# A Conical Connection Implant



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#### MIS Warranty:

MIS exercises great care and effort in maintaining the superior quality of its products. All MIS products are guaranteed to be free from defects in material and workmanship. However, should a customer find fault with any MIS product after using it according to the directions, the defective product will be replaced.

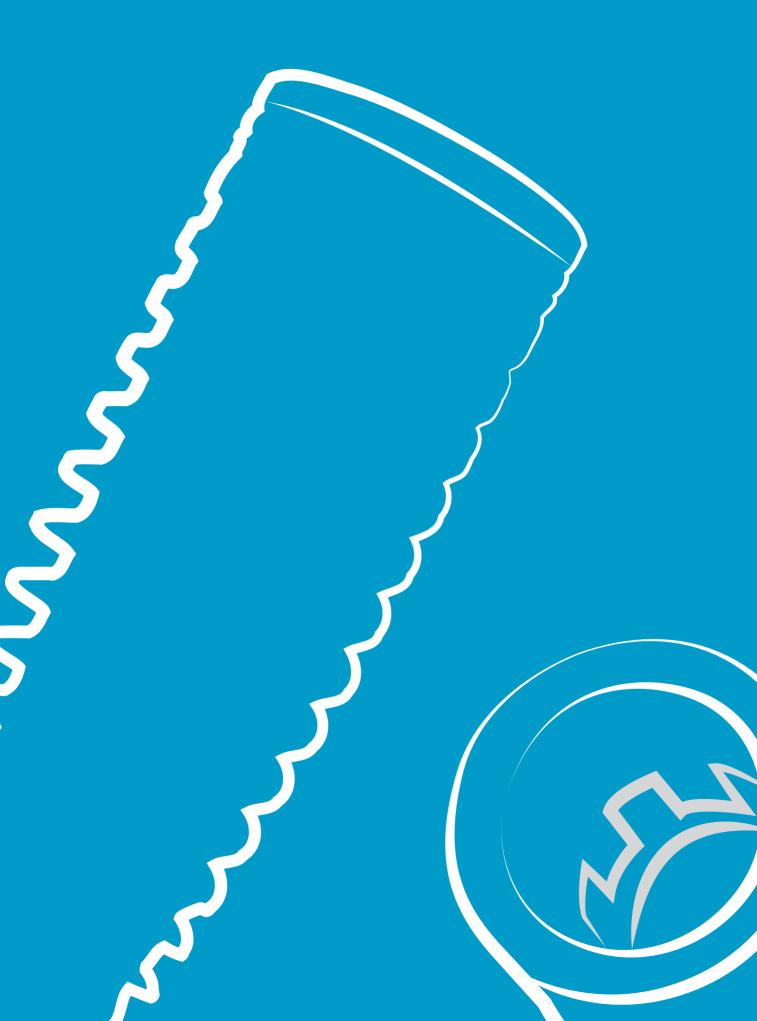
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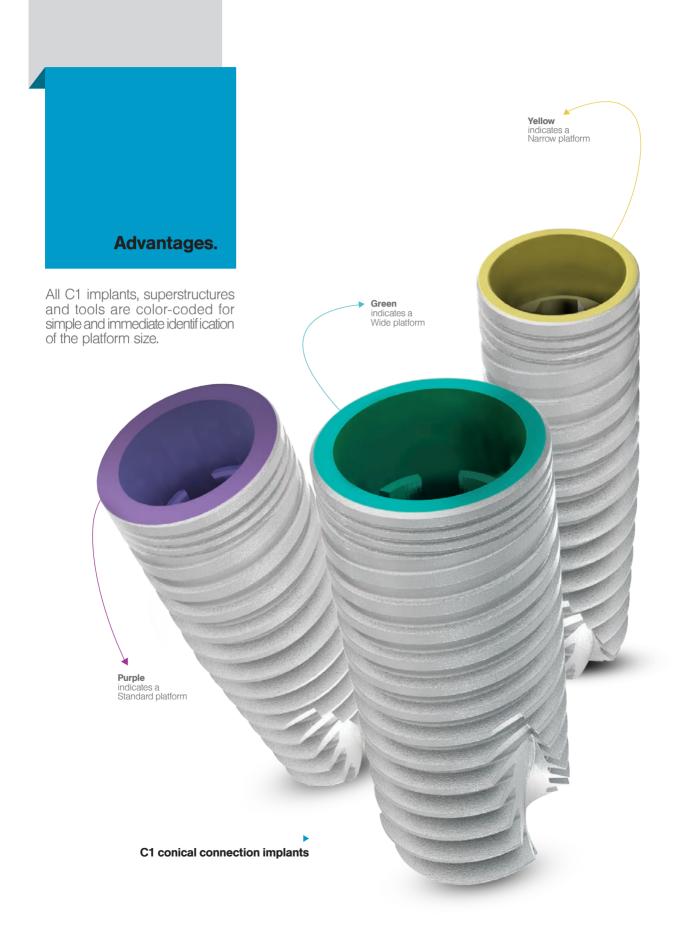
The C1 implant system includes an advanced implant design that offers a unique combination of surgical and restorative benefits, including a differential thread design to ensure superior initial stability in different clinical situations, platform switching and a conical connection with an anti-rotation index. Each C1 implant comes with a single-use final drill to ensure a safer and more accurate drilling procedure.













#### **Prosthetic options**

A broad range of MIS conical connection prosthetic components presents uncompromising accuracy; a consistent concave emergence profile for excellent soft tissue results; golden shade to support high esthetic results; color coding for simple and immediate platform identification.



#### **Platform switching**

C1 platform switching keeps the implant-abutment connection away from the bone; minimizing bone resorption. Platform switching additionally allows more vital growth of the soft tissue.



#### **Conical connection**

Featuring a 6-degree conical connection that ensures a secure fit between abutment and implant, the C1 minimizes micro-movements reducing bone loss at the crestal level. It has a six-position cone index within the conical connection to help orient the implant during insertion as well as for placing the abutment into the proper position.



#### **Micro-rings**

At the neck of the C1, micro-rings significantly increase the BIC (Bone to Implant Contact), avoiding bone resorption at the crestal zone.



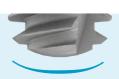
#### **Dual thread**

The C1 dual thread design increases the BIC (Bone to Implant Contact) over the entire body of the implant. The dual thread doubles the implant insertion rate (1.50mm), facilitating a simpler and faster implant placement.



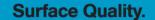
#### **Conical shape**

With its conical, root-shaped geometry and a unique thread design, C1 ensures a superior primary stability and offers the ultimate choice for a wide range of clinical cases and loading protocols. Its root-shaped design makes C1 ideal for narrow spaces, restricted by adjacent teeth or implants.



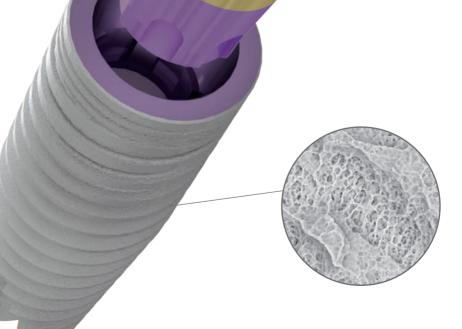
#### Two spiral channels and domed apex

The C1 features a domed apex, providing a high tolerance and safe procedure during insertion. Two cutting blades at the implant apex establish the self-tapping properties of the C1; supporting a simpler, safer and faster procedure.



C1 implants are sand-blasted and acid-etched. These surface treatments increase the implant surface area by creating both micro and nano-structures and eliminating various surface contaminants.

The surface of MIS implants was found superior in its purity compared to other implant systems by two independent research studies, as published in the POSEIDO Journal and in EDI Journal.





#### SURFACE ANALYSIS OF STERIL F-PACKAGED IMPLANTS

Dr. Dirk Duddeck and Dr. Jörg Neugebauer. PhD

For the third time in a row, the Quality and Research (Q&R) Committee of BDIZ EDI is examining sterilepackaged implants under the scanning electron microscope for the more than 5,500 members of the association. In cooperation with the University Hospital of Cologne, extensive qualitative and quantitative elemental analyses are performed on each of the implants studied. In 2009/2008, the surfaces of 23 implants were analyzed, a number that had grown to 54 different implants from manufacturers in nine countries by 2012/2011. Here, isolated implants showed residue from the manufacturing and/or packaging process, pecularities in the external threading or residual filings inside the implant.

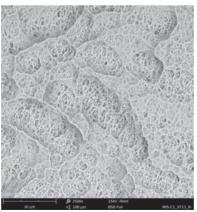
65 dental implants from different leading manufacturers underwent topographical and chemical composition analysis. The protocol included the use of a Scanning Electron Microscope (SEM), which enabled the topical evaluation of each implant surface. The high sensitivity backscattered electron detector generates images in compositional and topographical modes to a magnification of up to X5,000 for this study. The BSE detector also allows researchers to draw conclusions about the chemical nature and allocation of remnants or contaminants on the sample material. Qualitative and quantitative analyses of implant surfaces were done using Energy Dispersive X-ray Spectroscopy (EDX). This element identification software even allows the identification of elements deep within the sample. Testing on MIS implants revealed percentages of Titanium, Oxygen, Aluminum and Vanadium.

#### Conclusions reached in the study state:

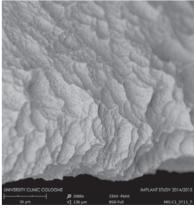
"The C1 implant and the Seven implant (both MIS) stood out positively in the current study. Whereas during the 2012/2011 study, the Seven implant still exhibited blasting material on up to seven per cent of the surface, the current study did not even find isolated spots with residue on the two MIS implant types of grade 23 titanium (Ti 6AI4-V ELI)".



Residue-free surface, MIS C1 implant (x 1000).



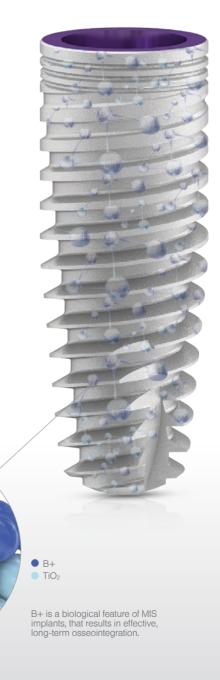
MIS C1 implant surface with micro-nano-structure (x 2.500).



MIS C1 implant side-view of a thread (x 2.000).

#### B+ Surface.

B+ is a biological feature of MIS implants, that results in effective, long-term osseointegration. A mono-molecular layer of multi phosphonates is permanently bound to the surface of the implant, which is perceived as bone-like by the body.









B+ label on inner and external tubes, for simple identification



B+ implants are available in all MIS lengths and diameters for C1 and V3 implant systems

**⊂**1

Screw type implant range

#### **Narrow Platform**

Length	10mm	11.50mm	13mm	16mm
Туре	C1-10330	C1-11330	C1-13330	C1-16330
Ø3.30 mm				

# Surgical Tools



# Implant cover screw and healing caps









## Ø3.30mm

Narrow Platform

Titanium Alloy Ti 6Al 4V ELI	
Sand-Blasted and Acid-Etched	



<sup>\*</sup> The implant package includes: a cover screw, temporary cylinder and a final drill

#### Single-use final drill

A specially designed final drill for 10mm, 11.50mm, 13mm or 16mm implants is supplied with every implant, allowing a short, sterile and safe drilling procedure. This final drill should not be used in type 4 bone.

#### Ø3.30mm Implant Procedure

Catalog No.

C1-10330

C1-11330

C1-13330

C1-16330

Diameter	Ø1 90	Ø2 40	Ø2 40	Ø3 60	Ø3 30
Drilling Speed (RPM)	1500-	1200		400	15-25
	1000	000		200-	



Dimensions

Ø3.30mm Length 10mm

Ø3.30mm Length 11.5mm

Ø3.30mm

Length 13mm

Ø3.30mm Length 16mm



- Do not use the final drill for bone type 4
- The drilling sequence is illustrated using a 13mm implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

⊂1

Screw type implant range

#### **Standard Platform**

Length	8mm	10mm	11.50mm	13mm	16mm
Туре	C1-08375	C1-10375	C1-11375	C1-13375	C1-16375
Ø3.75 mm					
Ø4.20 mm	C1-08420	C1-10420	C1-11420	C1-13420	C1-16420

# Surgical Tools



#### CT-SLI10

Long insertion tool, conical connection, standard platform



#### CT-SSI10

Short insertion tool, conical connection, standard platform



#### CT-SLR10

Long ratchet insertion tool, conical connection, standard platform



#### CT-SSR10

Short ratchet insertion tool, conical connection, standard platform

# Implant cover screw and healing caps









#### **Ø3.75mm** Standard Platform

Catalog No.	Dimensions	
C1-08375	Ø 3.75mm Length 8mm	
C1-10375	Ø3.75mm Length 10mm	
C1-11375	Ø 3.75mm Length 11.50mm	月 <b>©</b>
C1-13375	Ø 3.75mm Length 13mm	Ø3.60 Ø3.75
C1-16375	Ø3.75mm Length 16mm	Ø3 Ø3.10

Sand-Blasted and Acid-Etched

Titanium Alloy Ti 6AI 4V ELI

#### Single-use final drill

A specially designed final drill for 8mm, 10mm, 11.50mm, 13mm or 16mm implants is supplied with every implant, allowing a short, sterile and safe drilling procedure. This final drill should not be used in type 4 bone.

\* The implant package includes: a cover screw, temporary cylinder and a final drill

#### Ø3.75mm Implant Procedure

Diameter	Ø1 90	Ø2 40	Ø2 40	Ø3	Ø3	Ø3 60	@3.75
Drilling Speed (RPM)	1500-	1200		700		400	15-25
	1200-	000		500		200-	





- ▲ Do not use the final drill for bone type 4
- The drilling sequence is illustrated using a 13mm implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

⊂1

#### **Ø4.20mm** Standard Platform

Catalog No.	Dimensions	
C1-08420	Ø 4.20mm Length 8mm	
C1-10420	Ø 4.20mm Length 10mm	
C1-11420	Ø 4.20mm Length 11.50mm	F 03.15.
C1-13420	Ø 4.20mm Length 13mm	Ø4.20 <b>Ø</b> 4.20
C1-16420	Ø 4.20mm Length 16mm	03.50 03.60

Titanium Alloy Ti 6Al 4V ELI Sand-Blasted and Acid-Etched

#### Single-use final drill

A specially designed final drill for 8mm, 10mm, 11.50mm, 13mm or 16mm implants is supplied with every implant, allowing a short, sterile and safe drilling procedure. This final drill should not be used in type 4 bone.

\* The implant package includes: a cover screw, temporary cylinder and a final drill

#### **Ø4.20mm** Implant Procedure

Diameter Diameter	Ø1.90	Ø2.40	Ø2.40	Ø3	Ø3.50	Ø3.50	Ø4	Ø4.20
Drilling Speed (RPM)	1500	1200		700	700	1	Ø3.50	15-25
	1200-	900-		500-	400-		400	
							200-	





- Do not use the final drill for bone type 4
- \* The drilling sequence is illustrated using a 13mm implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

Screw type implant range

#### **Wide Platform**

Length	8mm	10mm	11.50mm	13mm	16mm
Туре	C1-08500	C1-10500	C1-11500	C1-13500	C1-16500
Ø5 mm		THE STATE OF THE S	THE PARTY OF THE P	THE STATE OF THE S	

# Surgical Tools



# Implant cover screw and healing caps







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# **Ø5mm**Wide Platform

Catalog No.	Dimensions	
C1-08500	Ø5mm Length 8mm	
C1-10500	Ø5mm Length 10mm	
C1-11500	Ø5mm Length 11.50mm	Ā o
C1-13500	Ø5mm Length 13mm	Ø4.90 Ø5
C1-16500	Ø5mm Length 16mm	Ø4.10 Ø4.50

Titanium Alloy Ti 6Al 4V ELI Sand-Blasted and Acid-Etched

#### Single-use final drill

A specially designed final drill for 8mm, 10mm, 11.50mm, 13mm or 16mm implants is supplied with every implant, allowing a short, sterile and safe drilling procedure. This final drill should not be used in type 4 bone.

\* The implant package includes: a cover screw, temporary cylinder and a final drill

#### **Ø5mm** Implant Procedure

Diameter	Ø1.00	(2) 40	//2 //0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	700 02 E0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Ø4.10	( 10-20
Drilling Speed (RPM)	1500	1200		700	700	600		400	15.25
	1200-	900-		500-	400-	400-		400-	



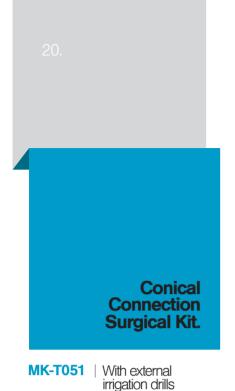


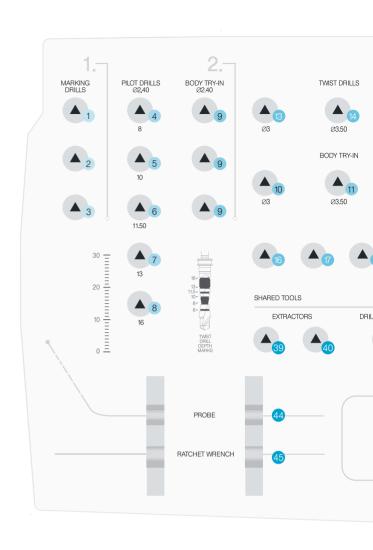
- Do not use the final drill for bone type 4
- \* The drilling sequence is illustrated using a 13mm implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

#### Conical Connection Surgical Kit.

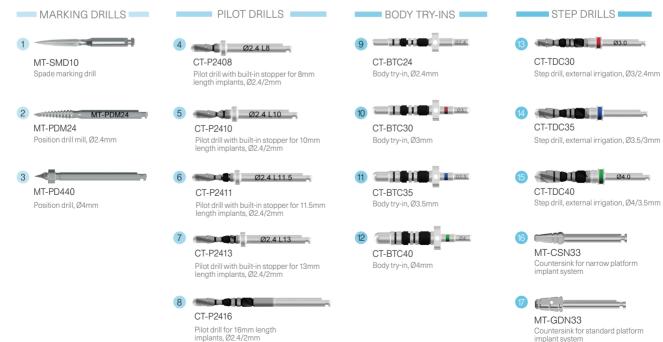
The innovative Conical Connection Surgical Kit, is designed for simple and safe implant placement procedures. The kit presents a novel ergonomic design that follows the surgical drilling sequence. In addition, the kit includes a set of length-based pilot drills and color-coded visual cues of both implant diameter and restorative platforms and is suitable for both C1 and V3 implants.



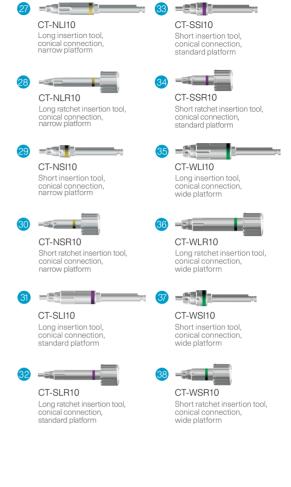




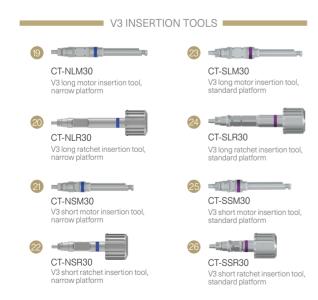
MT-GDN50 Countersink for wide platform implant system







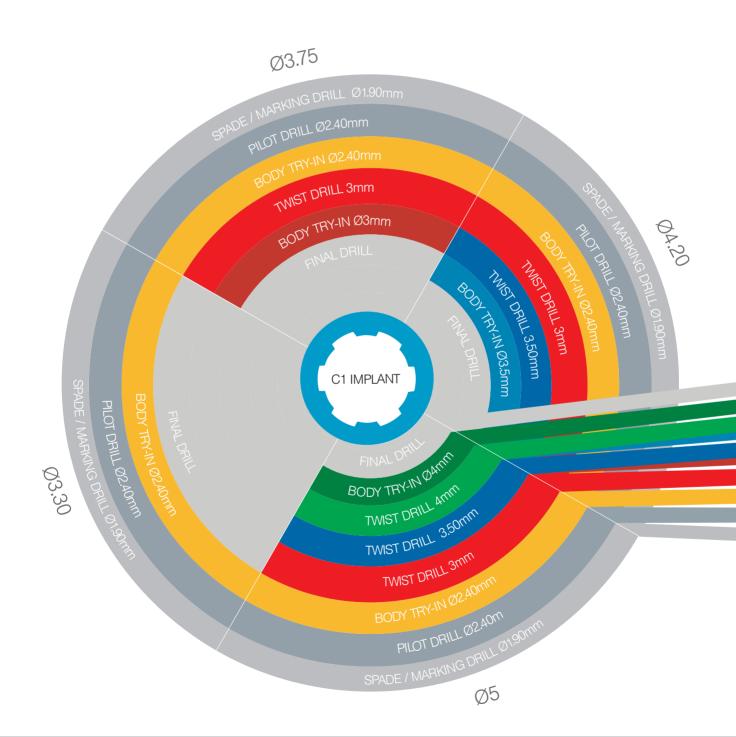
C1 INSERTION TOOLS

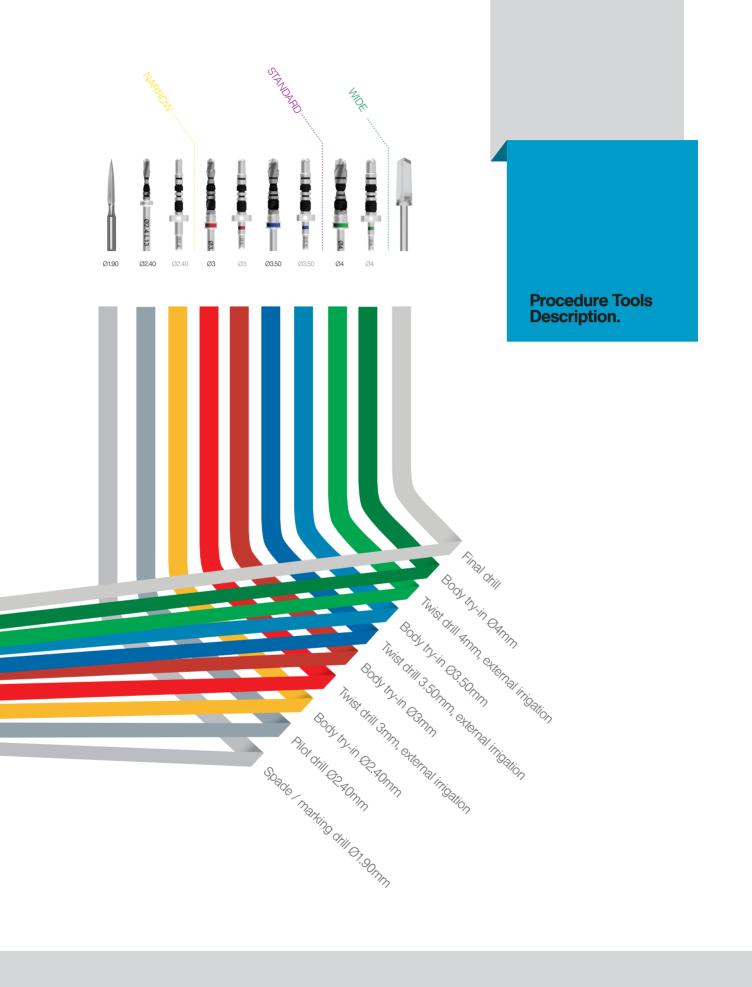




Drilling Procedures.

Initial surgical steps are common for all implant diameters. Additional steps are required as the implant diameter increases.







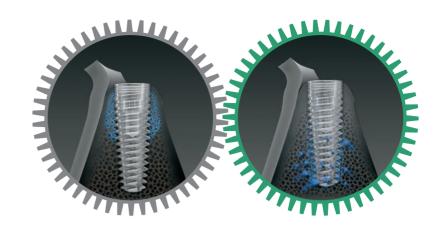
#### The Dual Stability Mechanism

The C1 offers a Dual Stability Mechanism (DSM) that combines the benefits of high primary stability with an accelerated osseointegration process, thus minimizing stability loss during the first

weeks after surgery. This differential drilling method enables moderate compression of the bone at the top 2/3 of the implant body in order to gain mechanical stability, while preventing such compression at the apical 1/3.



The 'compartments' created between the threads at the apical 1/3 are filled with blood and bone particles, enabling rapid bone growth.



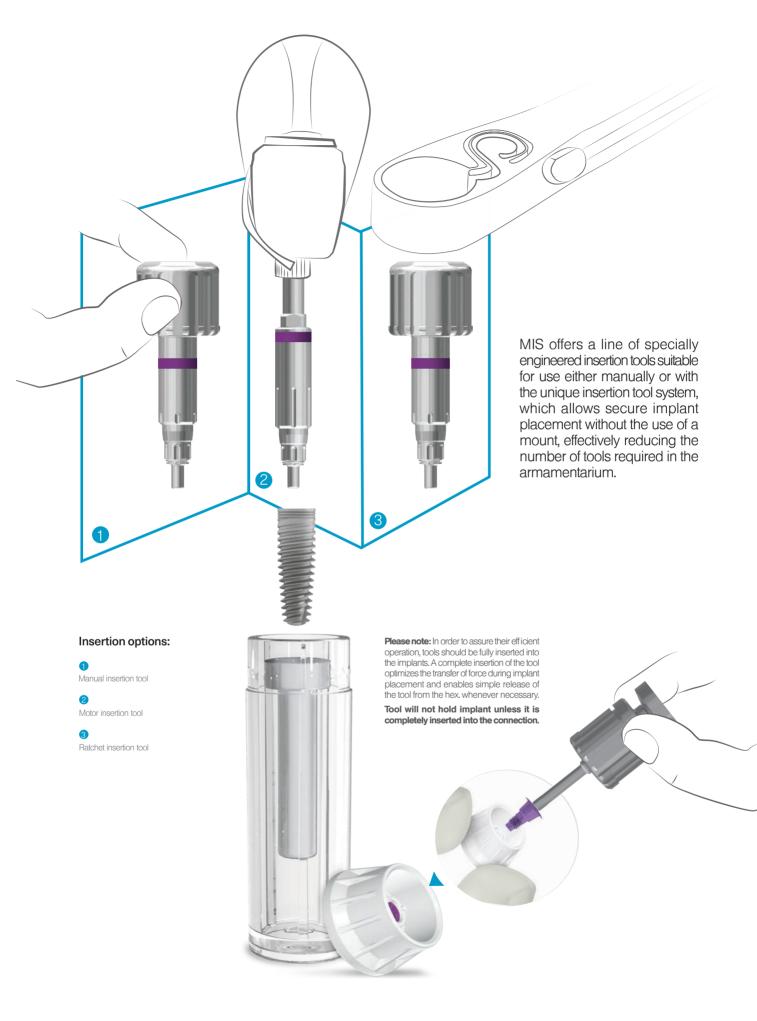


Standard platform tools shown

## **Insertion Tools.**

C1 implant placement tools are specially designed to facilitate quick and reliable implant procedures.





**Package Contents.** 

Each C1 implant comes with sterilized components for multiple clinical scenarios.

Following the "Make It Simple" philosophy, MIS is proud to be the first to present a comprehensive tool set which includes: a single-use final drill, a cover screw and a temporary cylinder with every C1 implant, meeting all your clinical needs.



# Packaging.

Providing a simple, immediate identification of implant type, length and diameter, the C1 package is well designed for ease of use during surgery.

#### Implant diameter & platform indication

The outer tube is color-coded indicating the implant platform. The numeric indication specifies the implant diameter and length.

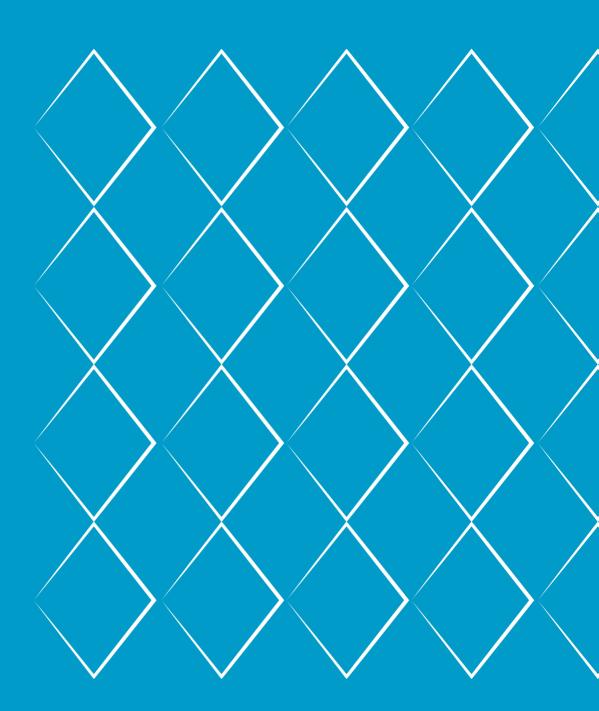


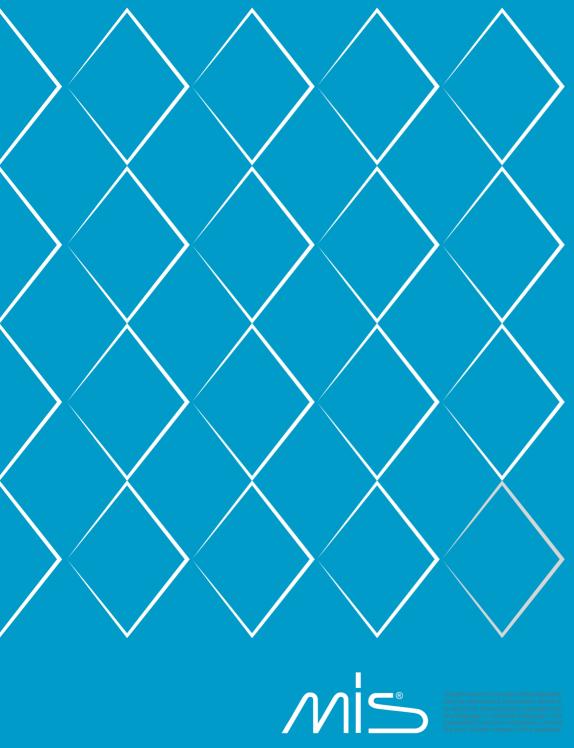
#### Prosthetic platform indication

Prosthetic components are marked by specific colors, representing platform sizes.

A double packing system ensures sterilization and safety. Packages are designed for ease of use during surgery and for use with surgical gloves.









The MIS Quality System complies with international quality standards: ISO 13485:2003 – Quality Management System for Medical Devices, ISO 9001: 2008 – Quality Management System and Medical Device Directive 93/42/EEC. MIS products are CE marked. Please note, not all products are registered or available in every country/region.

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