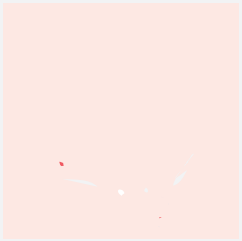
UNO

One Piece and Narrow Implants by mis

mis®

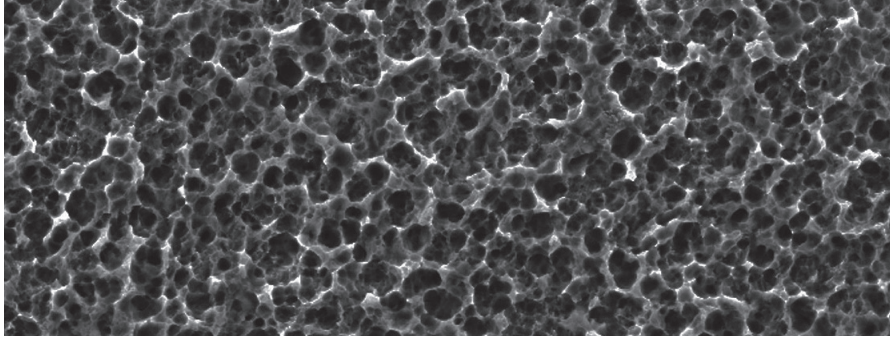
Make it Simple

Based on extensive long term research MIS is proud to introduce the new UNO implants . Each of these unique implants are specifically engineered for narrow ridges and tight spaces. The insertion of the UNO implant is a quick and simple one stage procedure. Due to their innovative geometries and advanced surface morphology these unique implants offer high initial stability. These versatile implants can be used to restore single crowns and anterior cemented bridges.

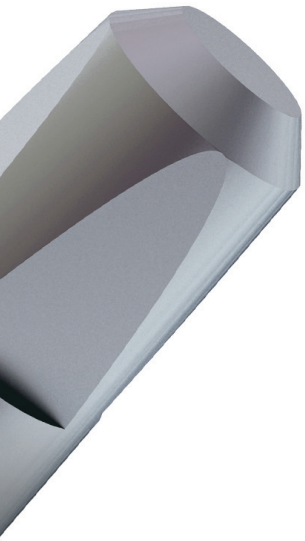



mis
UNO

UNO One Piece Implant Ø3.50mm



New surface morphology



Advantages.

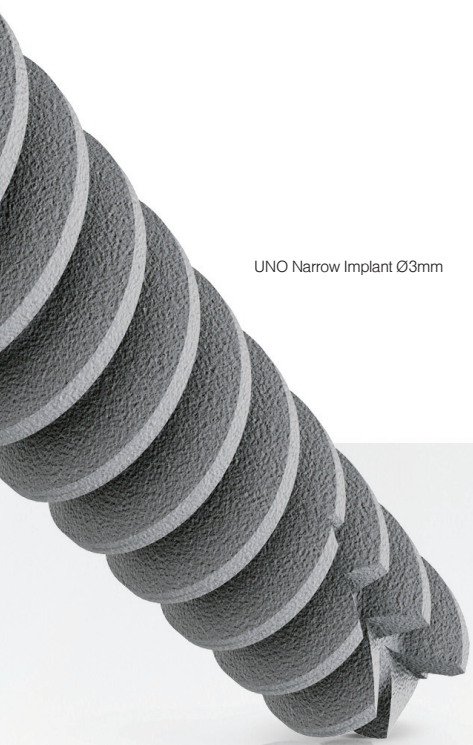
Simple
MIS UNO's specially designed tools and simple procedure ensures a worry free restoration for the clinician.

Easy
An innovative design with increased insertion speed makes the MIS UNO an easy implant to insert.

Stability
The MIS UNO design ensures maximum strength and stability for the implant and restorative parts.

Versatility
The MIS UNO is indicated for use in narrow ridges and tight places such as maxillary lateral and mandibular incisors. The MIS UNO's versatility enables the clinician to use the implant for single tooth, partial denture and over denture restorations.

Long lasting
Due to the innovative geometry and advanced surface treatment, the MIS UNO will provide high initial stability and a long lasting restorative result.



UNO Narrow Implant Ø3mm

Length	10mm	11.50mm	13mm	16mm
Type				
Ø3mm One Piece Implant	MO1-10300 	MO1-11300 	MO1-13300 	MO1-16300 
Ø3.50mm One Piece Implant	MO1-10350 	MO1-11350 	MO1-13350 	MO1-16350 

Implant Range.

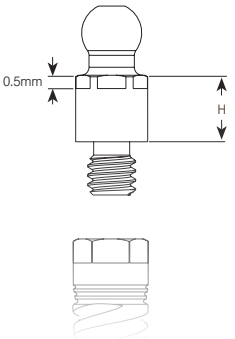
Length	10mm	11.50mm	13mm	16mm
Type				
Ø 3mm Narrow Two Piece Implant	MO2-10300 	MO2-11300 	MO2-13300 	MO2-16300 

Uno Ball anchor screws:

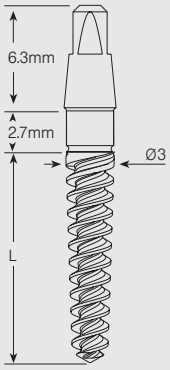
MB-NR005
Height 0.5mm

MB-NR010
Height 1.5mm

MB-NR025
Height 2.5mm

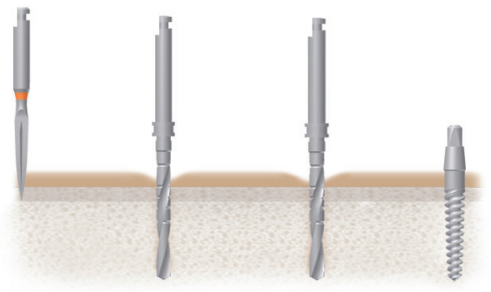


UNO screw type implants
Ø3mm One Piece.

Catalog No.	Dimensions	Material	Description
MO1-10300	Ø3mm length 10mm	Titanium Alloy Ti 6Al-4V ELI Abutment Part: Acid-Etched Implant Part: Sand Blasted and Acid-Etched	
MO1-11300	Ø3mm length 11.50mm		
MO1-13300	Ø3mm length 13mm		
MO1-16300	Ø3mm length 16mm		

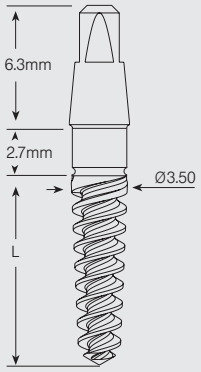
Implant Ø3mm Procedure

Drill Speed (RPM)	1200-1500	900-1200	700-900	15-20
Diameter	Ø1.90	Ø2	Ø2.40	Ø3.00



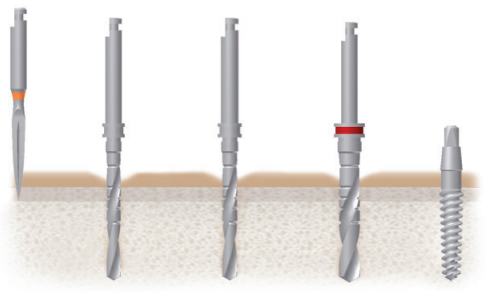
Procedure recommended by MIS cannot replace the judgment and the experience of the surgeon

UNO screw type implants
Ø3.50mm One Piece.

Catalog No.	Dimensions	Material	Description
MO1-10350	Ø3.50mm length 10mm	Titanium Alloy Ti 6Al-4V ELI Abutment Part: Acid-Etched Implant Part: Sand Blasted and Acid-Etched	
MO1-11350	Ø3.50mm length 11.50mm		
MO1-13350	Ø3.50mm length 13mm		
MO1-16350	Ø3.50mm length 16mm		

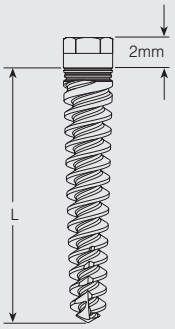
Implant Ø3.50mm Procedure

Drill Speed (RPM)	1200-1500	900-1200	700-900	400-700	15-20
Diameter	Ø1.90	Ø2	Ø2.40	Ø3	Ø3.50



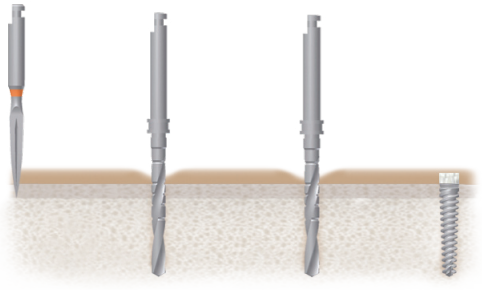
Procedure recommended by MIS cannot replace the judgment and the experience of the surgeon

Uno screw type implants
Ø3mm Narrow.

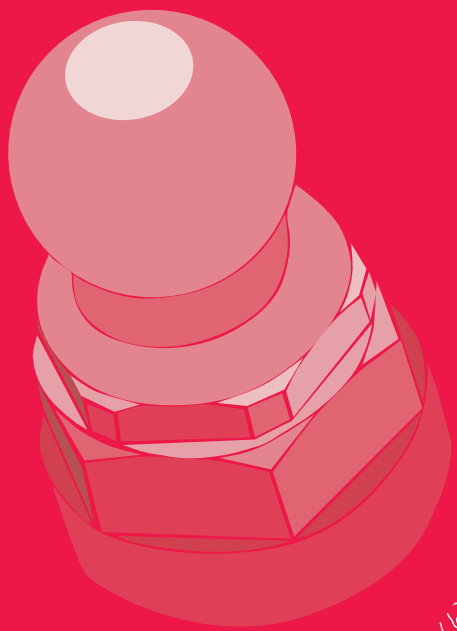
Catalog No.	Dimensions	Material	Description
MO2-10300	Ø3mm length 10mm	Titanium Alloy Ti 6Al-4V ELI Sand Blasted and Acid-Etched	
MO2-11300	Ø3mm length 11.50mm		
MO2-13300	Ø3mm length 13mm		
MO2-16300	Ø3mm length 16mm		

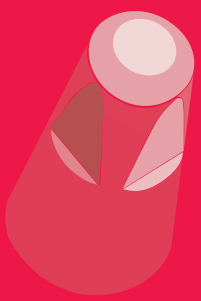
Ø3mm Implant Procedure

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



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





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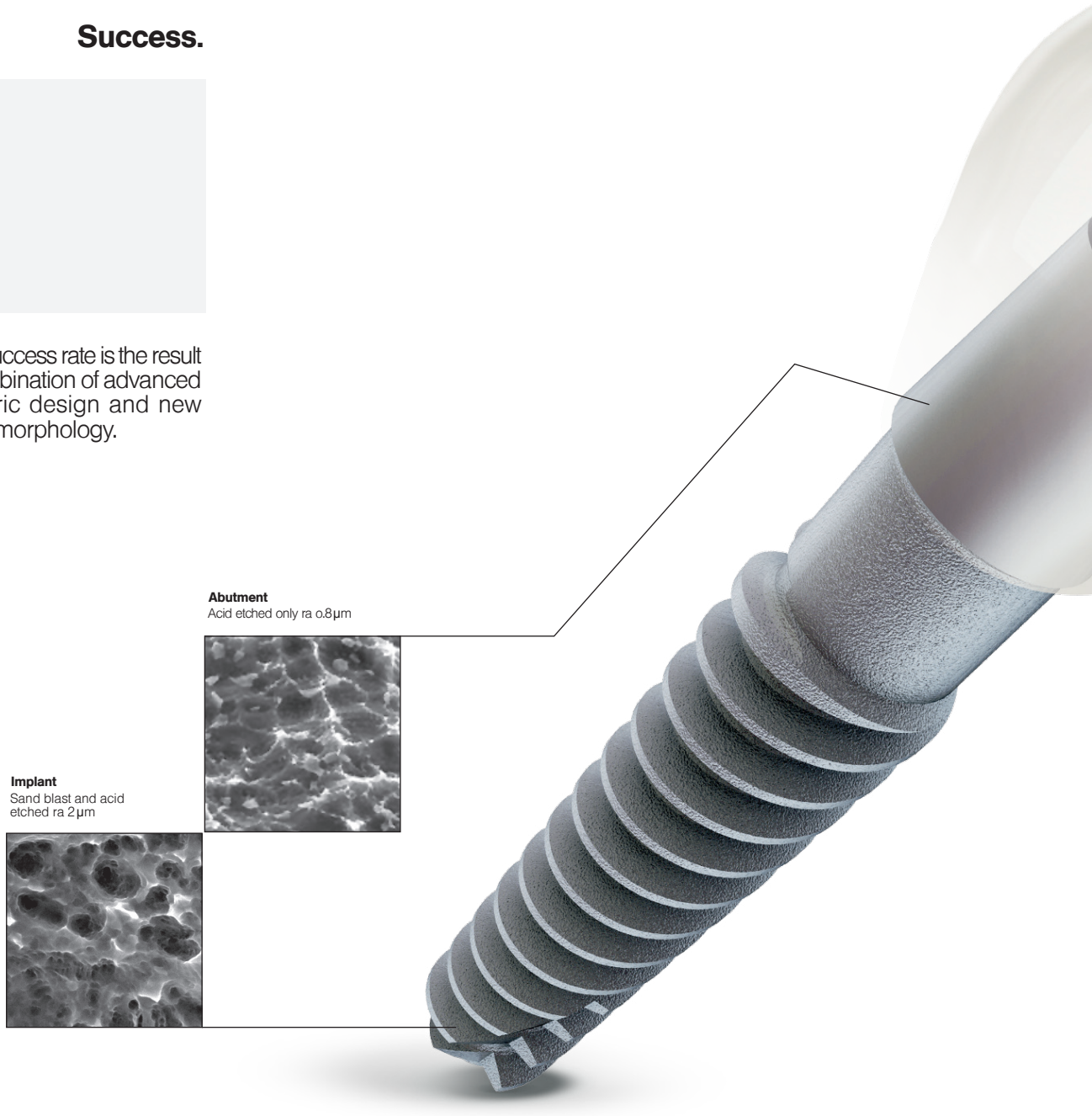
An innovative design with increased insertion speed makes the MIS UNO an easy implant to insert.

Success.

A high success rate is the result of a combination of advanced geometric design and new surface morphology.



Micro Structure - Surface Morphology

The surface roughness and microgeometry of titanium is achieved by blasting particles and acid-etching. A larger surface area increases bone-to-implant contact, resulting in more area for bone cell attachment. The micro mechanical fixation increases the stability of the implant.

- High-level of surface morphology.
- Increased bone attachment has been shown to be optimal with micro pits in the 5-10 micron range.

Adsorption of Serum Protein to Modified Titanium Surfaces

M.N. Sela, L.Badihi, G.Rosen, D.Kohavi and D. Steinberg

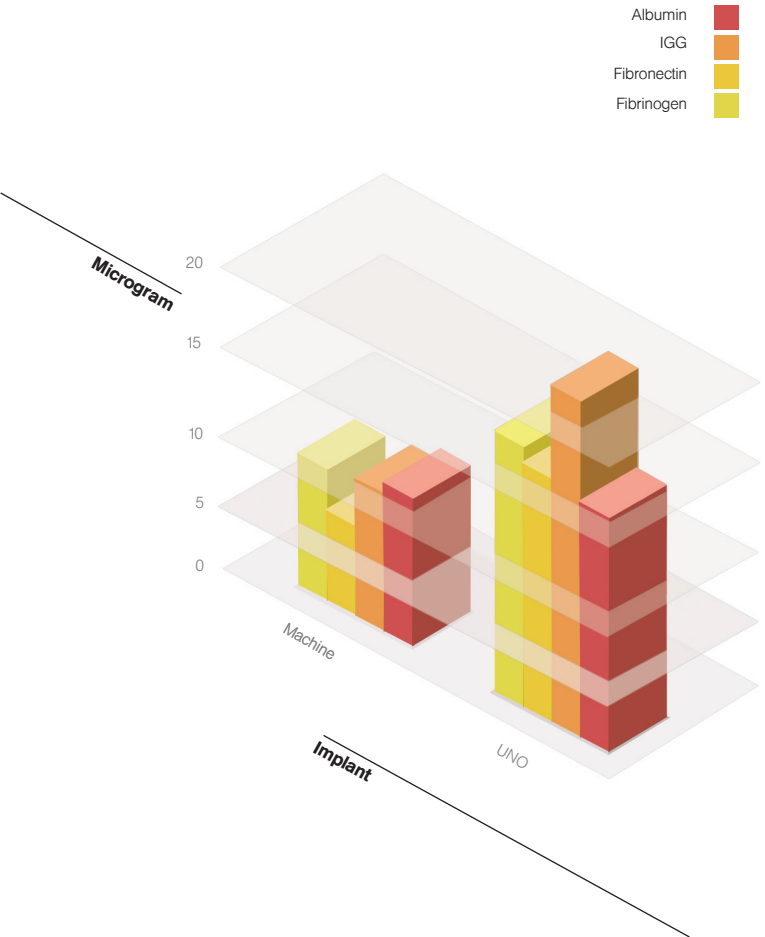
The use of Titanium (Ti) implants is a novel clinical procedure in dentistry. The adsorption of biological molecules to the implant's surface triggers a sequence of events that may determine the outcome of this procedure. Clinical data suggests that modified Ti surfaces play an important role in the success or failure of the implant. Objective: the purpose of this study was to investigate the interaction between Ti implants with different surface properties and serum proteins, in order to find the optimal implant surfaces which may improve the Osseointegration process and implant intake.

Materials & Methods: 6mm in diameter Ti disks with two types of surface modifications were compared: Machined and Sandblast plus Acid-Etched. The disks were coated with mixtures of Human Serum Albumin conjugated with fluorescein (HAS-FITC).

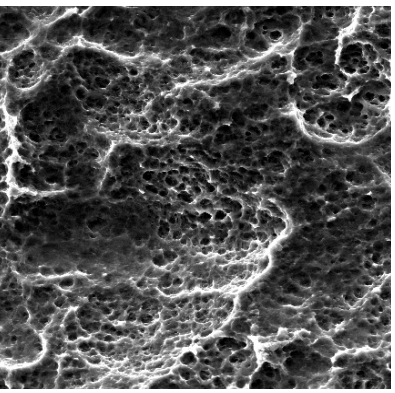
Following incubation, the coat was removed from the disks by SDS. A Confocal Scanning Laser Microscope was used to visualize and measure the HAS-FITC coat and the degree of protein removal from the Ti surfaces.

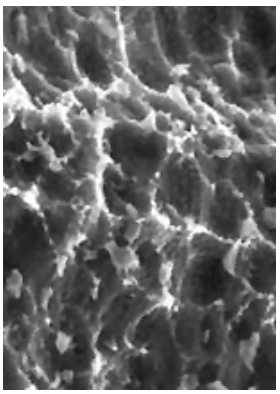
Results: The Confocal Microscope images revealed a significantly higher amount of HAS-FITC coat on the rough disks, as compared with the machined disks. Furthermore, under similar experimental conditions, less HAS-FITC could be removed from the rough disks than from the machined disks.

Conclusions: Absorption of albumin to the rough treated Ti surface is both qualitatively and quantitatively far more intense, as compared with the machined surfaces. Further studies of the chemical and physical characterization of the modified Ti surfaces are underway. Moreover, additional serum proteins, as well as oral microorganisms, are being examined for their interactions with the modified Ti surfaces.



Hebrew University
Jerusalem, Israel, IADR
August 03, 2004



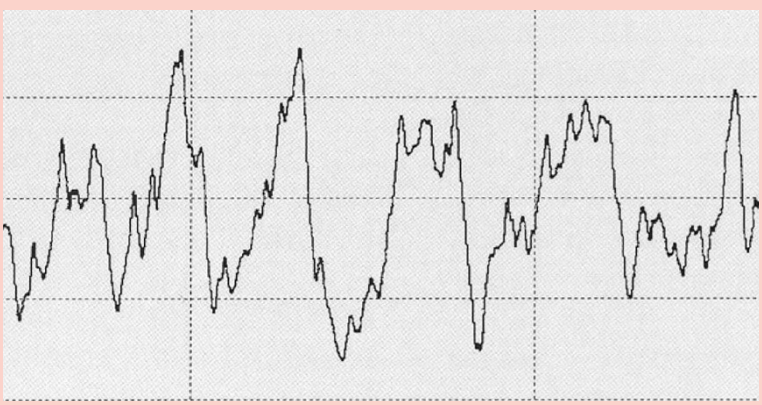


Surface.

The surface roughness, together with the high level of surface morphology, prevents bone resorption at the implant's neck.

Roughness Measurement

The arithmetic average of the deviation Ra is the most commonly used measurement for surface roughness. The micro geometry of MIS implants meet the roughness recommended in the international literature.



Instrument:
Parthometer M1
(MAHR)

Ra 2.25micron
Rz 14.65micron
Rmax 15.5micron
R profile 0.25mm
Lt 5.60mm
Lc 0.80mm
Pc (0.5-0.5) 165/c

Analysis Reports

XPS analysis conditions

Instrument: VG Scientific Sigma Probe
X-Ray Source: Monochromatic Al Kα, 1486.6eV
X-Ray Beam Size: 400 μm

For surface analysis, the samples were irradiated with monochromatic X-rays. Survey spectra were recorded with a pass energy of 100e V, through which the surface chemical composition was determined. The atomic concentrations were calculated using elemental sensitivity factors without applying any standardization procedure. The core level binding energies of the different peaks were normalized by setting the binding energy for the Cls at 284.6 eV.

For chemical state identification of Ti, high-energy resolution measurements of the Ti2p line were performed with a pass energy of 20eV. Using the Ti2p spectrum, the Ti oxide layer thickness was calculated from the experimental Ti oxide and Ti metal peak ratio. The results of elemental quantitative analysis and Ti oxide layer thicknesses are summarized in the following Tables.

Table 1
XPS Atomic Concentrations (%)

Area	C	Ti	O	N	Ca	Si	S	Mg	Cl	Na	V	Al
Thread	28.21	15.2	48.78	1.08	0.90	0.68	-	-	-	-	-	5.13

Table 2
Ti Oxide Thickness (nm)

Area	Oxid-Dicke (nm)
Thread	5.97

Solid State Institute
Technion Israel Institute of Technology
Haifa 32000, Israel

Surgical Kit.

The MIS UNO implant Surgical Kit is a small kit, which includes drills, tools and a ratchet wrench.

Uno Implant Surgical Kit
MK-0036

One Piece and Narrow **Kit Contents:**

Shared Parts

MT-RI030 | Ratchet wrench

MT-TDN30 | Twist drill 3mm external irrigation

MT-TDN20 | Pilot drill 2mm external irrigation

MT-TDN24 | Twist drill 2.40mm external irrigation

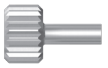
MT-SMD10 | Spade marking drill

MT-BT020 | Body try in 2mm

MT-PP001 | Parallel pin

One Piece

MT-HRL27 | Long ratchet adapter for Narrow Implant



MT-HKO21 | UNO One Piece Implant insertion tool

MT-UMS21 | UNO One Piece Implant motor adapter, short

Narrow

MT-MRH20 | Hex. Ratchet Long Adapter for Int. Hex. Connection

MT-BK235 | Ball attachment anchor key

MT-HDL30 | Long Hex. Drive 0.05”

MT-MMH20 | Long Motor Adapter for Int. Hex. Connection

Analogs and Keys.

MIS is proud to introduce the Uno One Piece and Narrow Implants tools. These tools are designed to facilitate quick and reliable implants procedures.

Analogs

MO1-RSA10
UNO One Piece
Implant analog

MB-RS375
Ball attachment
analog

Keys

MT-HKL21
UNO One Piece
Implant long key

MT-HKS15
UNO One Piece
Implant short key

MT-HRL27
Long ratchet adapter
for Narrow Implant

MT-HRS27
Short ratchet adapter
for Narrow Implant

Narrow Mount Tube

The Narrow Implant enables the clinician with three tool options for simple and reliable methods of mounted implant procedures. The direction of the implants face can be quickly and accurately determined by viewing the direction indicator incorporated on each tool.

One Piece Mountless Tube

The Uno One Piece Implant allows the clinician four tool options for simple and reliable methods of mountless implant procedures.

Packaging.

The packaging is designed for ease of use by the dentist and the distributor.

Implant identification markings

Quick identification of implant size and length. Upper number represents the implant diameter, while the lower represents implant length.

Easy pulling tab

The pull tab is easily indentified which facilitates quick and easy opening.

For the dentist's use

The implant packaging allows a convenient, logical arrangement in the drawer and immediate identification of the parts.

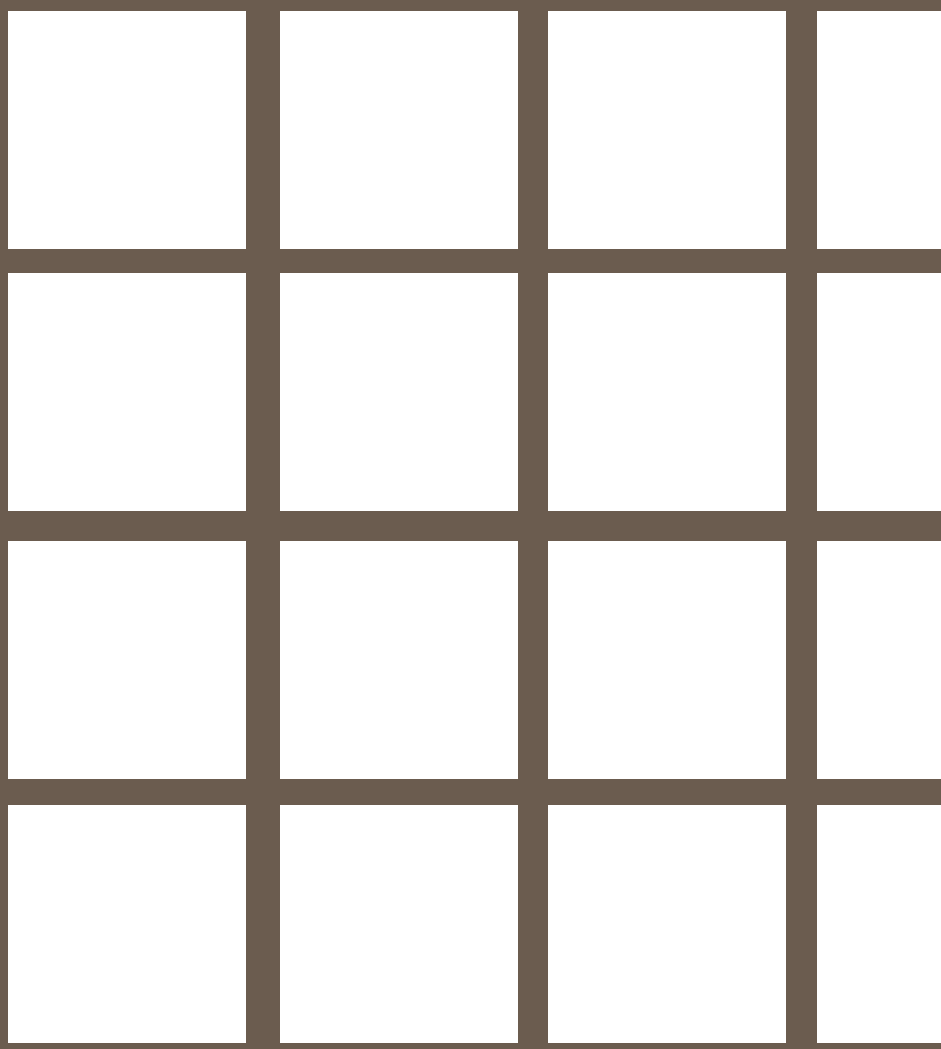
Implant

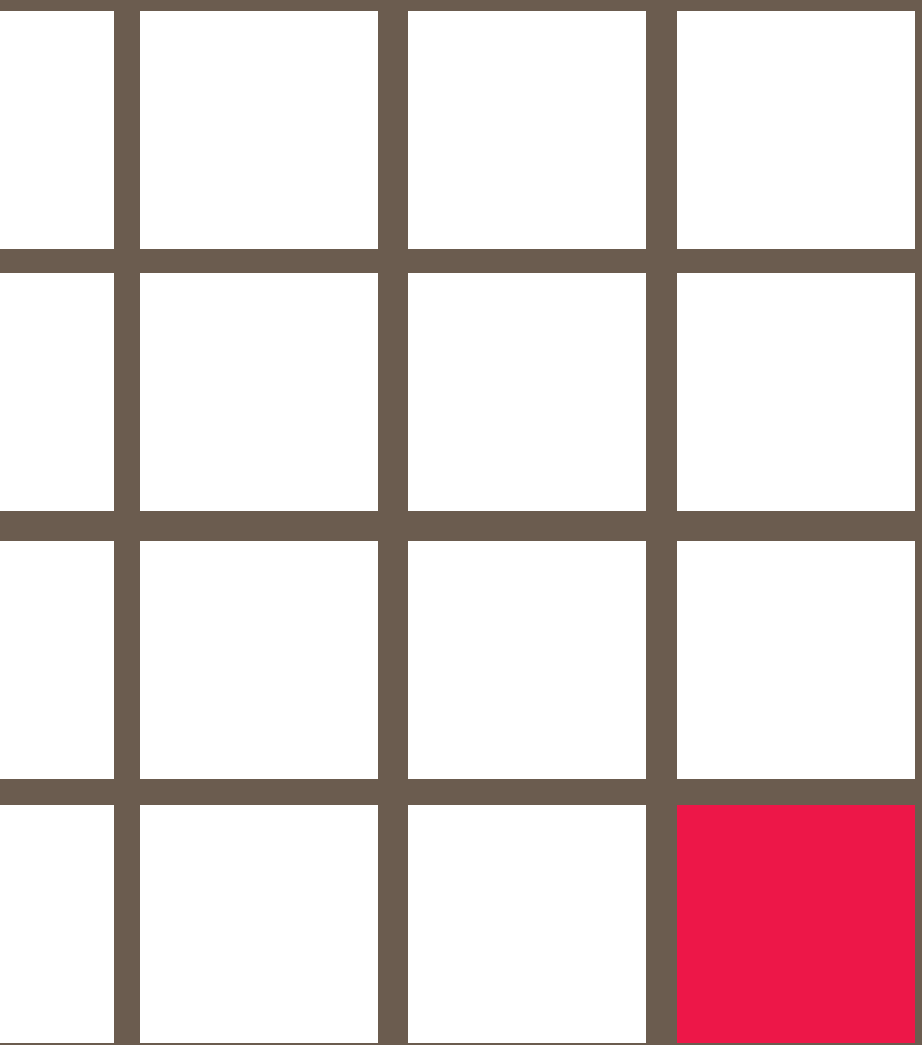
Tubes

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

10 implants pack

The packaging is boxed to contain exactly ten pieces of each item with the same lot number. It can be used as a stand or in the drawer, where items can be easily displayed and readily identified.





MC-UNO08 Rev.2

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

MIS's Quality System complies with international quality control standards: ISO 13485:2003 - Quality Management System for Medical Devices, ISO 9001: 2000 – Quality Management System and CE Directive for Medical Devices 93/42/EEC. MIS's products are cleared for marketing in the USA and CE approved.