

**MIS<sup>®</sup> | SEVEN<sup>®</sup>**  
Proven Success Meets Enhanced Stability



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**MIS Warranty:**

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

Warning: MIS products should be used by licensed dentists only.









## BENEFITS

### High initial stability

The SEVEN's root-shaped geometry and unique threads are designed to enable excellent primary stability, offering the ultimate choice for a wide range of clinical cases. This allows for a simpler and faster implant placement.

### Bone preservation

The SEVEN implant now incorporates the **platform-switching** design concept. Implants with a platform-switched configuration have been shown to exhibit less bone loss when compared to non-platform-switched implants, which may lead to soft tissue preservation and growth.

**The straight neck**, combined with the compatible final drill, may lead to crestal bone preservation.

**Micro-rings** on the implant neck improve BIC (Bone-to-Implant-Contact) at the crestal zone, and are designed to reduce pressure on the cortical bone to minimize resorption at the implant neck.

### Esthetics

The SEVEN now includes a variety of concave emergence profile abutments which, as scientific research has proven, when combined with platform switching, may increase soft tissue volume.

Gold shaded prosthetics enable less reflection of the component through the gingiva.

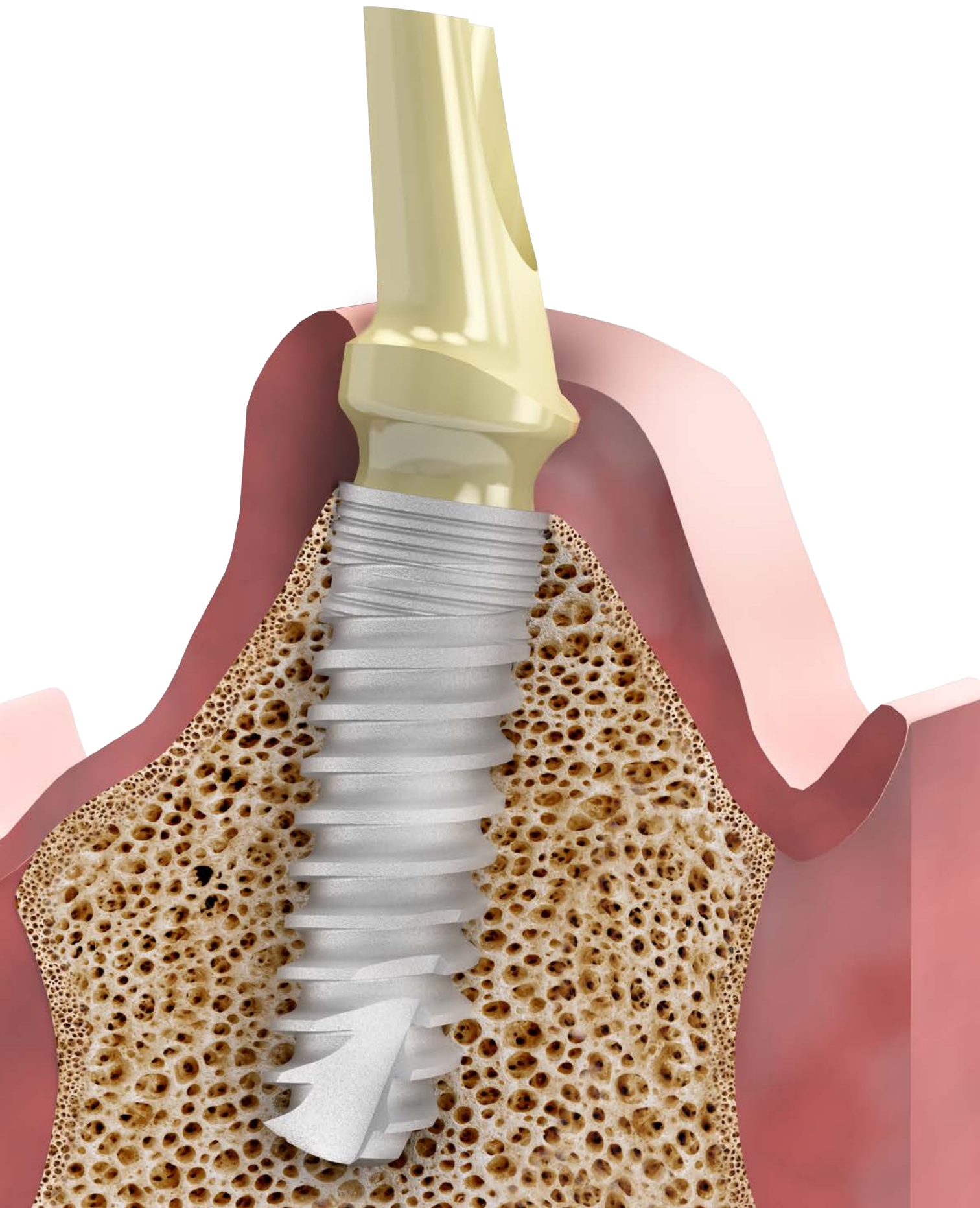
### Safety

Each SEVEN implant is supplied with a single-use final drill corresponding to the correct diameter and length, allowing for a short and safe drilling procedure. The dome-shaped apex prevents over-insertion for safer implant placement.

### Clinical success




The surface roughness and micro-morphology of all MIS implants, is a result of sand-blasting and acid-etching. This MIS established surface technology has provided millions of patients with excellent osseointegration results and long-lasting clinical success, and is backed by years of research and supporting data.



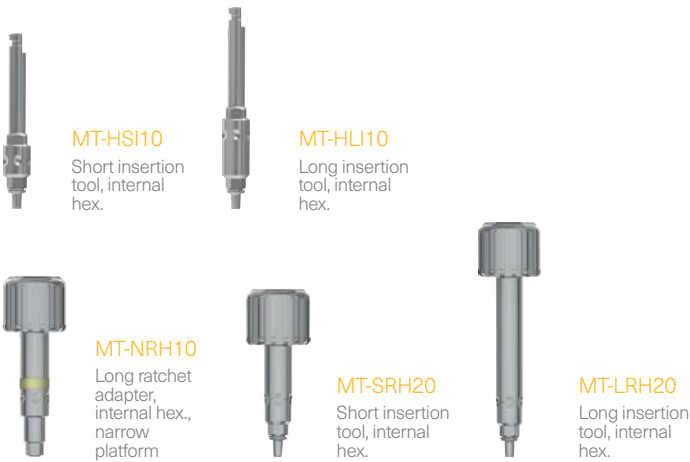




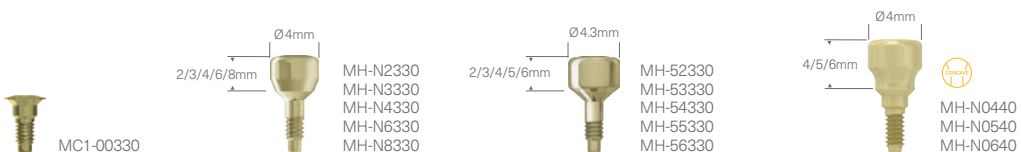
Implants range  
**NARROW PLATFORM**

Length	6mm	8mm	10mm	11.50mm	13mm	16mm
Ø3.30 mm			MF7-10330 	MF7-11330 	MF7-13330 	MF7-16330 

### Surgical Tools



### Implant Cover Screw and Healing Caps

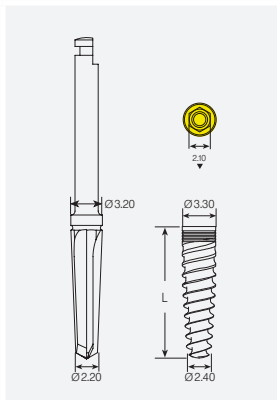


Catalog No.	Dimensions
MF7-10330	Ø3.30mm length 10mm
MF7-11330	Ø3.30mm length 11.50mm
MF7-13330	Ø3.30mm length 13mm
MF7-16330	Ø3.30mm length 16mm



**Internal hex. implant**

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

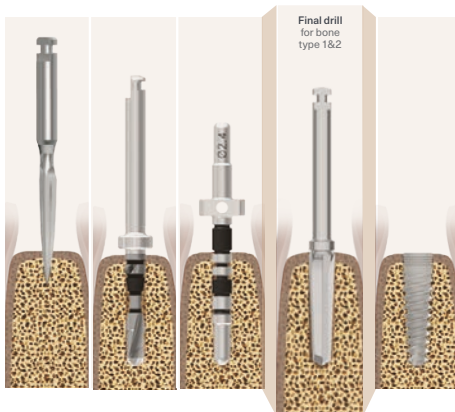


**Final Drill**

Each implant is supplied with a single-use final drill corresponding to the correct diameter and length, allowing a short and safe drilling procedure.

## Ø3.30mm Implant Procedure

Drilling Speed (RPM)	1200-1500	900-1200	200-400	15-25	
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.20 Ø3.20	Ø3.30



Do not use the final drill for bone types 3&4.

The drilling sequence is illustrated using a 13mm implant.

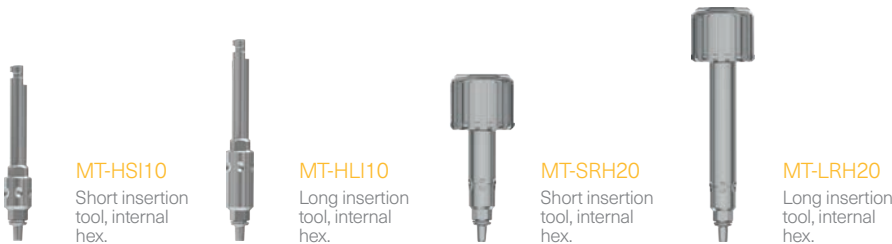
Procedures recommended by MIS cannot replace the judgment and professional experience of the surgeon.



Implants range  
STANDARD PLATFORM

Length	6mm	8mm	10mm	11.50mm	13mm	16mm
Ø 3.75 mm		MF7-08375 	MF7-10375 	MF7-11375 	MF7-13375 	MF7-16375 
Ø 4.20 mm	MF7-06420 	MF7-08420 	MF7-10420 	MF7-11420 	MF7-13420 	MF7-16420 

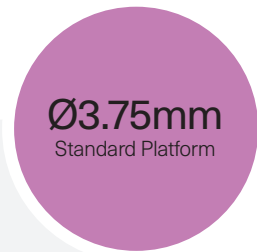
Surgical Tools



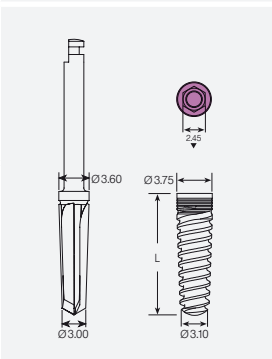
Implant Cover Screw and Healing Caps



Catalog No.	Dimensions
MF7-08375	Ø3.75mm length 8mm
MF7-10375	Ø3.75mm length 10mm
MF7-11375	Ø3.75mm length 11.50mm
MF7-13375	Ø3.75mm length 13mm
MF7-16375	Ø3.75mm length 16mm



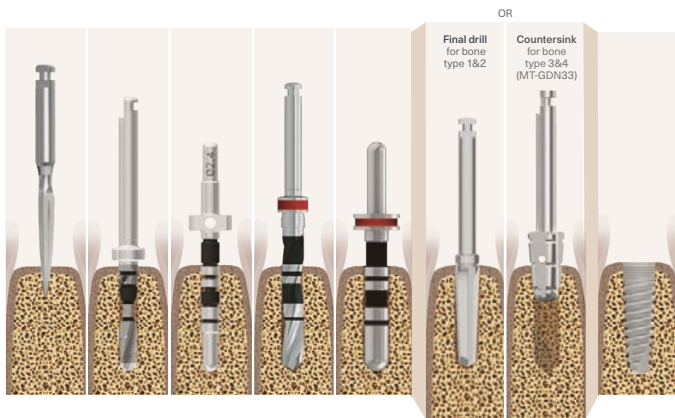
**Internal hex. implant**  
 Titanium Alloy Ti 6Al 4V ELI  
 Sand-Blasted and Acid-Etched



**Final Drill**  
 Each implant is supplied with a single-use final drill corresponding to the correct diameter and length, allowing a short and safe drilling procedure.

## Ø3.75mm Implant Procedure

Drilling Speed (RPM)	1200-1500	900-1200	500-700	200-400	200-500	15-25
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø2.80	Ø3.75
				Ø3.60	Ø3.60	Ø3.75



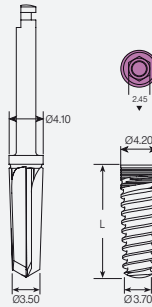
Do not use the final drill for bone types 3&4.

The drilling sequence is illustrated using a 13mm implant.

Procedures recommended by MIS cannot replace the judgment and professional experience of the surgeon.



Catalog No.	Dimensions
MF7-06420	Ø4.20mm length 6mm
MF7-08420	Ø4.20mm length 8mm
MF7-10420	Ø4.20mm length 10mm
MF7-11420	Ø4.20mm length 11.50mm
MF7-13420	Ø4.20mm length 13mm
MF7-16420	Ø4.20mm length 16mm

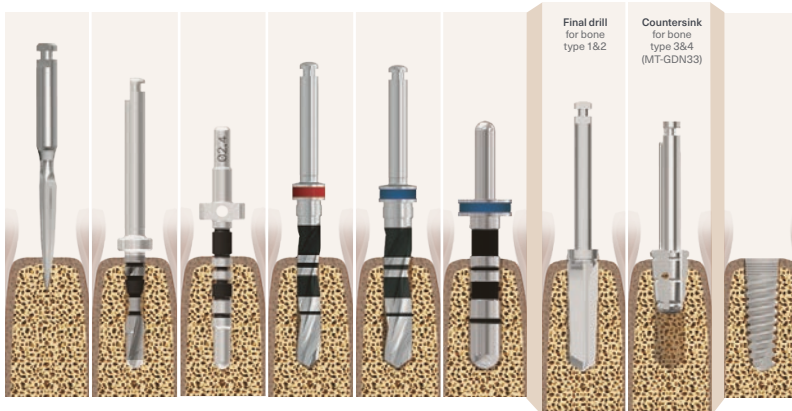


**Internal hex. implant**  
 Titanium Alloy Ti 6Al 4V ELI  
 Sand-Blasted and Acid-Etched

**Final Drill**  
 Each implant is supplied with a single-use final drill corresponding to the correct diameter and length, allowing a short and safe drilling procedure.

## Ø4.20mm Implant Procedure

Drilling Speed (RPM)	1200-1500	900-1200		500-700	400-700		200-400	200-500		15-25
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø3.20	Ø3.20	Ø3.50 Ø4.10	Ø3.30 Ø4.20	Ø4.20	Ø4.20



Do not use the final drill for bone types 3&4.

The drilling sequence is illustrated using a 13mm implant.

Procedures recommended by MIS cannot replace the judgment and professional experience of the surgeon.





Implants range  
**WIDE PLATFORM**

Length	6mm	8mm	10mm	11.50mm	13mm	16mm
Ø 5 mm	MF7-06500 	MF7-08500 	MF7-10500 	MF7-11500 	MF7-13500 	MF7-16500 
Ø 6 mm	MF7-06600 	MF7-08600 	MF7-10600 	MF7-11600 	MF7-13600 	

**Surgical Tools**



**MT-HSI10**  
Short insertion tool, internal hex.



**MT-HLI10**  
Long insertion tool, internal hex.



**MT-SRH20**  
Short insertion tool, internal hex.



**MT-LRH20**  
Long insertion tool, internal hex.

**Implant Cover Screw and Healing Caps**



MC1-00470



MH-W3500  
MH-W4500  
MH-W5500

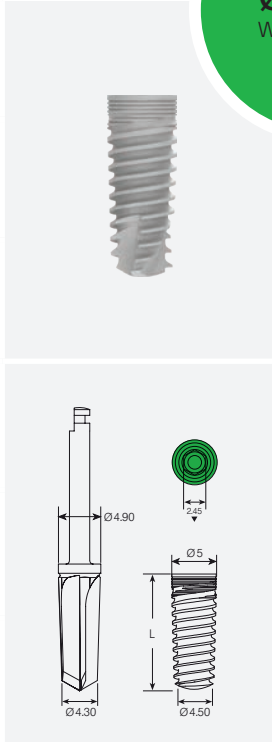


MH-W3630  
MH-W4630  
MH-W5630



MH-W0455  
MH-W0555  
MH-W0655

Catalog No.	Dimensions
MF7-06500	Ø5mm length 6mm
MF7-08500	Ø5mm length 8mm
MF7-10500	Ø5mm length 10mm
MF7-11500	Ø5mm length 11.50mm
MF7-13500	Ø5mm length 13mm
MF7-16500	Ø5mm length 16mm



**Internal hex. implant**

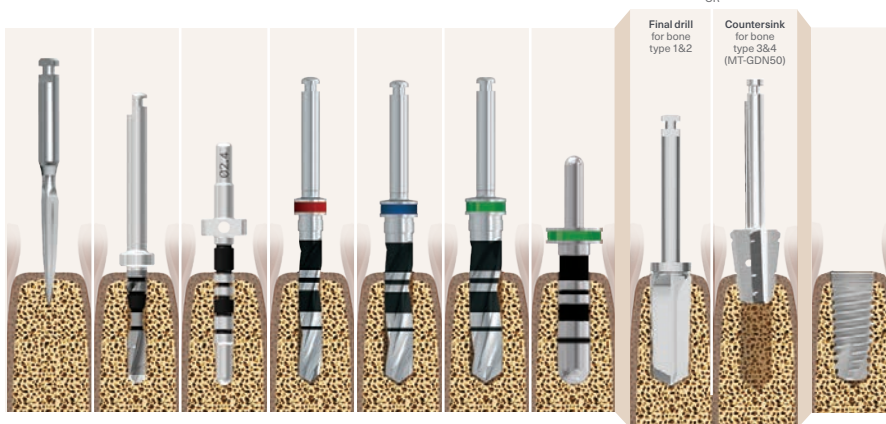
Titanium Alloy Ti 6Al 4V ELI  
Sand-Blasted and Acid-Etched

**Final Drill**

Each implant is supplied with a single-use final drill corresponding to the correct diameter and length, allowing a short and safe drilling procedure.

## Ø5mm Implant Procedure

Drilling Speed (RPM)	1200-1500	900-1200	500-700	400-700	400-600	200-400	200-500	15-25	
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø3.20	Ø4	Ø4	Ø4.30 Ø4.90	Ø5

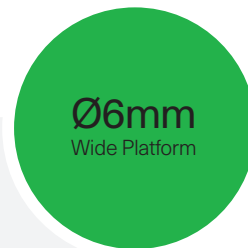


Do not use the final drill for bone types 3&4.

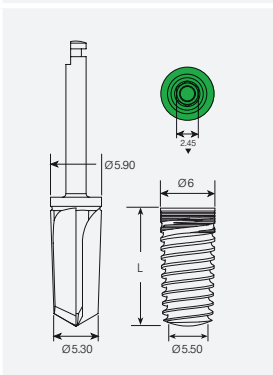
The drilling sequence is illustrated using a 13mm implant.

Procedures recommended by MIS cannot replace the judgment and professional experience of the surgeon.

Catalog No.	Dimensions
MF7-06600	Ø6mm length 6mm
MF7-08600	Ø6mm length 8mm
MF7-10600	Ø6mm length 10mm
MF7-11600	Ø6mm length 11.50mm
MF7-13600	Ø6mm length 13mm



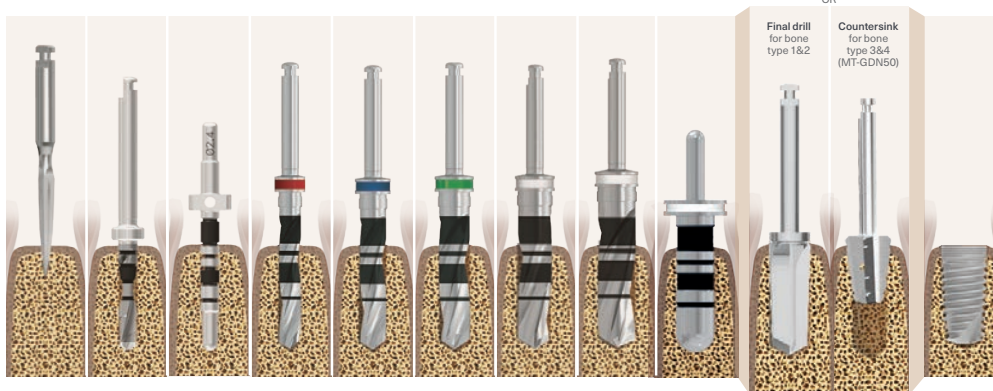
**Internal hex. implant**  
Titanium Alloy Ti 6Al 4V ELI  
Sand-Blasted and Acid-Etched



**Final Drill**  
Each implant is supplied with a single-use final drill corresponding to the correct diameter and length, allowing a short and safe drilling procedure.

## Ø6mm Implant Procedure

Drilling Speed (RPM)	1200-1500	900-1200		500-700	400-700	400-600	300-500	300-500			200-400	200-500	
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø3.20	Ø4	Ø4.50	Ø5	Ø5	Ø5	Ø4.30 Ø5.90	Ø6	Ø6



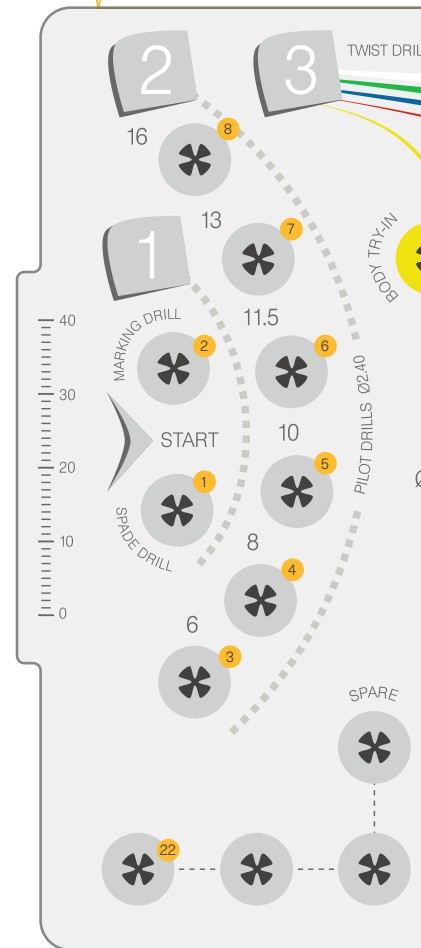
Do not use the final drill for bone types 3&4.

The drilling sequence is illustrated using a 13mm implant.

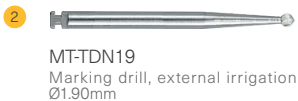
Procedures recommended by MIS cannot replace the judgment and professional experience of the surgeon.

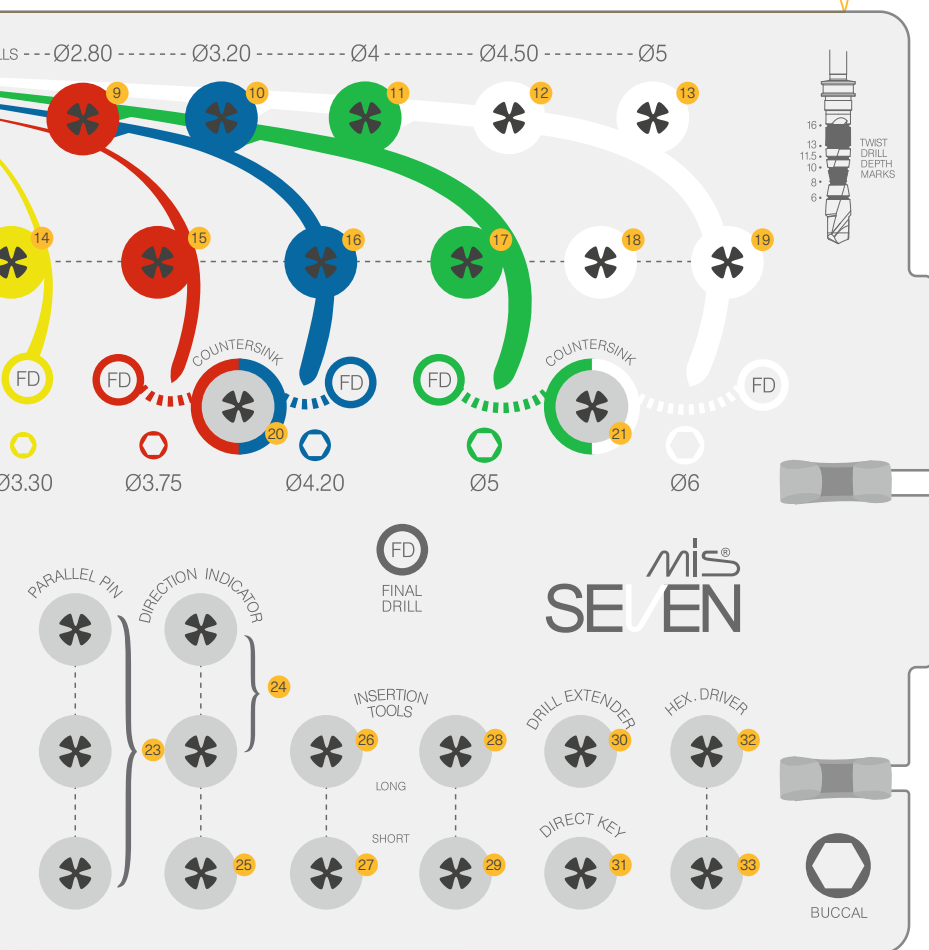
MIS<sup>®</sup>  
SEVEN<sup>®</sup>

# SURGICAL KIT



MK-T048  
With external  
irrigation drills





16   
**MT-BTT32**  
 Body try-in, Ø3.20mm

17   
**MT-BTT40**  
 Body try-in, Ø4mm

18   
**MT-BTT45**  
 Body try-in, Ø4.50mm

19   
**MT-BTT50**  
 Body try-in, Ø5mm

20   
**MT-GDN33**  
 Countersink, SP

21   
**MT-GDN50**  
 Countersink, WP

22   
**MT-NRH10**  
 Long ratchet adapter, internal hex., NP

23   
**MT-PP240**  
 Parallel pin, Ø2.40/3mm

24   
**MD-PF375**  
 Direct press fit for closed tray, SP/WP

25   
**MN-PF330**  
 Direct press fit for closed tray, NP

26   
**MT-HLI10**  
 Long insertion tool, internal hex.

27   
**MT-HSI10**  
 Short insertion tool, internal hex.


28   
**MT-LRH20**  
 Long insertion tool, internal hex.

29   
**MT-SRH20**  
 Short insertion tool, internal hex.

30   
**MT-DE001**  
 Drill extender

31   
**MT-RMR10**  
 Long direct hand and ratchet key

32   
**MT-RDL30**  
 Long driver for 0.05 inch hex.

33   
**MT-RDS30**  
 Short driver for 0.05 inch hex.

34   
**MT-RT070**  
 Surgical torque ratchet

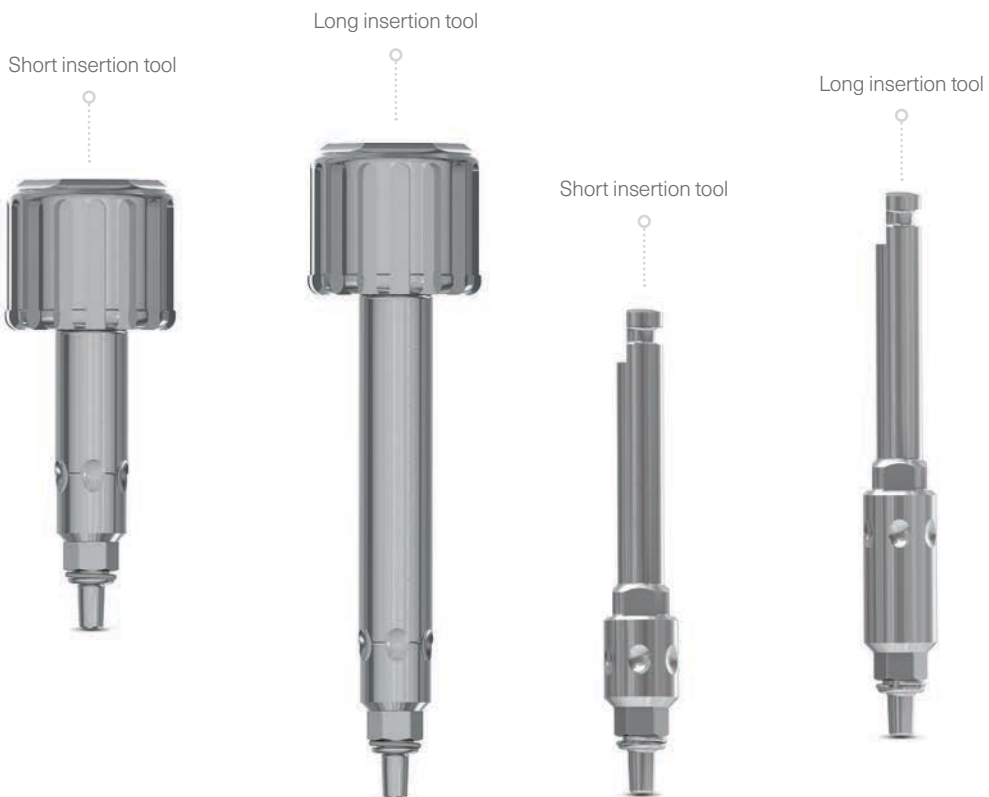


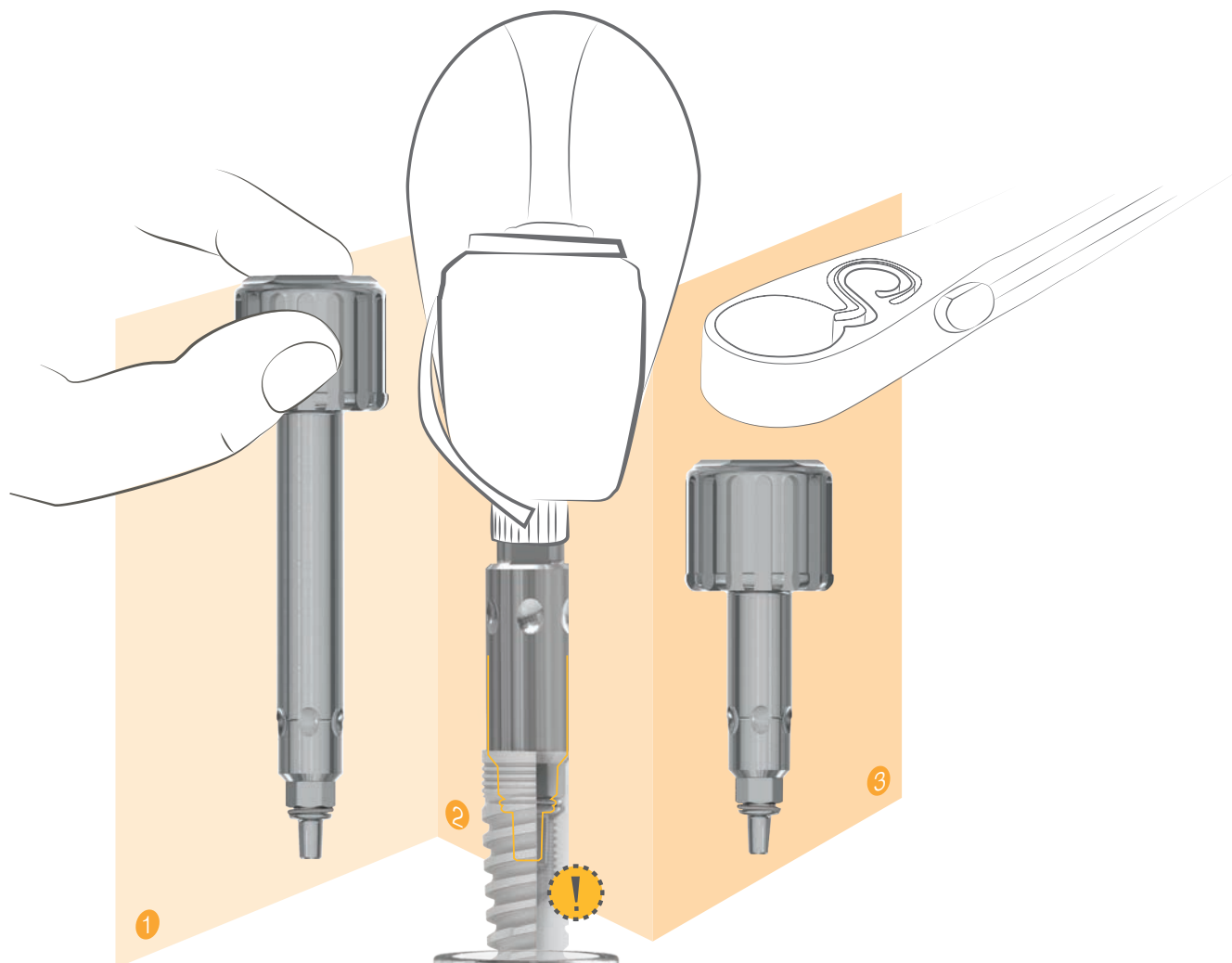
mis<sup>®</sup>  
SEVEN<sup>®</sup>

## INSERTION TOOLS

The SEVEN key system is designed to facilitate quick, reliable implant procedures. Keys are supplied within the advanced SEVEN surgical kit. The keys are suitable for use with SEVEN narrow connectors.

MIS offers a line of specially engineered insertion tools suitable for use either manually or with a ratchet, effectively reducing the number of tools required in the armamentarium.





### Insertion options:

- ① Insertion tool and hand key adapter
- ② Motor insertion tool
- ③ Ratchet insertion tool

**Please note:** In order to assure their efficient operation, tools should be fully inserted into the implants. A complete insertion of the tool optimizes the transfer of force during implant placement and enables simple release of the tool from the hex, whenever necessary.

**Tool will not hold implant unless it is completely inserted into the hex.**





## SURFACE QUALITY

All MIS implants undergo the same surface treatments; sand-blasting and acid-etching. The research study was done on the SEVEN implant, however the results are valid for all MIS implant surfaces.



Identification Card and Codification of the Chemical and Morphological Characteristics of 62 Dental Implant Surfaces. Part 3: Sand-Blasted/Acid-Etched (SLA Type) and Related Surfaces (Group 2A, main subtractive process).

### Background and Objectives

Dental implants are commonly used in dental therapeutics, but dental practitioners only have limited information about the characteristics of the implant materials they take the responsibility to place in their patients. The objective of this work is to describe the chemical and morphological characteristics of 62 implant surfaces available on the market and establish their respective Identification (ID) Card, following the Implant Surface Identification Standard (ISIS). In this third part, surfaces produced through the main subtractive process (sand-blasting/acid-etching, SLA-type and related) were investigated.

### Materials and Methods

Eighteen different implant surfaces were characterized: Straumann SLA (ITI Straumann, Basel, Switzerland), Ankylos (Dentsply Friadent, Mannheim, Germany), Xive S (Dentsply Friadent, Mannheim, Germany), Frialit (Dentsply Friadent, Mannheim, Germany), Promote (Camlog, Basel, Switzerland), Dentium Superline (Dentium Co., Seoul, Korea), Osstem SA (Osstem implant Co., Busan, Korea), Genesis (GC Corporation, Tokyo, Japan), Aadva (GC Corporation, Tokyo, Japan), MIS Seven (MIS Implants Technologies, Bar Lev, Israel), ActivFLUOR (Blue Sky Bio, Grayslake, IL, USA), Tekka SA2 (Tekka, Brignais, France), Twinkon

Ref (Tekka, Brignais, France), Bredent OCS blueSKY (Bredent Medical, Senden, Germany), Magitech MS2010 (Magitech M2I, Levallois-Perret, France), EVL Plus (SERF, Decines, France), Alpha Bio (Alpha Bio Tec Ltd, Petach Tikva, Israel), Neoporos (Neodent, Curitiba, Brazil). Three samples of each implant were analyzed.

Superficial chemical composition was analyzed using XPS/ESCA (X-Ray Photoelectron Spectroscopy/Electron Spectroscopy for Chemical Analysis) and the 100nm in-depth profile was established using Auger Electron Spectroscopy (AES). The microtopography was quantified using optical profilometry (OP). The general



morphology and the nanotopography were evaluated using a Field Emission-Scanning Electron Microscope (FE-SEM). Finally, the characterization code of each surface was established using the ISIS, and the main characteristics of each surface were summarized in a reader-friendly ID card.

## Results

From a chemical standpoint, in the 18 different surfaces of this group, 11 were based on a commercially pure titanium (grade 2 or 4) and 7 on a titanium-aluminium alloy (grade 5 or grade 23 ELI titanium), 4 surfaces presented some chemical impregnation of the titanium core, and 5 surfaces were covered with residual alumina blasting particles. 15 surfaces presented different degrees

of inorganic pollutions, and 2 presented a severe organic pollution overcoat. Only 3 surfaces presented no pollution (and also no chemical modification at all): GC Aadva, Genesis, MIS SEVEN®. From a morphological standpoint, all surfaces were microrough, with different microtopographical aspects and values. All surfaces were nanosmooth, and therefore presented no significant and repetitive nanostructures. 14 surfaces were homogeneous and 4 heterogeneous. None of them was fractal.

## Discussion and Conclusion

The ISIS systematic approach allowed to gather the main characteristics of these commercially available products in a clear and accurate ID card. The SLA-type sur-

faces have specific morphological characteristics (microrough, nanosmooth, with rare and in general accidental chemical modification) and are the most frequent surfaces used in the industry. However they present different designs, and pollutions are often detected (with blasting/etching residues particularly). Users should be aware of these specificities if they decide to use these products.

Identification card of the MIS SEVEN surface, following the Implant Surface Identification Standard (ISIS) codification

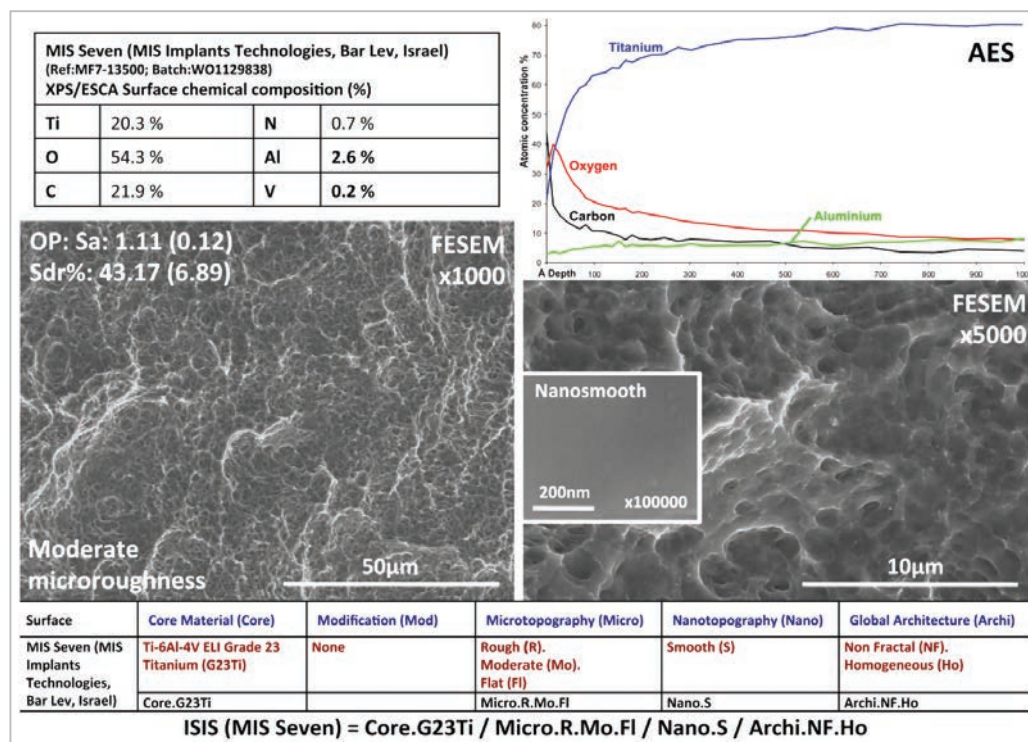


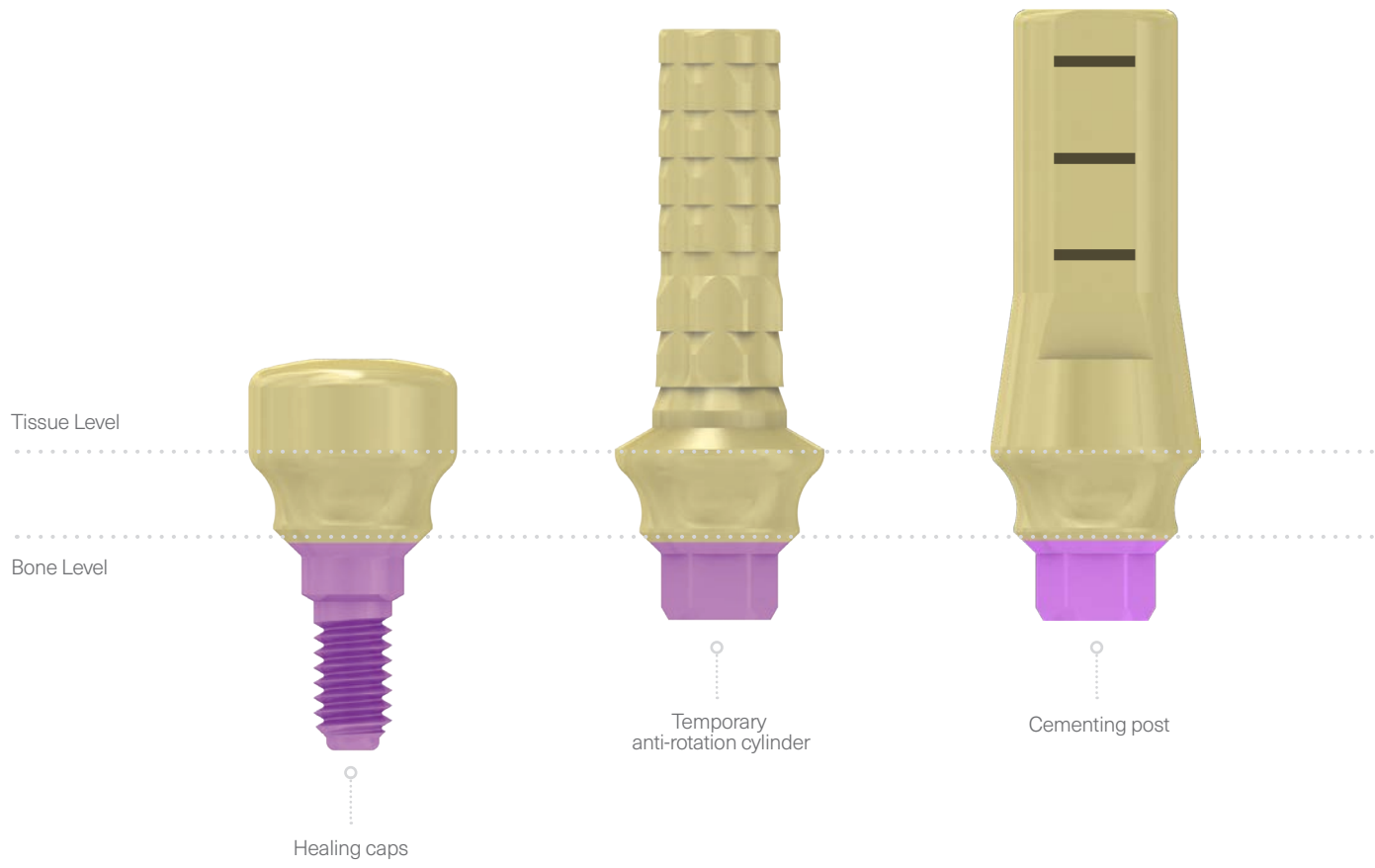
Fig. 1

Identification Card of the MIS SEVEN® surface: MIS Seven (MIS Implants Technologies, Bar Lev, Israel; Figure 1) was a sandblasted/acid-etched surface on a grade 23 ELI (Extra Low Interstitials) titanium core. No pollution or chemical modification was detected. The surface was moderately microrough, nanosmooth, and homogeneous all over the implant.

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PROSTHETICS



Tissue Level

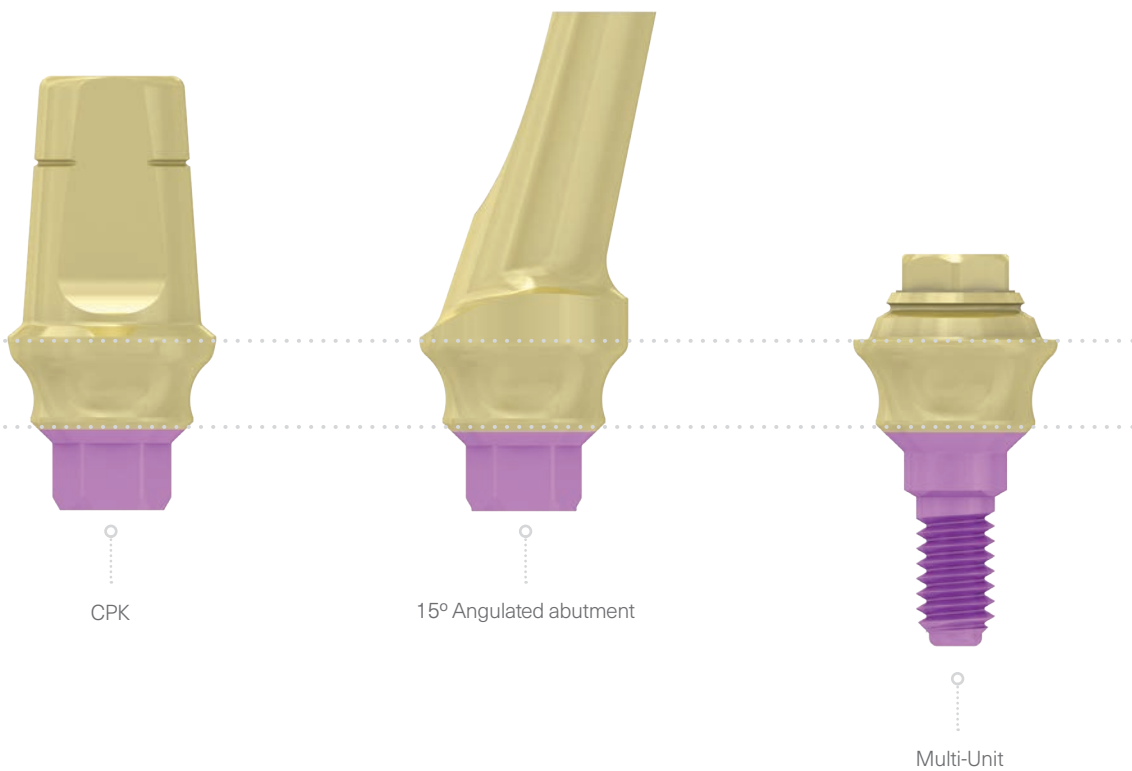
Bone Level

Healing caps

Temporary anti-rotation cylinder

Cementing post

With a comprehensive concept for enhanced esthetics and better bone preservation in mind, and in order to support the advanced features of the SEVEN, an additional line of **concave, gold-shaded and color-coded** abutments is available, including additional gingival heights.





MIS<sup>®</sup>  
SEVEN<sup>®</sup>

## PACKAGING

Each SEVEN implant comes with a cover screw inside the implant package. Following our “Make it Simple” philosophy, MIS is proud to be the first to include a sterile single-use final drill with every SEVEN implant, to ensure a safe and precise surgical procedure.

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



#### Implant diameter & platform indication

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

#### Prosthetic platform indication

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



#### Implant identification

The sticker on top of the box, specifies implant diameter, length and platform size.

#### Easy pull tab

The pull tab is easily identified and facilitates convenient opening during surgery.

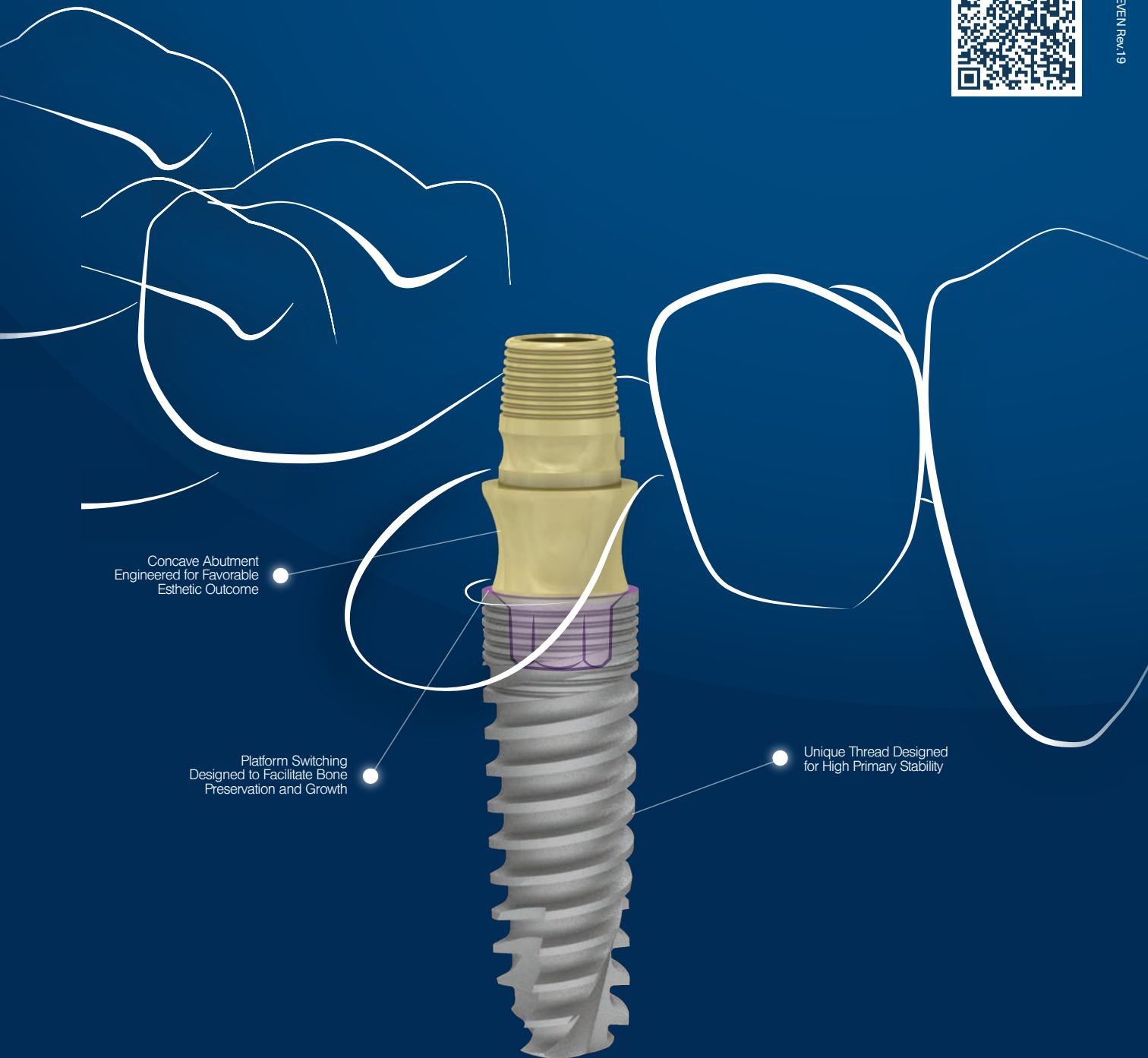


The MIS Quality System complies with international quality standards: ISO 13485: 2016- Quality Management System for Medical Devices, ISO 9001: 2008 - Quality Management System and Medical Device Directive 93/42/EEC. MIS products are CE marked. Please note, not all products are registered or available in every country/region.



mis

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Concave Abutment  
Engineered for Favorable  
Esthetic Outcome

Platform Switching  
Designed to Facilitate Bone  
Preservation and Growth

Unique Thread Designed  
for High Primary Stability

Domed Apex for  
Safe Insertion

## PROVEN SUCCESS MEETS ENHANCED STABILITY. **MAKE IT SIMPLE**

The biological stability and predictable esthetics of the SEVEN, combined with the extensive research and development process have given the SEVEN a potential advantage in soft tissue preservation and growth as well as an array of restorative benefits. Learn more about the SEVEN implant system and MIS at: [www.mis-implants.com](http://www.mis-implants.com)

