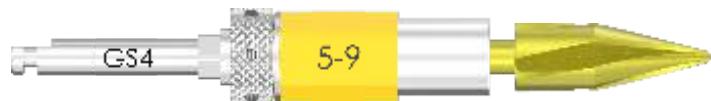




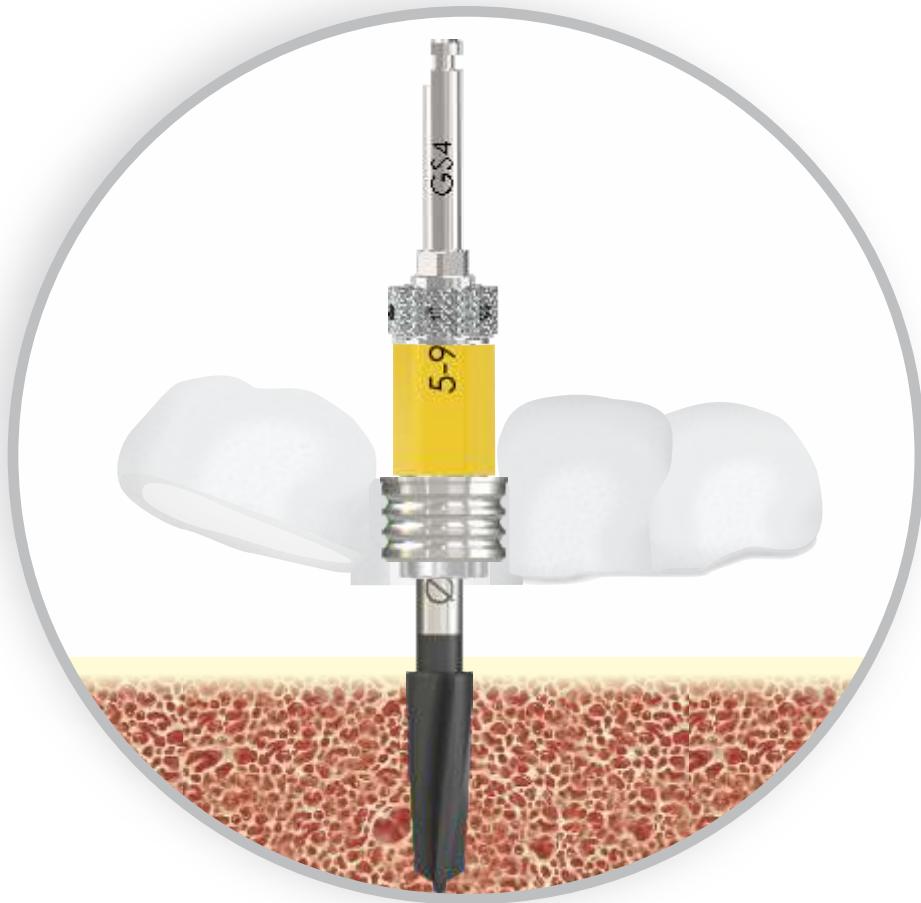
# SIREAL™

Guided Surgery System



Product Catalogue





Southern Implants is a leading provider of unique and innovative dental implant products with a focus on top-end professional users who want more choices. Southern's expertise in research, development and manufacturing of dental implants allows us to provide Innovative Treatment Solutions that will reduce treatment times and improve patient outcomes.

Striving for excellence and meeting customer needs, has led to our wide product range characterized by Unique and Innovative products which include;

- Multiple interfaces, to suit customer preference.
- INVERTA® implant, featuring a body-shift design, engineered for primary stability and suitable for immediate loading.
- Co-Axis®, sub-crestal angle correcting implant, available in angulations of 12°, 24° & 36° and various internal and external connections.
- MAX implant, specifically designed for immediate molar tooth replacement.
- The ZYGAN® and ZYGEX® implants for severely resorbed maxilla and craniofacial reconstruction.

Our product portfolio is in synchronized evolution with protocol improvements and technological advances.

My sincere thanks to all specialists, dentists and technicians who put their trust in our company.



**Graham Blackbeard**  
Managing Director, Southern Implants

## CONTENTS

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<b>Introduction</b>	Page 04
<b>SIREAL GUIDED SURGERY</b>	
<b>SIREAL Standard</b>	Page 05
Universal Guided Surgery Tool.....	Page 06
Offset Sleeves.....	Page 06
Assembly & use of the universal guided surgery tool.....	Page 07
Step 1: Setting the offset.....	Page 07
Step 2: Inserting an instrument.....	Page 07
Choosing the correct offset sleeve.....	Page 08
SIREAL Standard guide sleeves.....	Page 09
Placement Tools.....	Page 10
Cortical Perforator.....	Page 10
Surgical Tray.....	Page 11
Clinical Procedure.....	Page 12
Site Preparation Protocols.....	Page 14
<b>Guided Workflows</b>	
External Hex.....	Page 16
PROVATA®.....	Page 20
Internal Hex (M-series).....	Page 22
TRI-NEX.....	Page 24
Deep Conical.....	Page 26
INVERTA® External Hex.....	Page 28
INVERTA® Deep Conical.....	Page 30
<b>SIREAL Narrow</b> .....	Page 32
Narrow Diameter Guided Surgery.....	Page 33
SIREAL Order Guide.....	Page 34
Explanation of Labeling Symbols.....	Page 35

For more information scan the below



or visit

**SOUTHERNIMPLANTS.COM**

## INTRODUCTION

The **Southern Implants** guided surgery solution, **SIREAL** guide, provides a complete computer-assisted dental implant planning and placement solution for Southern Implants' tapered implants. This is achieved by virtual prosthesis and on-screen design of a surgical guide, enabling prosthetically driven implant placement.

### Surgical guide types

The surgical guide type selection depends on the dental professional's preference, patient anatomy, and the available planning software.

There are three types of surgical guides:



**NOTE:** All surgical guides are patient specific and consists of a 3D printed or milled acrylic guide and metal guide sleeves.

### Treatment planning

Diagnostic and patient specific conditions influence the guided treatment plan. The type of restoration, provisionals, number of implants, and imaging procedures must be taken into consideration during planning.

The following considerations should be reviewed during pre-planning:

- Quantity, quality and health of both soft and hard tissues.
- Occlusal analysis.
- Oral hygiene assessment.
- The patient's vertical opening of the mouth needs to be sufficient to accommodate the instruments used during guided surgery.

### CT scanning

Several imaging technologies are available to accurately scan data. The dental professional and/or radiologist, needs to follow the instructions of the imaging system used.

**Warning:** There may be distortion in the CT image data. These distortions could lead to fit and trajectory problems. It is recommended to validate the guide fit and trajectory by taking a CT scan of the patient wearing the guide before surgery. Open the CT scan image to review both the position and orientation of the guide sleeve. Measure guide sleeve distance and orientation in the CT scan and compare it to the offset/prolongation selected during the planning phase.

The dental professional must follow Southern Implants sleeve offsets and prolongations, failing to do so will result in patient injury. The guide manufacturer ensures compatibility with Southern Implants guided instruments by using SIREAL Guide sleeves, and instruments positioned according to offsets and prolongations described in this manual.

Verify the fit of the guide by seating it on the patients jaw. It is recommended to validate the fit and sleeve position with a CT scan of the patient with the guide in-situ. If the guide was manufactured on a stone model, the inaccuracy of the model or poor image quality from the scan data may result in the guide not fitting. Should there be a variance, do not proceed, remake the guide.

After fixing the guide into place, proceed using SIREAL drills and instrumentation to prepare the osteotomy. The surgical protocol together with the surgical guide will govern which instruments are required to prepare each implant site.

Please note: • Images are for illustration purposes only and do not necessarily accurately represent the product.  
• All dimensions in this catalogue are in mm, unless otherwise specified.  
• Not all products are cleared for sale in all countries.

### SIREAL STANDARD



#### Implant planning



#### Sleeves

$\varnothing 6.2$  (outer) /  $\varnothing 5.2$  (inner)



#### $\varnothing 5.1$ offset sleeve

9mm; 10.5mm; 12mm; 14mm



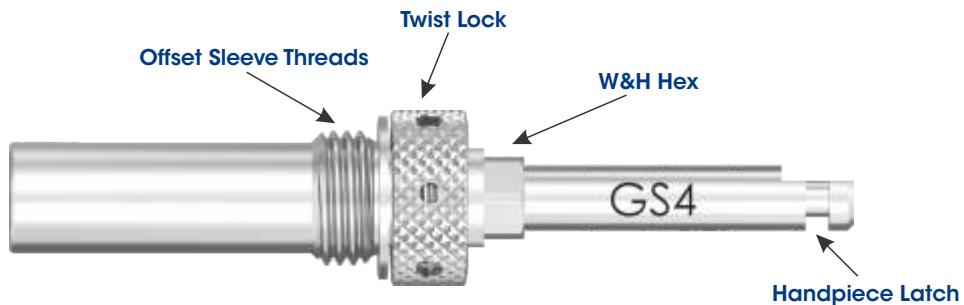
#### Commission Guide



## SIREAL GUIDED SURGERY: THE CONCEPT

### UNIVERSAL GUIDED SURGERY TOOL

The universal guided surgery tool, I-DE-GS4, from Southern Implants is the solution to the SIREAL guided surgery system. This tool allows clinicians to utilise their standard Southern Implants drill kit, and convert the drills into guided surgery drills.

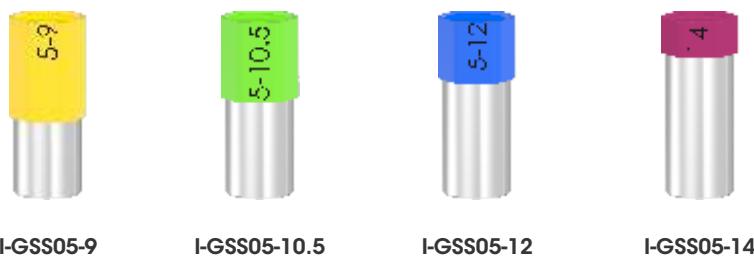


The universal guided surgery tool features a "twist lock" mechanism which locks the latch grip of the drills and placement tools into the I-DE-GS4 tool.

The W&H hex allows for handpieces with the W&H connection to engage the tool, allowing torque to be applied through the instrument.

**Note:** High torque can only be applied to instruments with a W&H hex to a maximum of their specific torque rating, and no higher than 70 Ncm. Instruments and drills without the W&H hex (universal tools) do not exceed 40 Ncm.

### OFFSET SLEEVES



Four offset sleeves are available: **9mm**, **10.5mm**, **12mm** and **14mm**. This is to accommodate the patient's vertical opening or adjacent teeth height that could interfere with the guide sleeve.

Offset is measured from the implant platform to the top of the guide sleeve.

## SIREAL GUIDED SURGERY: THE CONCEPT

### Assembly & use of the universal guided surgery tool:

Follow instructions illustrated below, with the handpiece latch pointing to the right.

#### Step 1: Setting the offset sleeve

The offset is the distance between the implant platform to the top of the surgical guide sleeve.

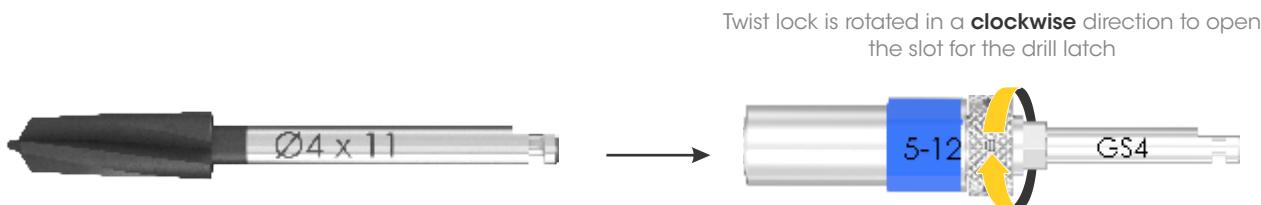
Select the offset sleeve that corresponds to one of the offset lengths (9mm, 10.5mm, 12mm and 14mm) during the implant planning and guide design phase.

Screw the offset sleeve in a **clockwise** direction onto the universal guided surgery tool, with the latch facing to the right as illustrated below.



#### Step 2: Inserting a drill or placement tool

The universal guided surgery tool is designed primarily for use with drills and placement tools, to allow for partially or fully guided surgeries.



Rotate the twist lock in an **anti-clockwise** to engage the latch of the drill



Ensure that the twist lock on the I-DE-GS4 is rotated fully in the **clockwise** direction before inserting the drill or placement tool. Insert the drill/placement tool until it seats inside the tool (this might require rotation until the seat lines up with the latch).

Once the latch is seated, rotate the twist lock in an **anti-clockwise** direction until locked into position.

To release the drill or placement tool, rotate the twist lock 45° in a **clockwise** direction and separate the drill/placement tool from the I-DE-GS4.

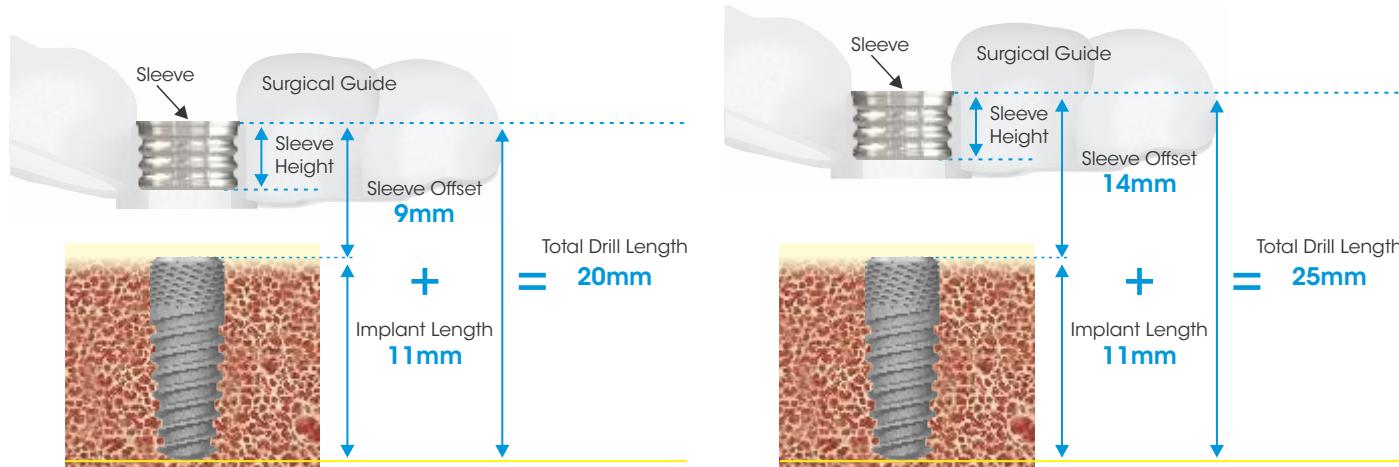
## SIREAL GUIDED SURGERY: THE CONCEPT

### Choosing the correct offset and offset sleeve

The example cases below utilizes an 11mm length implant.

In a molar site, the vertical opening of the patient will be limited. When placing the implant in a posterior site, it's best to go for a shorter total drill length. Select the 9mm offset sleeve (the top of the guide sleeve is 9mm from the implant platform), and that is where the drill will stop. An 11mm implant + 9mm offset = 20mm total drill length (which is the total length from the top of the guide sleeve to the apex of the osteotomy).

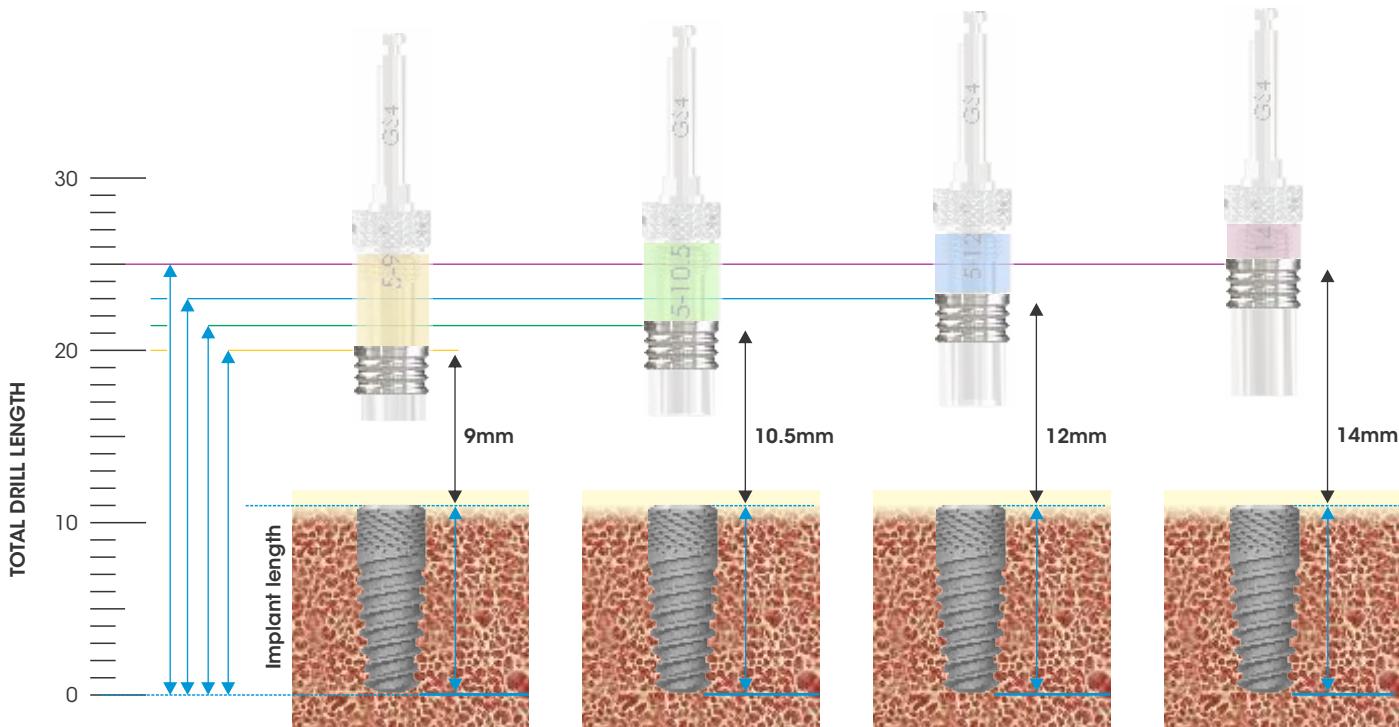
In an anterior case where the patient has long dentition and you can't fit the sleeve in between the adjacent teeth, lift the sleeve offset to 14mm above the planned implant platform. The 11mm implant + 14mm offset = 25mm total drill length.



Illustrating how to determine the correct offset sleeve to determine the maximum drill length

This planning and sleeve selection can be utilized for both the 10.5mm and 12mm.

SIREAL Offset is measured from implant platform to top of the sleeve.



Scan or visit SOUTHERNIMPLANTS.COM for online calculator.

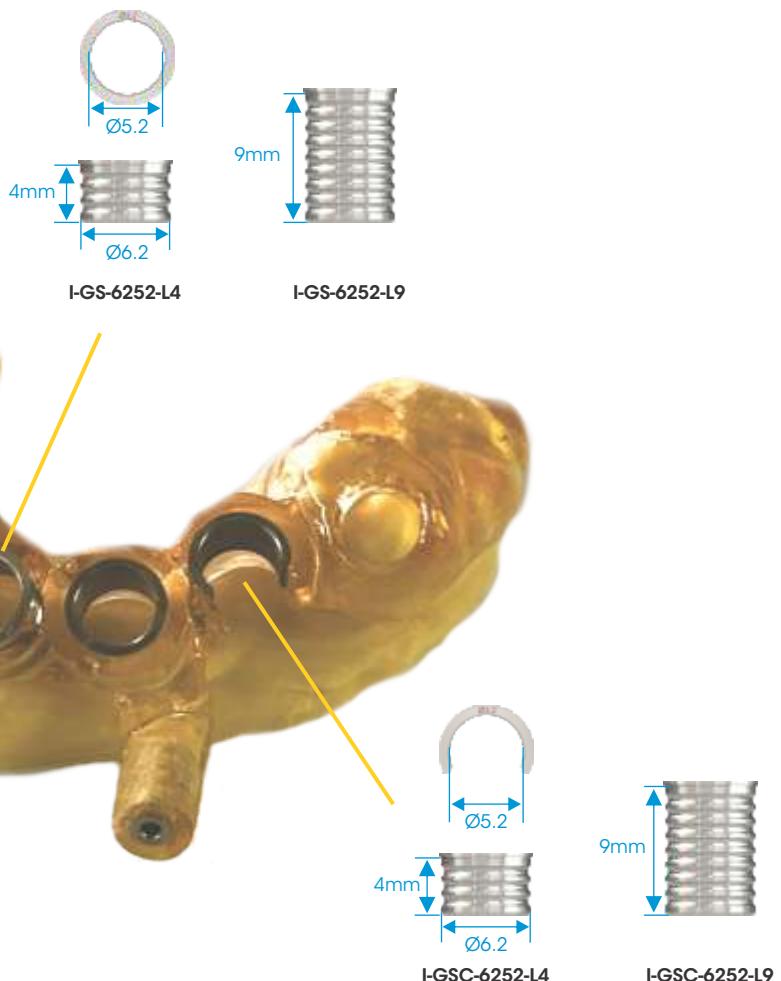
# SIREAL GUIDED SURGERY: THE CONCEPT

## SIREAL STANDARD GUIDE SLEEVES

### Closed sleeves

Indications for use:

- should be used with tapered implants.
- Available in 4mm and 9mm lengths.



### Fixation Pins & Fixation Pin Sleeves

Indications for use:

- Southern Implants fixation pins are used to stabilise the surgical guide.
- D-12T-M15 drill is used to drill through the fixation pin sleeve while guide is in situ. After drilling, insert the pin.
- It is recommended to use 3 pins for full arch guide. If a tooth supported guide requires additional stability, a minimum of 2 pins should be used.
- Pin/s (I-D12-GP) must not interfere with placement tool (I-DE-GS4) or drill trajectory.
- Vertical opening and anatomical constraints of the patient must be considered when designing the guide with fixation pins.

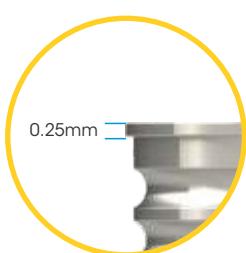
### C-Sleeves (open sleeves)

Indications for use:

- should be used with Co-Axis tapered implants.
- should be positioned to allow access to the fixture mount screw. This will assist the user to remove the fixture mount when placing the implant fully guided.
- used in the posterior region where vertical opening is a challenge. The universal guided surgery tool and drill can be implemented from the side which allows additional space saving of the offset distance.
- allows irrigation at the osteotomy site while drilling.

### NOTE:

- The lip on the guide sleeve, adds 0.25mm, this does not need to be taken into consideration as most Southern Implants drills extend 1mm longer.
- **Always plan for at least 2mm from nerves /anatomical structures.**



## CLINICAL PROCEDURE

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**Step 1:** Insert the D-3SPADE-1.8M into the I-DE-GS4 and proceed with pilot drilling.



**Step 2 (optional):** Place the D-20T-M10 into the I-DE-GS4



**Step 3:** Place the D-DCT3011 into the I-DE-GS4



**Step 4:** Place the D-DCT3511 into the I-DE-GS4



## CLINICAL PROCEDURE

**Step 5:** Place the D-DCT4011 into the I-DE-GS4

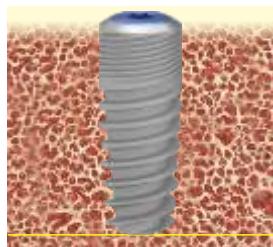
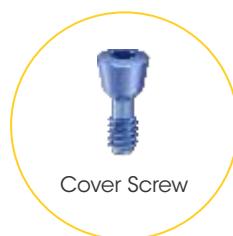


**Step 6:** Place the placement tool I-HDC4-GS into the I-DE-GS4



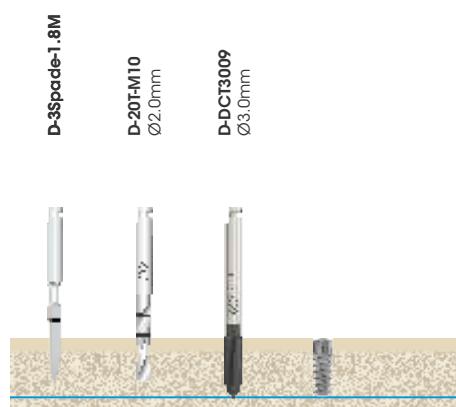
NOTE: For implant torque, refer to surgical manual

**Step 7:** Good primary stability will govern if immediate loading can be done or not.

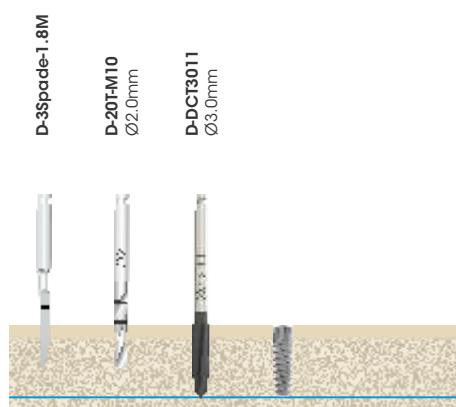


## Ø3.0mm Tapered (DCT30)

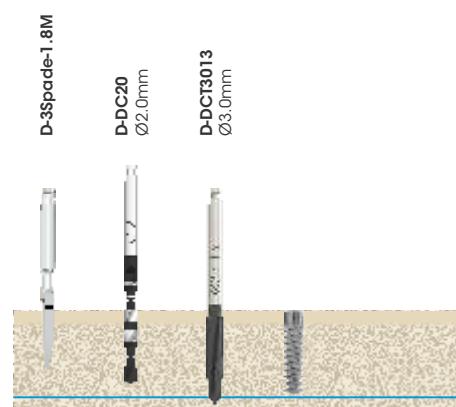
DCT3009



DCT3011

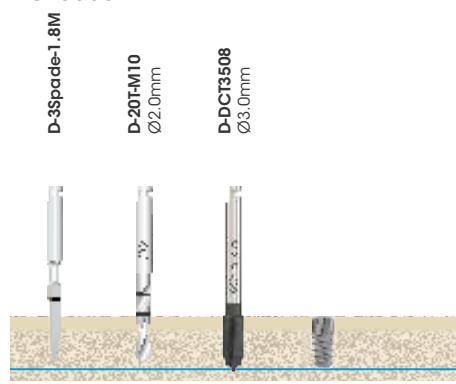


DCT3013

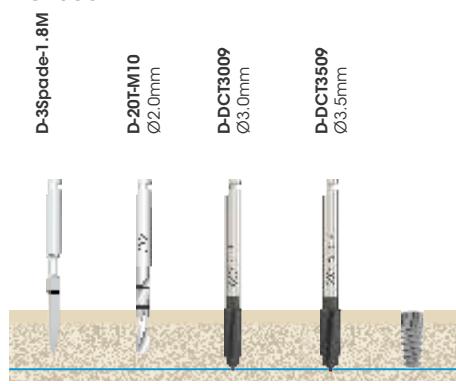


## Ø3.5mm Tapered (DCT35)

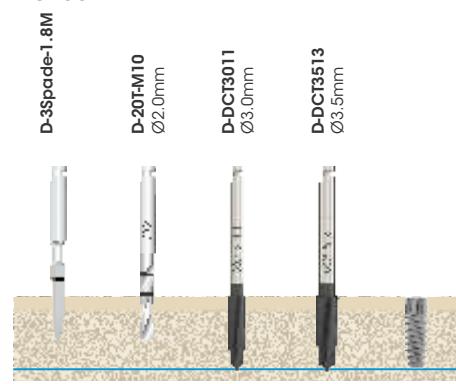
DCT3508



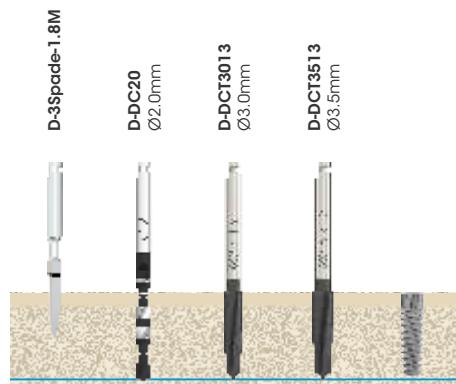
DCT3509



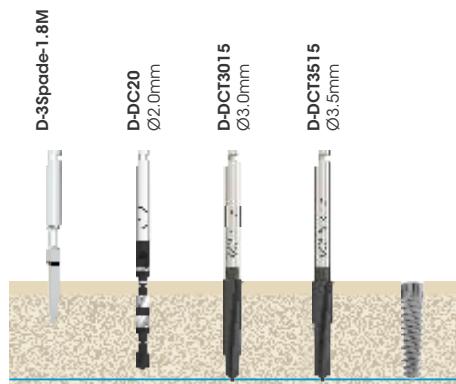
DCT3511



DCT3513



DCT3515

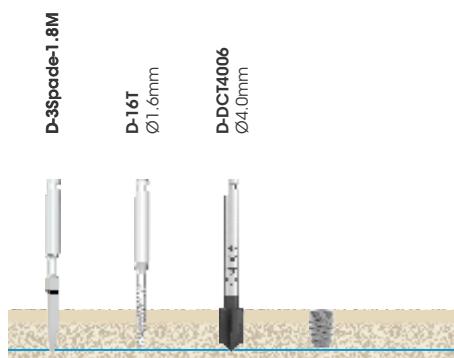


# DEEP CONICAL SITE PREPARATION PROTOCOLS

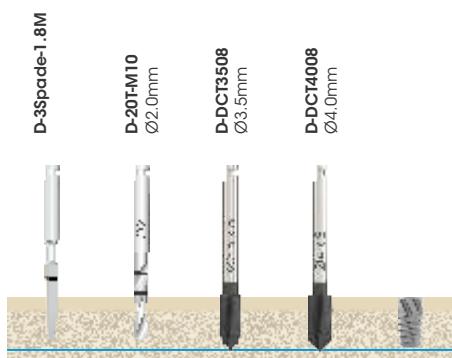
(for demonstration purposes only)

## Ø4.0mm Tapered (DCT40)

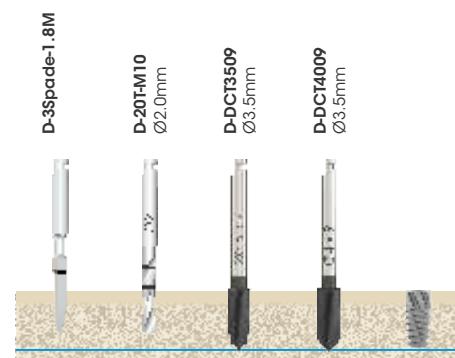
DCT4006



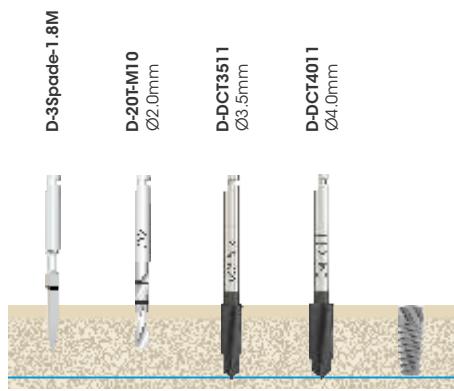
DCT4008



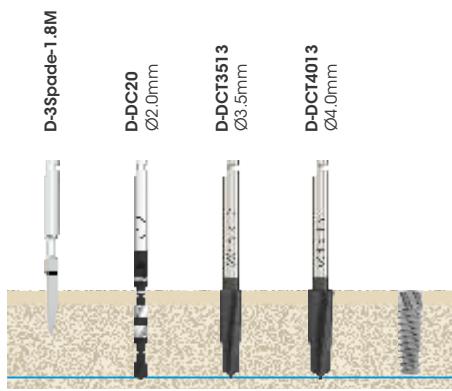
DCT4009



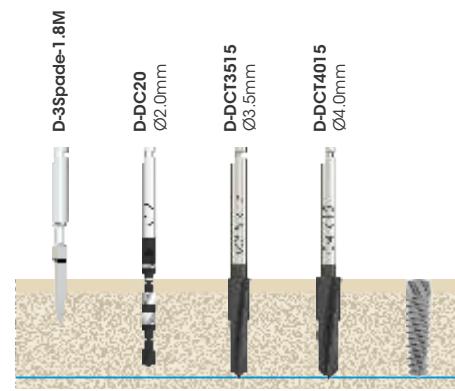
DCT4011



DCT4013

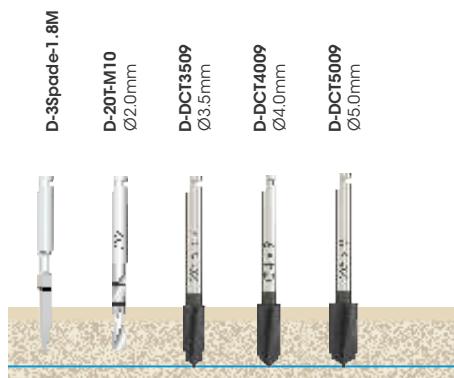


DCT4015

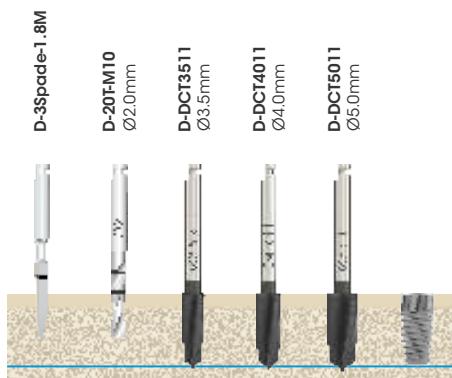


## Ø5.0mm Tapered (DCT50)

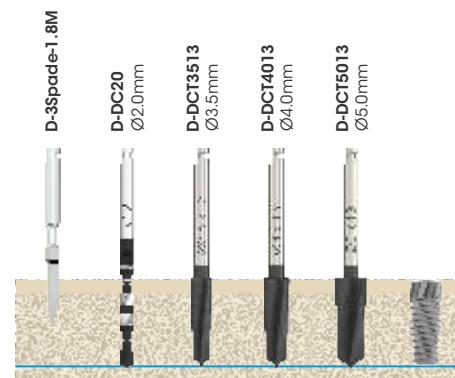
DCT5009



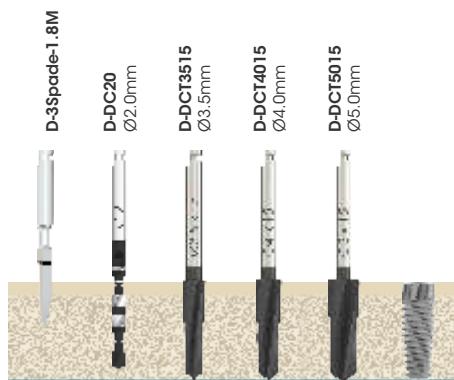
DCT5011



DCT5013



DCT5013



## INSTRUMENTATION

### PLACEMENT TOOLS

This is for placement of Southern Implants tapered implants, partially and fully guided.

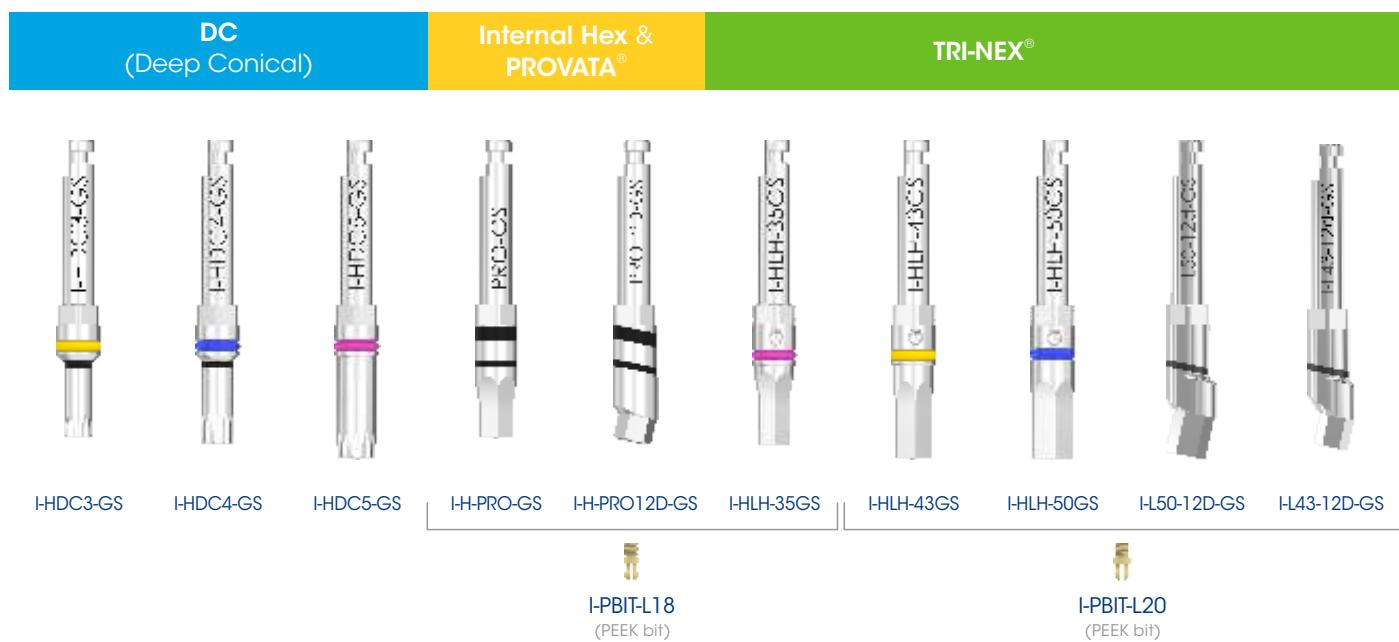
#### Partially guided

The surgical guide is designed to prepare the osteotomy from pilot to final drill. Implant placement is not done through the surgical guide.

#### Fully guided

The surgical guide is designed to prepare the osteotomy from pilot to final drill, as well as placing the implant through the surgical guide.

### TAPERED IMPLANTS SUPPORTED FOR FULLY GUIDED SURGERY



Insertion tools supplied with PEEK bit.

**Important:** The PEEK bits (I-PBIT-L18 / L20) should be replaced on a regular basis. Items sold separately. General wear & tear are to be expected with regular use.

### TAPERED IMPLANTS SUPPORTED FOR PARTIAL GUIDED SURGERY

External Hex	IT (Internal Octagon)
--------------	--------------------------

**NOTE:** These placement tools are specifically developed for the SIREAL Guided System. The standard tools should NOT be used for fully guided surgery.

#### Cortical Perforator (for use with only the standard Ø5.1 guide sleeves)

The cortical perforator, D-GS-CP, is used to initiate the osteotomy by perforating the cortical plate at the planned implant position.

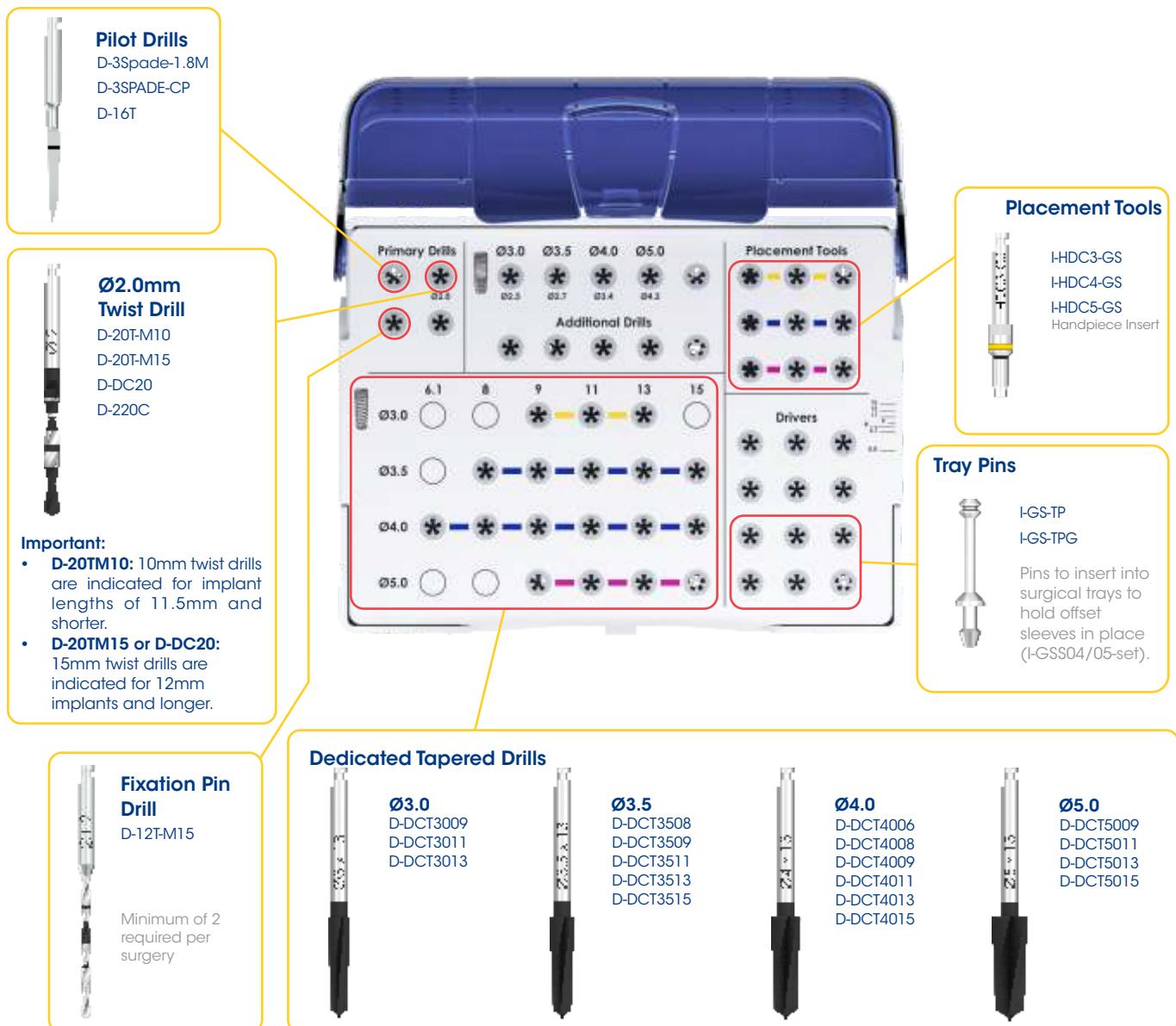


**NOTE:** This tool fits directly into the handpiece and **should not** be used with the I-DE-GS4 tool.

## SURGICAL TRAY

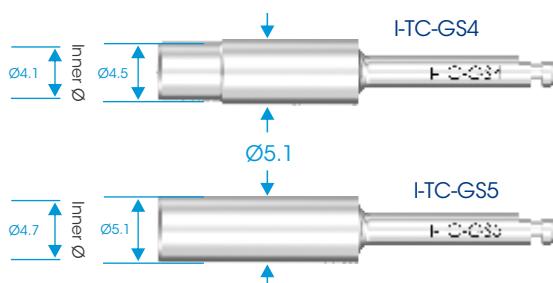
### I-DC-EG Deep Conical Instrument Tray

(for demonstration purposes only)



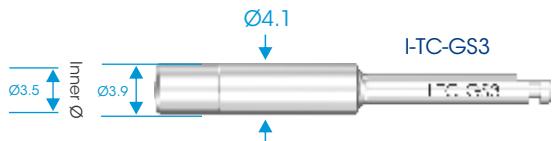
### TISSUE CUTTERS (Optional)

#### SIREAL standard



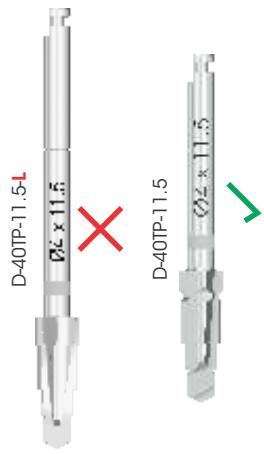
**CAUTION:** When drilling close to crucial anatomical landmarks, consider that the drill preparation site may be up to 1mm deeper than the corresponding implant length.

#### Narrow



**TAPERED DRILLS:**

- SIREAL universal guided surgery tool is only to be used with Southern Implants standard length tapered drills.
- Do not use long shaft drills. It will drill deeper than the planned depth.
- Long drills can be identified by an "L" in the product code. For example: D-40TP-11.5-L



Initiate the osteotomy		Drill sequence per bone densities		
Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone	2nd Drill Final Drill for soft bone	Final Drill for medium and dense bone
IP8.5	D-3SPADE-1.8M	D-20T-M10	D-30TP-8.5	
IP10	D-3SPADE-1.8M	D-20T-M10	D-30TP-10	
IP11.5	D-3SPADE-1.8M	D-20T-M10	D-30TP-11.5	
IP13	D-3SPADE-1.8M	D-20T-M15	D-30TP-13	
IP15	D-3SPADE-1.8M	D-20T-M15	D-30TP-15	

**Initiate the osteotomy**

Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	Final Drill for medium and dense bone
IBNT8.5	D-3SPADE-1.8M	D-20T-M10	D-30TP-8.5	D-33TP-8.5	
IBNT10	D-3SPADE-1.8M	D-20T-M10	D-30TP-10	D-33TP-10	
IBNT11.5	D-3SPADE-1.8M	D-20T-M10	D-30TP-11.5	D-33TP-11.5	
IBNT13	D-3SPADE-1.8M	D-20T-M15	D-30TP-13	D-33TP-13	
IBNT15	D-3SPADE-1.8M	D-20T-M15	D-30TP-15	D-33TP-15	
IBNT18	D-3SPADE-1.8M	D-20T-M15	D-30TP-18	D-33TP-18	

**INVERTA® DRILLS:**

When placing INVERTA® implants with SIREAL, the Guided INVERTA drills laser marked with "GS" must be utilised.

**Initiate the osteotomy**

Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	Final Drill for medium and dense bone
IBT6	D-3SPADE-GS	D-20T-M10	D-33TP-8.5	D-40TP-6	
IBT8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-8.5	
IBT10	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-10	
IBT11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-13	D-40TP-11.5	
IBT13	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-13	
IBT15	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-15	
IBT18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	

**Initiate the osteotomy**

Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for medium and dense bone
BAT6	D-3SPADE-GS	D-20T-M10	D-33TP-8.5	D-40TP-6	D-50TP-6
BAT8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-8.5	D-50TP-8.5
BAT10	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-10	D-50TP-10
BAT11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-13	D-40TP-11.5	D-50TP-11.5
BAT13	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-13	D-50TP-13
BAT15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15
BAT18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill	Final Drill NOT through the guide
BBBT6	D-3SPADE-GS	D-20TM10	D-33TP-8.5	D-40TP-6	D-50TP-6	D-60TP-6
BBBT8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10	D-60TP-8.5
BBBT10	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5	D-60TP-10
BBBT11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-13	D-40TP-13	D-50TP-13	D-60TP-11.5
BBBT13	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15	D-60TP-13
BBBT15	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18	D-60TP-15
BBBT18	D-3SPADE-1.8M	D-20T-M15				D-60TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill for soft bone	3rd Drill	4th Drill	Final Drill for medium and dense bone
IBNT12D-8.5	D-3SPADE-1.8M	D-20T-M10	D-30TP-8.5	D-33TP-8.5	D-33TP-8.5	D-33TP-8.5
IBNT12D-10	D-3SPADE-1.8M	D-20T-M10	D-30TP-10	D-33TP-10	D-33TP-10	D-33TP-10
IBNT12D-11.5	D-3SPADE-1.8M	D-20TM10	D-30TP-11.5	D-33TP-11.5	D-33TP-11.5	D-33TP-11.5
IBNT12D-13	D-3SPADE-1.8M	D-20T-M15	D-30TP-13	D-33TP-13	D-33TP-13	D-33TP-13
IBNT12D-15	D-3SPADE-1.8M	D-20T-M15	D-30TP-15	D-33TP-15	D-33TP-15	D-33TP-15
IBNT12D-18	D-3SPADE-1.8M	D-20T-M15	D-30TP-18	D-33TP-18	D-33TP-18	D-33TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill for soft bone	3rd Drill	4th Drill	Final Drill for medium and dense bone
IBT12D-8.5	D-3SPADE-1.8M	D-20TM10	D-33TP-8.5	D-40TP-8.5	D-40TP-8.5	D-40TP-8.5
IBT12D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-40TP-10	D-40TP-10
IBT12D-11.5	D-3SPADE-1.8M	D-20TM10	D-33TP-11.5	D-40TP-11.5	D-40TP-11.5	D-40TP-11.5
IBT12D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-40TP-13	D-40TP-13
IBT12D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-40TP-15	D-40TP-15
IBT12D-18	D-3SPADE-1.8M	D-20TM15	D-33TP-18	D-40TP-18	D-40TP-18	D-40TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill for soft bone	3rd Drill	4th Drill	Final Drill for medium and dense bone
IBR12D-8.5	D-3SPADE-1.8M	D-20TM10	D-33TP-8.5	D-40TP-8.5	D-40TP-8.5	D-40TP-8.5
IBR12D-10	D-3SPADE-1.8M	D-20TM10	D-33TP-10	D-40TP-10	D-40TP-10	D-40TP-10
IBR12D-11.5	D-3SPADE-1.8M	D-20TM10	D-33TP-11.5	D-40TP-11.5	D-40TP-11.5	D-40TP-11.5
IBR12D-13	D-3SPADE-1.8M	D-20TM15	D-33TP-13	D-40TP-13	D-40TP-13	D-40TP-13
IBR12D-15	D-3SPADE-1.8M	D-20TM15	D-33TP-15	D-40TP-15	D-40TP-15	D-40TP-15
IBR12D-18	D-3SPADE-1.8M	D-20TM15	D-33TP-18	D-40TP-18	D-40TP-18	D-40TP-18

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Implant Code	Initiate the osteotomy		Drill sequence per bone densities		
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	Final Drill for medium and dense bone
IBR24D-8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5	
IBR24D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	
IBR24D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	
IBR24D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	
IBR24D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	
IBR24D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for medium and dense bone
BAT12D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10
BAT12D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5
BAT12D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13
BAT12D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15
BAT12D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for medium and dense bone
BAR12D-8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5	D-50TP-8.5
BAR12D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10
BAR12D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5
BAR12D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13
BAR12D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15
BAR12D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for soft bone	Final Drill for medium and dense bone
BAR24D-8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5	D-50TP-8.5	D-50TP-8.5
BAR24D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10	D-50TP-10
BAR24D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5	D-50TP-11.5
BAR24D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13	D-50TP-13
BAR24D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15	D-50TP-15
BAR24D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18	D-50TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for soft bone	Final Drill for medium and dense bone
BAR36D-8.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5	D-50TP-8.5	D-50TP-8.5
BAR36D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10	D-50TP-10
BAR36D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5	D-50TP-11.5
BAR36D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13	D-50TP-13
BAR36D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15	D-50TP-15
BAR36D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18	D-50TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill	Final Drill for soft bone
BBBT12D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10	D-60TP-10
BBBT12D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5	D-60TP-11.5
BBBT12D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13	D-60TP-13
BBBT12D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15	D-60TP-15
BBBT12D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18	D-60TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill	Final Drill for soft bone
BBBT24D-10	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10	D-60TP-10
BBBT24D-11.5	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5	D-60TP-11.5
BBBT24D-13	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13	D-60TP-13
BBBT24D-15	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15	D-60TP-15
BBBT24D-18	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18	D-60TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	2nd Drill for soft bone	Final Drill for medium and dense bone
PRO308	D-3SPADE-1.8M	D-20T-M10	D-30TP-8.5		D-33TP-8.5
PRO310	D-3SPADE-1.8M	D-20T-M10	D-30TP-10		D-33TP-10
PRO311	D-3SPADE-1.8M	D-20T-M10	D-30TP-11.5		D-33TP-11.5
PRO313	D-3SPADE-1.8M	D-20T-M15	D-30TP-13		D-33TP-13
PRO315	D-3SPADE-1.8M	D-20T-M15	D-30TP-15		D-33TP-15
PRO318	D-3SPADE-1.8M	D-20T-M15	D-30TP-18		D-33TP-18

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided	
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	Final Drill for medium and dense bone	Implant placement	
PRO408	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5		I-H-PRO-GS	
PRO410	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10		I-H-PRO-GS	
PRO411	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5		I-H-PRO-GS	
PRO413	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13		I-H-PRO-GS	
PRO415	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15		I-H-PRO-GS	
PRO418	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18		I-H-PRO-GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided	
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for medium and dense bone	Final Drill for medium and dense bone	Implant placement
PRO508	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5	D-50TP-8.5		I-H-PRO-GS
PRO510	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10		I-H-PRO-GS
PRO511	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5		I-H-PRO-GS
PRO513	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13		I-H-PRO-GS
PRO515	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15		I-H-PRO-GS
PRO518	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18		I-H-PRO-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	Final Drill for medium and dense bone	
PRO12D408	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5		I-H-PRO12D-GS
PRO12D410	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10		I-H-PRO12D-GS
PRO12D411	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5		I-H-PRO12D-GS
PRO12D413	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13		I-H-PRO12D-GS
PRO12D415	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15		I-H-PRO12D-GS
PRO12D418	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18		I-H-PRO12D-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for medium and dense bone	
PRO12D508	D-3SPADE-1.8M	D-20T-M10	D-33TP-8.5	D-40TP-8.5	D-50TP-8.5	I-H-PRO12D-GS
PRO12D510	D-3SPADE-1.8M	D-20T-M10	D-33TP-10	D-40TP-10	D-50TP-10	I-H-PRO12D-GS
PRO12D511	D-3SPADE-1.8M	D-20T-M10	D-33TP-11.5	D-40TP-11.5	D-50TP-11.5	I-H-PRO12D-GS
PRO12D513	D-3SPADE-1.8M	D-20T-M15	D-33TP-13	D-40TP-13	D-50TP-13	I-H-PRO12D-GS
PRO12D515	D-3SPADE-1.8M	D-20T-M15	D-33TP-15	D-40TP-15	D-50TP-15	I-H-PRO12D-GS
PRO12D518	D-3SPADE-1.8M	D-20T-M15	D-33TP-18	D-40TP-18	D-50TP-18	I-H-PRO12D-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	Final Drill for medium and dense bone	Final Drill for medium and dense bone	
IM-T3708	D-3SPADE-1.8M	D-20T-M10	D-MT3708	I-H-PRO-GS	
IM-T3710	D-3SPADE-1.8M	D-20T-M10	D-MT3710	I-H-PRO-GS	
IM-T3711	D-3SPADE-1.8M	D-20T-M10	D-MT3711	I-H-PRO-GS	
IM-T3713	D-3SPADE-1.8M	D-20T-M15	D-MT3713	I-H-PRO-GS	
IM-T3715	D-3SPADE-1.8M	D-20T-M15	D-MT3715	I-H-PRO-GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	
IM-T4208	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3708	D-MT4208
IM-T4210	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3710	I-H-PRO-GS
IM-T4211	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3711	I-H-PRO-GS
IM-T4213	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3713	I-H-PRO-GS
IM-T4215	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3715	I-H-PRO-GS
IM-T4218	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3718	I-H-PRO-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	
IM-T5008	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3708	D-MT5008
IM-T5010	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3710	I-H-PRO-GS
IM-T5011	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3711	I-H-PRO-GS
IM-T5013	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3713	I-H-PRO-GS
IM-T5015	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3715	I-H-PRO-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided Implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	medium and dense bone	
IM-T4208-12d	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3708	D-MT4208	I-H-PRO12D-GS
IM-T4210-12d	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3710	D-MT4210	I-H-PRO12D-GS
IM-T4211-12d	D-3SPADE-1.8M	D-20T-M10	D-30T-M10	D-MT3711	D-MT4211	I-H-PRO12D-GS
IM-T4213-12d	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3713	D-MT4213	I-H-PRO12D-GS
IM-T4215-12d	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3715	D-MT4215	I-H-PRO12D-GS
IM-T4218-12d	D-3SPADE-1.8M	D-20T-M15	D-30T-M15	D-MT3718	D-MT4218	I-H-PRO12D-GS

Initiate the osteotomy		Drill sequence per bone densities			
Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	Final Drill for medium and dense bone	Fully guided	
IA-LH-35-8	D-3SPADE-1.8M	D-20T-M10	D-L-35-8	I-HLH-35GS	Implant placement
IA-LH-35-10	D-3SPADE-1.8M	D-20T-M10	D-L-35-10	I-HLH-35GS	
IA-LH-35-11.5	D-3SPADE-1.8M	D-20T-M10	D-L-35-11.5	I-HLH-35GS	
IA-LH-35-13	D-3SPADE-1.8M	D-20T-M15	D-L-35-13	I-HLH-35GS	
IA-LH-35-16	D-3SPADE-1.8M	D-20T-M15	D-L-35-16	I-HLH-35GS	

Initiate the osteotomy		Drill sequence per bone densities			
Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	Final Drill for soft bone	Final Drill for medium and dense bone	Fully guided
IA-LH-43-8	D-3SPADE-1.8M	D-20T-M10	D-L-35-8	D-L-43-8	I-HLH-43GS
IA-LH-43-10	D-3SPADE-1.8M	D-20T-M10	D-L-35-10	D-L-43-10	I-HLH-43GS
IA-LH-43-11.5	D-3SPADE-1.8M	D-20T-M10	D-L-35-11.5	D-L-43-11.5	I-HLH-43GS
IA-LH-43-13	D-3SPADE-1.8M	D-20T-M15	D-L-35-13	D-L-43-13	I-HLH-43GS
IA-LH-43-16	D-3SPADE-1.8M	D-20T-M15	D-L-35-16	D-L-43-16	I-HLH-43GS

Initiate the osteotomy		Drill sequence per bone densities			
Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Fully guided
IA-LH-50-8	D-3SPADE-1.8M	D-20T-M10	D-L-35-8	D-L-43-8	I-HLH-50GS
IA-LH-50-10	D-3SPADE-1.8M	D-20T-M10	D-L-35-10	D-L-43-10	I-HLH-50GS
IA-LH-50-11.5	D-3SPADE-1.8M	D-20T-M10	D-L-35-11.5	D-L-43-11.5	I-HLH-50GS
IA-LH-50-13	D-3SPADE-1.8M	D-20T-M15	D-L-35-13	D-L-43-13	I-HLH-50GS
IA-LH-50-16	D-3SPADE-1.8M	D-20T-M15	D-L-35-16	D-L-43-16	I-HLH-50GS

Initiate the osteotomy		Drill sequence per bone densities			
Implant Code	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill
IA-LH-60-8	D-3SPADE-1.8M	D-20T-M10	D-L-35-8	D-L-43-8	D-L-50-8
IA-LH-60-10	D-3SPADE-1.8M	D-20T-M10	D-L-35-10	D-L-43-10	D-L-60-10
IA-LH-60-11.5	D-3SPADE-1.8M	D-20T-M10	D-L-35-11.5	D-L-43-11.5	D-L-60-11.5
IA-LH-60-13	D-3SPADE-1.8M	D-20T-M15	D-L-35-13	D-L-43-13	D-L-60-13
IA-LH-60-16	D-3SPADE-1.8M	D-20T-M15	D-L-35-16	D-L-43-16	D-L-60-16

<b>Initiate the osteotomy</b>		Drill sequence per bone densities				<b>Fully guided</b>	
<b>Implant Code</b>	<b>Initial Drill</b>	Optional Drill for medium and dense cortical bone.	2nd Drill	Final Drill for soft bone	Final Drill for medium and dense bone	Implant placement	
IA43-12d-10	D-3SPADE-1.8M	D-20T-M10	D-L-35-10	D-L-43-10	I-L43-12D-GS		
IA43-12d-11.5	D-3SPADE-1.8M	D-20T-M10	D-L-35-11.5	D-L-43-11.5	I-L43-12D-GS		
IA43-12d-13	D-3SPADE-1.8M	D-20T-M15	D-L-35-13	D-L-43-13	I-L43-12D-GS		
IA43-12d-16	D-3SPADE-1.8M	D-20T-M15	D-L-35-16	D-L-43-16	I-L43-12D-GS		

<b>Initiate the osteotomy</b>		Drill sequence per bone densities				<b>Fully guided</b>	
<b>Implant Code</b>	<b>Initial Drill</b>	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for soft bone	Find Drill for medium and dense bone	Find Drill for Implant placement
IA50-12d-10	D-3SPADE-1.8M	D-20T-M10	D-L-35-10	D-L-43-10	D-L-50-10	I-L50-12D-GS	
IA50-12d-11.5	D-3SPADE-1.8M	D-20T-M10	D-L-35-11.5	D-L-43-11.5	D-L-50-11.5	I-L50-12D-GS	
IA50-12d-13	D-3SPADE-1.8M	D-20T-M15	D-L-35-13	D-L-43-13	D-L-50-13	I-L50-12D-GS	
IA50-12d-16	D-3SPADE-1.8M	D-20T-M15	D-L-35-16	D-L-43-16	D-L-50-16	I-L50-12D-GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	Final Drill	2nd Drill	Final Drill for medium and dense bone	
DCT3009	D-3SPADE-1.8M	D-20T-M10	D-DDCT3009	D-DDCT3009	I-HDC3-GS	
DCT3011	D-3SPADE-1.8M	D-20T-M10	D-DDCT3011	D-DDCT3011	I-HDC3-GS	
DCT3013	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3013	D-DDCT3013	I-HDC3-GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	Final Drill for soft bone	2nd Drill	Final Drill for medium and dense bone	
DCT3508	D-3SPADE-1.8M	D-20T-M10	D-DDCT3009	D-DDCT3008	D-DDCT3008	I-HDC4-GS
DCT3509	D-3SPADE-1.8M	D-20T-M10	D-DDCT3011	D-DDCT3009	D-DDCT3009	I-HDC4-GS
DCT3511	D-3SPADE-1.8M	D-20T-M10	D-DDCT3013	D-DDCT3511	I-HDC4-GS	
DCT3513	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3013	D-DDCT3513	I-HDC4-GS	
DCT3515	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3015	D-DDCT3515	I-HDC4-GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	Final Drill for medium and dense bone	
DCT4006	D-3SPADE-GS	D-16-T		D-DDCT3008	D-DDCT4006	I-HDC4-GS
DCT4008	D-3SPADE-1.8M	D-20T-M10	D-DDCT3009	D-DDCT4008	I-HDC4-GS	
DCT4009	D-3SPADE-1.8M	D-20T-M10	D-DDCT3009	D-DDCT4009	I-HDC4-GS	
DCT4011	D-3SPADE-1.8M	D-20T-M10	D-DDCT3011	D-DDCT4011	I-HDC4-GS	
DCT4013	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3013	D-DDCT4013	I-HDC4-GS	
DCT4015	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3015	D-DDCT4015	I-HDC4-GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities			Fully guided implant placement
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill	
DCT5009	D-3SPADE-1.8M	D-20T-M10	D-DDCT3009	D-DDCT3509	D-DDCT4009	I-HDC5-GS
DCT5011	D-3SPADE-1.8M	D-20T-M10	D-DDCT3011	D-DDCT3511	D-DDCT4011	I-HDC5-GS
DCT5013	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3013	D-DDCT3513	D-DDCT4013	I-HDC5-GS
DCT5015	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DDCT3015	D-DDCT3515	D-DDCT4015	I-HDC5-GS

<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>			
<b>Implant Code</b>	<b>Initial Drill</b>	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill
DCT4008-12D	D-3SPADE-1.8M	D-20T-M10		D-DCT3508	D-DCT4008
DCT4009-12D	D-3SPADE-1.8M	D-20T-M10	D-DCT3009	D-DCT3509	D-DCT4009
DCT4011-12D	D-3SPADE-1.8M	D-20T-M10	D-DCT3011	D-DCT3511	D-DCT4011
DCT4013-12D	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DCT3013	D-DCT3513	D-DCT4013
DCT4015-12D	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DCT3515	D-DCT3515	D-DCT4015

<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>			
<b>Implant Code</b>	<b>Initial Drill</b>	Optional Drill for medium and dense cortical bone.	2nd Drill	3rd Drill	4th Drill
DCT5009-12D	D-3SPADE-1.8M	D-20T-M10		D-DCT3509	D-DCT4009
DCT5011-12D	D-3SPADE-1.8M	D-20T-M10	D-DCT3009	D-DCT3511	D-DCT4011
DCT5013-12D	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DCT3011	D-DCT3513	D-DCT4013
DCT5015-12D	D-3SPADE-1.8M	D-DC20/D-20T-M15	D-DCT3013	D-DCT3515	D-DCT4015

<b>Implant Code</b>	<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>
	Initial Drill	Final Drill	
IV-EX30-3710	D-3SPADE-1.8M	D-IV3710GS	
IV-EX30-3711	D-3SPADE-1.8M	D-IV3711GS	
IV-EX30-3713	D-3SPADE-1.8M	D-IV3713GS	
IV-EX30-3715	D-3SPADE-1.8M	D-IV3715GS	

<b>Implant Code</b>	<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>
	Initial Drill	Optional Drill for soft bone.	
IV-EX35-4510	D-3SPADE-1.8M	D-IV3710GS	D-IV4510GS
IV-EX35-4511	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS
IV-EX35-4513	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS
IV-EX35-4515	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS

<b>Implant Code</b>	<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>
	Initial Drill	Optional Drill for medium and dense cortical bone.	
IV-EX40-5010	D-3SPADE-1.8M	D-IV3710GS	D-IV4510GS
IV-EX40-5011	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS
IV-EX40-5013	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS
IV-EX40-5015	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS

<b>Implant Code</b>	<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>
	Initial Drill	Optional Drill for soft bone	
IV-EX52-6010	D-3SPADE-1.8M	D-IV3710GS	D-IV5010GS
IV-EX52-6011	D-3SPADE-1.8M	D-IV3711GS	D-IV5011GS
IV-EX52-6013	D-3SPADE-1.8M	D-IV3713GS	D-IV5013GS
IV-EX52-6015	D-3SPADE-1.8M	D-IV3715GS	D-IV5015GS

<b>Implant Code</b>	<b>Initiate the osteotomy</b>		<b>Drill sequence per bone densities</b>
	Initial Drill	Final Drill for medium and dense bone	
IV-EX52-6010	D-3SPADE-1.8M	D-IV3710GS	D-IV5010GS
IV-EX52-6011	D-3SPADE-1.8M	D-IV3711GS	D-IV5011GS
IV-EX52-6013	D-3SPADE-1.8M	D-IV3713GS	D-IV5013GS
IV-EX52-6015	D-3SPADE-1.8M	D-IV3715GS	D-IV5015GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities	
	Initial Drill		Final Drill for medium and dense bone	
IV-EX3012D-3711	D-3SPADE-1.8M	D-IV3711GS		
IV-EX3012D-3713	D-3SPADE-1.8M	D-IV3713GS		
IV-EX3012D-3715	D-3SPADE-1.8M	D-IV3715GS		

Implant Code	Initiate the osteotomy		Drill sequence per bone densities	
	Initial Drill		Optional Drill for soft bone.	Final Drill for medium and dense bone
IV-EX3512D-4510	D-3SPADE-1.8M	D-IV3710GS	D-IV4510GS	
IV-EX3512D-4511	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS	
IV-EX3512D-4513	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS	
IV-EX3512D-4515	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities	
	Initial Drill		Optional Drill for medium and dense cortical bone.	Final Drill for soft bone
IV-EX4012D-5011	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS	D-IV5011GS
IV-EX4012D-5013	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS	D-IV5013GS
IV-EX4012D-5015	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS	D-IV5015GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities	
	Initial Drill		Optional Drill for medium and dense cortical bone.	Final Drill for soft bone
IV-EX5212D-6011	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS	D-IV5011GS
IV-EX5212D-6013	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS	D-IV5013GS
IV-EX5212D-6015	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS	D-IV5015GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided Implant placement
	Initial Drill	Final Drill	2nd Drill for medium and dense cortical bone.	Final Drill for medium and dense bone	
IV-DC30-3710	D-3SPADE-1.8M	D-IV3710GS			I-HDC3-GS
IV-DC30-3711	D-3SPADE-1.8M	D-IV3711GS			I-HDC3-GS
IV-DC30-3713	D-3SPADE-1.8M	D-IV3713GS			I-HDC3-GS
IV-DC30-3715	D-3SPADE-1.8M	D-IV3715GS			I-HDC3-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided Implant placement
	Initial Drill	Final Drill	2nd Drill for medium and dense cortical bone.	Final Drill for medium and dense bone	
IV-DC35-4510	D-3SPADE-1.8M	D-IV3710GS		D-IV4510GS	I-HDC4-GS
IV-DC35-4511	D-3SPADE-1.8M	D-IV3711GS		D-IV4511GS	I-HDC4-GS
IV-DC35-4513	D-3SPADE-1.8M	D-IV3713GS		D-IV4513GS	I-HDC4-GS
IV-DC35-4515	D-3SPADE-1.8M	D-IV3715GS		D-IV4515GS	I-HDC4-GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided Implant placement
	Initial Drill	Final Drill	2nd Drill for medium and dense cortical bone.	3rd Drill Final Drill for soft bone	
IV-DC40-5010	D-3SPADE-1.8M	D-IV3710GS		D-IV4510GS	D-IV5010GS
IV-DC40-5011	D-3SPADE-1.8M	D-IV3711GS		D-IV4511GS	D-IV5011GS
IV-DC40-5013	D-3SPADE-1.8M	D-IV3713GS		D-IV4513GS	D-IV5013GS
IV-DC40-5015	D-3SPADE-1.8M	D-IV3715GS		D-IV4515GS	D-IV5015GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		Fully guided Implant placement
	Initial Drill	Final Drill	2nd Drill for medium and dense cortical bone.	3rd Drill Final Drill for soft bone	
IV-DC50-6010	D-3SPADE-1.8M	D-IV3710GS		D-IV4510GS	D-IV6010GS
IV-DC50-6011	D-3SPADE-1.8M	D-IV3711GS		D-IV4511GS	D-IV6011GS
IV-DC50-6013	D-3SPADE-1.8M	D-IV3713GS		D-IV4513GS	D-IV6013GS
IV-DC50-6015	D-3SPADE-1.8M	D-IV3715GS		D-IV4515GS	D-IV6015GS

Implant Code	Initiate the osteotomy		Drill sequence per bone densities	
	Initial Drill	Optional Drill for medium and dense cortical bone.	Final Drill for medium and dense bone	Final Drill for medium and dense bone
IV-DC3512D-4511	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS	
IV-DC3512D-4513	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS	
IV-DC3512D-4515	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS	

Implant Code	Initiate the osteotomy		Drill sequence per bone densities		
	Initial Drill	Optional Drill for medium and dense cortical bone.	2nd Drill	2nd Drill for soft bone	Final Drill for medium and dense bone
IV-DC4012D-5011	D-3SPADE-1.8M	D-IV3711GS	D-IV4511GS	D-IV5011GS	
IV-DC4012D-5013	D-3SPADE-1.8M	D-IV3713GS	D-IV4513GS	D-IV5013GS	
IV-DC4012D-5015	D-3SPADE-1.8M	D-IV3715GS	D-IV4515GS	D-IV5015GS	

### SIREAL NARROW



#### Implant planning



#### Sleeves

$\varnothing 5.1$ (outer) /  $\varnothing 4.2$  (inner)



#### $\varnothing 4.1$ offset sleeve

9mm; 10.5mm; 12mm; 14mm



#### Commission Guide



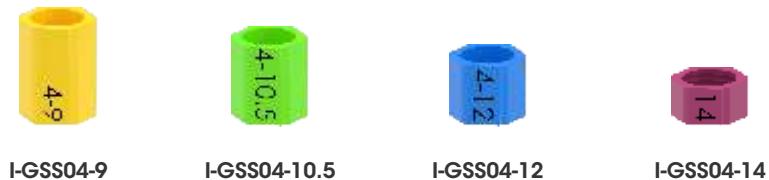
## SIREAL NARROW

### UNIVERSAL GUIDED SURGERY TOOL

The universal guided surgery tool has a diameter of 4.1mm. The Ø4.1mm offset sleeves only fits directly on the threaded part of the I-DE-GS4. The shaft of the I-DE-GS4 guides through the narrow Ø4.2mm guide sleeves.



### NARROW OFFSET SLEEVES



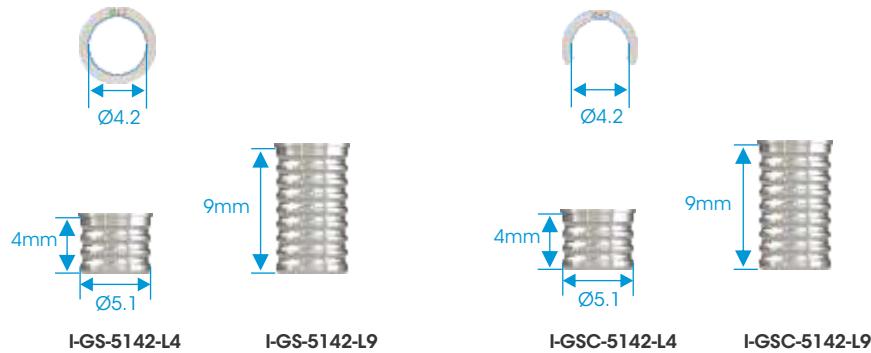
The inversal guided surgery tool threads are used to engage the four varied Offset Sleeves for setting the depth of the tool.

**NOTE:** The narrow offset sleeves do not have a cylinder attached as with the SIREAL standard offset sleeves. The shaft of the universal guided surgery tool acts as a Ø4.1mm cylinder, which fits through the narrow guide sleeves.



Four Offset Sleeves are available: **9mm**, **10.5mm**, **12mm** and **14mm**. This is to accommodate the patient's vertical opening or adjacent teeth height that could interfere with the guide sleeve.

### NARROW GUIDE SLEEVES



## UNIVERSAL GUIDED SURGERY TOOL



I-DE-GS4

## ADDITIONAL INFORMATION

- If driving on the latch, the recommended MAX torque is 40Ncm.
- If driving on the W&H hex, the recommended MAX torque is 70Ncm  
Recommended to order 2.

## Ø5.1 STANDARD OFFSET SLEEVES



I-GSS05-9



I-GSS05-10.5

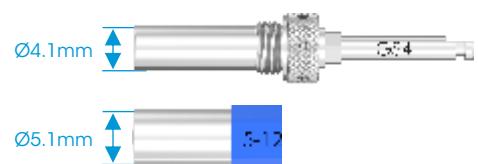


I-GSS05-12



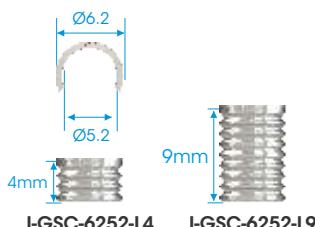
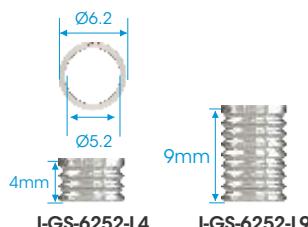
I-GSS05-14

The addition of the Ø5.1 Standard offset sleeve converts the cylinder diameter of the universal guided surgical tool from Ø4.1mm to Ø5.1mm.



## GUIDED SLEEVES

Ø6.2 (outer) / Ø5.2 (inner)



I-GS-6252-L4	4mm	Closed Guide Sleeve
I-GS-6252-L9	9mm	Closed Guide Sleeve
I-GSC-6252-L4	4mm	Open Guide Sleeve
I-GSC-6252-L9	9mm	Open Guide Sleeve

## Why and when to use a C-guide sleeve?

- Better irrigation at the osteotomy site.
- Side entry: when the patients has limited vertical space (especially posteriorly).
- Co-Axis compatibility
- Fixture mount screw access.

## Benefits of a 9mm sleeve height

The SIREAL universal guided surgery tool will be guided by longer guide sleeve length, which increases the guidance and stability.

**NOTE:** 9mm guide sleeves can not be used with a 9mm offset.

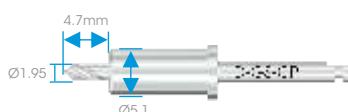
## TISSUE CUTTERS



I-TC-GS4	Tissue Cutter Ø4.5 outer Ø4.1 inner
I-TC-GS5	Tissue Cutter Ø5.0 outer Ø4.7 inner

Can only be used with the standard offset sleeves and the standard guide sleeves.

## CORTICAL PERFORATOR



D-GS-CP	Cortical Perforator Guide Surgery
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- Only compatible with Ø5.1 guided sleeves.
- Recommended to be used as initial drill for 6mm implants. Do not use D-20TM10 to prevent preparing the osteotomy too deep.

## UNIVERSAL GUIDED SURGERY TOOL



I-DE-GS4

## Ø4.1 NARROW OFFSET SLEEVES



I-GSS04-9



I-GSS04-10.5



I-GSS04-12

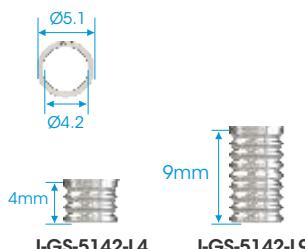


I-GSS04-14

I-GSS04-9	Ø4.1 x 9mm Offset Sleeve	(YELLOW)
I-GSS04-10.5	Ø4.1 x 10.5mm Offset Sleeve	(GREEN)
I-GSS04-12	Ø4.1 x 12mm Offset Sleeve	(BLUE)
I-GSS04-14	Ø4.1 x 14mm Offset Sleeve	(PURPLE)

## NARROW GUIDED SLEEVES

Ø5.1(outer) / Ø4.2 (inner)



I-GS-5142-L4	4mm	Closed Guide Sleeve
I-GS-5142-L9	9mm	Closed Guide Sleeve
I-GSC-5142-L4	4mm	Open Guide Sleeve
I-GSC-5142-L9	9mm	Open Guide Sleeve

## TISSUE CUTTER



I-TC-GS3	Tissue Cutter Ø3.9 outer Ø3.5 inner
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## ADDITIONAL INFORMATION

- If driving on the latch, the recommended MAX torque is 40Ncm.
- If driving on the W&H hex, the recommended MAX torque is 70Ncm  
Recommended to order 2.

The narrow offset sleeves utilise the Ø4.1 cylinder of the SIREAL tool to engage the NARROW sleeves.



## Why and when to use a C-guide sleeve?

- Better irrigation at the osteotomy site.
- Side entry: when the patients has limited vertical space (especially posteriorly).
- Co-Axis compatibility
- Fixture mount screw access.

## Benefits of a 9mm guide sleeve height

The SIREAL universal guided surgery tool will be guided by longer sleeve length, which increases the guidance and stability.

**NOTE:** 9mm guide sleeves can not be used with a 9mm offset.

Can only be used with the narrow offset sleeves and the narrow guide sleeves.

**GUIDE FIXATION PIN / SLEEVE / DRILL**



**I-D12-GS**  
Guide Fixation Pin



**I-GS-2513-L6**  
Guide Fixation Pin Sleeve

I-D12-GS	Guide Fixation Pin
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I-GS-2513-L6	Guide Fixation Pin Sleeve
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**D-12T-M15**  
Fixation Pin Drill

D-12T-M15	Twist Drill Ø1.2 x 15mm
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**INSTRUMENT TRAY INSERTS** (to keep the Offset sleeves upright)



**I-GS-TP**

I-GS-TP	Guide Sleeve Pin GS Tray
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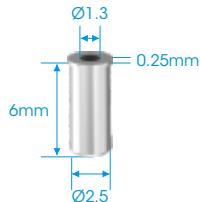


**I-GS-TPG**

I-GS-TPG	Guide Sleeve Pin GS Tray Grommet
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**ADDITIONAL INFORMATION**

Place at least 3 pins to stabilize the guide.



The guide pins are inserted through the fixation guide sleeve, after drilling a hole with the D-12T-M15.

Due to the Narrow diameter of the Ø1.2 twist drill:

- Avoid lateral movement whilst drilling.
- Have a spare available.



Compatible with silicone insert trays.



Compatible with trays containing grommets.

**INITIAL DRILLS**



D-16-T

D-16-T	Pilot drill - side cutting Ø1.6mm
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D-20T-M10

D-20T-M10	Initial drill - twist drill Ø2.0mm x 10mm
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D-20T-M15

D-20T-M15	Initial drill - twist drill Ø2.0mm x 10mm
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D-DC20

D-DC20	Initial drill - twist drill Ø2.0mm x 15mm
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D-220C

D-220C	Initial drill - twist drill Ø2.0mm x 15mm
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**ADDITIONAL INFORMATION**

Drill is indicated when placing a 6mm length implant. Do not use the D-20T-M10 initial drill.

10mm twist drill is indicated for implant lengths 11.5mm and shorter.  
(Applicable to all implant ranges)

15mm twist drill is indicated for implant lengths 12mm and longer.  
(Applicable to all implant ranges)

D-DC20 drill is indicated for implant lengths 13mm and longer.  
For shorter implants, use D-20T-M10.

Indicated for IT implant lengths 12mm and longer. For shorter implants, use D-20T-M10.



**CAUTION:**

- All INVERTA® tapered drills used with SIREAL must be part of the "GS" drill range.
- Utilising the standard INVERTA® tapered drills will result in deeper site preparation than planned.

**GUIDED DRILLS FOR INVERTA® GUIDED SURGERY**

D-IV3708GS	Drill Taper IV GS Ø3.75 x 8mm
D-IV3710GS	Drill Taper IV GS Ø3.75 x 10mm
D-IV3711GS	Drill Taper IV GS Ø3.75 x 11.5mm
D-IV3713GS	Drill Taper IV GS Ø3.75 x 13mm
D-IV3715GS	Drill Taper IV GS Ø3.75 x 15mm
D-IV4508GS	Drill Taper IV GS Ø4.5 x 8mm
D-IV4510GS	Drill Taper IV GS Ø4.5 x 10mm
D-IV4511GS	Drill Taper IV GS Ø4.5 x 11.5mm
D-IV4513GS	Drill Taper IV GS Ø4.5 x 13mm
D-IV4515GS	Drill Taper IV GS Ø4.5 x 15mm
D-IV4518GS	Drill Taper IV GS Ø4.5 x 18mm
D-IV5008GS	Drill Taper IV GS Ø5 x 8mm
D-IV5010GS	Drill Taper IV GS Ø5 x 10mm
D-IV5011GS	Drill Taper IV GS Ø5 x 11.5mm
D-IV5013GS	Drill Taper IV GS Ø5 x 13mm
D-IV5015GS	Drill Taper IV GS Ø5 x 15mm
D-IV5018GS	Drill Taper IV GS Ø5 x 18mm
D-IV6010GS	Drill Taper IV GS Ø6 x 10mm
D-IV6011GS	Drill Taper IV GS Ø6 x 11.5mm
D-IV6013GS	Drill Taper IV GS Ø6 x 13mm
D-IV6015GS	Drill Taper IV GS Ø6 x 15mm
D-IV6018GS	Drill Taper IV GS Ø6 x 18mm

FULLY GUIDED IMPLANT PLACEMENT TOOLS

DC (Deep Conical)



I-HDC3-GS

I-HDC4-GS

I-HDC5-GS

I-HDC3-GS	Ø3.0 Placement Tool
I-HDC4-GS	Ø4.0 Placement Tool
I-HDC5-GS	Ø5.0 Placement Tool

Internal Hex & PROVATA®



I-H-PRO-GS

I-H-PRO12D-GS

I-H-PRO-GS	Placement Tool
I-H-PRO12D-GS	Placement Tool, Co-Axis

TRI-NEX®



I-HLH-35GS

I-HLH-43GS

I-HLH-50GS

I-L43-12D-GS

I-L50-12D-GS

I-HLH-35GS	Ø3.5 Placement Tool
I-HLH-43GS	Ø4.3 Placement Tool
I-HLH-50GS	Ø5.0 Placement Tool
I-L43-12D-GS	Ø4.3 Placement Tool, Co-Axis
I-L50-12D-GS	Ø5.0 Placement Tool, Co-Axis

ADDITIONAL INFORMATION



CAUTION:

- All fully guided implant placement tools used with the SIREAL universal guide tool must be part of the "GS" range.
- Utilising the standard implant placement tools could result in deeper implant placement than planned.

PEEK bits



I-PBIT-L18

Insertion tools supplied with PEEK bit.

PEEK bits



I-PBIT-L18

for  
Ø3.5mm interface  
instrumentation only.



I-PBIT-L20

for  
Ø4.3mm & Ø5.0mm  
interface  
instrumentation.

Insertion tool supplied with PEEK bit.

**Important:** The PEEK bits should be replaced on a regular basis.

Items sold separately.

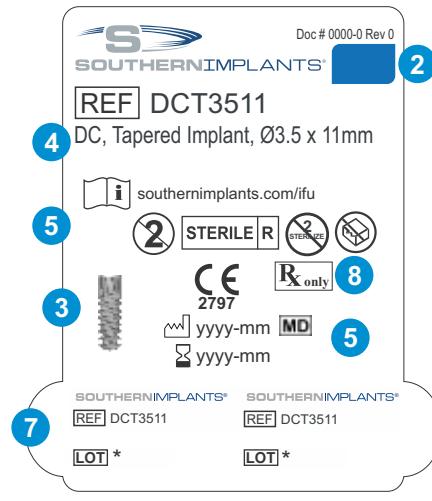
General wear & tear are to be expected with regular use.

## EXPLANATION OF LABELING SYMBOLS

The following symbols are used on packaging labels and they indicate the following:

- 1 Manufacturer
- 2 Colour code indicating platform diameter
- 3 Implant image
- 4 Implant details and size
- 5 Sterilization using Irradiation
- 6 Do not Resterilize
- 7 Consult instruction for use
- 8 Do not reuse
- CE CE mark and notified body number
- Use by Date
- Date of manufacture
- Do not use if package is damaged
- Identifies the product as a medical device
- 6 2D Bar coding  
Contains the GTIN, Use by Date and LOT Number
- 7 Patient sticker for documentation purposes  
(to be used by health care provider on patient file)
- 8 Prescription device

**CAUTION: FEDERAL LAW RESTRICTS THE DEVICE TO SALE BY OR ON THE ORDER OF A LICENCED HEALTH CARE PROVIDER.**



For more information on Instructions for Use of our products, please scan the below,



or visit our website  
[southernimplants.com/ifu](http://southernimplants.com/ifu)

For more information, please contact your  
Southern Implants Representative or visit [southernimplants.com](http://southernimplants.com)



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