on the implant collar. Raises aesthetic aspects to the highest levels.
- Eliminates the GAP between abutment and implant at the bony crest.
- Direct placement of the prosthesis onto the implant, in case of multi-unit screw-retained prosthesis. Optimally combines the highest functional levels with lower costs, with maximum respect for the physiological width of the soft tissues.

# TORQUE TYPE Line Special Characteristics



**OPTIMUM STABILITY**  
in any type of bone, thanks to undersized apex of 1.8 mm. and the osteotomic threads.  
Also, ideal for immediate loading.



3°  
0.7

## macro morphology

### THREAD BIO-ENGAGING

Double-threaded and double-step threads for easy implant placement with half the turns required.

The groove at the bottom of the thread decompresses the bone by dissipating the forces and facilitating blood clot deposit. At the same time, it increases the implant surface by facilitating cell neoformation.

### Micro Rough Surface

With a rough surface achieved by direct subtraction of the implant surface.

discharge grooves

Wide and deep for the deposition of bone frustules and the formation of a clot during the osteo integration phase.

TTi



### Internal hex connection

- Free Lock Connection (equal to the KAPPA Line).



TTx



### External hex connection

- Ideal for Just on 4/6 technique. Designed for restorations with CAB device

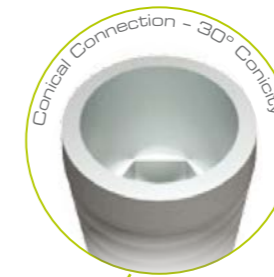


TTc



### Internal conical connection with antirotational hex

- (conicity 3°)
- Suitable for prosthetic superstructures with conical activation.

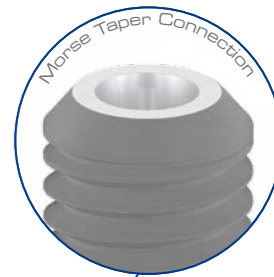


TTcm

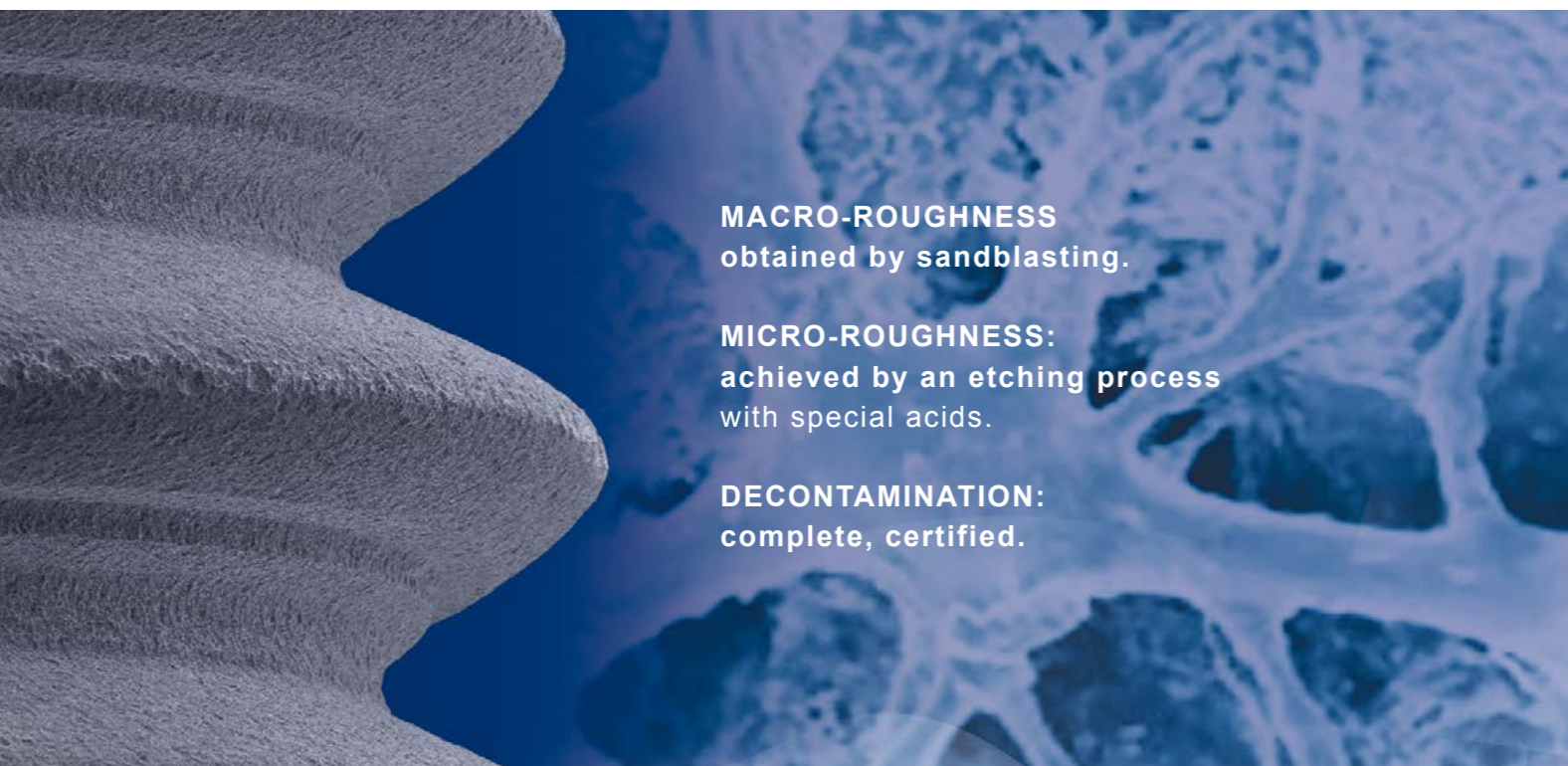


### Morse Taper Connection (conicity 1.5°)

- Suitable for aesthetic solutions.
- No transverse screws.



# WINSIX Micro Rough Surface



**MACRO-ROUGHNESS**  
obtained by sandblasting.

**MICRO-ROUGHNESS:**  
achieved by an etching process  
with special acids.

**DECONTAMINATION:**  
complete, certified.

## MRS Surface: 10 years of clinical applications a value reconfirmed daily

WINSIX Micro Rough Surface has a rugged morphology, achieved by a process of subtraction, by direct sandblasting and etching of the surface of the Titanium implant.

It can boast of years of well documented clinical applications, that highlight its optimisation of implant osteo-integration times due to the special three-dimensional geometry of its nanostructure and to a process of osteo-conduction promoted by the specificity of the scaffold.

**BEST QUALITY AND QUANTITY OF BONE AROUND THE IMPLANT:** a key factor for achieving osteo-integration, thanks to the regularity and roughness of the MRS microstructure.

### WIDELY SCIENTIFICALLY VALIDATED

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• Influence of Novel Nano - titanium Implant Surface on Human Osteoblast Behaviour and Growth - S. Tetè, F.Mastrangeb, R.Quaresima, R.Vinci, G.Sammartino, L.Stuppia, Enrico F. Gherlone - Implant Dentistry Vol.19, n.26 - 2010

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• Valutazione della capacità osteogenetica di hafscs ottenute da liquido amniotico - S. Tetè, U. Di Tore, V. Zizzari, L. Stuppia, F. Zarone, E.F. Gherlone - Atti del III Expo di Autunno, Università della Lombardia, 27 - 28 Novembre 2009

# WINSIX Implant Connections Prospectus

The WINSIX System offers 4 different types of connection (internal, external, conical, Morse Taper), in a single dimension in the different implant measurements.

The same instruments and prosthetic components can be used with any type of implant. Ergonomics and system management are optimised and the work of the operators simplified.

Internal hex  
Free Lock



External hex



Internal conical



Internal morse taper



### FREE LOCK INTERNAL HEX

- In use since 1995
- It provides great connection stability thanks to the hexagon and screw dimensions.

### EXTERNAL HEX

- 2.7 mm hexagonal wrench. - h. 0.7 mm.
- Particularly suitable for Just on 4/6 Techniques

### INTERNAL CONICAL

- Conicity 3°
- With antirotational hex for the repositioning of prosthetic abutments and for implant screw-retention
- Activated with a low torque value (20 N/cm)
- Low torque value of conicity activation can be very useful in the case of regenerative techniques where bone density is poor
- Platform Switching incorporated

### INTERNAL MORSE TAPER

- Conicity 1.5°
- Percussion activated
- No tightening screw for the prosthetic abutment
- Platform Switching incorporated

# Summary Table: WINSIX Implants Indications

WINSIX IMPLANTS INDICATIONS DIAGRAM												
Type of Implant	Traditional bone level implant protocol during the osseointegration phase	Immediate post-extraction	Transmucosal Protocol	Platform Switching	Single Tooth Aesthetics	Aesthetics	Single tooth with roots converging apically to adjacent teeth	Direct prosthesis onto implant	Immediate Loading	Just on 4/6	CAB	Multi-unit screw-retained prosthesis
<b>KAPPA line</b>												
<b>K</b>	...	...	•	... <small>(not for 3,3)</small>	...	...	-	•	...	-	-	...
<b>KT</b>	•	••	...	...	•	•	-	...	...	-	-	...
<b>KE</b>	-	...	...	-	...	...	-	...	...	-	-	... <small>(Flat Line)</small>
<b>Torque Type Line</b>												
<b>TTi</b>	...	...	•	...	...	...	...	•	...	•	-	...
<b>TTx</b>	...	...	•	... <small>(not for 3,3)</small>	-	-	-	...	...	...	...	...
<b>TTc</b>	...	...	•	...	...	...	...	-	...	...	...	...
<b>TTcm</b>	...	...	...	...	...	...	...	-	...	-	-	-

- KEY**
- ... Particularly suitable
  - Average suitability
  - Suitable
  - Not suitable

## Conventional Implant Insertion

It is very important to keep in mind that each variation in the surgical stage has a direct impact on the prosthesis and vice versa because of their mutual interactions.

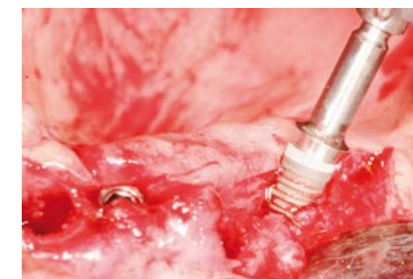
## Surgical Guide

In order to perform an accurate work, it is advisable to use a surgical guide, made on a study model of the patient's mouth during the pre-prosthetic planning. This will guide the positioning and inclination of the implants according to what has been designed.

Alternatively, you can perform the design and surgical intervention with the help of a software assisted system (guided surgery).



1. Surgical guide for correctly positioning the implants and checking with a direction indicator



2. After having prepared the implant site with the help of the surgical guide, the implant is put into place

# WINSIX Surgical Kit

ST16 SURGICAL TRAY



- 60000 Ratchet
- KMP adapter for ratchet screwdriver
- 65000K dynamometric ratchet 10 - 35 N/cm
- STP6N drill stop for 6 mm implants TT1S-TT2S-TT3S
- STP7N drill stop for 7 mm implants TT1S-TT2S-TT3S
- STP9N drill stop for 9 mm implants TT1S-TT2S-TT3S
- STP11N drill stop for 11 mm implants TT1S-TT2S-TT3S
- STP6R drill stop for 6 mm implants TT4S-TT5S-TT6S
- STP7R drill stop for 7 mm implants TT4S-TT5S-TT6S
- STP9R drill stop for 9 mm implants TT4S-TT5S-TT6S
- STP11R drill stop for 11 mm implants TT4S-TT5S-TT6S
- STP6W drill stop for 6 mm implants TT7S-TT8S-TT9-TT10
- STP7W drill stop for 7 mm implants TT7S-TT8S-TT9-TT10
- STP9W drill stop for 9 mm implants TT7S-TT8S-TT9-TT10
- STP11W drill stop for 11 mm implants TT7S-TT8S-TT9-TT10

**LONG DRILL L: 6-7-9-11-13-15-18 mm**

- TT1L Ø: 2.0 mm
- TT2L Ø: 2.2/2.6 mm
- TT3L Ø: 2.6/3.0 mm
- TT4L Ø: 3.0/3.4 mm
- TT5L Ø: 3.4/3.8 mm
- TT6L Ø: 3.8/4.2 mm
- TT7L Ø: 4.2/4.6 mm
- TT8L Ø: 4.6/5.0 mm

**SHORT DRILL S: 6-7-9-11-13 mm**

- TT1S Ø: 2.0 mm
- TT2S Ø: 2.2/2.6 mm
- TT3S Ø: 2.6/3.0 mm
- TT4S Ø: 3.0/3.4 mm
- TT5S Ø: 3.4/3.8 mm
- TT6S Ø: 3.8/4.2 mm
- TT7S Ø: 4.2/4.6 mm
- TT8S Ø: 4.6/5.0 mm

**SHORT DRILL**

- TT9 Ø: 5.0/5.4 mm
- TT10 Ø: 5.4/5.8 mm

**TTK Precision drill**

**99000 Drill Extension Shaft**

**SDS - SDL Short and long manual screwdriver**

**SDTS - SDTL Short and long manual Torx Screwdriver**

**30000 Prosthetic wrench with handpiece connection**

**30000T Torx Prosthetic wrench with handpiece connection**

**CORTICAL DRILL**

- CD 33
- CD 38
- CD 45
- CD 52
- CD 59

**BONE MILL for EA**

- BM 33
- BM 38
- BM 45
- BM 52
- BM 59

**62TTc extractor for TTc**

**62EA manual screwdriver for straight EA**

**IMPLANT DRIVER i**

**IMPLANT DRIVER x**

**IMPLANT DRIVER c**

**IMPLANT DRIVER cm**

**SCREWDRIVER FOR IMPLANTS internal hex connection**

62Si short screwdriver  
62Mi medium screwdriver  
62Li long screwdriver

**SCREWDRIVER FOR IMPLANTS external hex connection**

62Sx short screwdriver  
62Mx medium screwdriver  
62Lx long screwdriver

**SCREWDRIVER FOR IMPLANTS conical connection**

62Sc short screwdriver  
62Mc medium screwdriver  
62Lc long screwdriver

**SCREWDRIVER FOR IMPLANTS morse taper connection**

62Scm short screwdriver  
62Mcm medium screwdriver  
62Lcm long screwdriver

99Si short screwdriver for handpiece  
99Mi medium screwdriver for handpiece  
99Li long screwdriver for handpiece

99Sx short screwdriver for handpiece  
99Mx medium screwdriver for handpiece  
99Lx long screwdriver for handpiece

99Sc short screwdriver for handpiece  
99Mc medium screwdriver for handpiece  
99Lc long screwdriver for handpiece

99Scm short screwdriver for handpiece  
99Mcm medium screwdriver for handpiece  
99Lcm long screwdriver for handpiece

DPI depth indicator

DI direction indicator

99EA straight EA screwdriver for handpiece

Depth gauge Drill/Implant



## Available materials

Product Code	Description	N.
TTK	Precision drill	1
TT1S	Short drill Ø: 2.0 mm - L: 6-7-9-11-13 mm	1
TT2S	Short drill Ø: 2.2/2.6 mm - L: 6-7-9-11-13 mm	1
TT3S	Short drill Ø: 2.6/3.0 mm - L: 6-7-9-11-13 mm	1
TT4S	Short drill Ø: 3.0/3.4 mm - L: 6-7-9-11-13 mm	1
TT5S	Short drill Ø: 3.4/3.8 mm - L: 6-7-9-11-13 mm	1
TT6S	Short drill Ø: 3.8/4.2 mm - L: 6-7-9-11-13 mm	1
TT7S	Short drill Ø: 4.2/4.6 mm - L: 6-7-9-11-13 mm	1
TT8S	Short drill Ø: 4.6/5.0 mm - L: 6-7-9-11-13 mm	1
TT9	Short drill Ø: 5.0/5.4 mm - L: 6-7-9-11-13 mm	1
TT10	Short drill Ø: 5.4/5.8 mm - L: 6-7-9-11-13 mm	1
TT1L	Long drill Ø: 2.0 mm - L: 6-7-9-11-13-15-18 mm	1
TT2L	Long drill Ø: 2.2/2.6 mm - L: 6-7-9-11-13-15-18 mm	1
TT3L	Long drill Ø: 2.6/3.0 mm - L: 6-7-9-11-13-15-18 mm	1
TT4L	Long drill Ø: 3.0/3.4 mm - L: 6-7-9-11-13-15-18 mm	1
TT5L	Long drill Ø: 3.4/3.8 mm - L: 6-7-9-11-13-15-18 mm	1
TT6L	Long drill Ø: 3.8/4.2 mm - L: 6-7-9-11-13-15-18 mm	1
TT7L	Long drill Ø: 4.2/4.6 mm - L: 6-7-9-11-13-15-18 mm	1
TT8L	Long drill Ø: 4.6/5.0 mm - L: 6-7-9-11-13-15-18 mm	1
99000	Drill Extension Shaft	1
BM33	Bone mill for EA Ø 3.3 mm	1
BM38	Bone mill for EA Ø 3.8 mm	1
BM45	Bone mill for EA Ø 4.5 mm	1
BM52	Bone mill for EA Ø 5.2 mm	1
BM59	Bone mill for EA Ø 5.9 mm	1
CD33	Cortical Drill Ø 3.3 mm	1
CD38	Cortical Drill Ø 3.8 mm	1
CD45	Cortical Drill Ø 4.5 mm	1
CD52	Cortical Drill Ø 5.2 mm	1
CD59	Cortical Drill Ø 5.9 mm	1
DI	Direction Indicator	4
DPI	Depth Indicator	1
62SI	Short Screwdriver for internal hex connection Implants	1
62MI	Medium Screwdriver for internal hex connection Implants	1
62LI	Long Screwdriver for internal hex connection Implants	1
99SI	Short Handpiece Screwdriver for internal hex connection Implants	1
99MI	Medium Handpiece Screwdriver for internal hex connection Implants	1
99LI	Long Handpiece Screwdriver for internal hex connection Implants	1
62SX	Short Screwdriver for external hex connection Implants	1
62MX	Medium Screwdriver for external hex connection Implants	1
62LX	Long Screwdriver for external hex connection Implants	1

## for the Surgical Kit

Product Code	Description	N.
99SX	Short Handpiece Screwdriver for external hex connection Implants	1
99MX	Medium Handpiece Screwdriver for external hex connection Implants	1
99LX	Long Handpiece Screwdriver for external hex connection Implants	1
62Sc	Short Screwdriver for conical connection Implants	1
62Mc	Medium Screwdriver for conical connection Implants	1
62Lc	Long Screwdriver for conical connection Implants	1
99Sc	Short Handpiece Screwdriver for conical connection Implants	1
99Mc	Medium Handpiece Screwdriver for conical connection Implants	1
99Lc	Long Handpiece Screwdriver for conical connection Implants	1
62Scm	Short Screwdriver for conometric connection Implants	1
62Mcm	Medium Screwdriver for conometric connection Implants	1
62Lcm	Long screwdriver for conometric connection Implants	1
99Scm	Short Handpiece Screwdriver for morse taper connection Implants	1
99Mcm	Medium Handpiece Screwdriver for morse taper connection Implants	1
99Lcm	Long Handpiece Screwdriver for morse taper connection Implants	1
SDL	Long Manual Screwdriver	1
SDS	Short Manual Screwdriver	1
30000	Prosthetic wrench with handpiece connection	1
SDTL	Long Torx Manual Screwdriver	1
SDTS	Short Torx Manual Screwdriver	1
30000T	Torx Wrench with handpiece connection	1
60000	Ratchet	1
KMP	Adapter for ratchet screwdriver	1
STP6N	6 mm implant drill stops for TT1S-TT2S-TT3S drills	1
STP7N	7 mm implant drill stops for TT1S-TT2S-TT3S drills	1
STP9N	9 mm implant drill stops for TT1S-TT2S-TT3S drills	1
STP11N	11 mm implant drill stops for TT1S-TT2S-TT3S drills	1
STP6R	6 mm implant drill stops for TT4S-TT5S-TT6S drills	1
STP7R	7 mm implant drill stops for TT4S-TT5S-TT6S drills	1
STP9R	9 mm implant drill stops for TT4S-TT5S-TT6S drills	1
STP11R	11 mm implant drill stops for TT4S-TT5S-TT6S drills	1
STP6W	6 mm implant drill stops for TT7S-TT8S-TT9-TT10 drills	1
STP7W	7 mm implant drill stops for TT7S-TT8S-TT9-TT10 drills	1
STP9W	9 mm implant drill stops for TT7S-TT8S-TT9-TT10 drills	1
STP11W	11 mm implant drill stops for TT7S-TT8S-TT9-TT10 drills	1
62Ttc	Manual Extractor for conical connection	1
62EA	Manual screwdriver for straight EA	1
99EA	Straight EA screwdriver for handpiece	1
ST16	Single Surgical Tray	1

## Summary table for the use of Drills KAPPA line

RANGE INDICATING THE CORRECT DRILL TO USE IN THE EVENT OF:		SOFT BONE		MEDIUM BONE			HARD BONE								
<b>Short Drill</b>															
PRECISION DRILL TTK	TT1S	TT2S	TT3S	TT4S	TT5S	TT6S	TT7S	TT8S	TT9	TT10					
	2.0 mm.	2.2/2.6 mm.	2.6/3.0 mm.	3.0/3.4 mm.	3.4/3.8 mm.	3.8/4.2 mm.	4.2/4.6 mm.	4.6/5.0 mm.	5.0/5.4 mm.	5.4/5.8 mm.					

<b>Long Drill</b>																
PRECISION DRILL TTK	TT1L	TT2L	TT3L	TT4L	TT5L	TT6L	TT7L	TT8L								
	2.0 mm.	2.2/2.6 mm.	2.6/3.0 mm.	3.0/3.4 mm.	3.4/3.8 mm.	3.8/4.2 mm.	4.2/4.6 mm.	4.6/5.0 mm.								

<b>Cortical Drill</b>					
<p>Recommended for compact cortical tissue and for all implants</p>	cortical drill CD 3.3 mm.	cortical drill CD 3.8 mm.	cortical drill CD 4.5 mm.	cortical drill CD 5.2 mm.	cortical drill CD 5.9 mm.

## Summary table for the use of Drills KAPPA line

SOFT BONE				
Ø Nominal diameter of the implant	Ø Endosseous diameter	Ø Drill diameter	Last Drill Code	Cortical Drill
3.3	3.5	2.2/2.6	TT2	NO
3.8	4.0	2.6/3.0	TT3	NO
4.5	4.7	3.0/3.4	TT4	NO
5.2	5.4	3.4/3.8	TT5	NO
5.9	6.1	3.8/4.2(4.2/4.6)	TT6(TT7)	NO
MEDIUM BONE				
Ø Nominal diameter of the implant	Ø Endosseous diameter	Ø Drill diameter	Last Drill Code	Cortical Drill
3.3	3.5	2.6/3.0	TT3	NO
3.8	4.0	3.0/3.4	TT4	NO
4.5	4.7	3.4/3.8	TT5	NO
5.2	5.4	3.8/4.2	TT6	NO
5.9	6.1	4.2/4.6(4.6/5.0)	TT7(TT8)	NO
MEDIUM CORTICAL BONE				
Ø Nominal diameter of the implant	Ø Endosseous diameter	Ø Drill diameter	Last Drill Code	Cortical Drill
3.3	3.5	2.6/3.0	TT3	CD33
3.8	4.0	3.0/3.4	TT4	CD38
4.5	4.7	3.8/4.2	TT6	CD45
5.2	5.4	4.6/5.0	TT8	CD52
5.9	6.1	5.0/5.4	TT9	CD59
HARD BONE				
Ø Nominal diameter of the implant	Ø Endosseous diameter	Ø Drill diameter	Last Drill Code	Cortical Drill
3.3	3.5	3.0/3.4	TT4	
3.8	4.0	3.4/3.8	TT5	
4.5	4.7	3.8/4.2	TT6	CD45
5.2	5.4	4.6/5.0	TT8	
5.9	6.1	5.4/5.8	TT10	

Drills TT		Cortical Drills	
Code	Ø	Code	Ø
TT1	2.0		
TT2	2.2/2.6		
TT3	2.6/3.0	CD33	3.0/3.3
TT4	3.0/3.4	CD38	3.4/3.8
TT5	3.4/3.8		
TT6	3.8/4.2	CD45	4.2/4.5
TT7	4.2/4.6		
TT8	4.6/5.0	CD52	5.0/5.2
TT9	5.0/5.4	CD59	5.4/5.9
TT10	5.4/5.8		

# Surgical Stages

KAPPA LINE • TORQUE TYPE



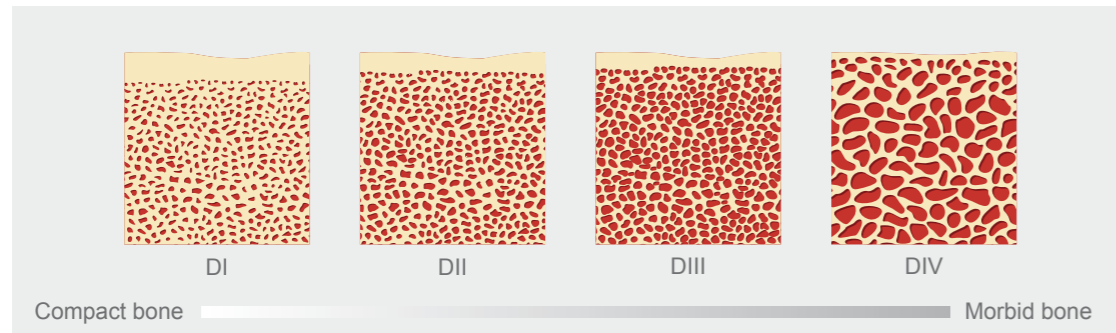
# Surgical Stages

## Bone Density Classifications

Bone density can vary considerably from patient to patient in different regions of the jaw. Its quality can be evaluated intra-surgically by a pilot hole, but often the diagnostic images are already good indicators. The preparation of the implant site must carefully consider the type of bone density available to ensure the necessary primary stability.

In this respect, the implant grip and the crestal preparation using the cortical drill play a decisive role.

Classifications of bone density DI, DII, DIII, DIV

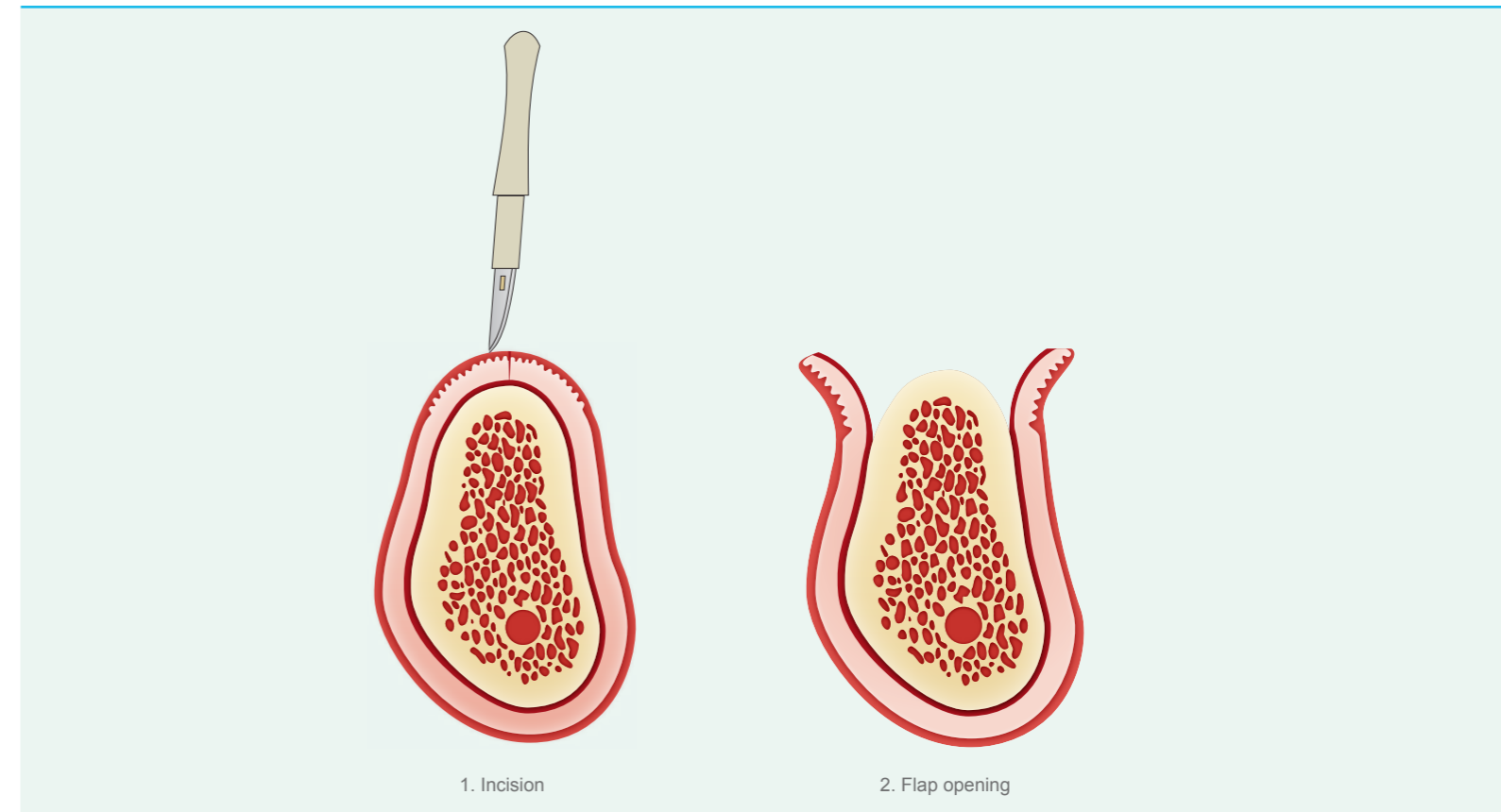


## Flap Preparation

Perform a para-crestal incision using a surgical scalpel. The mucosa and the periosteum are raised and the bone crest is exposed.

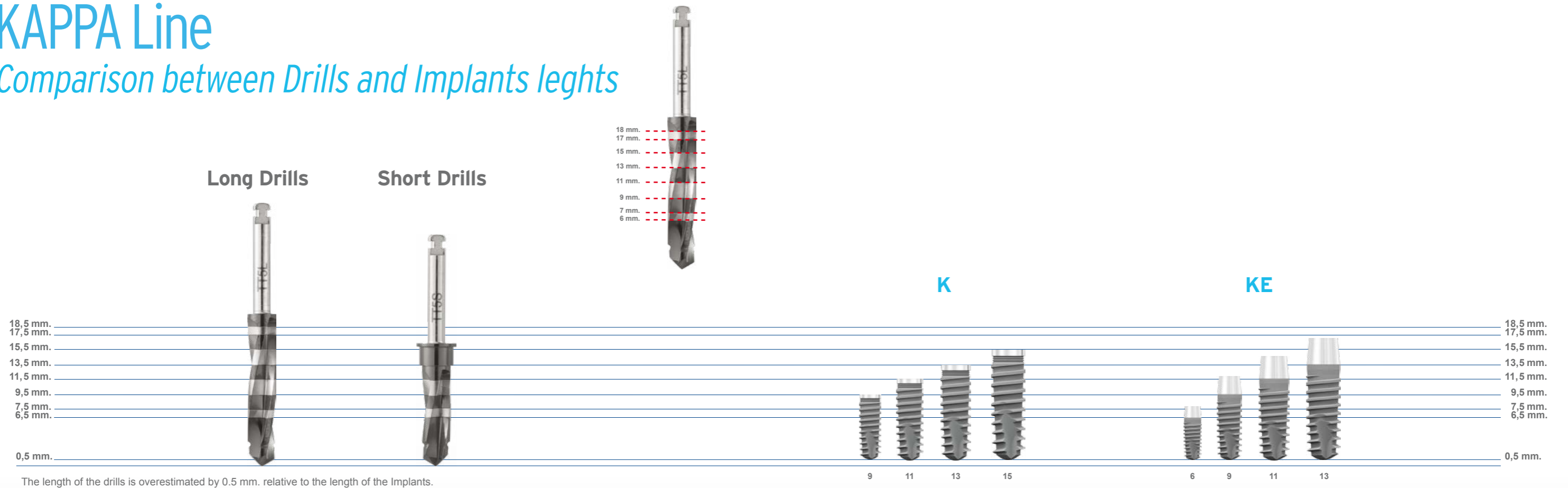
During the planning phase it is important to check that the horizontal and vertical bone volumes are adequate. Considering the insertion of the implant in the established proportions, the vestibular and lingual / palatal residual bone thickness should be at least 1.5 mm in order to avoid any re-absorption due to the compressions caused by the primary stability of the 'implant and / or poor blood circulation. If this condition does not arise, the use of regenerative techniques (with substitutes for bone such as BioBone type) may be considered.

## Opening the Flap



# Milling stage KAPPA Line

## Comparison between Drills and Implants lengths



The length of the drills is overestimated by 0.5 mm. relative to the length of the Implants.

- Markings on the cutters makes it easy to check the depth reached during the operating phase
- The Colour Code for the cortical drills clearly indicates the reference  $\varnothing$
- The short drills are predetermined at L.13,5 mm and may be used with depth STOP devices for preparations at 6.5 mm and 11.5 mm.
- Simple and mechanical attachment / removal to the micromotor
- Surgical steel, sterilisable

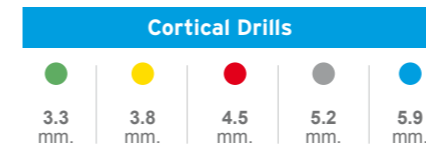
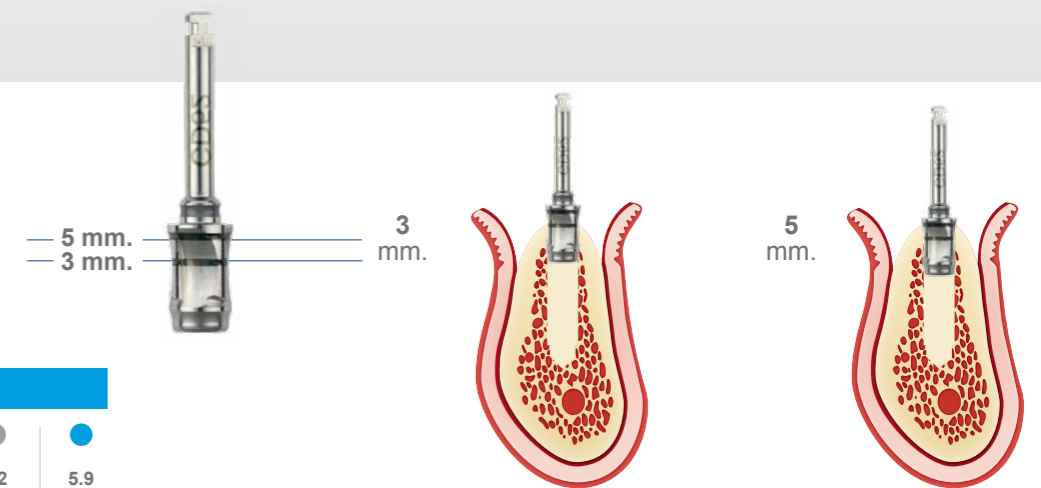
### Depth Stops

Implant positioning at crest level



### Cortical Drill

Depth of the cortical drill in relation to the crest.



**NOTE:** Overall preparation will be deeper by 0.5 mm as shown in the Drills description above.

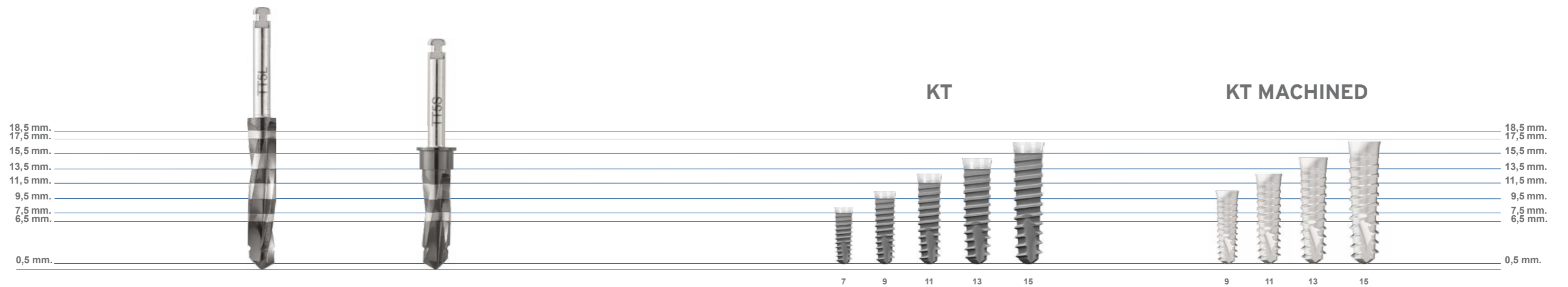


The drills should be washed by ultrasound by placing them in a rack in order to prevent contact between them which spoils their cutting edges.

For the drills sterilization protocol see page 74.

# Milling Phase KAPPA Line

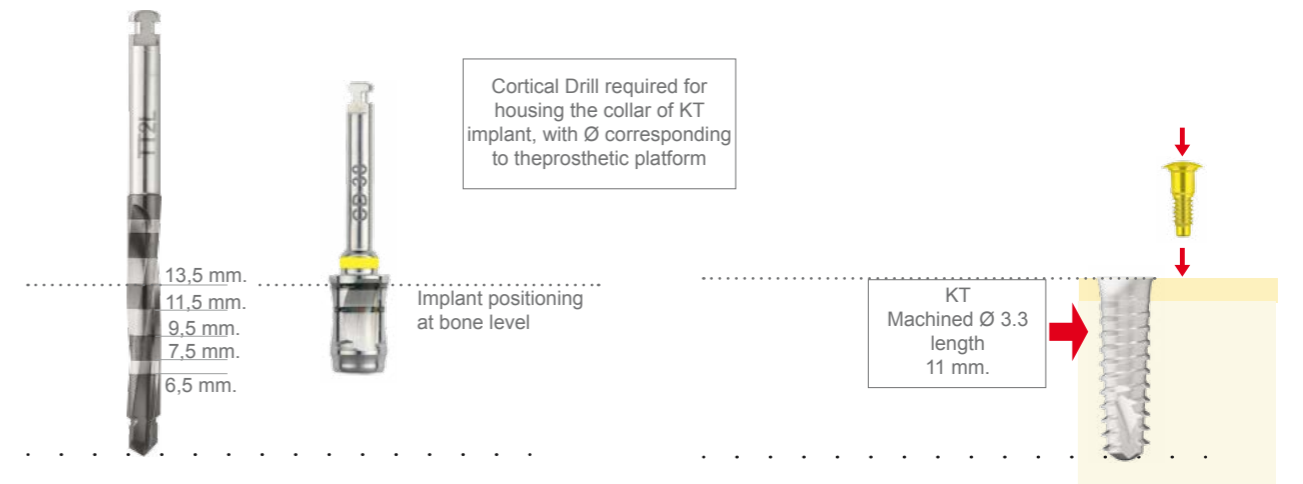
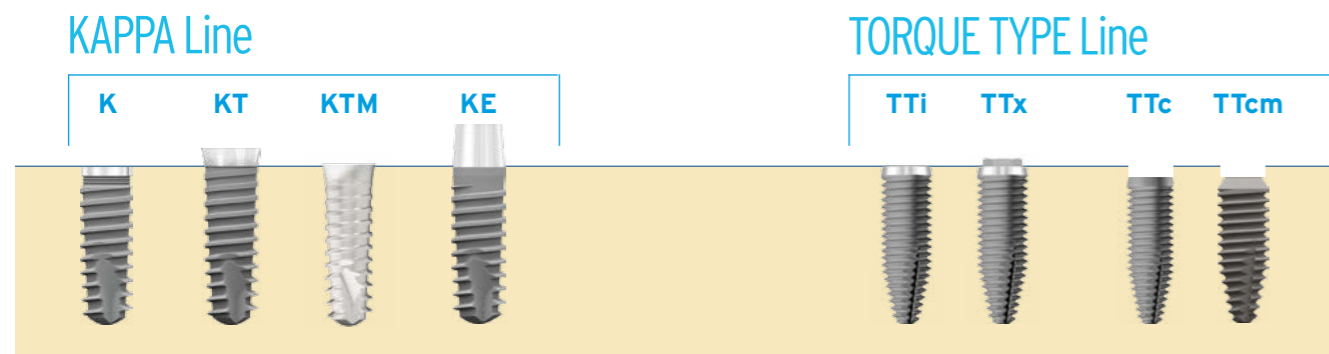
## Comparison between Drills and Implants lengths



The length of the drills is overestimated by 0.5 mm. relative to the length of the Implants

KT Machined implants should be positioned implants in order to be buried during the osteointegration phase which ranges from 4 months in the mandible to 6 months in the upper, maxilla.

## Implant positioning in the crest

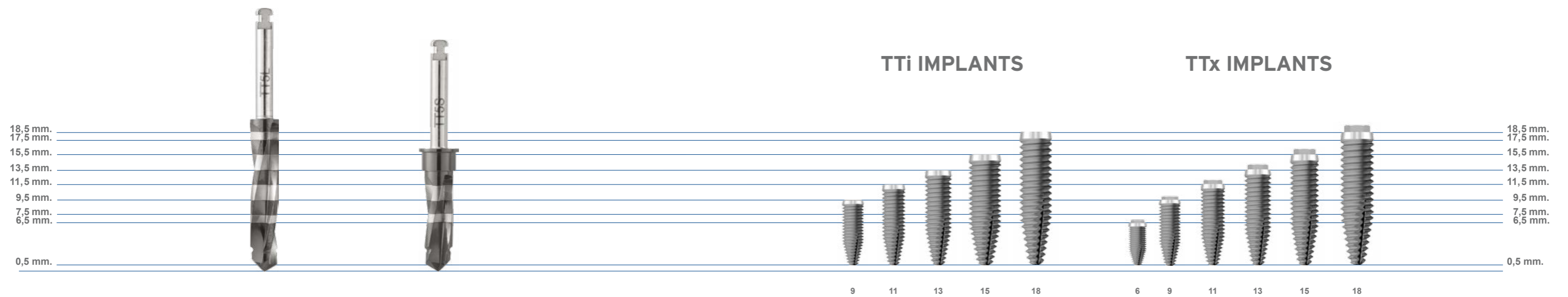


With KT Machined implants, it is important to drill 2 mm deeper

# Milling Phase

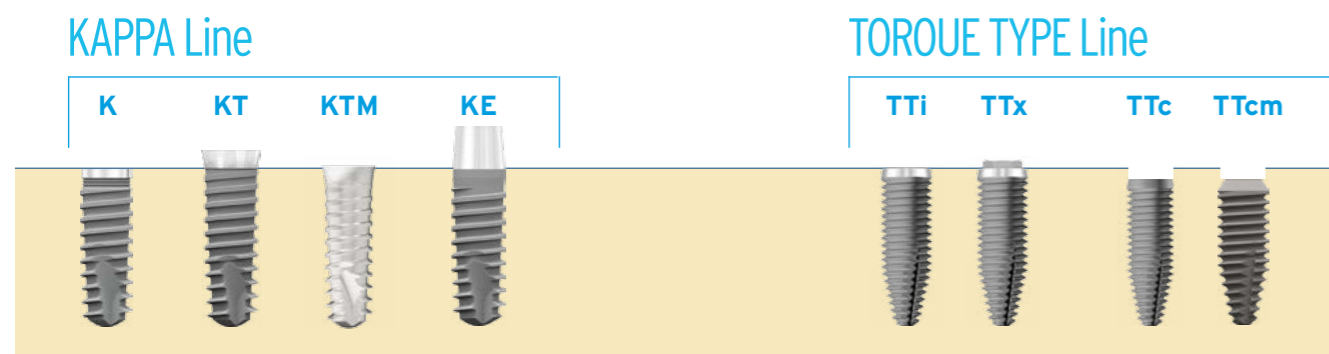
## TORQUE TYPE Line

### Comparison between Drills and Implants lengths



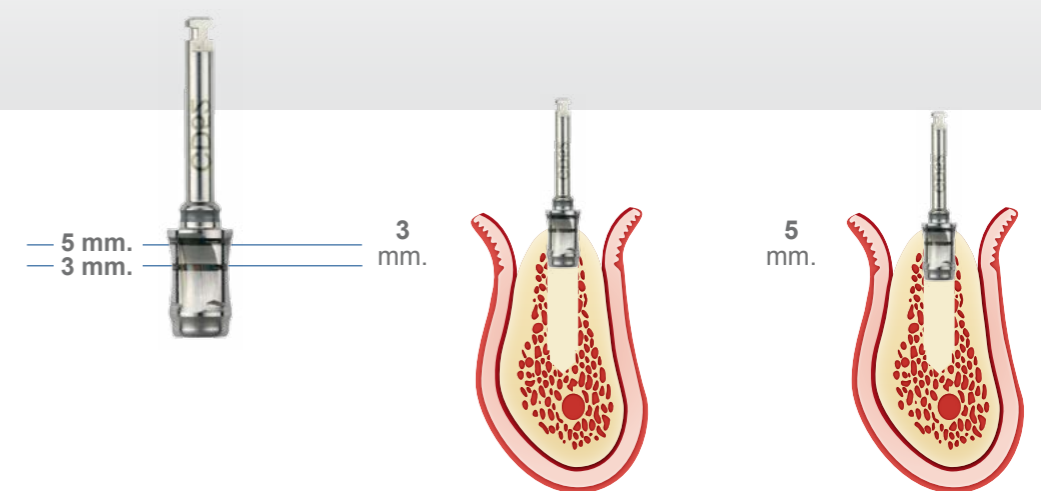
The length of the drills is overestimated by 0.5 mm relative to the length of the Implants

### Positioning Implants in the Crest



### Cortical Drill

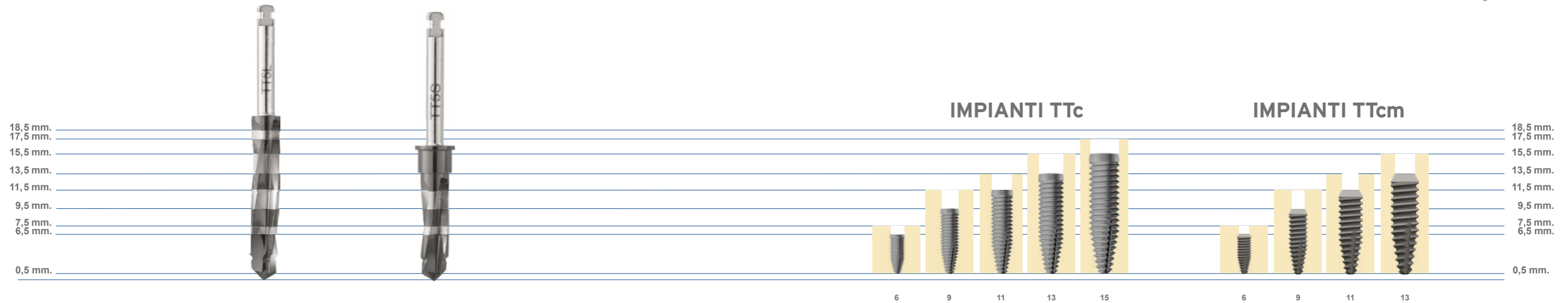
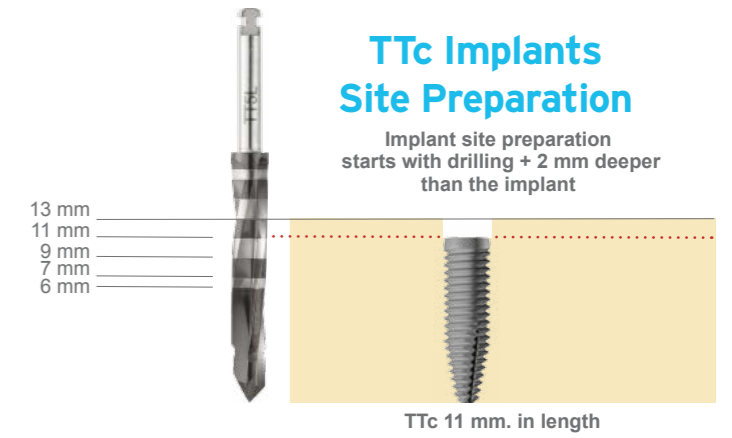
Depth of cortical drill in relation to the crest.



# Drilling Stage

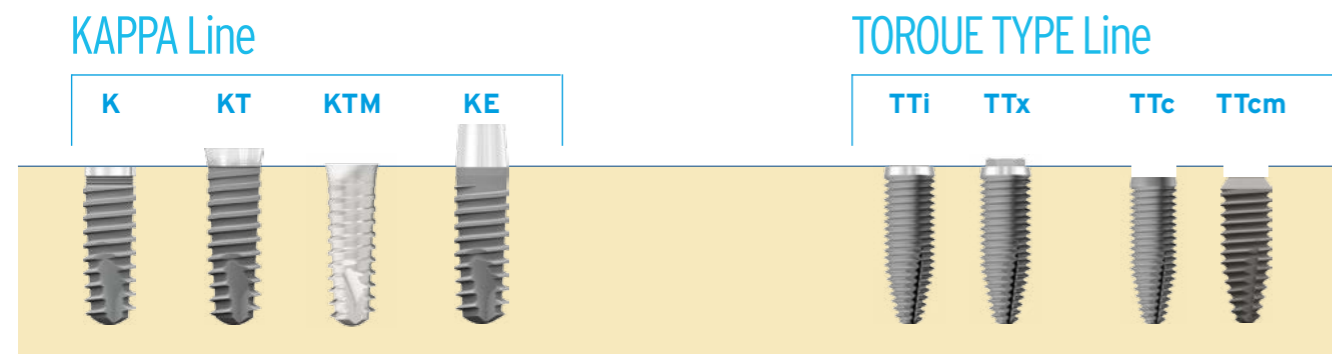
## TORQUE TYPE Line

### Comparison of Drills and length of Implants

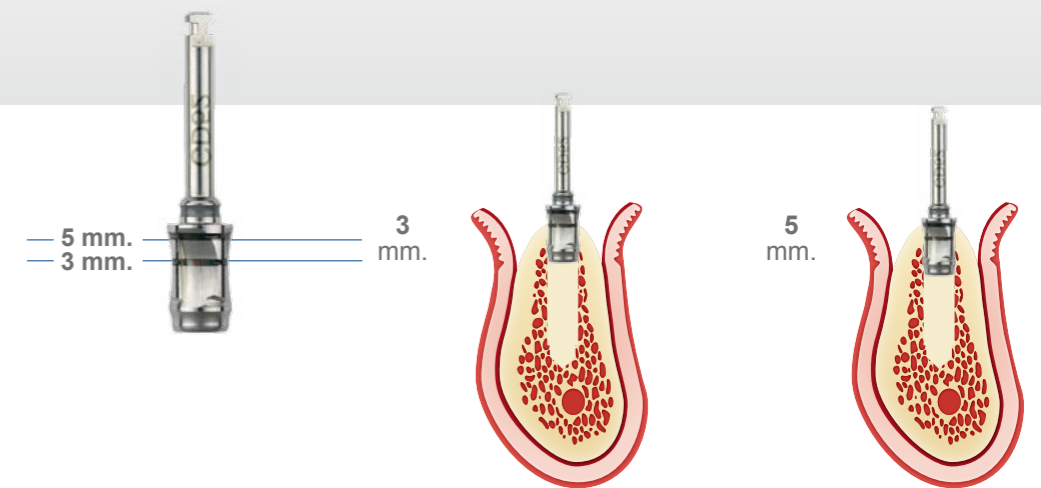


The length of the drill is underestimated by 0.5 mm relative to the length of the Implants.

### Position of implant in the crest



**Cortical Drill**  
Depth of drill in relation to crest.

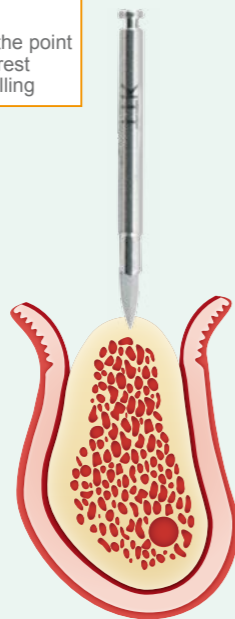


# Preparation of surgical Site

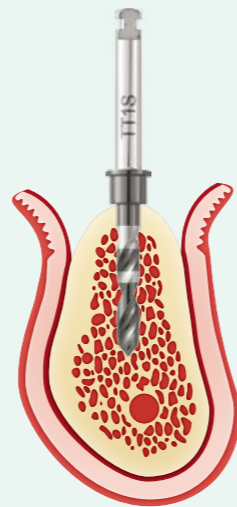
## KAPPA Line - TORQUE TYPE Line

### Operating Steps and Tools

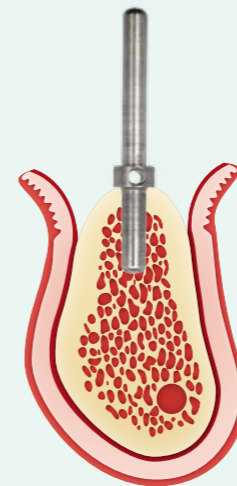
**Precision Drill**  
Code TTK  
In the initial phase, it marks the point of drilling on the bone crest to favour subsequent drilling



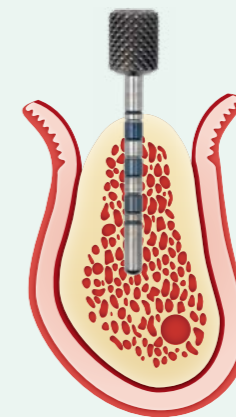
**Drill S/L 2.0 mm.**  
Code TT1  
With depth markers



**Direction Indicator**  
Code DI  
To check the implant axis



**Depth Indicator**  
Code DPI  
To check the depth of the implant site



KAPPA LINE - TORQUE TYPE LINE

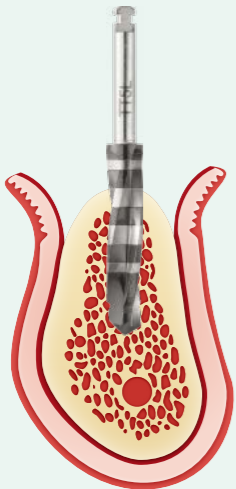
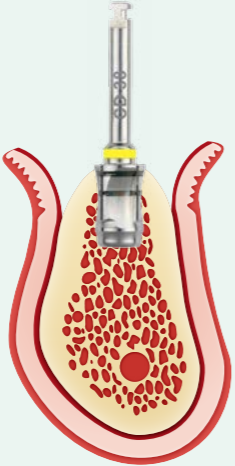
# Preparation of Surgical Site

## KAPPA Line - TORQUE TYPE Line

### Operating Steps and Tools

**Standard Drill**  
Code TT  
With depth markers

**Cortical Drill with depth markers**  
Code CD33- 38- 45 - 52 - 59  
same diameter as the pre-selected implant

**THE CORTICAL DRILL SHOULD BE USED FOR BONE TYPES DI-DII**  
It has the function of:

- reducing bone crest compression
- facilitating implant insertion

**KAPPA LINE - TORQUE LINE TYPE** →

## Summary Table of the use of Torque Type Drills in relation to the Type of Bone

SOFT BONE				
Implant Nominal Ø	Implant actual Ø	Drill Ø	Final drill code	Cortical Drill
● 3.3	3.5	2.2/2.6	TT2	NO
● 3.8	4.0	2.6/3.0	TT3	NO
● 4.5	4.7	3.0/3.4	TT4	NO
● 5.2	5.4	3.4/3.8	TT5	NO
● 5.9	6.1	3.8/4.2(4.2/4.6)	TT6(TT7)	NO
MEDIUM BONE				
Implant Nominal Ø	Implant actual Ø	Drill Ø	Final drill code	Cortical Drill
● 3.3	3.5	2.6/3.0	TT3	NO
● 3.8	4.0	3.0/3.4	TT4	NO
● 4.5	4.7	3.4/3.8	TT5	NO
● 5.2	5.4	3.8/4.2	TT6	NO
● 5.9	6.1	4.2/4.6(4.6/5.0)	TT7(TT8)	NO
CORTICALIZED MEDIUM BONE				
Implant Nominal Ø	Implant actual Ø	Drill Ø	Final drill code	Cortical Drill
● 3.3	3.5	2.6/3.0	TT3	CD33
● 3.8	4.0	3.0/3.4	TT4	CD38
● 4.5	4.7	3.8/4.2	TT6	CD45
● 5.2	5.4	4.6/5.0	TT8	CD52
● 5.9	6.1	5.0/5.4	TT9	CD59
HARD BONE				
Implant Nominal Ø	Implant actual Ø	Drill Ø	Final drill code	Cortical Drill
● 3.3	3.5	3.0/3.4	TT4	
● 3.8	4.0	3.4/3.8	TT5	
● 4.5	4.7	3.8/4.2	TT6	CD45
● 5.2	5.4	4.6/5.0	TT8	
● 5.9	6.1	5.4/5.8	TT10	

TT Drills		Cortical Drills	
Code	Ø	Code	Ø
TT1	2.0		
TT2	2.2/2.6		
TT3	2.6/3.0	CD33	3.0/3.3
TT4	3.0/3.4	CD38	3.4/3.8
TT5	3.4/3.8		
TT6	3.8/4.2	CD45	4.2/4.5
TT7	4.2/4.6		
TT8	4.6/5.0	CD52	5.0/5.2
TT9	5.0/5.4	CD59	5.4/5.9
TT10	5.4/5.8		

# Implant insertion

The implants are provided in a sterile environment, in a transparent ampoule within a colour coded titanium container. The sterile ampoule is thermo sealed inside a blister pack.

The direct engagement of the implant to its holder is a specific feature of the WINSIX implant.

In this way, it:

- has a reduced vertical dimension, facilitating insertion into the oral cavity by means of the insertion instruments.
- never accidentally comes into contact with any materials other than titanium, thus avoiding possible contamination.
- allows the implant to be engaged by the specific mounters, without further manoeuvring during software-assisted implantology.

# Packaging

This reports all of the information needed to immediately recognise the product, besides the other indicators required by law, in compliance with standards regulating medical devices.

The packaging adequately preserves the product allowing easy storage and immediate visual identification of the implant type, thanks to its colour code.

**On the Ampoule:**

- Product Code
- Production Batch

**Packaging:**

- With Colour Code per Type of Implant
- Information Leaflet
- Label with stickers for accurate documental management of Patient data:
  - 1 sticker for the clinical records
  - 1 for communications with the laboratory
  - 1 for the Patient's Personal Record Card

**On the Blister:**

- Product Code
- Production Batch
- Sterilisation Batch
- Sterilisation Date
- Expiry Date



**Box colour identifies the type of implant**

K	KT	KTM	KE	TTx	TTi	TTc	TTcm
---	----	-----	----	-----	-----	-----	------



1. Closure screw anchoring the implant to the cap. Removed with the aid of a screwdriver for K - KT - KE - TTI - TTx hexagonal screwdriver. Use the TORX screwdriver for TTc implant.



2. Closure screw for KT implant anchored to the cap of the vial. To be removed with the aid of a screwdriver.

## 1 Opening the Packaging


The non-sterile assistant opens, first the box, then the blister pack, and drops the sterile ampoule on the surgical tray without touching it. The sterile operator opens the ampoule by lifting the cap to which the locking screw of the implant is attached. The implant is housed inside the sterile ampoule. To remove it, use the appropriate tools without turning it upside down.

## 2 Extracting the Implant

The implant is anchored by the operator directly inside the ampoule using the handpiece, manually or with a ratchet, without interrupting the sterile chain.

Closing screws in KT implants have different color codes than those of the implants, since they correspond to the next prosthetic diameter.

### EXTRACTING THE IMPLANT WITHOUT INTERRUPTING THE STERILE CHAIN



Non sterile Operator

With hand piece

Sterile operator Anchoring the implant with a Handpiece Screwdriver, series 99.

Manually

Sterile operator Anchoring the implant with a Screwdriver, series 62, mounted on KMP Code Manual Adapter

With a ratchet

Sterile Operator System Anchoring the implant with a Screwdriver, series 62, Mounted on Ratchet Code 60000

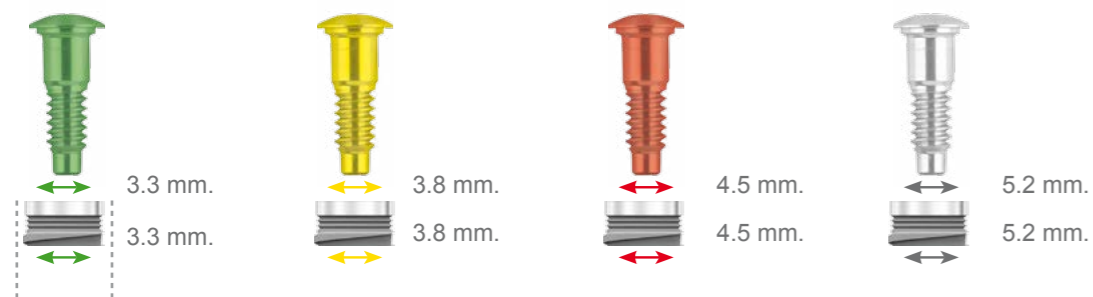


# KAPPA Line

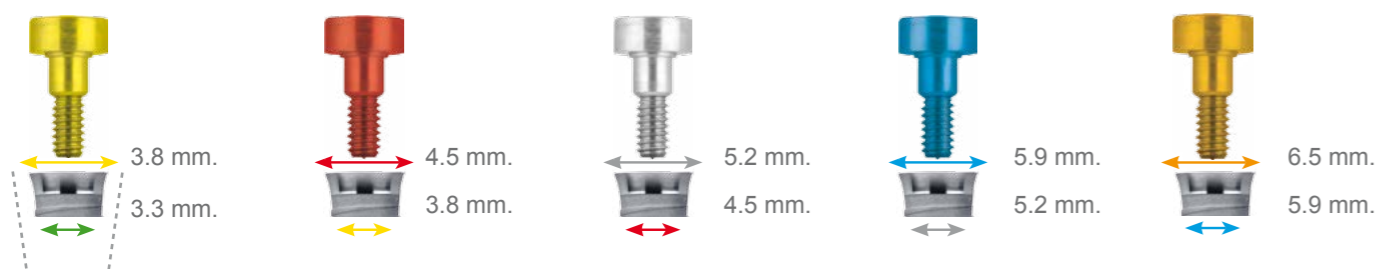
## Soft Tissue Management

KAPPA Line Implants share the same implanting body and differ in respect of the types of collars, providing optimum soft tissue management.

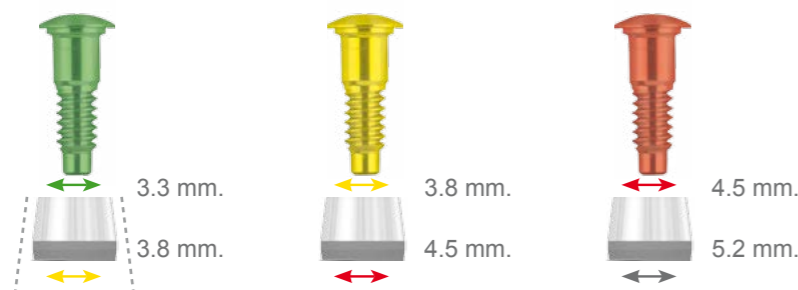
### K IMPLANT



### KT IMPLANT



### KE IMPLANT



## Codice Colore

IMPLANT K		
NOM.	ENDOSSOUS Ø	PROSTHETIC PLATFORM Ø
Ø 3.3	● 3.5	● 3.3
Ø 3.8	● 4.0	● 3.8
Ø 4.5	● 4.7	● 4.5
Ø 5.2	● 5.4	● 5.2

#### SPECIAL FEATURES OF IMPLANT K:

- Aesthetic collar, h.0.3 mm with microgrooves, for greater bone stability in the coronal area and hence an excellent aesthetic result.
- Semi-spherical apex especially suitable for sinus lift and reducing to a minimum the risk of lacerating the sinusal membrane.

IMPLANT KT		
NOM.	ENDOSSOUS Ø	PROSTHETIC PLATFORM Ø
Ø 3.3	● 3.5	● 3.8
Ø 3.8	● 4.0	● 4.5
Ø 4.5	● 4.7	● 5.2
Ø 5.2	● 5.4	● 5.9
Ø 5.9	● 6.1	● 6.5

#### SPECIAL FEATURES OF IMPLANT KT:

- Possibility of personalised peri-implant tissue management in the healing phase. In fact, the closing screw adopts a cylindrical shape of h.2mm serving a trans-gingival function.
- Possibility of using a wider prosthetic diameter, even in case of lower bone availability.
- Optimal combination of biological width of the soft tissues and aesthetic/functional results.
- Platform switching possible from an endosseous Ø of 3.3 mm

IMPLANT KE		
NOM.	ENDOSSOUS Ø	PROSTHETIC PLATFORM Ø
Ø 3.8	● 4.0	● 3.3
Ø 4.5	● 4.7	● 3.8
Ø 5.2	● 5.4	● 4.5

#### SPECIAL FEATURES OF IMPLANT KE:

- Possibility of prosthetisation with the prosthetic crown directly on the implant collar, eliminating any gap at the crest and between the abutment and the implant.
- Possibility of using multi-unit screw-retained prosthesis directly onto the principles of, perfectly combining the main biological width of the soft tissues with cost reduction.

# Implants Screwing

KAPPA • TORQUE TYPE LINE

# Implants screwing

## KAPPA Line - K Implants

### Operating Steps and Tools

## Internal Connections

The diagram illustrates the five-step process for internal connection screwing, with corresponding tools and anatomical cross-sections for each step:

- Step 1: Counter Angled Screwdriver** (Code 99SI - 99MI - 99LI). The anatomical diagram shows the screwdriver being inserted into the implant's internal channel.
- Step 2: Adaptors for Ratchet screwdrivers** (Code KMP). The anatomical diagram shows the adaptor being placed over the screwdriver.
- Step 3: Ratchet Screwdriver** (Code 62SI - 62MI - 62LI). The anatomical diagram shows the ratchet screwdriver being used to begin turning the screw.
- Step 4: Surgical Ratchet** (Code 60000). The anatomical diagram shows the surgical ratchet being used to continue turning the screw.
- Step 5: Manual Screwdriver Short and Long** (Code SDS - SDL – Closing Screw max. 10 Ncm\*). The anatomical diagram shows the manual screwdriver being used to fully seat the screw.
- Step 6: Implant closure and soft tissue suture**. The anatomical diagram shows the final state with the implant closed and soft tissue sutured.

**NB:** When screwing in 3.3 mm implants, do not exceed a Torque of 35/Ncm

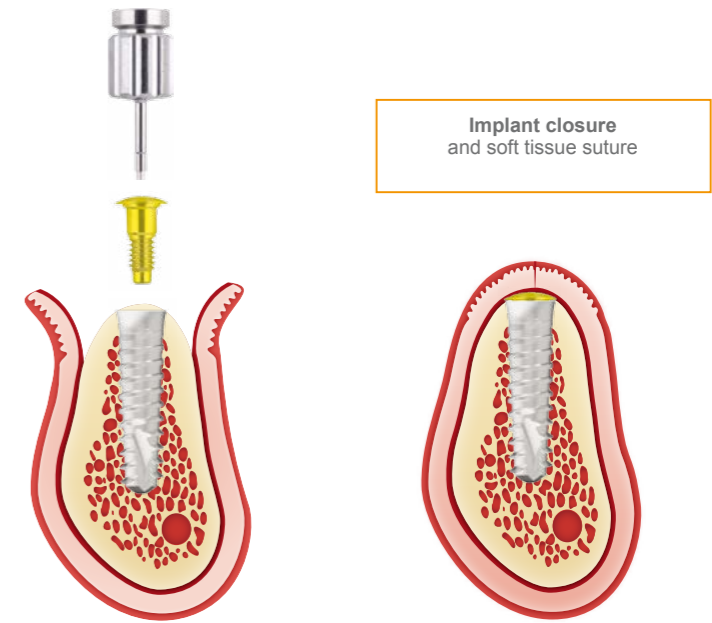
\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.

# Implants screwing

## KAPPA Line - KT Implants

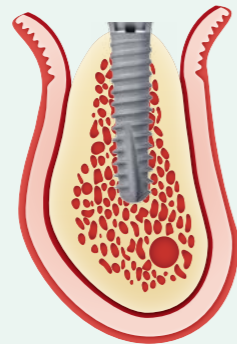
### Operating Steps and Tools

**KT Machined**  
Positioning at bone level.  
Use the same tools as for KT.

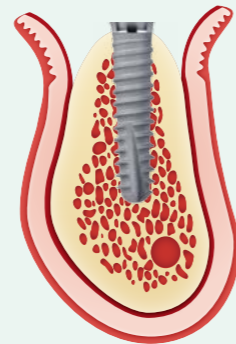


## Internal Connections

**Counter Angled Screwdriver**  
Code 99SI - 99MI - 99LI

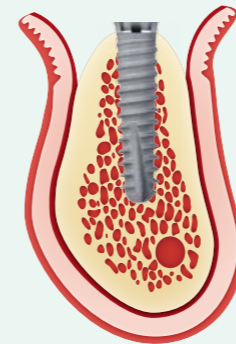


**Adaptors**  
For ratchet screwdrivers  
Code KMP



**Ratchet Screwdriver**  
Code 62SI - 62MI - 62LI

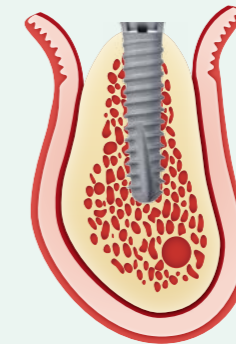
**Surgical Ratchet**  
Code 60000



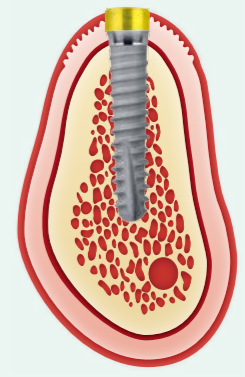
**Ratchet Screwdriver**  
Code 62SI - 62MI - 62LI



**Manual screwdriver short and Long**  
Code SDS - SDL - Closing Screw  
max. 10 Ncm\*



**Implant closure**  
and soft tissue suturing



**NB:** When screwing the 3.3 mm implants do not exceed a Torque of 35/Ncm

\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.

# Implants screwing

## KAPPA Line - KE Implants

### Operating Steps and Tools

## Internal Connections

The diagram illustrates the five steps of internal connection screwing for KAPPA Line - KE Implants. Each step is accompanied by a list of tools and a corresponding anatomical cross-section illustration.

- Step 1: Counter Angled Screwdriver**  
Code 99SI - 99MI - 99LI
- Step 2: Adaptors For Ratchet Screwdrivers**  
Code KMP
- Step 2: Ratchet Screwdriver**  
Code 62SI - 62MI - 62LI
- Step 3: Surgical Ratchet**  
Code 60000
- Step 3: Ratchet Screwdriver**  
Code 62SI - 62MI - 62LI
- Step 4: Short and Long Manual Screwdrivers**  
Code SDS - SDL – Closing Screws max. 10 Ncm\*
- Step 5: Implant Closure and soft tissue suturing**

\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.

# Implants screwing

## TORQUE TYPE Line - TTi Implants

### Operating Steps and Tools

## Internal Connections

The diagram illustrates the five steps of internal connection screwing for TORQUE TYPE Line - TTi Implants. Each step is accompanied by a list of tools and a corresponding anatomical illustration of the implant site.

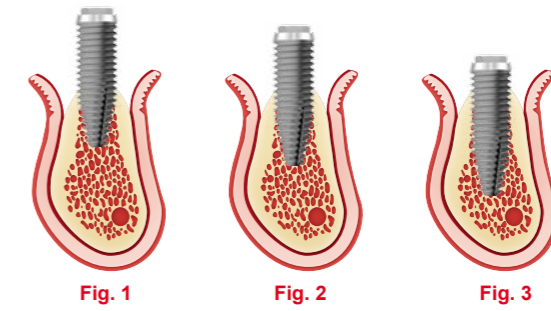
- Step 1: Contra Angle Screwdriver**  
Code 99SI - 99MI - 99LI
- Step 2: Adaptors For Ratchet Screwdrivers**  
Code KMP
- Step 2: Ratchet Screwdrivers**  
Code 62SI - 62MI - 62LI
- Step 3: Surgical Ratchet**  
Code. 60000
- Step 3: Ratchet Screwdriver**  
Code 62SI - 62MI - 62LI
- Step 4: Manual Screwdriver Short and Long**  
Code SDS - SDL – Closure Screw  
max. 10 Ncm\*
- Step 5: Implant closure and soft tissue suturing**

\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.

# Implants screwing

## TORQUE TYPE Line - Implants TTx

### Operating Steps and Tools



#### Recommended procedure with TTx

1. Set the drive unit at 30Ncm.
2. If the implant stops in the initial part of the cylinder, or half way (see Figs. 1 and 2) it means the sub-preparation is excessive for the type of bone, and it is therefore advisable to remove the implant and put it back into its Titanium ampoule, so that it can be used later, after a passage of the next larger diameter drill.
3. Only a few threads remain to complete the implant insertion (see Fig. 3), then proceed with final housing using the surgical ratchet.

## External Connections

**Contra Angle Screwdriver**  
Code 99SX - 99M1 - 99LX

**Adaptors**  
For Ratchet screwdriver  
Code KMP

**Ratchet Screwdriver**  
Code 62SX - 62MX - 62LX

**Surgical Ratchet**  
Code 60000

**Ratchet Screwdriver**  
Code 62SX - 62MX - 62LX

**Manual Screwdriver Short and Long**  
Code SDTS - SDTL – Closing Screw  
max. 10 Ncm\*

**Implant Closure**  
and soft tissue suturing

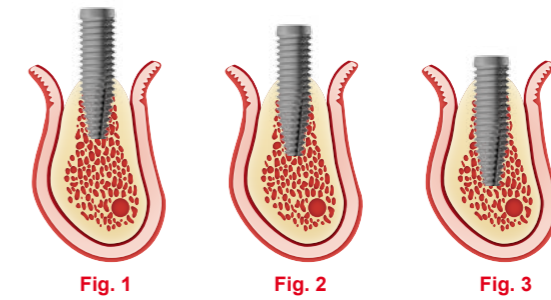
**NB:** When screwing in 3.3 mm implants, do not exceed a Torque of 35/Ncm

\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.

# Implants screwing

## TORQUE TYPE Line - TTc Implants

### Operating Steps and Tools

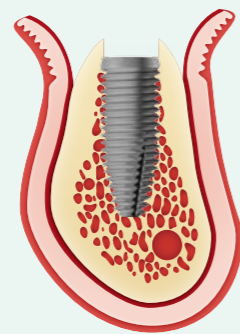


#### Recommended procedure with TTc

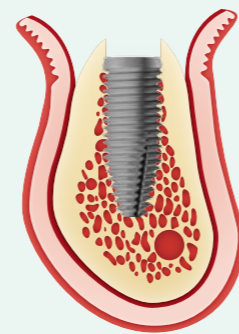
1. Set the drive unit at 30Ncm.
2. If the implant stops in the initial part of the cylinder, or half way (see Figs. 1 and 2) it means the sub-preparation is excessive for the type of bone, and it is therefore advisable to remove the implant and put it back into its Titanium ampoule, so that it can be used later, after a passage of the next larger diameter drill.
3. Only a few threads remain to complete the implant insertion (see Fig. 3), then proceed with final housing using the surgical ratchet.

## Conical Connections

Counter Angle Screwdriver  
Code 99Sc - 99Mc - 99Lc

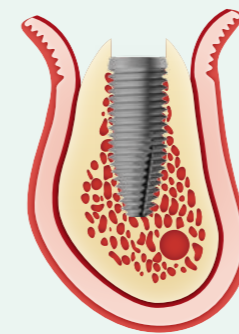


Adaptor  
For Ratchet Screwdriver  
Code KMP



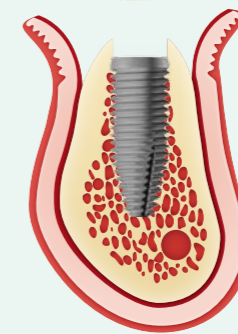
Ratchet Screwdriver  
Code 62Sc - 62Mc - 62Lc

Surgical Ratchet  
Code 60000

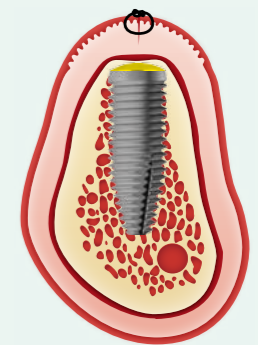


Ratchet Screwdriver  
Code 62Sc - 62Mc - 62Lc

Manual Screwdriver Torx Short and Longo  
Code SDTS - SDTL - Closure Screw



Closure of Implant  
and soft tissue suturing



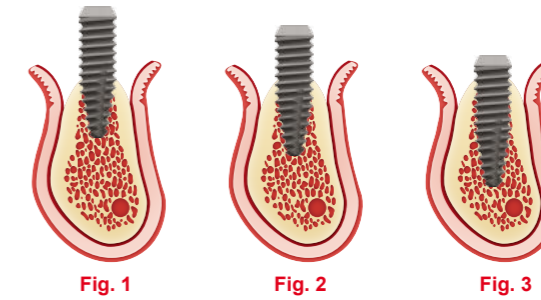
\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.



# Implants screwing

## TORQUE TYPE Line - TTcm Implant

### Operating Steps and Tools

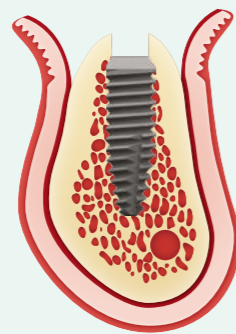


#### Recommended procedure with TTcm

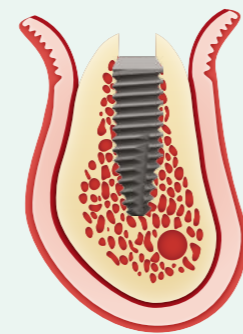
1. Set the drive unit at 30Ncm.
2. If the implant stops in the initial part of the cylinder, or half way (see Figs. 1 and 2) it means the sub-preparation is excessive for the type of bone, and it is therefore advisable to remove the implant and put it back into its Titanium ampoule, so that it can be used later, after a passage of the next larger diameter drill.
3. Only a few threads remain to complete the implant insertion (see Fig. 3), then proceed with final housing using the surgical ratchet.

## Morse Taper Connections

**Contra Angle Screwdriver**  
Code 99Scm - 99Mcm - 99Lcm

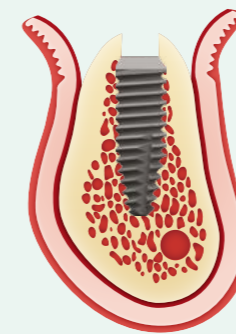


**Adaptor**  
For ratchet screwdriver  
Code. KMP



**Ratchet Screwdriver**  
Code 62Scm - 62Mcm - 62Lcm

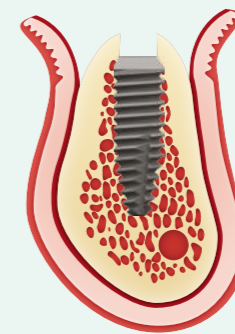
**Surgical Ratchet**  
Code 60000



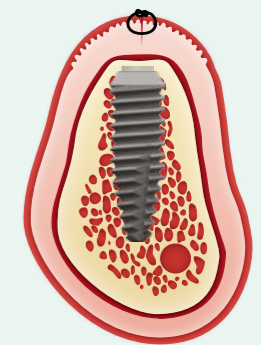
**Ratchet Screwdriver**  
Code 62Scm - 62Mcm - 62Lcm



**Manual Screwdriver Torx Short and Long**  
Code SDTS - SDTL - Closure Screw  
maximum 10 Ncm\*



**Implant Closure**  
and soft tissue suturing



\* To completely prevent potential seizing between the implant and prosthetic components, it is advisable to soak the screw in antibiotic paste.

# Second Surgical Stage

## Exposure of the implant

During the healing phase, it is useful to check the patient regularly to verify the state of healing of the soft tissues and the stability of the implant.

In relation to the prosthetic solution adopted, you will proceed to:

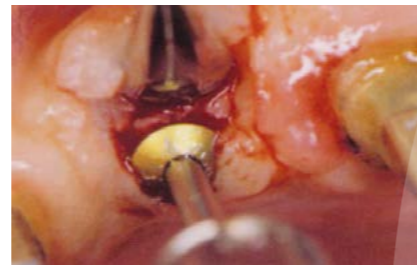
- Remove the Closing Screw and replace it with a Healing Screw, to obtain a prosthetic rehabilitation in compliance with the times set by the traditional approach (Fig.1-6).



1. Check the osseointegration via X ray examination



2. After having identified the position of the implant, with a periodontal probe, make a classic incision with a scalpel or a circular localized one, with a circular scalpel



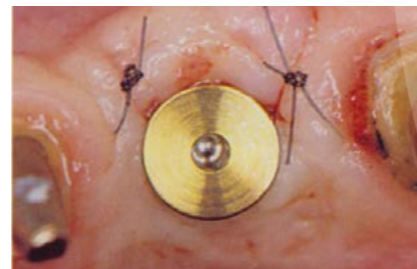
3. Removal of the Closing Screw



4. Choose and position the healing screw



5. Tightening the healing screw and positioning the gingival tissue around it



6. Suturing the tissue around the Healing Screw

Just on 4 Technique  
IMPLANT INSERTION

# Just on 4 Technique

## Applications of the rehabilitation technique



The Just on 4/6 technique (below J04 / 6) allows rehabilitation of the edentulous arch of patients affected by severe atrophy of the jaw with an immediate implant-supported full-arch solution. The approach is such as to guarantee minimal surgical invasiveness and a satisfactory aesthetic performance the screw-retained prosthetic product, limiting the biological cost and at the same time, saving costs for the patient. Using the CAB reinforcement bar to build the prosthesis, dropping it inside the product, also provides excellent performance in terms of the structural strength of the prosthesis under the chewing load.

The synergic use of J04 / 6 and CAB has so far enabled extraordinary clinical results in terms of implant and prosthetic success rates, meeting the needs of the patient, who, in a single session, is rehabilitated with the placement of a provisional prosthesis.

In the period between December 2010 and December 2016, the systematic use of this approach at U.O.C. of Dentistry at I.R.C.C.S. San Raffaele Hospital has allowed to rehabilitate a total of 224 edentulous arches (179 with J04 and 45 with J06, with a total of 982 implants) in 186 patients (man 91, women 95) with an average age of 61, 38 of whom underwent rehabilitation of both jaws.

All rehabilitated patients according to J04 / 6 have been included in a follow-up program of professional oral hygiene, which includes performing prophylaxis sessions every three months and disassembling the prosthesis once a year to allow a more direct professional treatment of perimplant tissues



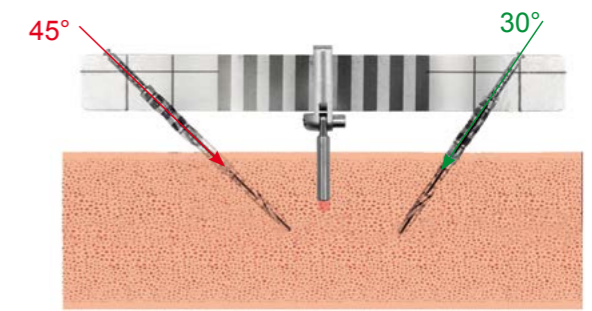
IMPLANT SUCCESS/SURVIVAL				
Placed implants	Lack of osseointegration	Implant Repositioning	Survival	Success
982	15	15	100%	98,47%

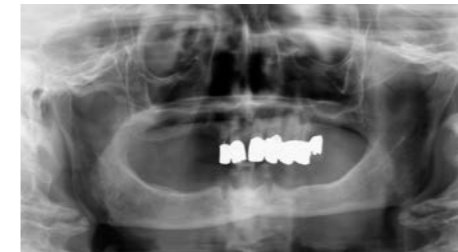
PROSTHETIC COMPLICATIONS				
	Type	Incidence	Survival	Success
Without CAB®	Fracture of 6 prostheses provisional	14,6%	100%	85,4%
With CAB®	none	0	100%	100%

# Just on 4 Technique

## Operating Steps and Tools



Just Guide: guided drills tilting



Surgery is performed under local anesthesia by infiltrations of articaine hydrochloride solution (4%) with adrenalin 1:100.000. Tooth extractions are carried out, when necessary, preserving the integrity of vestibular cortical bone.



In cases of extraction, an accurate revision of the fresh socket is made through a bone curette and irrigating saline solution to remove the possible granulation tissue.



By means of a scalpel blade 15C, mucoperiosteal incisions are made on the alveolar ridge from the first molar on one side to the first molar on the contralateral side with bilateral releasing incisions: the available keratinized gingiva is divided in into two equal halves.



Flap reflection is performed with periosteal elevator (Freer type/Prichard type) and a surgical plier: first on palatal/lingual side and then on vestibular side. Remove any granulation tissue residual from the flap.



The bone exposure aims at a direct view of alveolar ridge, for the undercut or concavity evaluation on lingual mandibular side. On maxillary side, it's important to evaluate the shape of the anterior maxillary sinus wall and, in the most severe cases of bone atrophy, also the level of the nasal floor.



Bone shaping is performed with surgical tools (Rongeur/bony forceps) and a round bur to level the bone crest to achieve a flat crestal surface for the placement of Torque Type Implant (X-type)

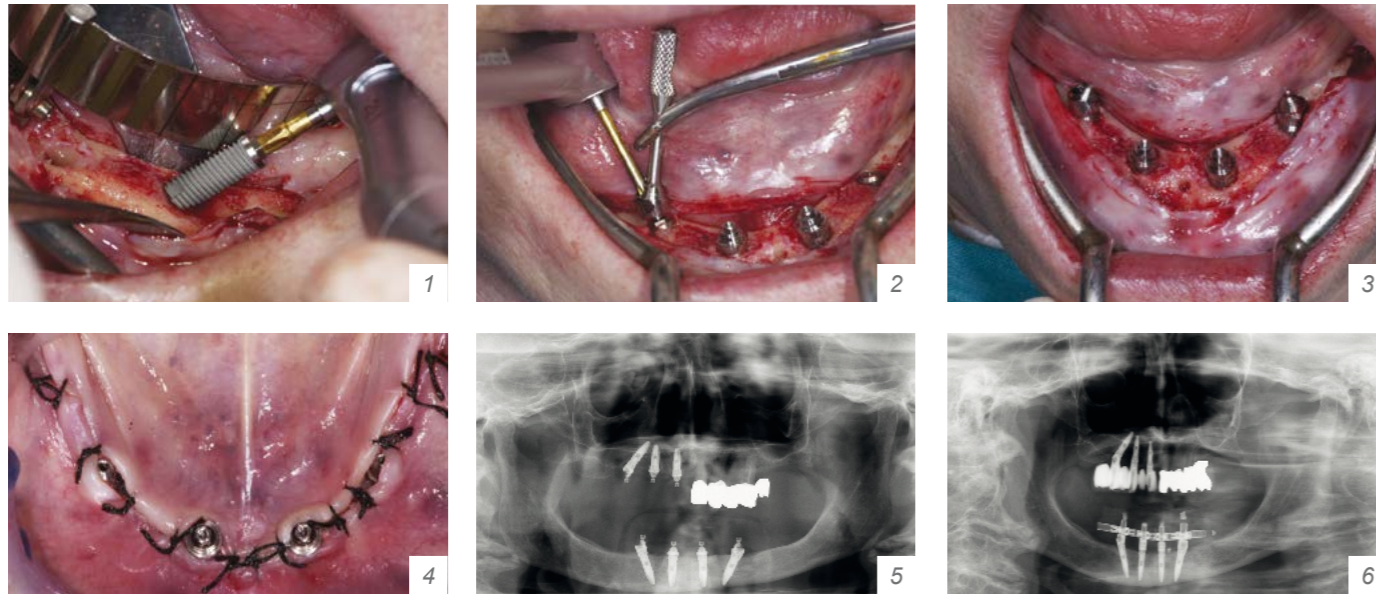
# Tecnica Just on 4

## Step Operativi e Strumenti

After the bone shaping, proceed with creating a site with a bur TT1 (Ø 2.0 mm) for the placement of the surgical guide "Just Guide (WG46)" and check the correct inclination through a directional Pin (DI). The Surgical Guide plays a key role for the placement of both the anterior axial and the posterior tilted implants. Made of surgical steel, the Guide can be modelled on the bone crest's curvilinear shape for each patient.

Implant sites for the posterior implant, carried out with the aid of the surgical guide Just Guide, shall be set at 30°/45°. On the Guide, incised lines are used as a reference for the inclination: in this way, it is possible to precisely tilt the handpiece so as to meet the correct inclination range. The TT Burs' sequence provides different diameters from 2.0 mm, allowing a fine control of the underpreparation. Underpreparation need to be performed to obtain high primary stability for each bone quality. For the mandible an implant emergence at the level of mental nerve shall be sought, obviously respecting its integrity. For the maxilla an implant engagement with the mesial sinus cortical shall be sought, respecting the sinus integrity. Then proceed to implants insertion.

After positioning the distal implants, the anterior implant sites shall be prepared and the implants positioned. Subsequently, Extreme Abutment (EA) abutments are positioned. On distal implants 30° angled EA Abutments are placed, in order to correct the implants inclination and have a suitable prosthetic emergence. On anterior implants, straight EA abutments are positioned. The suture shall be performed and the prosthetic work finalized.



1. Torque Type distal tilted implant insertion with the aid of surgical "Just Guide"
2. EA 30° angled abutment placement on the implant
3. Straight and angled EA abutments on torque type implants
4. Flap closure around EA abutments
5. Post-op Orthopantomography
6. Post - op Orthopantomography with the CAB bar in place

# WINSIX Prosthetic Solutions

<b>WINSIX IMPLANTS</b> Free Lock internal hex connection	Single cement-retai- ned crown	Single screw-retai- ned crown	Permanent cement- retained prosthesis	Permanent multi-unit screw- retained prosthesis	Removable prosthesis bar	Removable Prosthesis	Just on 4/6 Technique
Temporary Abutment	•	•					
Milling Abutment	•		•				
Straight Abutment / MBC / Multipurpose / Aesthetic	•		•				
15° Angled Abutment / MBC / Multipurpose / Aesthetic	•		•				
25° Angled Abutment / MBC / Multipurpose / Aesthetic	•		•				
Overcasting Abutment	•	•	•				
Castable Abutment	•	•	•				
Castable Drillable Abutment	•	•	•				
Ball Attachment						•	
Locator Attachment						•	
WINZIR Abutment	•	•	•				
PRO Abutment	•	•	•				
Flat Shift Line				•	•		
EA LINE - Extreme Abutment				•	•		•
WB Abutment	•	•	•				

<b>TTx IMPLANTS</b> External hex connection	Single cement-retai- ned crown	Single screw-retai- ned crown	Permanent cement- retained prosthesis	Permanent multi-unit screw- retained prosthesis	Removable prosthesis bar	Removable Prosthesis	Just on 4/6 Technique
Temporary Abutment	•	•					
Milling Abutment	•		•				
Straight Abutment	•		•				
15° Angled Abutment	•		•				
25° Angled Abutment	•		•				
Overcasting Abutment	•	•	•				
Castable Abutment	•	•	•				
Locator Attachment						•	
Flat Shift Line				•	•		
EA LINE - Extreme Abutment				•	•		•
CAB - Clip Abutment Bar							•

<b>TTc IMPLANTS</b> Conical connection	Single cement-retai- ned crown	Single screw-retai- ned crown	Permanent cement- retained prosthesis	Permanent multi-unit screw- retained prosthesis	Removable prosthesis bar	Removable Prosthesis	Just on 4/6 Technique
Temporary Abutment	•	•					
Milling Abutment	•		•				
Straight / Multipurpose / Aesthetic Abutments	•		•				
15° Angled Abutment	•		•				
25° Angled Abutment	•		•				
Multifunctional Line				•	•		•
Ball Attachment							•

<b>TTc IMPLANTS</b> Morse Taper connection	Single cement-retai- ned crown	Single screw-retai- ned crown	Permanent cement- retained prosthesis	Permanent multi-unit screw- retained prosthesis	Removable prosthesis bar	Removable Prosthesis	Just on 4/6 Technique
Temporary Abutment	•						
Milling Abutment	•		•				
Straight Abutment	•		•				
15° Angled Abutment	•		•				
25° Angled Abutment	•		•				

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# Sterilisation Protocol



- Detergent used: SEKUSEPT or similar, dilution: 1 measuring cup of detergent per litre of water.
- Decontaminate in solution for 15 min.
- Ultrasonic cleaning for 15 min. at 60°C.
- Dry (very important).

**NB:** The materials, must be checked for the presence of any residues, then blister packed and sterilised at 134°C for 45 min.

Autoclaved materials must be accurately rinsed and dried, since the autoclaving process increases the oxidising action of detergents.

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