

# SEVEN<sup>®</sup>

A self-tapping internal hex. implant by mis

P.4-5

P.6-7

P.8

P.9

P.10

P.11

P.12

P.13

P.14

P.15

P.16-17

P.18-19

P.20-21

P.22

P.23

P.24-25

#### MIS Warranty:

MIS exercises great care and effort in maintaining a superior quality of products. All MIS' products are guaranteed to be clear 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.

## **Table of contents.**

Introduction

Advantages

Implant range Narrow Platform

Ø3.30mm Implants

Implant range Standard Platform

Ø3.75mm Implants

Ø4.20mm Implants

Implant range Wide Platform

Ø5mm Implants

Ø6mm Implants

Drilling Procedures

Surgical Kit

Success

Delivery keys

Insertion Options

Packaging

Always dedicated to the development of innovative products and technologies, MIS' scientists and engineers conduct continuous laboratory and field studies in collaboration with prestigious universities and dental research institutes. SEVEN is the innovative result of an extensive research and development process, offering a unique combination of surgical and restorative benefits.

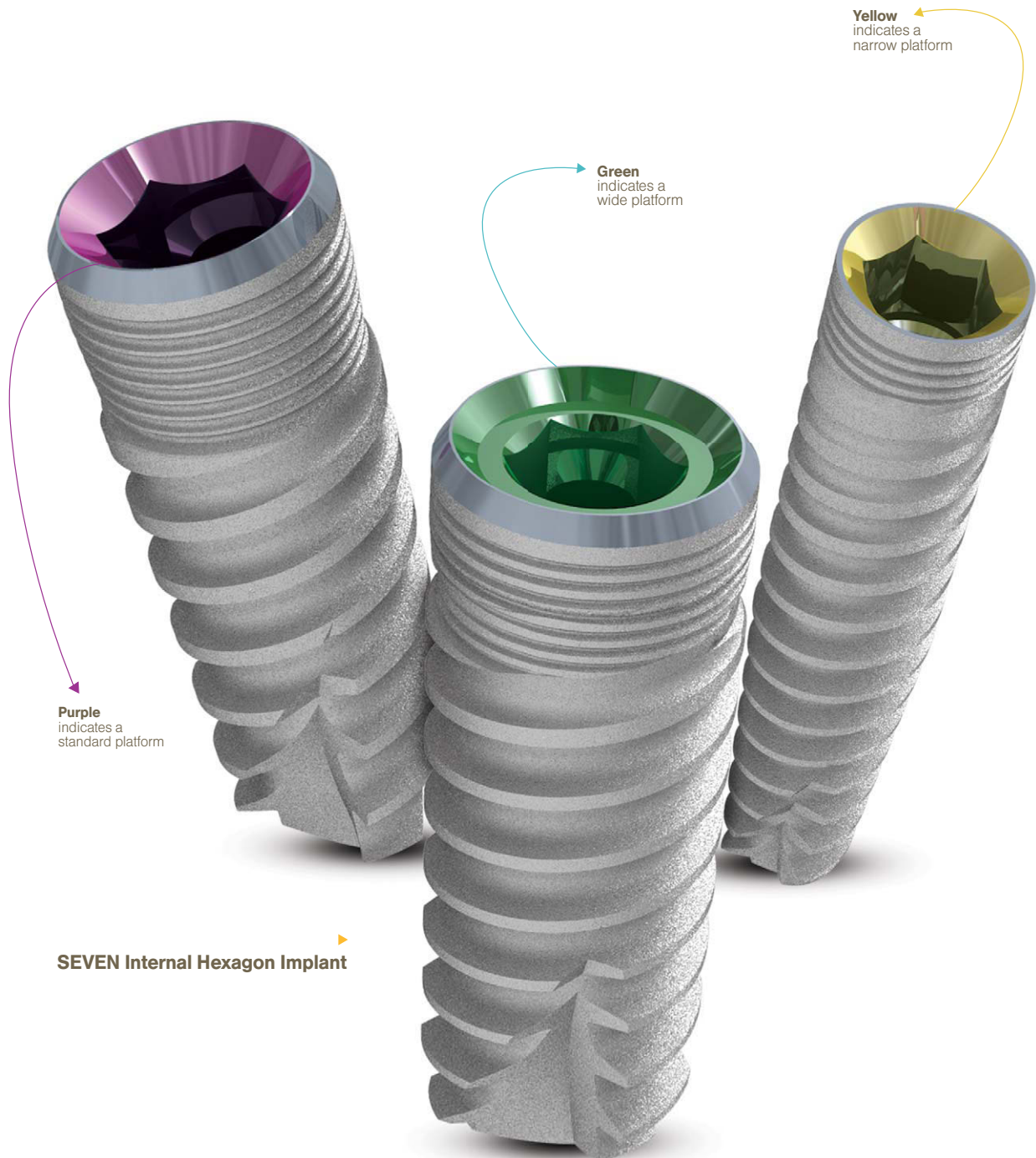


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6.

## Advantages.





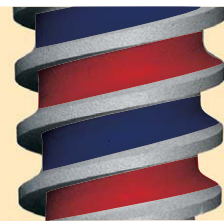
#### **Internal hex.**

MIS SEVEN implants feature an internal hex. connection, assuring proper implant abutment seating, anti-rotational engagement, resistance to lateral forces, excellent esthetic results and more.



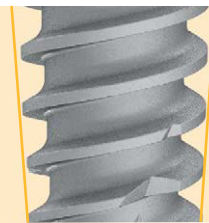
#### **Micro rings**

Micro rings on the implant's neck improve BIC (Bone To Implant Contact) at the crestal zone.



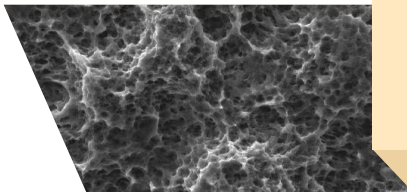
#### **Dual thread**

A dual thread design increases BIC (Bone to Implant Contact), reinforcing osseointegration for long lasting clinical success. The overall insertion rate of SEVEN is 2.4mm per revolution.



#### **Conical shape**

Conical, root-shaped geometry and a unique thread design ensure superior primary stability, offering the ultimate choice for a wide range of clinical cases and loading protocols.



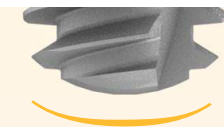
#### **Surface**

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



#### **Three spiral channels**

Three spiral channels at the apical end of the implant support its self tapping properties. The channels also collect and amass bone chips in the course of insertion, supporting efficient osseointegration and long-term stability.



#### **Domed apex**

The dome shaped apex prevents over-insertion for safer implant placement procedures.

8.

SEVEN®

NARROW

Screw type 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



MT-HLI10 | Long insertion tool, int. hex. connection



MT-HSI10 | Short insertion tool, int. hex. connection



MT-SRA10 | Square connection to ratchet adapter



MT-SHA10 | Hand wrench square connection



MT-NRH20 | Hex. ratchet long adapter for int. hex. connection, NP

Implant cover screws &  
healing caps

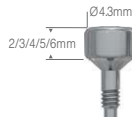
Available for heights: 2,3,4,5,6mm



MC1-00330



MH-N2330  
MH-N3330  
MH-N4330  
MH-N5330  
MH-N6330



MH-52330  
MH-53330  
MH-54330  
MH-55330  
MH-56330

SEVEN®

NARROW

**Ø3.30mm**  
Narrow Platform

Catalog No.

Dimensions

MF7-10330

Ø3.30mm  
length 10mm

MF7-11330

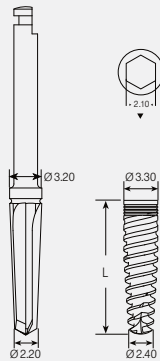
Ø3.30mm  
length 11.50mm

MF7-13330

Ø3.30mm  
length 13mm

MF7-16330

Ø3.30mm  
length 16mm



Titanium Alloy Ti 6Al 4V ELI

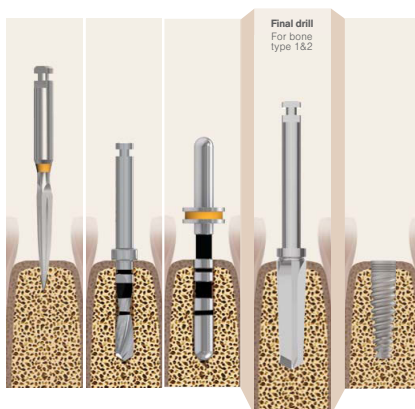
Sand Blasted and Acid-Etched

#### Final Drill

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

### Ø3.30mm Implant Procedure

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














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

The drilling sequence is demonstrated by a 13mm implant.

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

Screw type implants range  
Standard Platform

Length	6mm	8mm	10mm	11.50mm	13mm	16mm
Ø3.75 mm		MF7-08375 	MF7-10375 	MF7-11375 	MF7-13375 	MF7-16375 
Ø4.20 mm	MF7-06420 	MF7-08420 	MF7-10420 	MF7-11420 	MF7-13420 	MF7-16420 

## Surgical tools



## MT-HLI10

Long insertion tool, int.  
hex. Connection

## MT-HSI10

Short insertion tool, int.  
hex. Connection

## MT-SRA10

Square connection  
to ratchet adapter

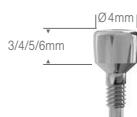
## MT-SHA10

Hand wrench  
square connectionImplant cover screw &  
healing caps

Available for heights: 3,4,5,6mm



MC1-00375

MH-03375  
MH-04375  
MH-05375  
MH-06375MH-53375  
MH-54375  
MH-55375  
MH-56375

SEVEN®

STANDARD

**Ø3.75mm**

Standard Platform

Catalog No.

Dimensions

MF7-08375

Ø3.75mm  
length 8mm

MF7-10375

Ø3.75mm  
length 10mm

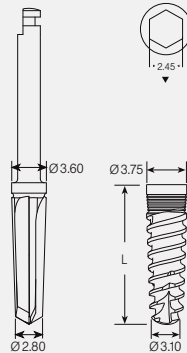
MF7-11375

Ø3.75mm  
length 11.50mm

MF7-13375

Ø3.75mm  
length 13mm

MF7-16375

Ø3.75mm  
length 16mm

Titanium Alloy Ti 6Al 4V ELI

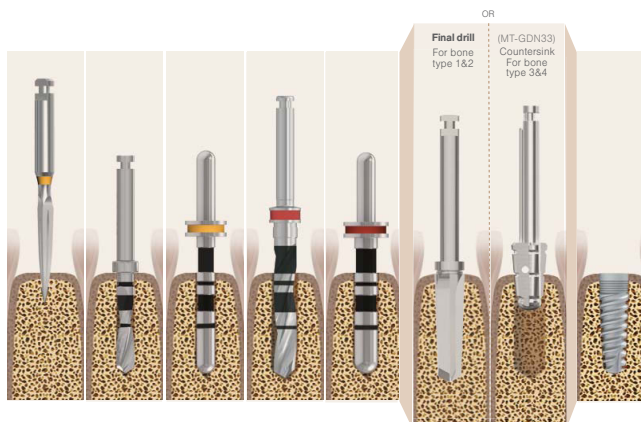
Sand Blasted and Acid-Etched

**Final Drill**

Each implant is supplied with a single use final drill corresponding to its 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	Ø2.8 Ø3.60	Ø3.75		Ø3.75



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

The drilling sequence is demonstrated by a 13mm implant.

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

# **Ø4.20mm** Standard Platform

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

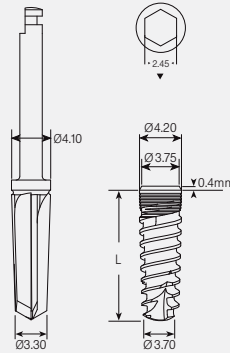
Ø4.20mm  
length 13mm

MF7-16420

Ø4.20mm  
length 16mm

Titanium Alloy Ti 6Al 4V ELI

Sand Blasted and Acid-Etched

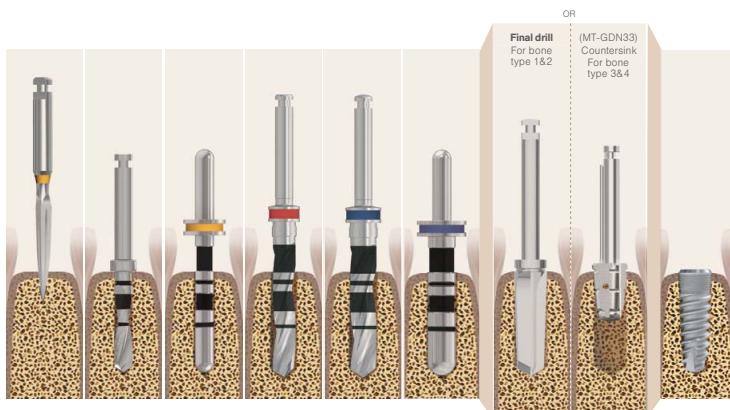


## **Final Drill**

Each implant is supplied with a single use final drill corresponding to its 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	
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø3.20	Ø3.20	Ø3.30 Ø4.10	Ø3.30 Ø4.20	15-25 Ø4.20



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









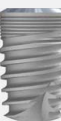

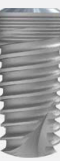
The drilling sequence is demonstrated by a 13mm implant.

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

SEVEN®

WIDE

Screw type implants range  
Wide Platform

Length	6mm	8mm	10mm	11.50mm	13mm	16mm
Type	MF7-06500	MF7-08500	MF7-10500	MF7-11500	MF7-13500	MF7-16500
Ø5 mm						
Ø6 mm	MF7-06600	MF7-08600	MF7-10600	MF7-11600	MF7-13600	
						

## Surgical tools



**MT-HLI10**  
Long insertion tool, int.  
hex. Connection



**MT-HSI10**  
Short insertion tool, int.  
hex. Connection



**MT-SRA10**  
Square connection  
to ratchet adapter



**MT-SHA10**  
Hand wrench  
square connection

## Implant cover screw & healing caps

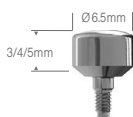
Available for heights: 3,4,5mm



MC1-00470



MH-W3500  
MH-W4500  
MH-W5500



MH-W3630  
MH-W4630  
MH-W5630

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

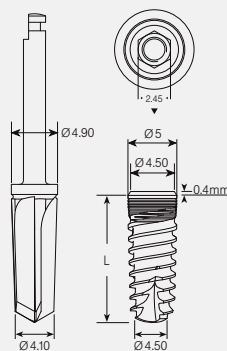
Ø5mm  
length 13mm

MF7-16500

Ø5mm  
length 16mm

Titanium Alloy Ti 6Al 4V ELI

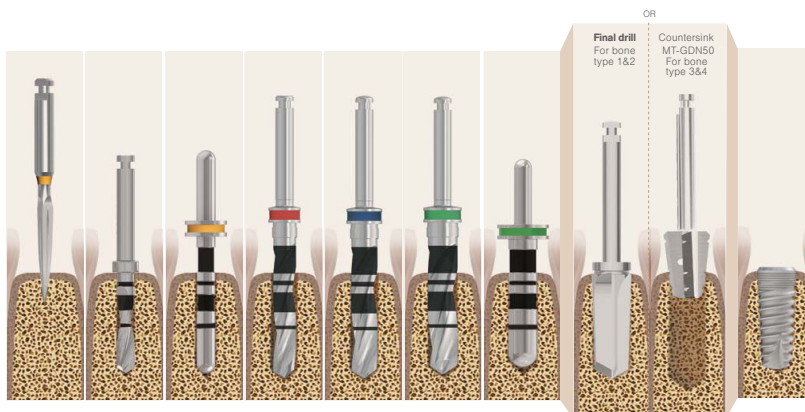
Sand Blasted and Acid-Etched

**Final Drill**

Each implant is supplied with a single use final drill corresponding to its 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	
Diameter	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø3.20	Ø4	Ø4	Ø4.10 Ø4.90	Ø5	15-25 Ø5



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

The drilling sequence is demonstrated by a 13mm implant.

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

SEVEN®

WIDE

Ø6mm

Wide Platform

Catalog No.

Dimensions

MF7-06600

Ø6mm  
length 6mm

MF7-08600

Ø6mm  
length 8mm

MF7-10600

Ø6mm  
length 10mm

MF7-11600

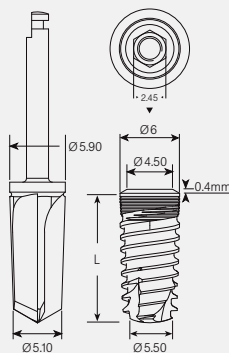
Ø6mm  
length 11.50mm

MF7-13600

Ø6mm  
length 13mm

Titanium Alloy Ti 6Al 4V ELI

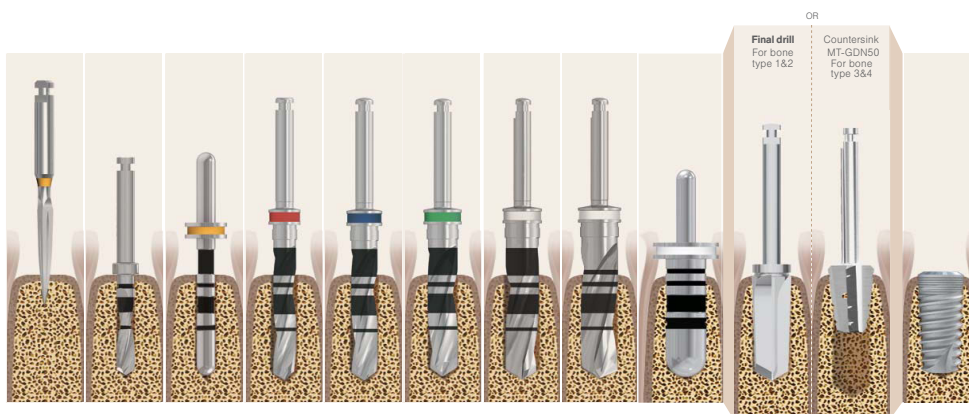
Sand Blasted and Acid-Etched

**Final Drill**

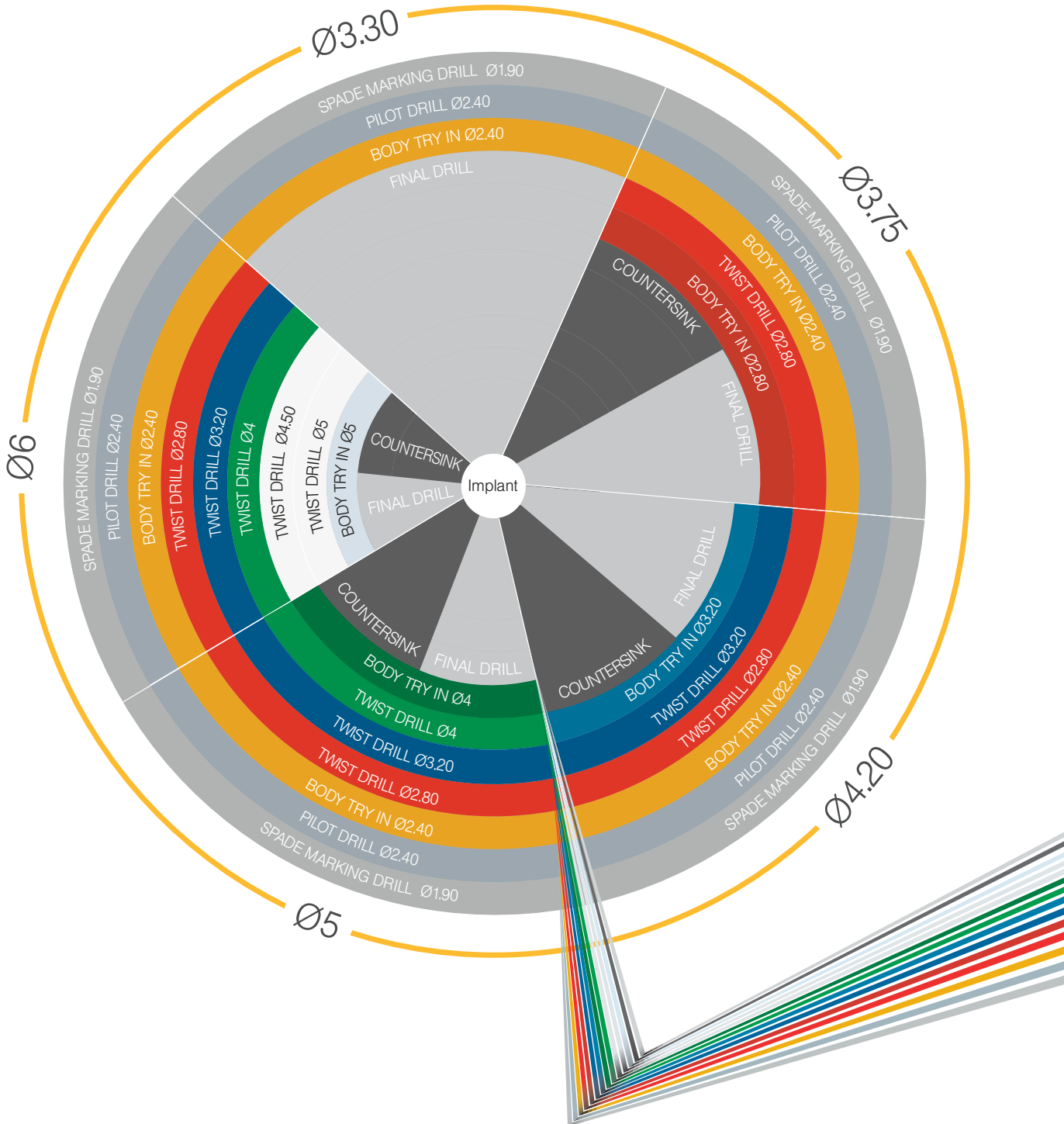
Each implant is supplied with a single use final drill corresponding to its diameter and length, allowing a short and safe drilling procedure.

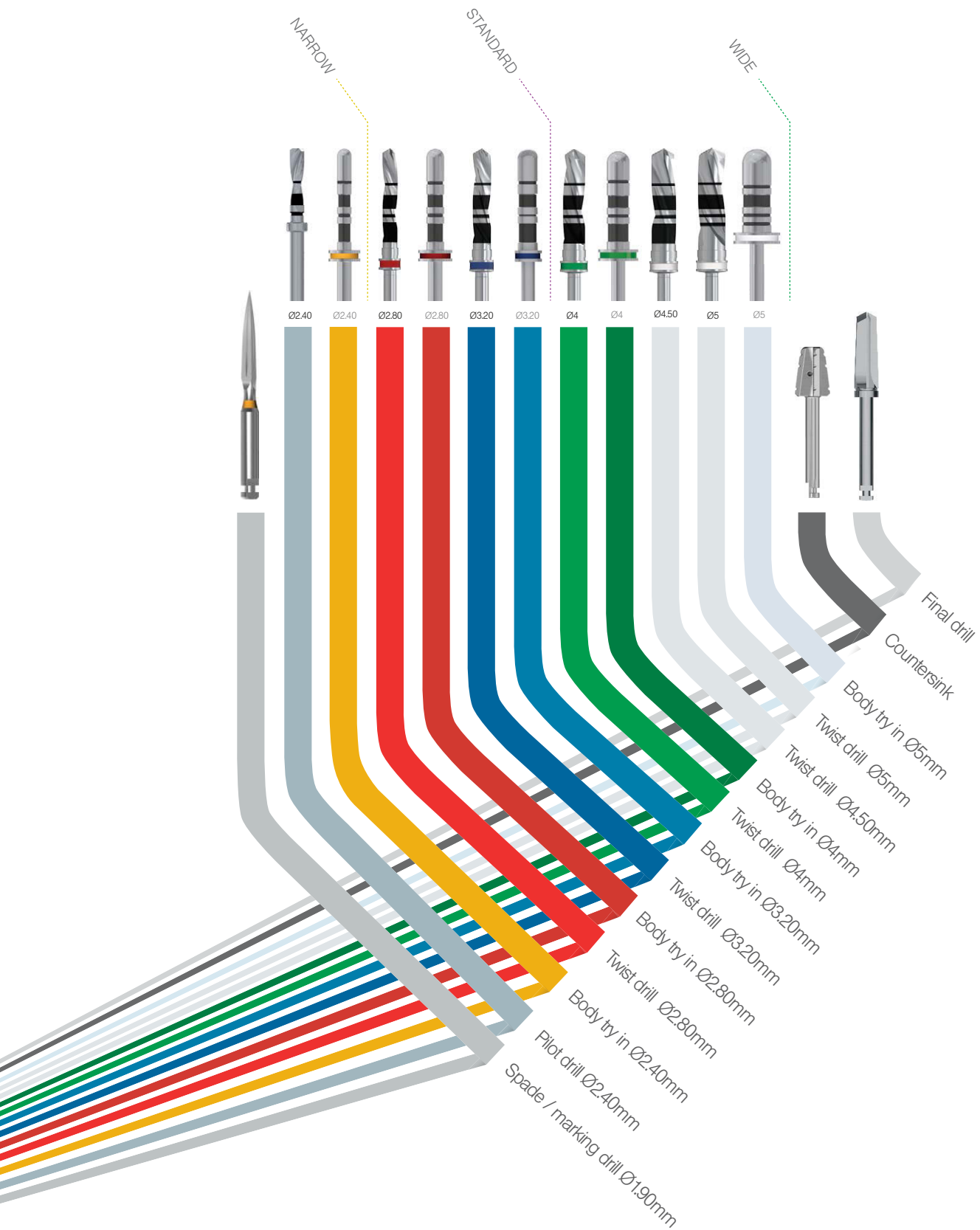
**Ø6mm** Implant Procedure

<b>Drilling Speed (RPM)</b>	1200-1500	900-1200		500-700	400-700	400-600	300-500	300-500		200-400	200-500	
<b>Diameter</b>	Ø1.90	Ø2.40	Ø2.40	Ø2.80	Ø3.20	Ø4	Ø4.50	Ø5	Ø5	Ø5.10 Ø5.90	Ø6	15-25 Ø6



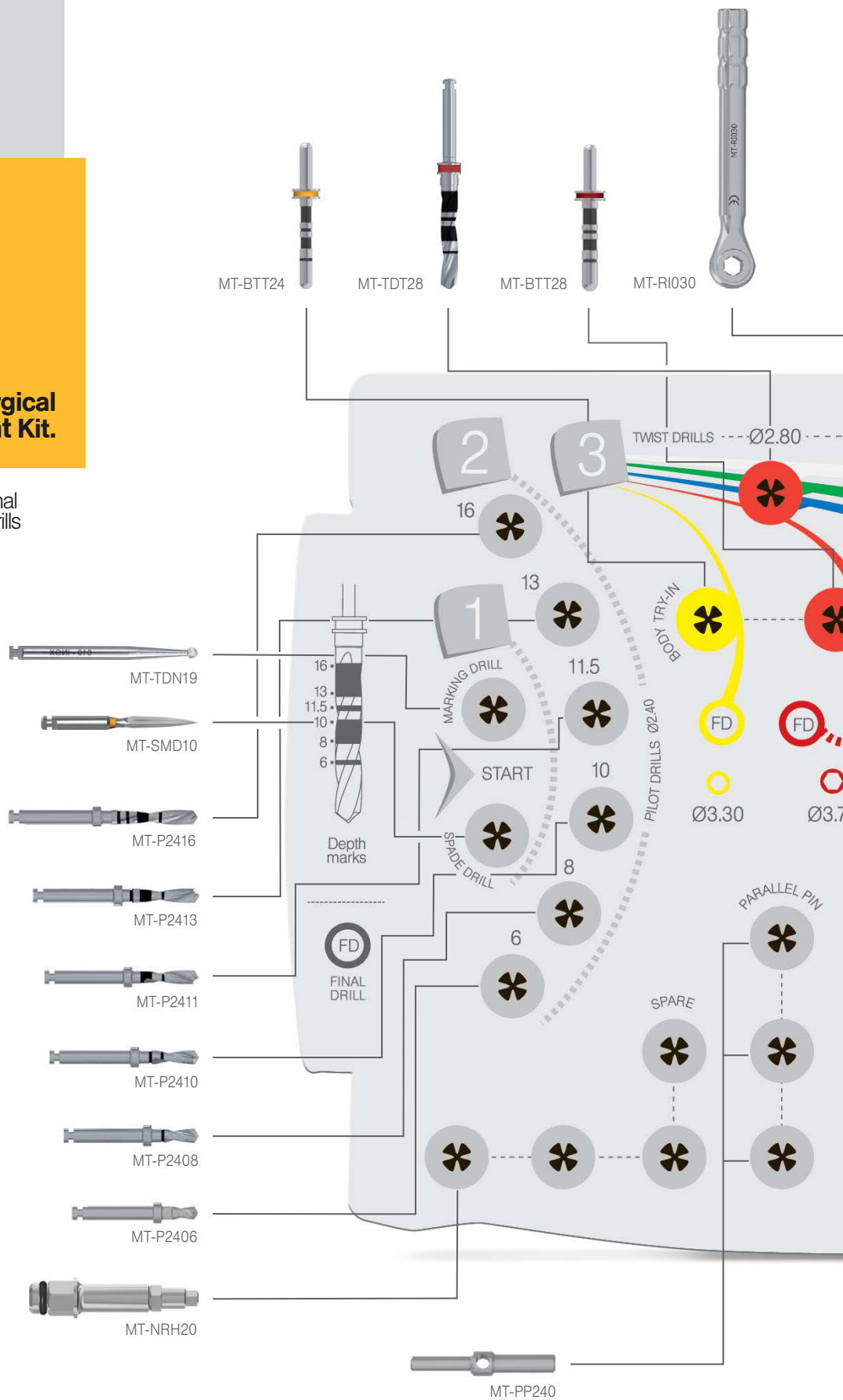
## Drilling Procedures.

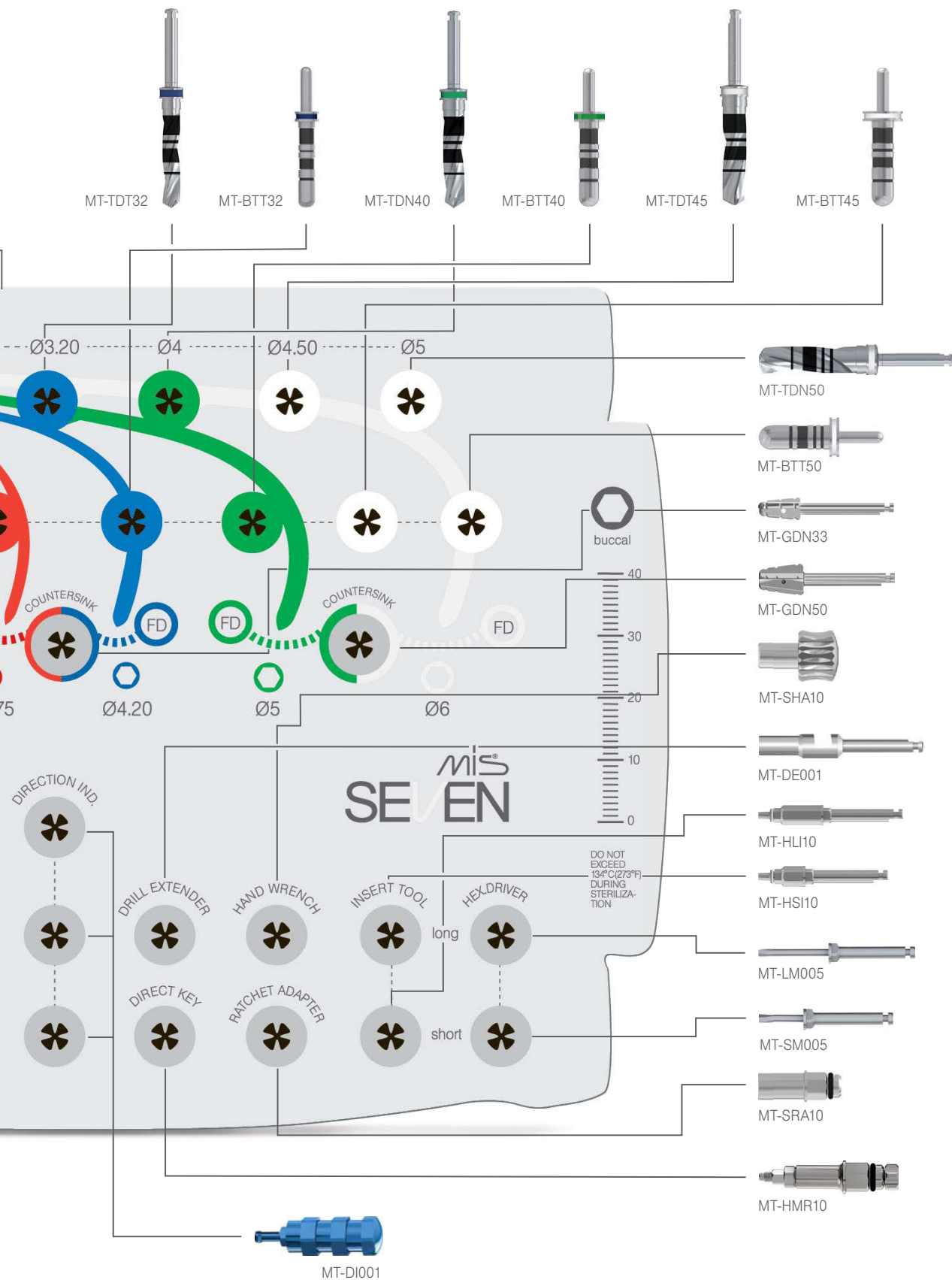




## Advanced Surgical Instrument Kit.

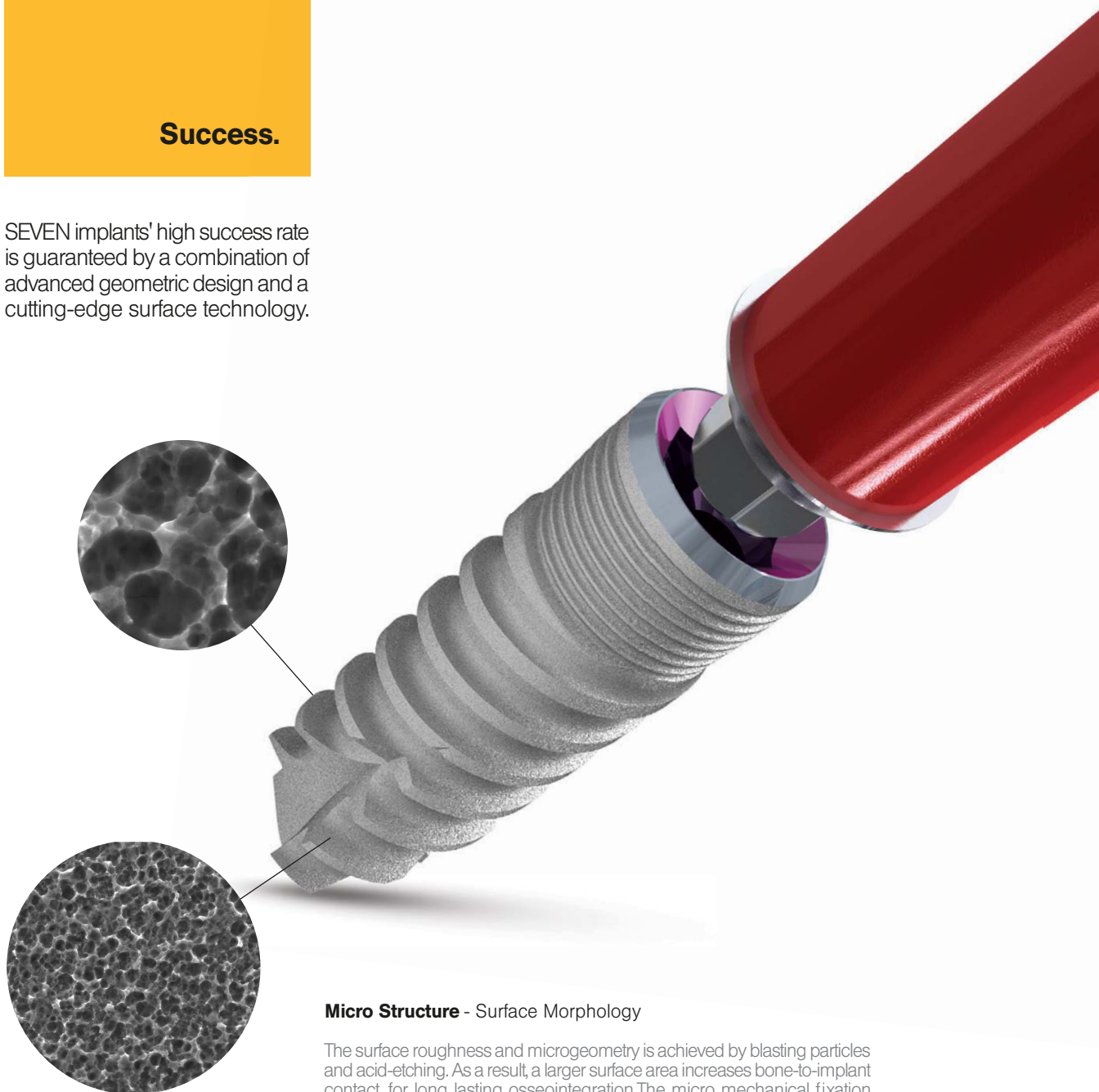
**MK-EI48** | With external irrigation drills



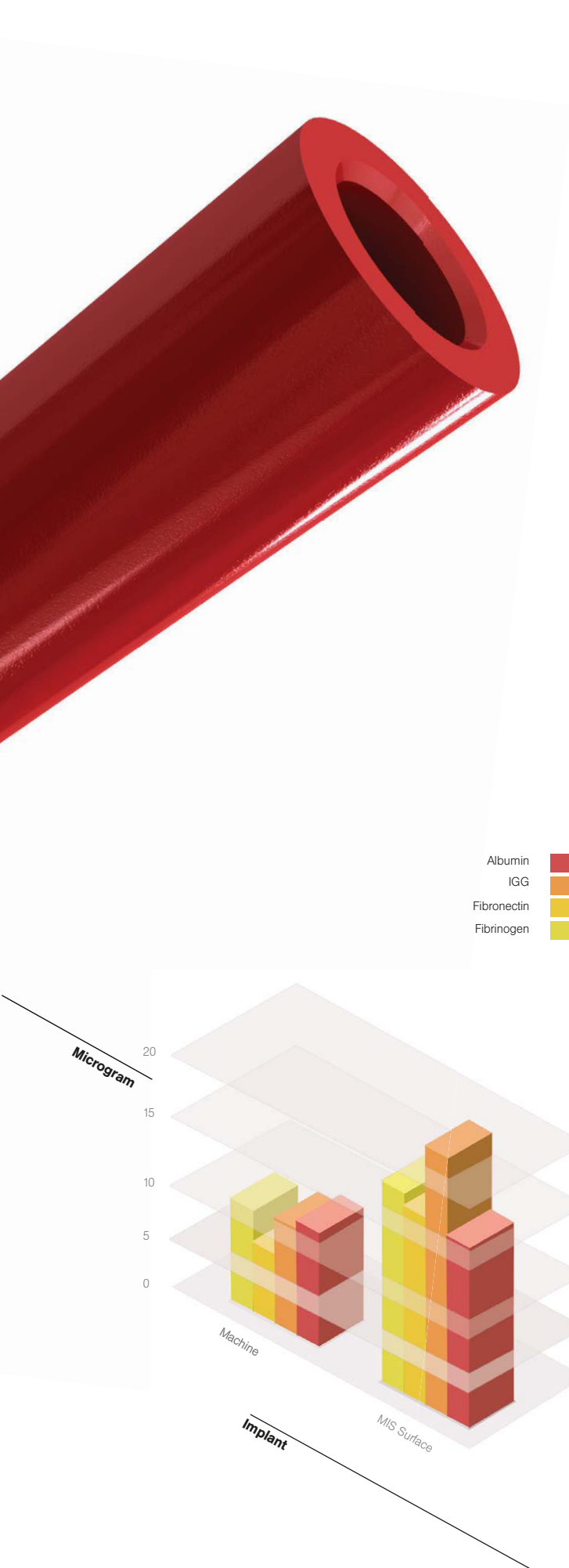


**Success.**

SEVEN implants' high success rate is guaranteed by a combination of advanced geometric design and a cutting-edge surface technology.

**Micro Structure - Surface Morphology**

The surface roughness and microgeometry is achieved by blasting particles and acid-etching. As a result, a larger surface area increases bone-to-implant contact, for long lasting osseointegration. The micro mechanical fixation increases implant stability.



## 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:** Six mm 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.

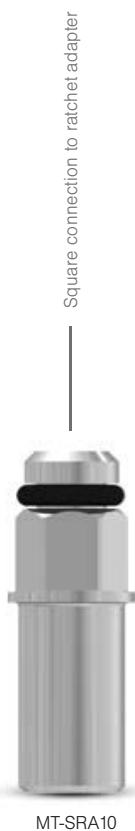
**Conclusions:** Absorption of albumin to the rough treated Ti surface is both qualitatively and quantitatively far more intense, as compared with the machined surfaces. Further studies of the chemical and physical characterization of the modified Ti surfaces are underway. Moreover, additional serum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

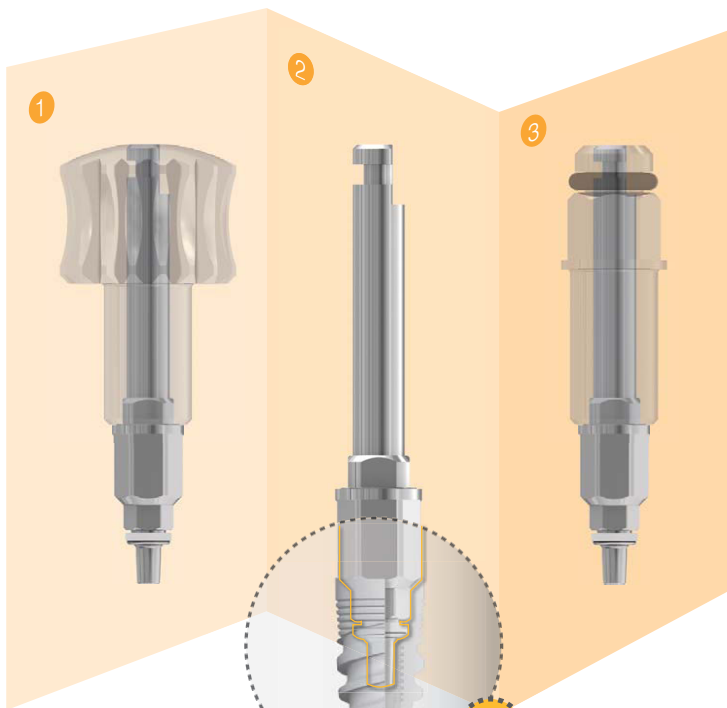
**Hebrew University**  
Jerusalem, Israel, IADR  
August 03, 2004

## Delivery keys.

Available within MIS' advanced surgical kit, the SEVEN key system is designed to facilitate quick and reliable implant procedures.

The new keys are suitable for use with SEVEN NARROW connectors.





## Insertion Options.

The unique "3 in One" key system minimizes the number of tools, and maximizes flexibility.

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

**Please note:** Key will not hold implant unless it is completely forced into the hex.

1. Insertion tool in hand key adapter
2. Insertion tool for motor
3. Insertion tool in ratchet adapter



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

## Package Content.

Each SEVEN implant comes with a large range of sterilized components for any clinical scenario.

Following the “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 safe and precise surgical procedure.

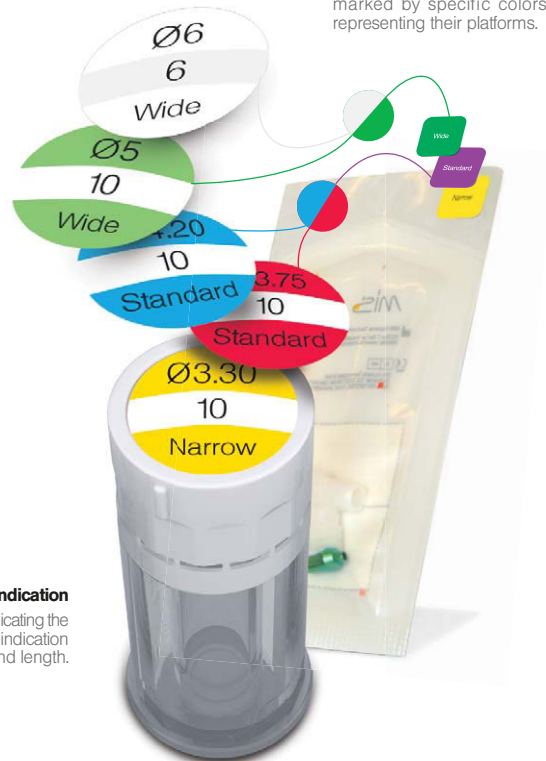


## Packaging.

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

### Prosthetic platform indication

Prosthetic components are marked by specific colors, representing their platforms.



### Implant diameter & platform indication

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



### Implant identification

A sticker on top of the box, specifies implant's diameter, length and platform size.

### Easy pull tab

The easily identified pull tab facilitates quick and easy opening during surgery.





mis®

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[www.mis-implants.com](http://www.mis-implants.com)

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