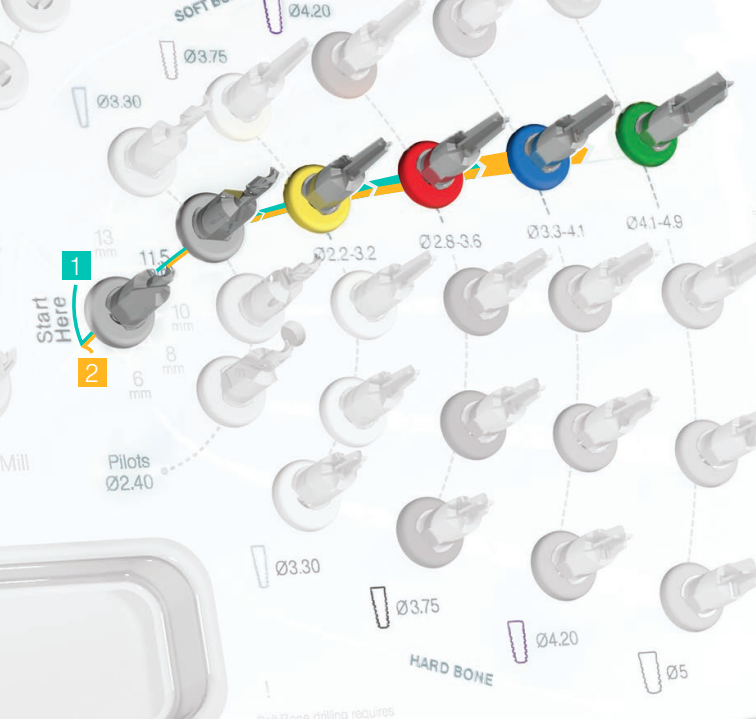


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FOR MIS SEVEN IMPLANTS

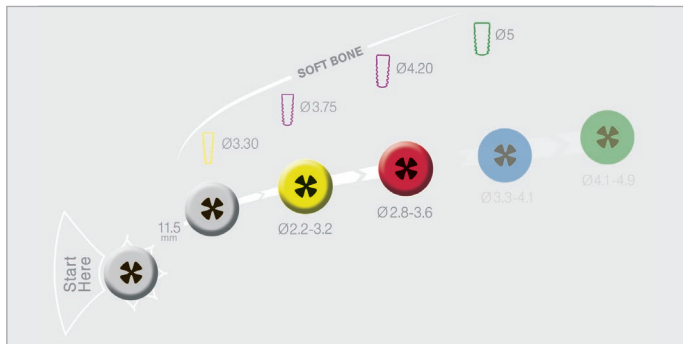


**STEP-BY-STEP** GUIDED SURGICAL PROCEDURE



# LOGICAL LAYOUT

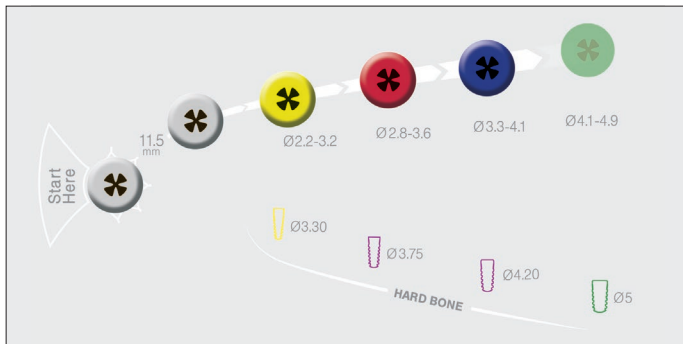
1 Example: Implant Ø4.20 / 11.5L ; **Soft Bone**



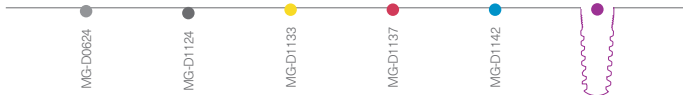
Ø4.20 / 11.5L



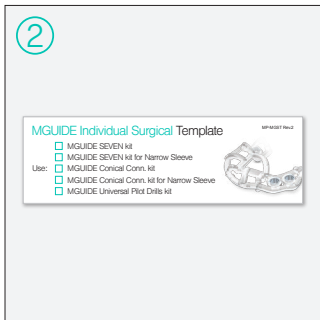
② Example: Implant Ø4.20 / 11.5L ; **Hard Bone**



Ø4.20 / 11.5L



# PRE-SURGICAL STEPS



## VERIFICATION

The package includes:

- A surgical template
- Documentation; including information specific to each planned implant.

## KITS REQUIRED

The kit selection is marked on the MGUIDE box label.

- Prior to surgery: Ensure that surgical template, plan and documentation are all made according to the doctor's specifications, and for the relevant patient.

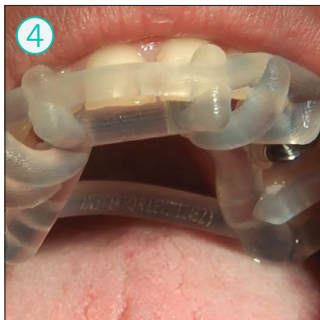


## DISINFECTION

The MGUIDE template is shipped non-sterile. Therefore, the template must undergo disinfection prior to use.

**DISINFECTION:** Completely immerse in a 0.2% Chlorhexidine solution for 10 minutes at room temperature prior to surgery.

- **WARNING!** Do not autoclave. Steam sterilization will deform the template.



## INITIAL TRY-IN

It is essential to try-in the template in the patient's mouth, prior to surgery. Correct seating and stability of the template must be confirmed, as well as sufficient space for surgical tools.

In order to avoid incorrect seating due to patient's anatomy change, MGUIDE Template should be used within 3 months from CBCT scan date. No changes shall be made to the oral cavity unless discussed with the MCENTER.

- In rare cases, minor adjustments may be required.

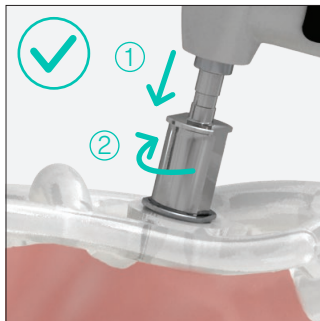
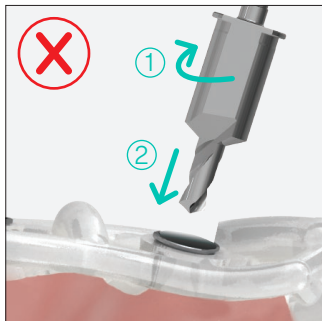
# PRECAUTIONS

## GENERAL

- All MGUIDE drills and instruments are for use ONLY with the MGUIDE surgical template.
- Metal sleeves must be firmly attached to the template.
- Inspect all instruments prior to each surgery and replace if broken or dull.
- Ensure cooling of cutting instruments with sterile saline solution.
- Tissue punch is NOT equipped with built-in stoppers.
- The MGUIDE Kit to be used, is marked on the MGUIDE Box label.

## HANDLING

- Hold the template firmly while drilling.
- Drills and tools MUST engage the sleeve before contra-angle is activated.
- Avoid lateral pressure on the instruments, as it may result in a shift in template position, detachment of sleeves from the template or damage to instruments.
- Use an 'in-out' motion while drilling, slowly inserting the drill until the built-in stopper touches the sleeve.
- Do not over-tighten implant insertion tools and fixation pins. This may result in a shift in template position or damage to the template.



Drills and tools **MUST** engage the sleeve before contra-angle is activated.



# FIXATION PINS

(When applicable)



**MG-DFP20**

MGUIDE drill for fixation pin, Ø2mm



**MG-FP020**

MGUIDE fixation pin, Ø2mm

## FIXATION PINS

MGUIDE fixation pins are recommended for use in fully edentulous cases or if template stability cannot be guaranteed.

- Fixation pins may **ONLY** be used when included in the MGUIDE surgical plan and when pin location is guided by the template.
- Template **MUST** be verified in position, and held firmly prior to drilling.
- Use the MG-DFP20 drill **ONLY!** Drill until stopper touches the sleeve.

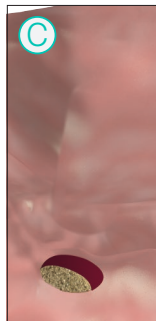
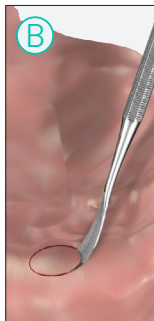
# TISSUE PUNCH

(When applicable)



## TISSUE PUNCH

The tissue punch creates a round cut beneath the sleeve. This marks the implant position.



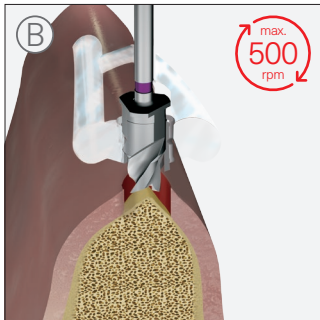
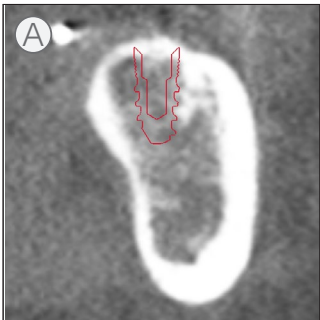
## TISSUE REMOVAL

Remove the template, then manually remove punched gingiva.

- Leave at least 2mm of attached gingiva around each implant site.
- Tissue punch tools DO NOT have built-in stoppers.

# BONE MILL

(When applicable)



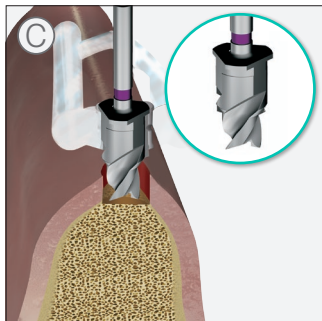
## BONE MILL

The bone mill is designed to flatten the alveolar ridge, when necessary, prior to drilling.

## BONE MILL USE

A flat surface allows for a better approach for the starter drill, therefore increasing the accuracy for the rest of the drilling sequence.

- Use of a bone mill should be part of the planning stage.



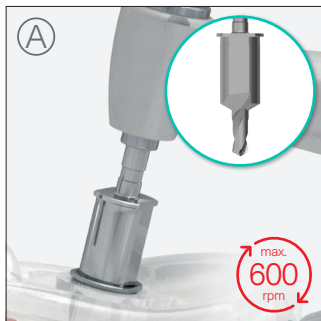
## BONE MILL STOPPER

A built-in stopper is used for depth control. Bone mill drills have a built-in stopper.

# BONE ANCHOR OSTEOTOMY

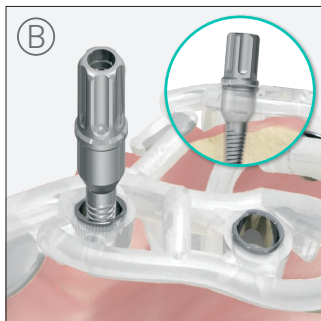


(When applicable)



## STARTER DRILL

Anchor screws are used to vertically secure the template into an osteotomy created by the starter drill MG-D0624.



## ANCHORING

Anchor screws should be placed manually. If necessary, secure screws using a ratchet until stopper touches the sleeve.

Ø5.5mm sleeve	Ø4mm sleeve
MG-TAS55	MG-NTAS0

- Do not over-tighten screws, as this may cause damage to the template.

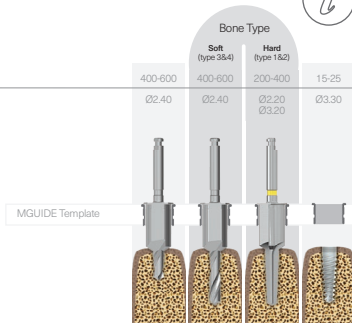
# PROCEDURE



Drilling Speed (RPM)

Diameter

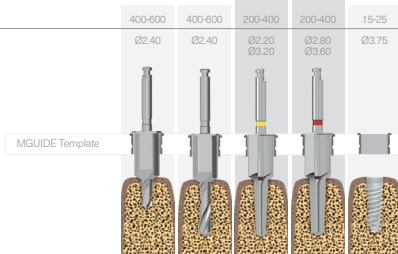
Ø3.30



Drilling Speed (RPM)

Diameter

Ø3.75



- Do not use the last drill for bone types 3 or 4.
- The drilling sequence is demonstrated by a 11.5mm SEVEN implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

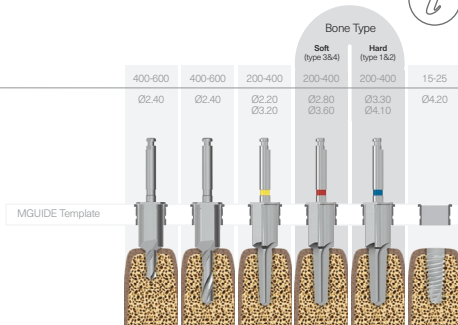
# PROCEDURE



Drilling Speed (RPM)

Diameter

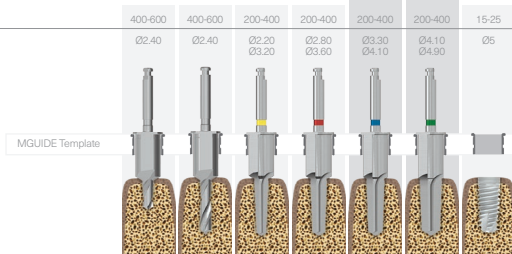
Ø4.20



Drilling Speed (RPM)

Diameter

Ø5

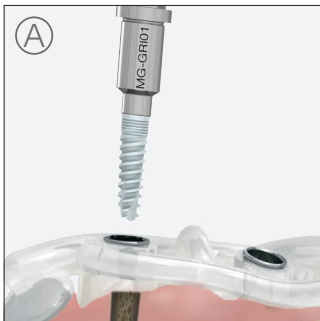


- Do not use the last drill for bone types 3 or 4.
- The drilling sequence is demonstrated by a 11.5mm SEVEN implant.
- Procedure recommended by MIS cannot replace the judgment and professional experience of the surgeon.

# DIRECT RATCHET INSERTION TOOL

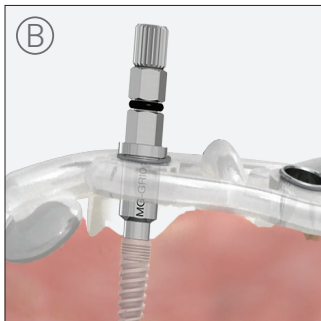


(When applicable)



## IMPLANT INSERTION

The direct insertion tool should be attached to the implant manually prior to implant placement. It should remain connected to the implant until the implant placement procedure has been completed, and then removed manually.



## STABILIZE THE MGUIDE

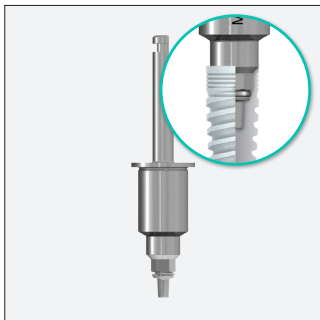
The direct insertion tool may be used to stabilize the MGUIDE.

- This option is valid only if the implant has significant primary stability.

- Do not over-tighten the direct insertion tool, as this may cause damage to the template.



# IMPLANT INSERTION OPTIONS



## BY MOTOR

Recommended for initial implant placement.

Ø5.5mm sleeve	Ø4mm sleeve
MG-GMI10	MG-NMN10
	MG-NMS10



## BY RATCHET

Orientation adjustment may be achieved only after template removal.

Ø5.5mm sleeve	Ø4mm sleeve
MG-GRI10	MG-NRN10
	MG-NRS10



## SAFETY TOOL



### BY RATCHET - DIRECT

In cases where additional stability is required for the template.

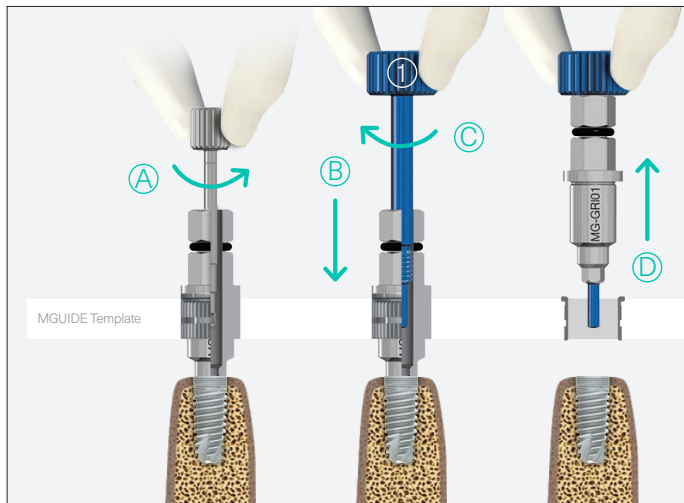
Ø5.5mm sleeve	Ø4mm sleeve
MG-GRI01	MG-NRN01
MG-GRN01	MG-NRS01



The guided drill length gauge (MG-DLG55), verifies drill length and may be used before, during and after surgery.





- **Taking measurements:** Place drill stopper in contact with the gauge. Measure to the drill tip.

# EXTRACTOR



After each use, the ratchet wrench's adapter should be removed and direct insertion tools should be disassembled prior to cleaning. Reassembly prior to sterilization is required.

## EXTRACTION PROCEDURE





	Unscrew pin
	Insert extractor tool
	Turn clockwise to release
	Pull up to remove

- For narrow implants, use insertion tool extractor, MG-IE160.



- MGUIDE Template should be used within 3 months from CBCT scan date.
- For cleaning and sterilization instructions, please refer to the 'Cleaning and Maintenance Instructions for Surgical Instruments' included.

### Key to codes used:

	Batch code
	Catalog number
	Manufacturer
	Non-sterile



MIS Implants Technologies Ltd.  
P.O.Box 7, Bar Lev Industrial Park,  
2015600, Israel  
Website: [www.mis-implants.com](http://www.mis-implants.com)



MIS Implants Technologies GmbH  
Simeonskarre 2, 32423 Minden, Germany  
Tel: +49 571-972-7620  
Email: [service@mis-implants.de](mailto:service@mis-implants.de)

# MGUIDE SET FOR MIS SEVEN IMPLANTS PROCEDURE

MGUIDE tool kit for  
internal hex. implants



MGUIDE drill kit for  
MIS SEVEN implants





# **MIS** | **M**GUIDE

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 CE Medical Device Directive 93/42/EEC.