mis® | UNO

One-Piece Implant by mis

mis®

MAKE IT SIMPLE

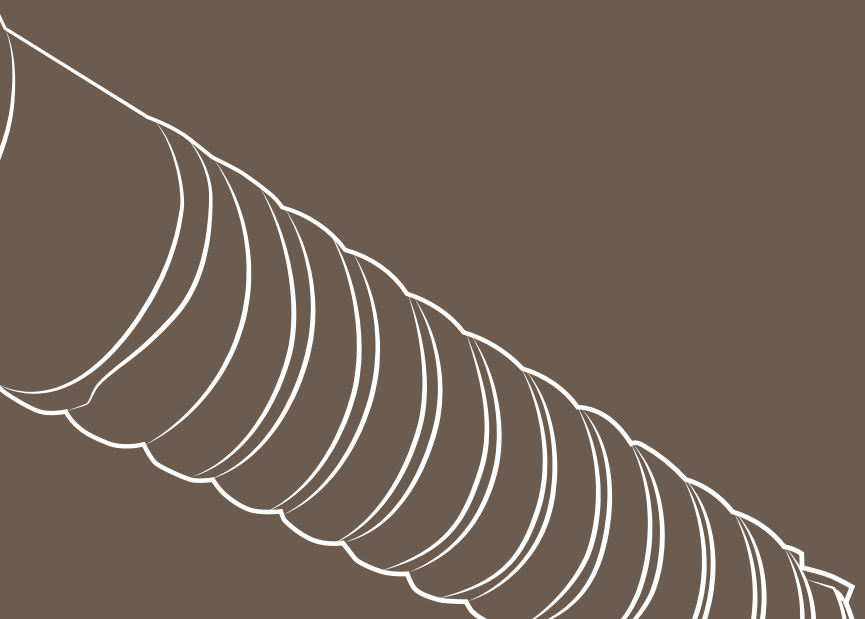
MIS Warranty:

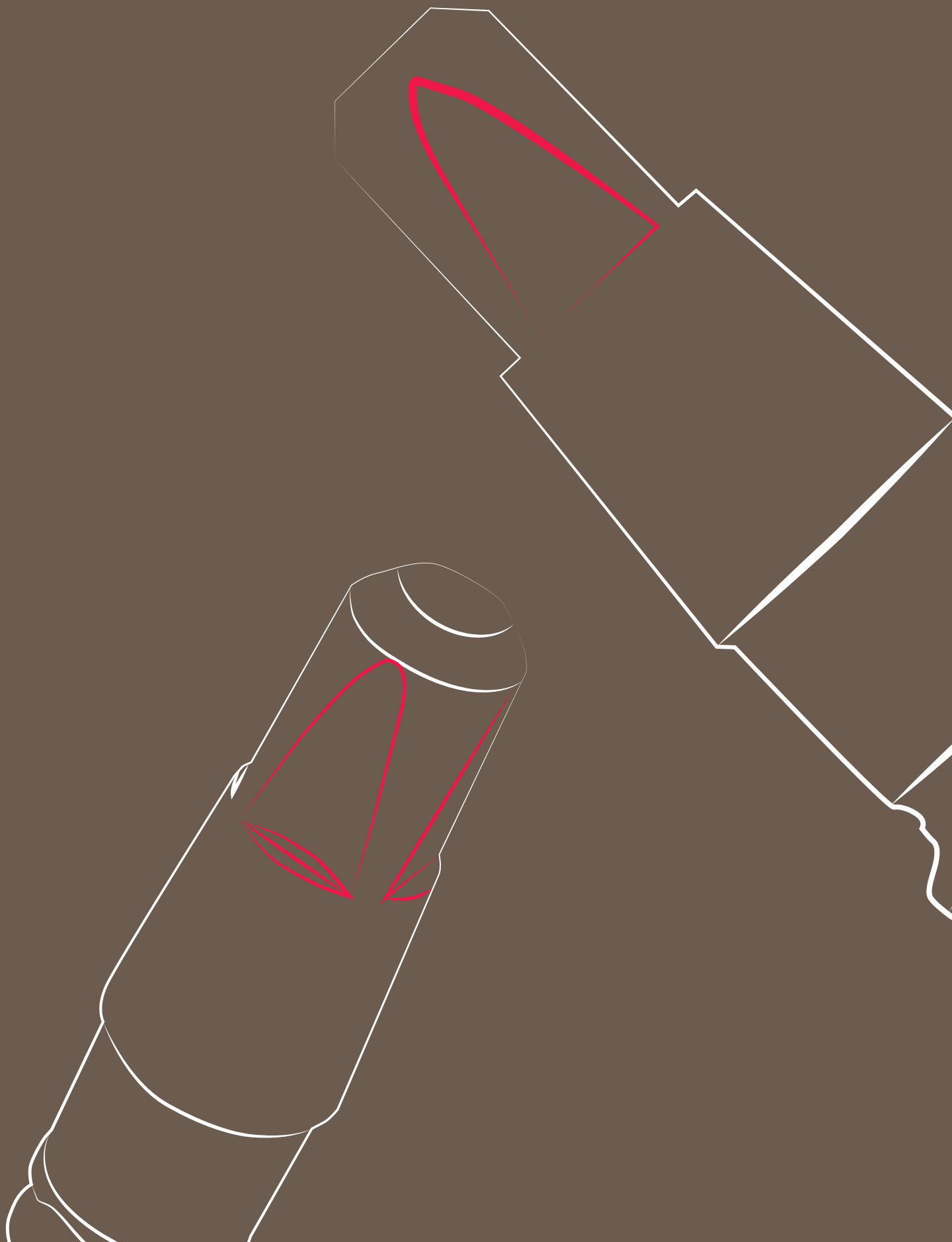
MIS exercises great care and effort in maintaining the superior quality of its products. All MIS products are guaranteed to be free from defects in material and workmanship. However, should a customer find fault with any MIS product after using it according to the directions, the defective product will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

Warning: Only a licensed dentist should use these products.
The images contained in this promotional material is for illustration purposes only and is subject to change.

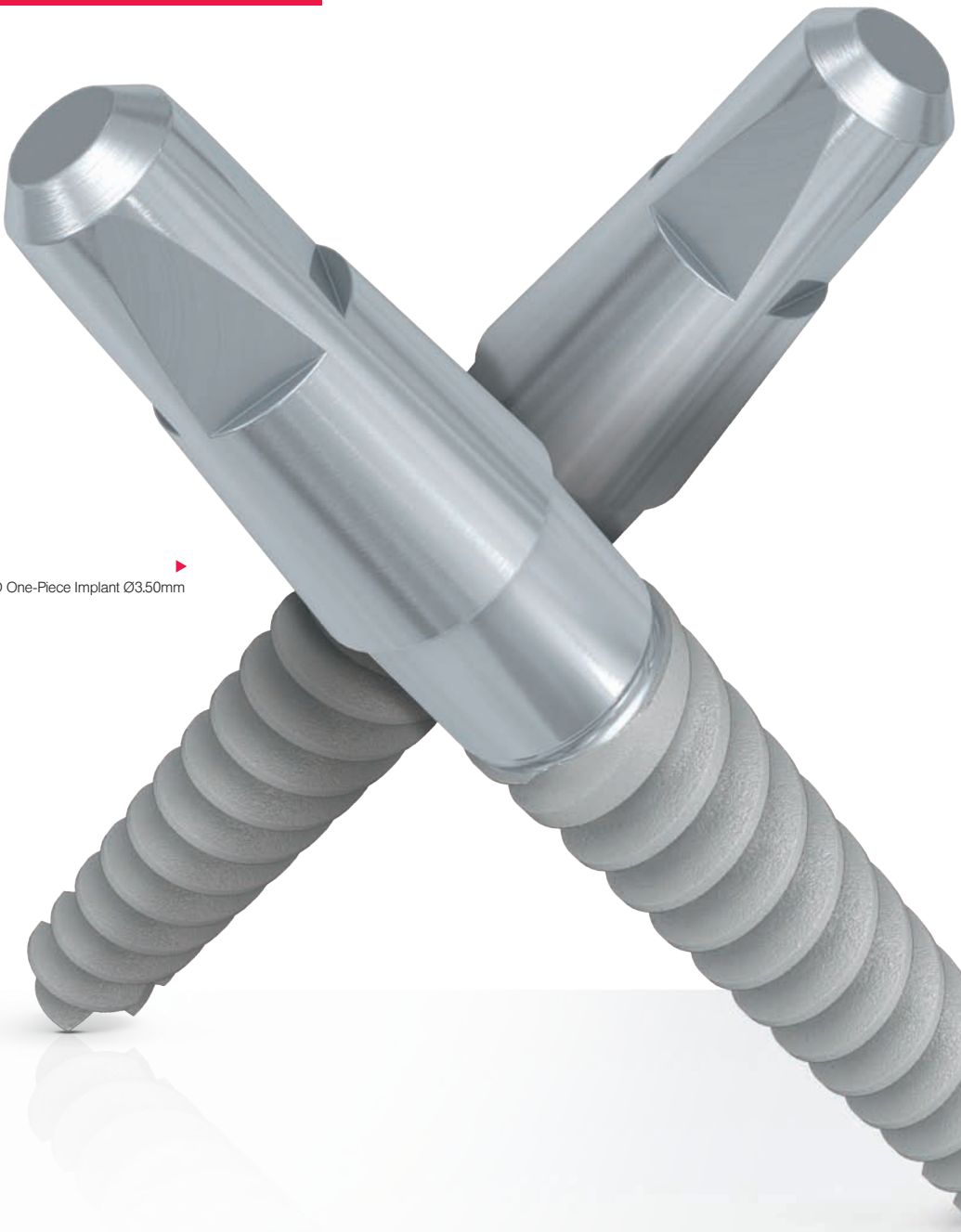
Table of contents.

The UNO One-Piece offers a unique monoblock design that integrates both implant and superstructure, for a quick, simple one-stage procedure. UNO implants are specifically engineered for use in narrow ridges and tight spaces. The innovative geometries and advanced surface morphology of the UNO offers high initial stability. These versatile implants can be used to restore single crowns and anterior cemented bridges.

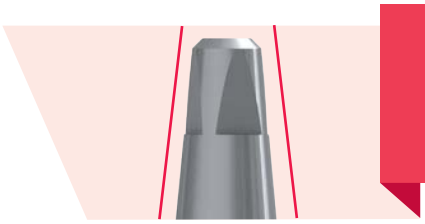




Advantages.

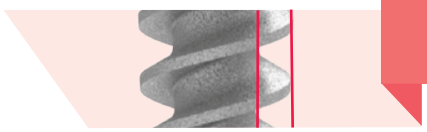


UNO One-Piece Implant Ø3.50mm



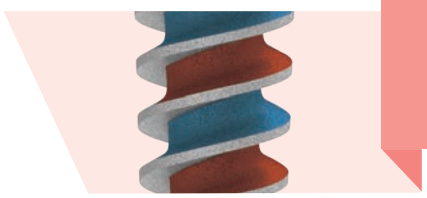
UNO One-Piece

Abutment dimensions and height allow easy adjustment for a perfect fit with cemented crowns or bridges.



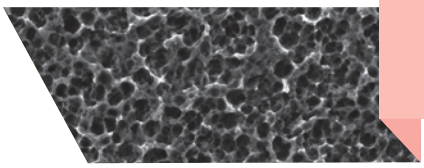
Deep threads

The deep thread design enables good initial stability. Sharp threads allow a smooth and predictable insertion into hard and dense bone.



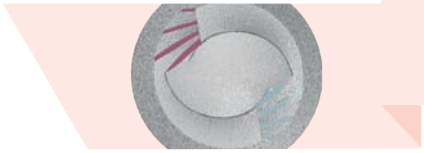
Dual thread

The UNO 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.



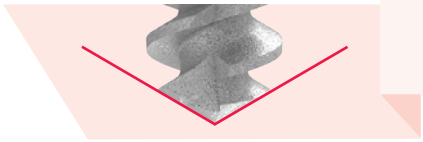
Surface treatment

The surface roughness and micro-morphology is a result of sand-blasting and acid-etching. This proven MIS surface technology has provided millions of patients and clinicians with excellent osseointegration results and long-lasting clinical success.



Two spiral channels

The UNO features a domed apex, providing a high tolerance and safe procedure during insertion.



Cutting apex

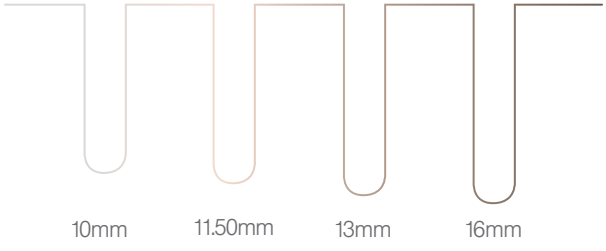
Drill tip allows self-drilling capability for easy depth adjustments.

Screw type implant range

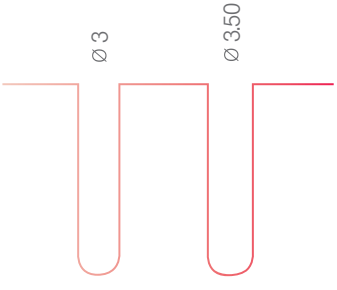
One-Piece Implants

Length	10mm	11.50mm	13mm	16mm
Type **Ø3 mm**	MO1-10300 	MO1-11300 	MO1-13300 	MO1-16300 
Ø3.50 mm	MO1-10350 	MO1-11350 	MO1-13350 	MO1-16350 

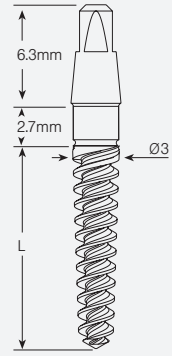
4 Depth Marks



2 Drilling Diameter Options



Ø3mm
UNO Screw-Type Implants

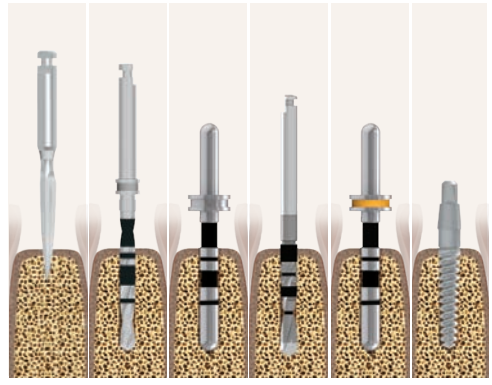
Catalog No.	Dimensions	
MO1-10300	Ø3mm length 10mm	
MO1-11300	Ø3mm length 11.50mm	
MO1-13300	Ø3mm length 13mm	
MO1-16300	Ø3mm length 16mm	

Titanium Alloy Ti 6Al 4V ELI

Sand-Blasted and Acid-Etched

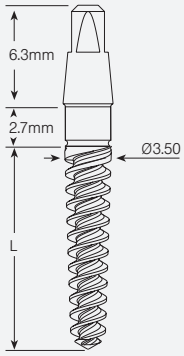
Implant Ø3mm Procedure

Drill Speed (RPM)	1200-1500	900-1200		700-900		15-25
Diameter	Ø1.90	Ø2	Ø2	Ø2.40	Ø2.40	Ø3



- Do not use the final drill for bone type 3&4
- The drilling sequence is illustrated using a 13mm implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

Ø3.50mm
UNO Screw-Type Implants

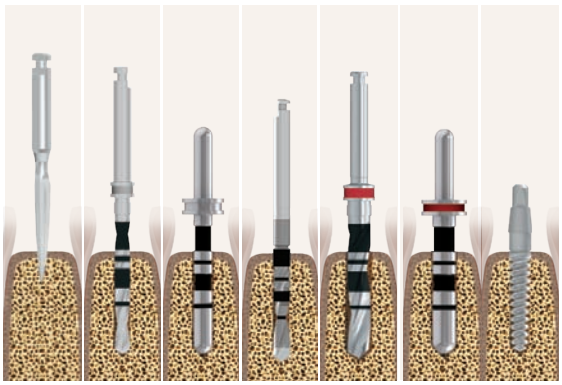
Catalog No.	Dimensions	
MO1-10350	Ø3.50mm length 10mm	
MO1-11350	Ø3.50mm length 11.50mm	
MO1-13350	Ø3.50mm length 13mm	
MO1-16350	Ø3.50mm length 16mm	

Titanium Alloy Ti 6Al 4V ELI

Sand-Blasted and Acid-Etched

Implant Ø3.50mm Procedure

Drill Speed (RPM)	1200-1500	900-1200		700-900	500-700		15-25
Diameter	Ø1.90	Ø2	Ø2	Ø2.40	Ø3	Ø3	Ø3.50



Do not use the final drill for bone type 3&4

The drilling sequence is illustrated using a 13mm implant.

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

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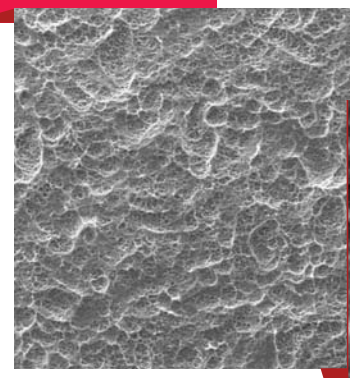
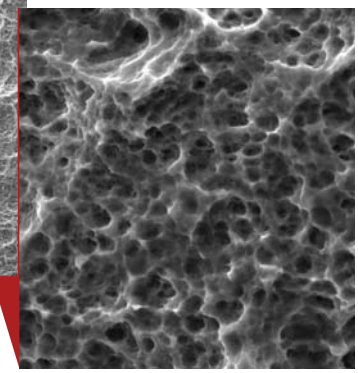
Innovative design makes the UNO One-Piece a simple and easy implant placement and restorative solution.

Surface.



SEM image of the implant surface showing the micro-structure (5 μm)



SEM image of the implant surface showing the micro-structure (10 μm)

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).

*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

David M. Dohan Ehrenfest1,2,*, Marco Del Corso3,4, Byung-Soo Kang5, Philippe Leclercq6, Ziv Mazor7, Robert A. Horowitz8, Philippe Russe9, Hee-Kyun Oh10, De-Rong Zou11, Jamil Awad Shibli12, Hom-Lay Wang13, Jean-Pierre Bernard2 and Gilberto Sammartino3.

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), Genesio (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, Genesio, 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 surfaces 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

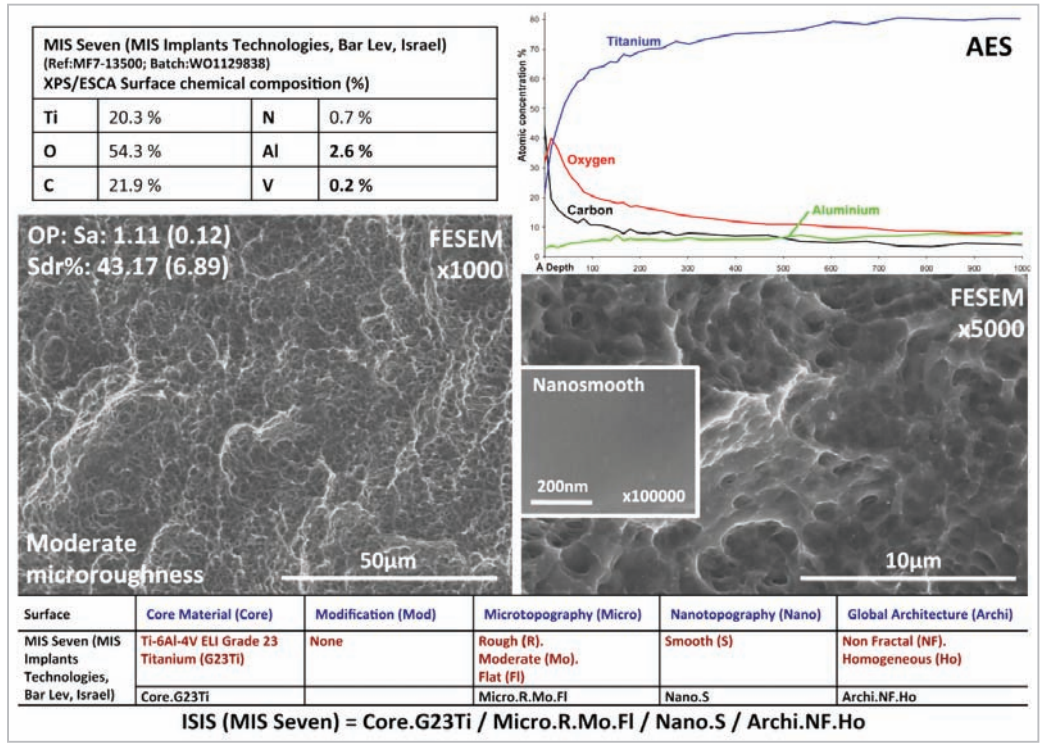


Fig. 1

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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Surgical Kit.

The UNO One-Piece implant Surgical Kit is a compact kit, that includes drills, tools and a ratchet wrench.

UNO Implant Surgical Kit
MK-0036

One-Piece **Kit Contents:**

MT-RI030 | Ratchet wrench

MT-SMD10 | Spade marking drill

MT-TDN20 | Pilot drill 2mm external irrigation

MT-P2416 | Pilot drill Ø2.40 height 16mm

MT-TDT30 | Twist drill 3mm external irrigation

MT-BTT20 | Body try-in 2mm for tapered impl. procedure

MT-PP001 | Parallel pin X2

MT-UML21 | UNO One-Piece implant motor adapter, long

MT-RKS15 | UNO One-Piece implant long key

MT-RKL21 | UNO One-Piece implant long key

Analogs and Keys.

MIS UNO One-Piece implant tools are designed to facilitate quick and reliable implant procedures.

Analog

MO1-RSA10
UNO One-Piece implant analog

UNO One-Piece mountless tube

One-Piece Keys

MT-UML21
UNO One-Piece implant motor adapter, long

MT-RKL21
UNO One-Piece implant long key

MT-RKS15
UNO One-Piece implant short key

Packaging.

The innovative MIS packaging system is designed for simple and easy use. All of our implant boxes feature distinctive colors, large typeface, clear data labels and a pull tab for quick opening. Boxes are a uniform shape and height, specifically designed to fit in clinic cabinets for easy accessibility and compact space-saving storage.

For the dentist's use

Boxes are a uniform shape and height, specifically designed to fit in clinic cabinets for easy accessibility and compact space-saving storage.

Implant identification markings

Quick identification markings signify: implant diameter (top), implant length (middle) and implant platform (bottom).

Easy-pull tab

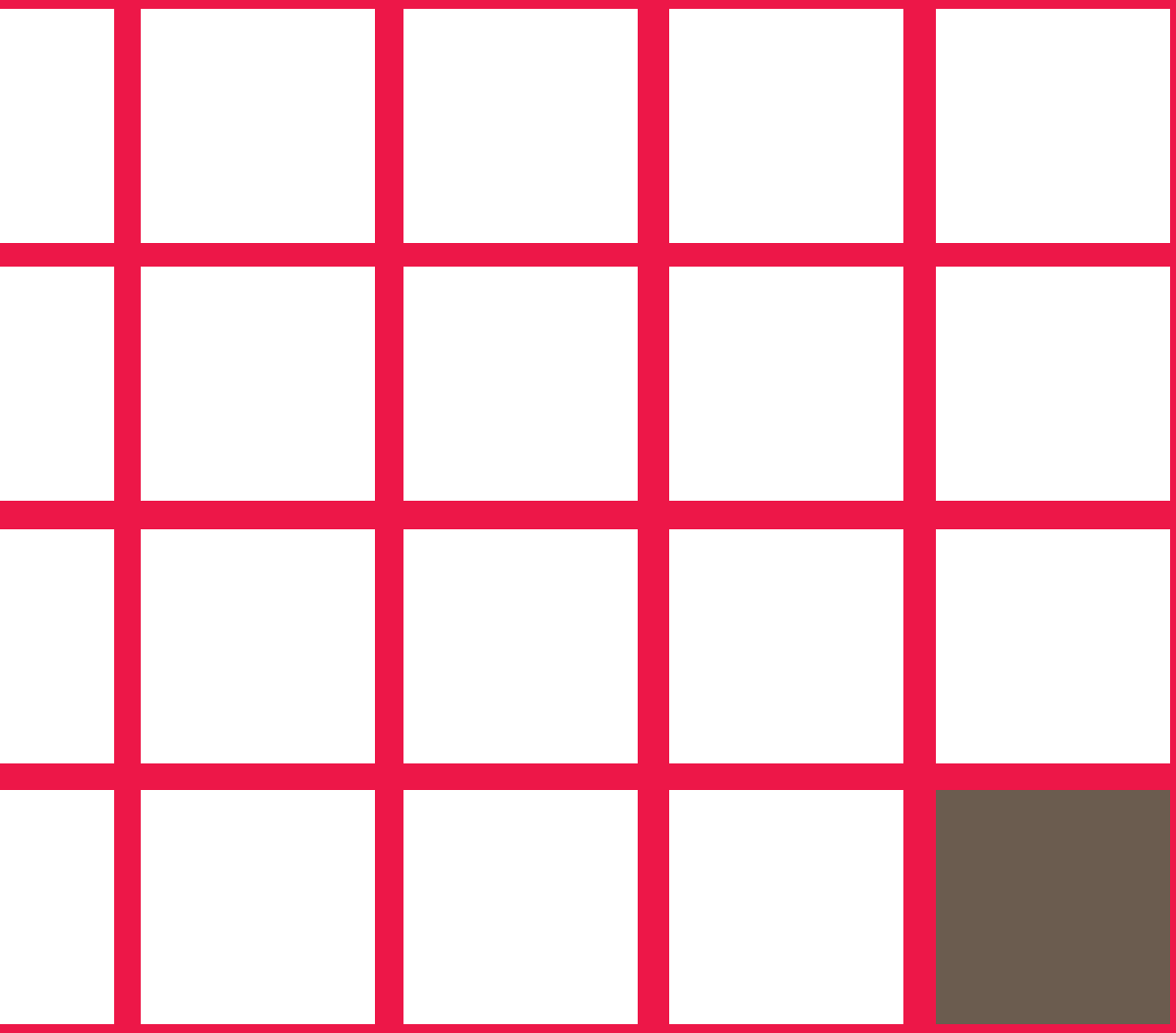
Convenient pull tab facilitates easy, quick opening of the box during surgery.

Tubes

Newlly designed molten polystyrene tubes provide easy use for maximum convenience.

Pack of 10 implants

The box is designed to contain exactly 10 pieces of each item with the same lot number. It can be used as a display stand or stored in a drawer, where items can be easily and readily identified.



MC-UNO08 Rev.5

MIS Implants Technologies Ltd.
www.mis-implants.com

MIS Quality System complies with international quality standards: ISO 13485:2003 - Quality Management System for Medical Devices, ISO 9001: 2008 – Quality Management System and CE Directive for Medical Devices 93/42/EEC. MIS products are cleared for marketing in the USA and CE approved.