

mis[®] | v3
More with Less



TABLE OF CONTENTS

INTRODUCTION

BENEFITS

V3 IMPLANT, NARROW PLATFORM

V3 IMPLANT, STANDARD PLATFORM

BONE GROWTH

SURGICAL KIT

INSERTION TOOLS

SURFACE QUALITY

PACKAGING

PROSTHETIC OPTIONS

MIS CONNECT SYSTEM

P. 4

P. 6-7

P. 8-9

P. 10-13

P. 14

P. 15-17

P. 18-19

P. 20-21

P. 22-23

P. 24-25

P. 26

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.

The V3 is a groundbreaking, innovative and sophisticated solution. It was invented by doctors for doctors and was designed for potentially optimizing esthetic procedures through tissue preservation and growth.

The MIS comprehensive conical connection solution offers:

One consistent prosthetic solution

One surgical kit

One drilling protocol

Two unique geometries of MIS V3 and MIS C1 implant systems provide optimum implant integration and bone growth.

The MIS Quality System complies with international quality standards: ISO 13485: 2016 - Quality Management System for Medical Devices and Medical Device Directive 9342//EEC. Please note, not all products are registered or available in every country/region.

IFUs for MIS products may be found at: <https://ifu.mis-implants.com>. Adobe Acrobat is required to view the IFU file on the website. This software may be freely downloaded from the Adobe website.



V3 Conical Connection
Implant on MIS Website



Additional information may be added to the product descriptions without prior notice.
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BENEFITS

Esthetics

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.

Implant integration

The triangular-shaped neck of the of the V3 was engineered to provide a reservoir for blood pooling and the formation of blood clots. These conditions are required for both optimum implant integration and bone growth.

Bone preservation

A 12-degree friction fit conical connection which ensures a secure seal and minimal micro-movements, along with the gaps formed around the sides of the implant neck and a platform switched design, were engineered to provide a tight interface, compression-free zone, and soft tissue preservation and growth. Crestal bone loss may be minimized by reducing mechanical trauma and stress in the cortical bone, and gaining soft tissue volume.

Maximum accuracy

Each V3 package comes with its own sterile, single-use final drill, which is suitable for all bone types, increasing the potential for a more precise-fit. V3 insertion tools are marked to help orient the implant during 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.

Engineered to create
an ultimate seal and
ideal connection

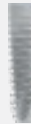


Triangular shaped neck
was designed to provide
high crestal stability



NARROW PLATFORM

Implant Range

Length	8mm	10mm	11.50mm	13mm	16mm
Ø3.30mm		V3-10330 	V3-11330 	V3-13330 	V3-16330 

Surgical Tools



CT-NLM30
V3 long motor
insertion tool,
narrow platform



CT-NSM30
V3 short motor
insertion tool,
narrow platform



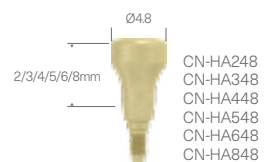
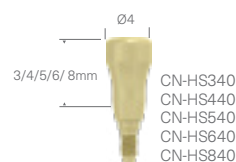
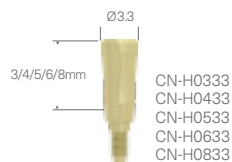
CT-NLR30
V3 long ratchet
insertion tool,
narrow platform



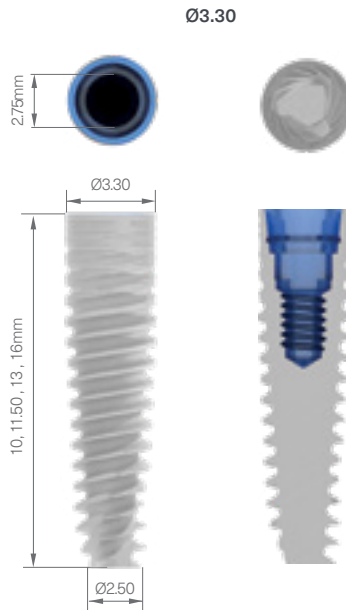
CT-NSR30
V3 short ratchet
insertion tool,
narrow platform

Implant Cover Screw and Healing Caps

Coverscrew



Technical Information



Material:

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

Ø3.30mm Implant Procedure



The drilling sequence is illustrated using a 11.50mm implant.
Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.



STANDARD PLATFORM

Implant Range

Length	8mm	10mm	11.50mm	13mm	16mm
Ø3.90mm	V3-08390 	V3-10390 	V3-11390 	V3-13390 	V3-16390 
Ø4.30mm	V3-08430 	V3-10430 	V3-11430 	V3-13430 	V3-16430 
Ø5mm	V3-08500 	V3-10500 	V3-11500 	V3-13500 	V3-16500 

Surgical Tools



CT-SLM30
V3 long motor
insertion tool,
standard platform



CT-SSM30
V3 short motor
insertion tool,
standard platform

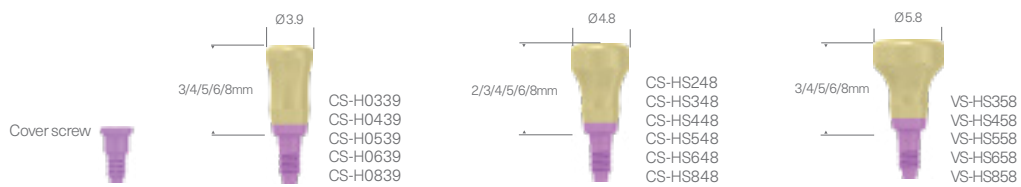


CT-SLR30
V3 long ratchet
insertion tool,
standard platform

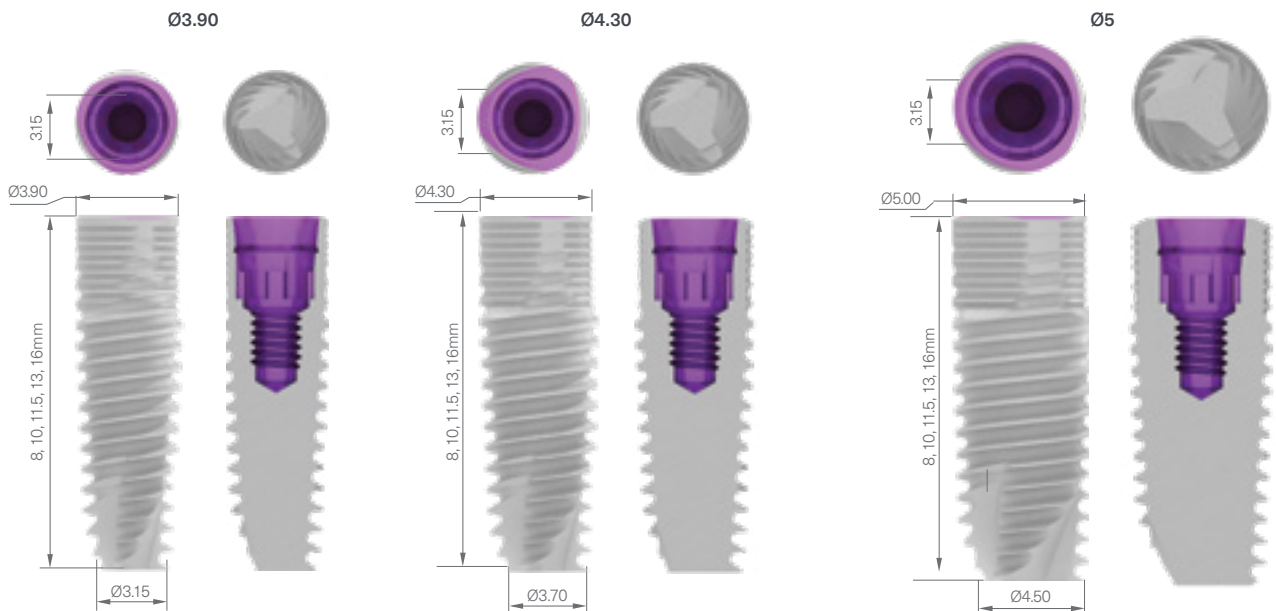


CT-SSR30
V3 short ratchet
insertion tool,
standard platform

Implant Cover Screw and Healing Caps



Technical Information



Material:

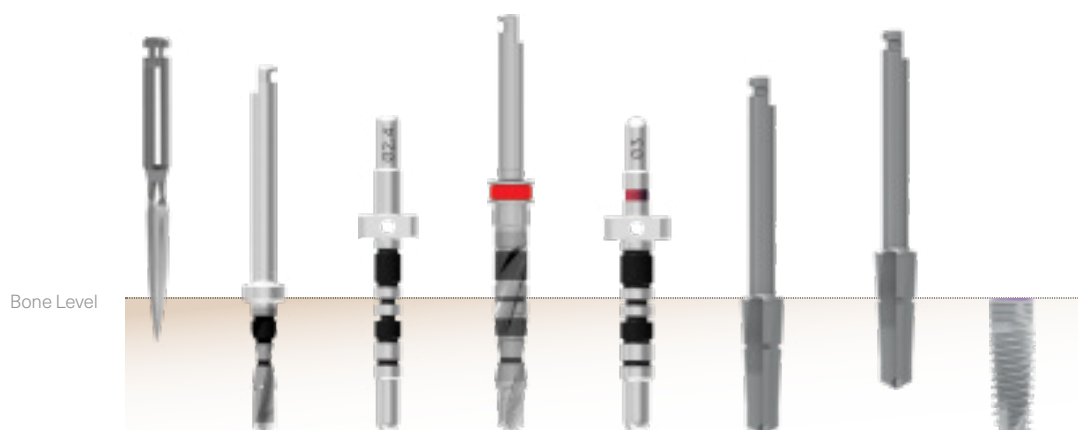
Titanium Alloy Ti 6Al 4V ELI
Sand-Blasted and Acid-Etched



STANDARD PLATFORM

Ø3.90mm Implant Procedure

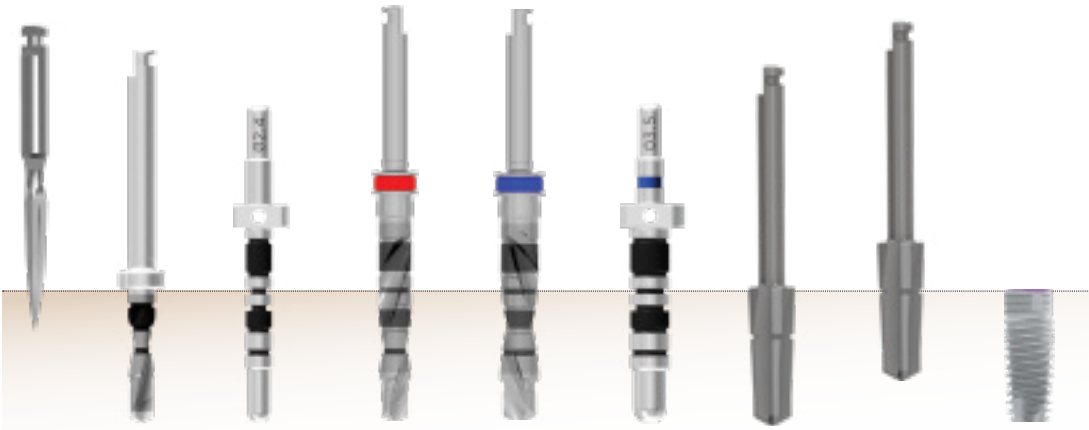
Drilling Speed (RPM)	800-1000	600-800		450-650		OR	200-400	200-400	Max. Torque: 60Ncm
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø3	Ø3		Final drill for bone types 1 and 2	Final drill for bone types 3 and 4	Ø3.90



The drilling sequence is illustrated using a 11.50mm implant.
Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

Ø4.30mm Implant Procedure

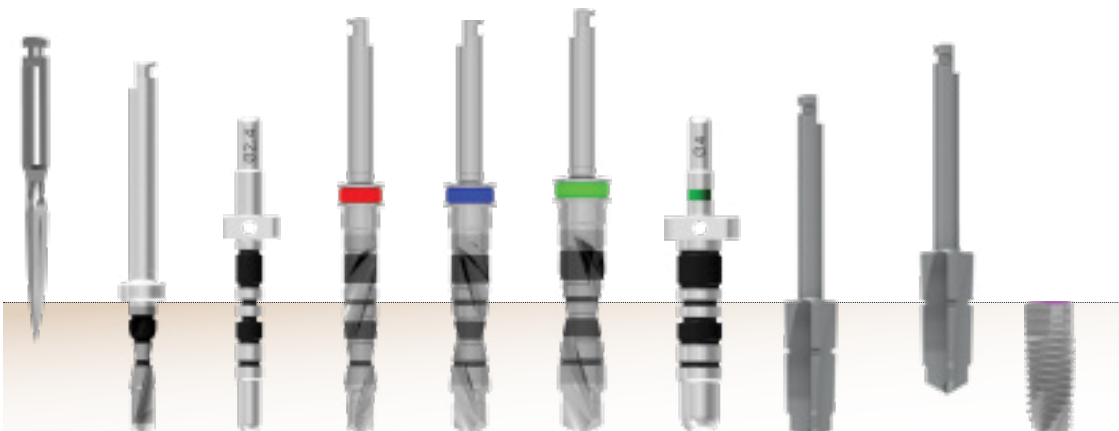
Drilling Speed (RPM)							OR		Max. Torque: 60Ncm
	800- 1000	600- 800		450- 650	350- 550		200- 400	200- 400	
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø3	Ø3.50	Ø3.50	Final drill for bone types 1 and 2	Final drill for bone types 3 and 4	Ø4.30



i The drilling sequence is illustrated using a 11.50mm implant.
Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

Ø5mm Implant Procedure

Drilling Speed (RPM)	800-1000	600-800		450-650	350-550	350-550	OR		200-400	200-400	Max. Torque: 60Ncm
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø3	Ø3.50	Ø4	Ø4		Final drill for bone types 1 and 2	Final drill for bone types 3 and 4	Ø5



Bone Level

i The drilling sequence is illustrated using a 11.50mm implant.
Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.



Designed for Additional Room for Bone Growth

The unique triangular-shape of the V3 implant's coronal portion was designed to allow additional space for bone growth and created to support highly stable surrounding soft tissues and result in more esthetic restorations.

This triangular design was created to provide solid anchorage at three points in the crestal area while forming gaps between the remaining sides of the implant neck and the osteotomy, which may result in a compression-free zone, where a stable blood clot may more easily be achieved.

The ingenious combination of compression-free gaps with a firm anchorage may encourage the establishment of a stable blood clot; the first step towards a successful osseointegration process: Hemostasis Phase > Proliferative Phase > Remodeling Phase.



mis[®]
V3

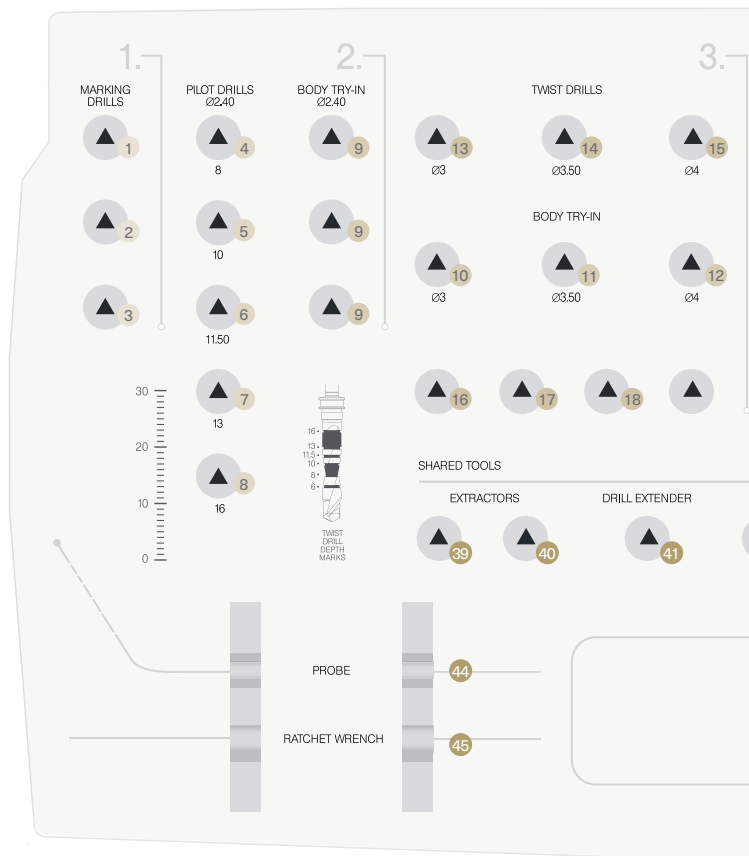
SURGICAL KIT

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.





Surgical Kit - MK-T051



MARKING DRILLS



MT-SMD10
Spade marking drill



MT-PDM24
Position drill mill, Ø2.4mm



MT-PD440
Position drill, Ø4mm

PILOT DRILLS



CT-P2408
Pilot drill with built-in stopper for 8mm length implants, Ø2.4/2mm



CT-P2410
Pilot drill with built-in stopper for 10mm length implants, Ø2.4/2mm



CT-P2411
Pilot drill with built-in stopper for 11.5mm length implants, Ø2.4/2mm



CT-P2413
Pilot drill with built-in stopper for 13mm length implants, Ø2.4/2mm



CT-P2416
Pilot drill for 16mm length implants, Ø2.4/2mm

BODY TRY-INS



CT-BTC24
Body try-in, Ø2.4mm



CT-BTC30
Body try-in, Ø3mm



CT-BTC35
Body try-in, Ø3.5mm



CT-BTC40
Body try-in, Ø4mm

STEP DRILLS



CT-TDC30
Step drill, external irrigation, Ø3/2.4mm



CT-TDC35
Step drill, external irrigation, Ø3.5/3mm



CT-TDC40
Step drill, external irrigation, Ø4/3.5mm



MT-CSN33
Countersink, narrow platform



MT-GDN33
Countersink, standard platform



MT-GDN50
Countersink, wide platform

V3 TOOLS
C1 TOOLS

C1 INSERTION TOOLS

27

CT-NLI10
Long motor insertion tool,
conical connection,
narrow platform

33

CT-SSI10
Short insertion tool,
conical connection,
standard platform

28

CT-NLR10
Long ratchet insertion tool,
conical connection,
narrow platform

34

CT-SSR10
Short ratchet insertion tool,
conical connection,
standard platform

29

CT-NSI10
Short motor insertion tool,
conical connection,
narrow platform

35

CT-WLI10
Long motor insertion tool,
conical connection,
wide platform

30

CT-NSR10
Short ratchet insertion tool,
conical connection,
narrow platform

36

CT-WLR10
Long ratchet insertion tool,
conical connection,
wide platform

31

CT-SLI10
Long motor insertion tool,
conical connection,
standard platform

37

CT-WSI10
Short motor insertion tool,
conical connection,
wide platform

32

CT-SLR10
Long ratchet insertion tool,
conical connection,
standard platform

38

CT-WSR10
Short ratchet insertion tool,
conical connection,
wide platform

V3 INSERTION TOOLS

19

CT-NLM30
V3 long motor insertion tool,
narrow platform

23

CT-SLM30
V3 long motor insertion tool,
standard platform

20

CT-NLR30
V3 long ratchet insertion tool,
narrow platform

24

CT-SLR30
V3 long ratchet insertion tool,
standard platform

21

CT-NSM30
V3 short motor insertion tool,
narrow platform

25

CT-SSM30
V3 short motor insertion tool,
standard platform

22

CT-NSR30
V3 short ratchet insertion tool,
narrow platform

26

CT-SSR30
V3 short ratchet insertion tool,
standard platform

SURGICAL TOOLS

39

MT-RE160
Int. connection abutment
extractor, narrow platform

44

MT-BTI20
Implant site depth probe

40

MT-RE172
Int. connection abutment
extractor

45

MT-RT070
Surgical torque ratchet

41

MT-DE001
Drill extender

42

MT-RDL30
Long driver for 0.05 inch hex.

43

MT-RDS30
Short driver for 0.05 inch hex.

The logo consists of the word "mis" in a lowercase, sans-serif font, with a registered trademark symbol (®) to its upper right. Below "mis" is the text "V3" in a larger, bold, sans-serif font. The entire logo is centered within a solid olive-green circle.

mis[®]
V3

INSERTION TOOLS

V3 implant placement tools are specially designed to facilitate quick and reliable implant procedures.

V3 short motor
insertion tool



V3 long motor
insertion tool

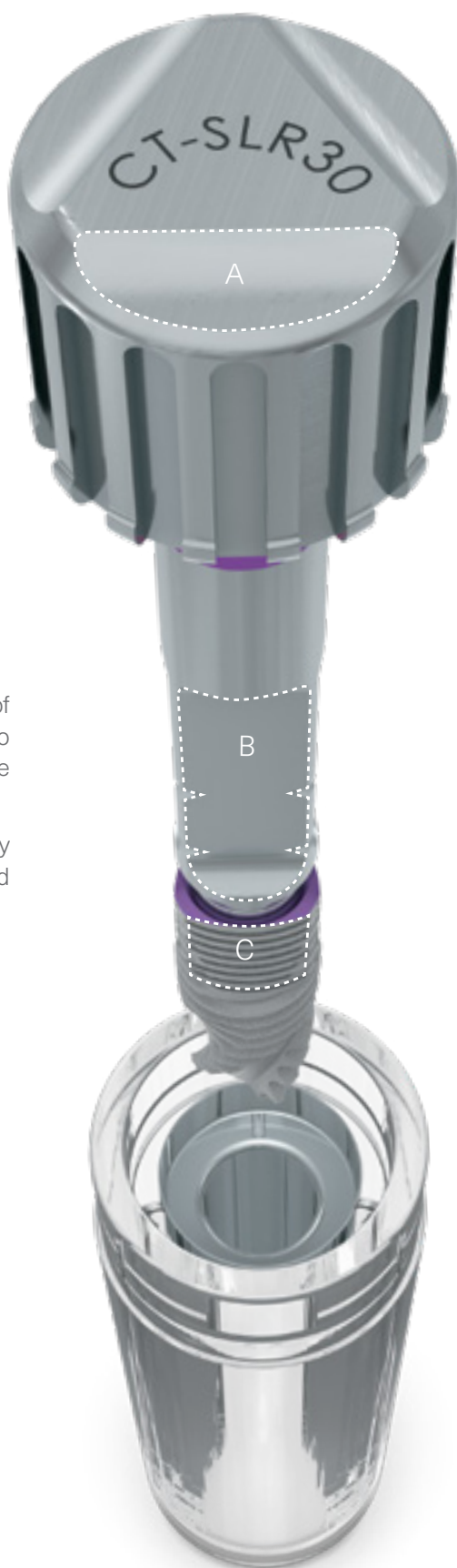


V3 short ratchet
insertion tool



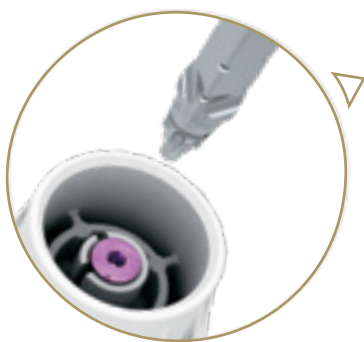
V3 long ratchet
insertion tool





Areas **A** and **B** indicate the position of the flat surface of the insertion tool to be aligned with the flat surface of the implant **C**.

This allows the dentist to easily identify the flat side of the implant for desired placement.



The insertion tool allows the delivery of a cover screw or a healing cap onto the implant after insertion.



SURFACE QUALITY

i 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), 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, 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 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

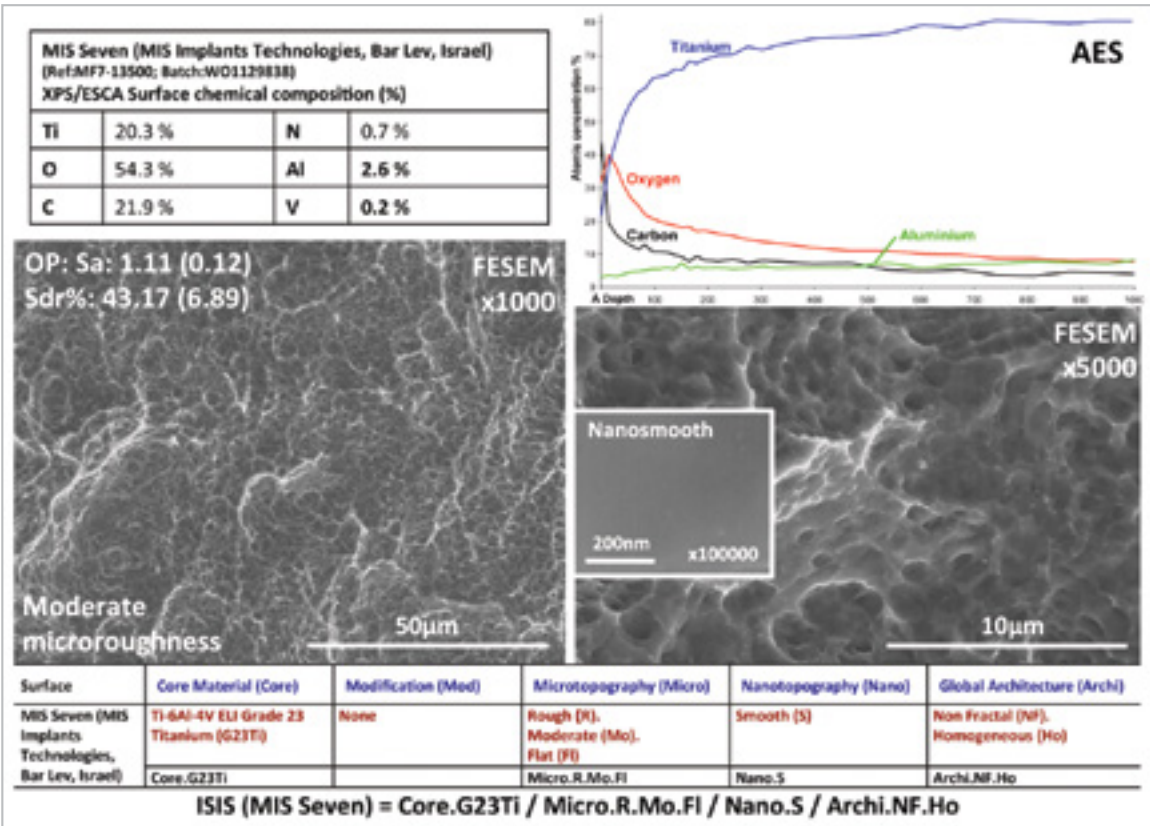


Fig. 1

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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The logo for mis V3 is displayed within a large, solid olive-green circle. The word "mis" is in a white, lowercase, sans-serif font, with a registered trademark symbol (®) to its upper right. Below "mis" is the text "V3" in a larger, white, sans-serif font. A thin, curved line extends from the right side of the circle towards the "PACKAGING" section.

mis[®]
V3

PACKAGING

Each V3 implant comes with a sterile cover screw and single-use final drill, suitable for all drilling protocols.

The sterile inner tube is fitted with a special titanium sleeve that has an anti-rotation grip, to ensure easy engagement between the insertion tool and the implant.



Providing a simple, immediate identification of implant type, length and diameter, the V3 package is well-designed for ease-of-use during surgical procedures.

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

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.



Implant identification markings

Quick identification of implant size and length. Sticker on the box lid, specifies implant diameter, length and platform size

Easy pull tab

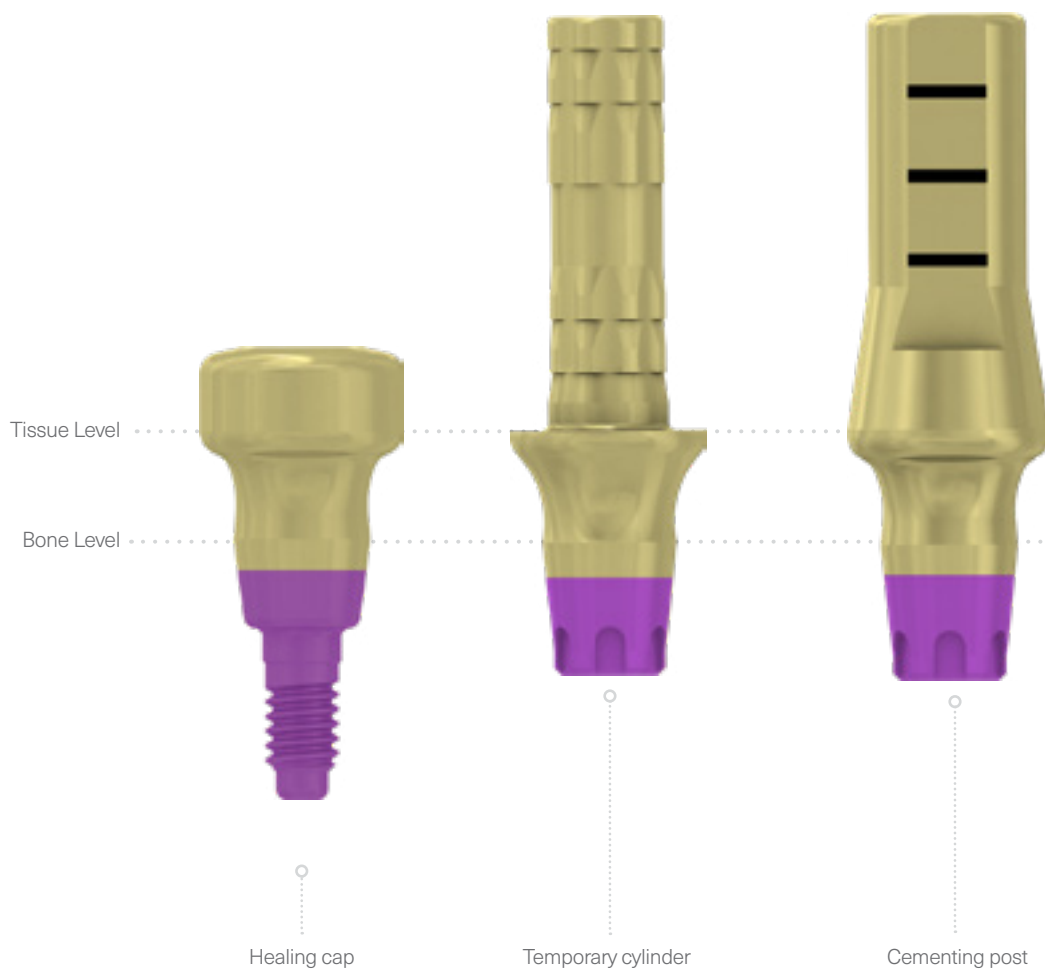
The convenient pull tab facilitates quick and easy opening during surgery.

Logical storage

Packages fit perfectly into clinic drawers for space-saving storage and easy identification.

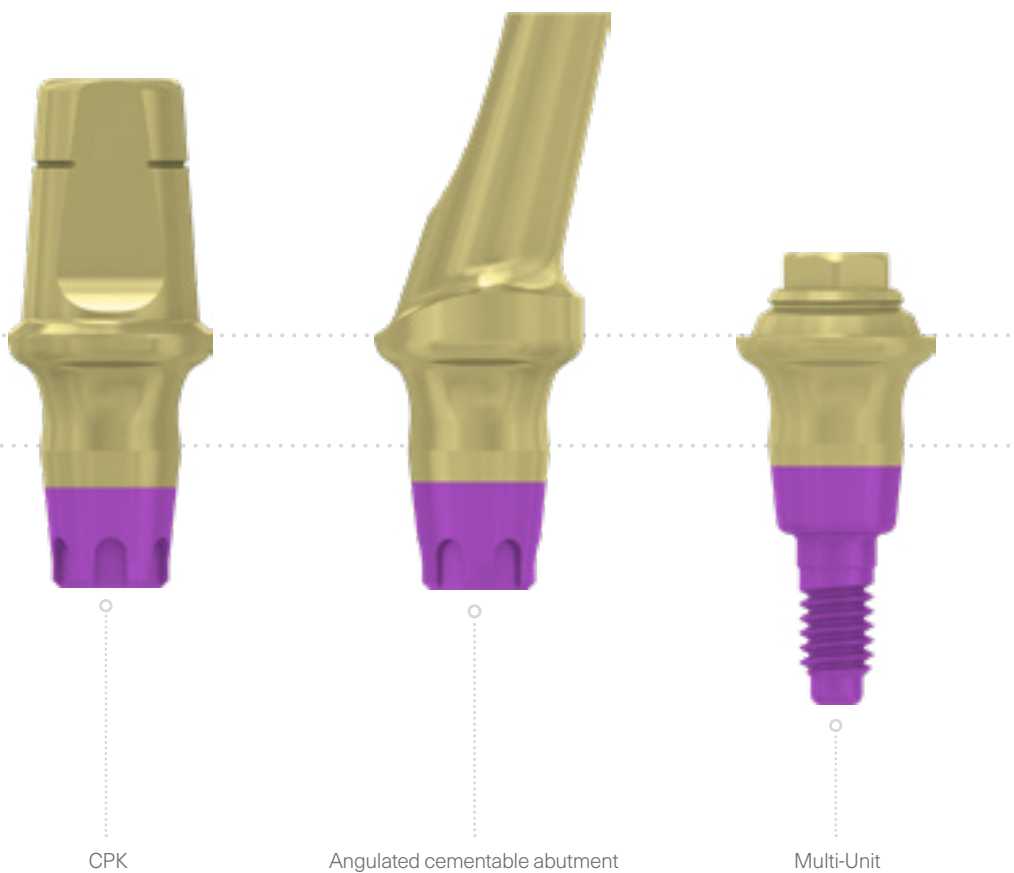
mis[®]
V3

PROSTHETIC OPTIONS



Consistent, Concave Abutment Profile

Consistent, concave emergence profile abutments which, as scientific research has proven, when combined with platform switching, may increase soft tissue volume.



The logo for MIS CONNECT, featuring the word "mis" in a stylized, lowercase font with a registered trademark symbol, and the word "CONNECT" in a bold, uppercase font, both in white, set against a grey circular background.

mis[®]
CONNECT

TISSUE-LEVEL SCREW-RETAINED SOLUTION

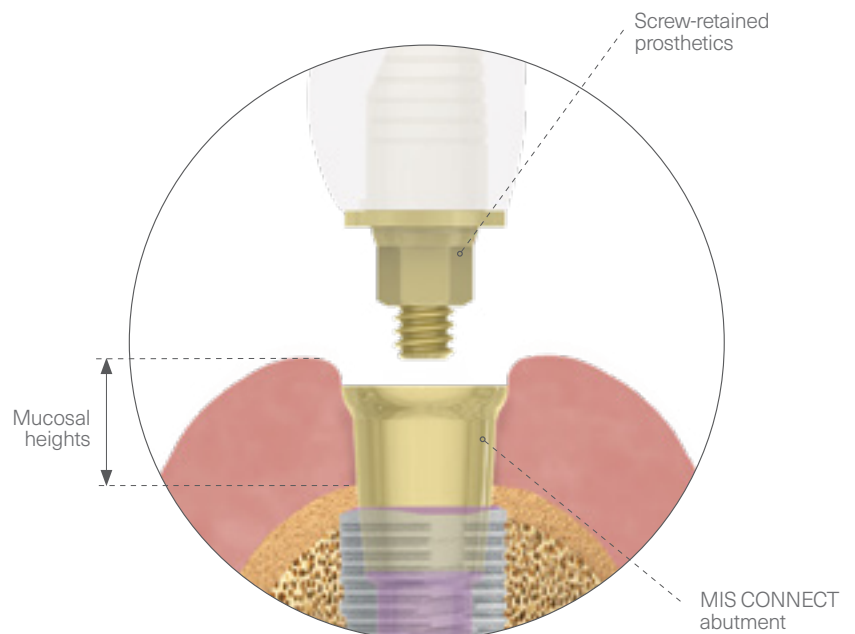
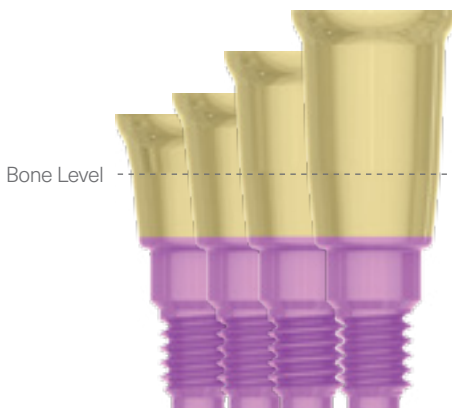
The MIS CONNECT is a stay-in abutment system which enables avoiding interference with the peri-implant gingival seal.

It offers doctors the ability to maximize the tissue-level restoration concept, enabling the entire prosthetic procedure and restoration to occur far from the bone, and at any level of the connective tissue.

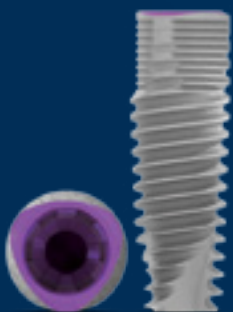
The CONNECT is designed to reduce micro-movements and micro-leakage of bacteria at the bone level.



Learn more about the CONNECT
System on MIS website



IT'S SIMPLE
TO SEE THE
BEAUTY



mis® | v3

MORE WITH LESS. MAKE IT SIMPLE

The MIS V3 Implant System was designed to offer immediate biological benefits and improved performance, while keeping surgical procedure simple. Learn more about the V3 implant and MIS at: www.mis-implants.com

