

Innovative Treatment Solutions





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<sup>™</sup> 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.

 $Our \, product \, port folio \, is \, in \, synchronized \, evolution \, with \, protocol \, improvements \, and \, technological \, advances.$ 

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

Graham Blackbeard Managing Director, Southern Implants

# CONTENTS

INTRODUCTION	Page 05
FULLY GUIDED IMPLANT SELECTION.	Page 08
GUIDED SURGICAL PLACEMENT	
Preparing the osteotomy (Tissue Cutters)	Page 12
Initiating the osteotomy (Cortical Perforator)	Page 13
Guide Spoons	Page 14
Pilot Drills	Page 16
Twist Drills	Page 17
Drill Stabilizers	Page 18
Tapered Drills	Page 19
GUIDED IMPLANT PLACEMENT - EXTERNAL HEX	
Guided Surgery Fixture Mounts	Page 22
Implant Placement	Page 24
Workflow: External Hex	Page 26
GUIDED IMPLANT PLACEMENT - PROVATA™	
Implant Placement	Page 34
Implant Placement Tool	Page 35
Guided Surgery Fixture Mount - PROVATA Co-Axis®	
Implant Placement PROVATA Co-Axis.	Page 37
Workflow: PROVATA	Page 38
PILOT DRILL GUIDED SURGERY	
Pilot Guide Sleeves	Page 42
Implant Selection: CSS-ID4	Page 43
Implant Selection: CSS-ID5	Page 44
Pilot Drill Guided Surgery.	Page 45
INSTRUMENT TRAY	Page 46
	Ö
Fully Guided Workflow: External Hex	Page 48
Fully Guided Workflow: Provata	Page 50
GENERAL INFORMATION AND WARNINGS	Page 53

 $\textbf{Please note:} \quad \bullet \quad \textbf{Images are for illustration purposes only and do not necessarily accurately represent the product.}$ 

- All dimensions in this catalogue are in mm, unless otherwise specified.
- Not all products are cleared for sale in all countries.

The Southern Implants guided surgery solution "SIGuided" provides the complete computer-assisted dental implant planning and placement solution for the External Hex and PROVATA™ implant systems. This is by virtual prosthesis and on-screen design of surgical guides, allowing prosthetically driven implant placements.

### **Solution Description**

A surgical guide transfers pre-operative, software planned dental implant placement to the patient intraoperatively. There are three types of surgical guides: Bone supported, Mucosa supported and Tooth-supported. All surgical guides are patient specific.

The surgical guide consists of a 3D printed/milled acrylic guide and metal guide sleeves. Additional spoons are inserted through the metal guide sleeves during surgery to facilitate drilling sequences and implant placement.

There are two guided surgery options available:

- Fully guided
- Pilot drill guided

### **Fully Guided**

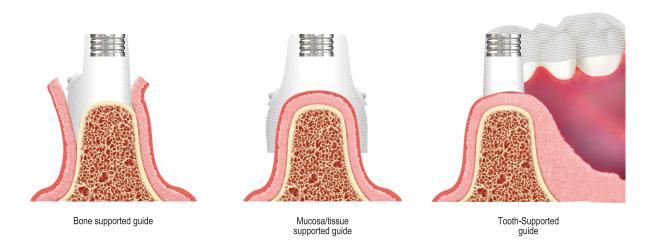
This is for placement of Southern Implants tapered and Co-Axis® External Hex and PROVATA implants. Implant diameters include Ø3.25, Ø4.0 and Ø5.0, in lengths from 8.5 to 15mm.

### **Pilot Drill Guided**

This is the guided solution for ONLY the initial pilot drill, where optimal osteotomy angulation, direction and depth can be planned and initiated.

### **Surgical Guide Types**

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



### **Surgical Guide Fixation**

To stabilise the surgical guide, Southern Implants fixation pins, or fixation screws are available.

For the safe and effective use of dental implants, it is strongly suggested that specialized training be undertaken, including practical training to learn proper technique, biomechanical requirements, and radiographic evaluation.

Instructions for handling of Southern Implants External Hex and PROVATA implants should be studied, refer to our website.

### Indications and intended use

Southern Implants External Hex and PROVATA implant systems are indicated for immediate replacement of compromised teeth in the mandible or maxilla, and are intended to provide support for fixed or removable dental prosthesis in the form of a single tooth, partial-arch or full arch restoration.

Southern Implants Guided range of instruments and implant libraries are available for various 3rd party software companies. For detailed information and instructions for use please contact these companies directly.

### **CONTRAINDICATIONS**

Do not use in patients:

- who are medically unfit for dental implant procedures (e.g. uncontrolled diabetes and untreated infection in nearby bone).
- who are allergic to or have hypersensitivity to Titanium.
- where adequate numbers of implants cannot be placed to achieve full functional support for a prosthesis.
- where site specific contraindications exist.
- with insufficient vertical opening.

### **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 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 in order to get accurate scan data, the dental professional or radiologist and patient 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 and review the guide sleeve positions and orientations. Measure guide sleeve distance and orientation in the CT scan and compare to the offset/prolongation selected during the planning phase.

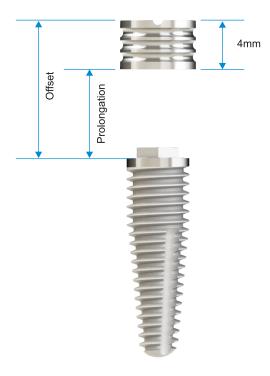
The dental professional must follow Southern Implants sleeve offsets and prolongations, failing to do so could result in patient injury. The guide manufacturer ensures compatibility with Southern Implants guided instruments by using SIGuided sleeves and instruments positioned according to offsets and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

### **Guided surgery**

Verify the fit of the guide by seating it on the patients jaw. It is recommended to validate the fit and sleeve positions with a CT scan of the patient with the guide insitu. 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. Do not proceed, remake the guide.

After fixing the guide into place, proceed using SIGuided 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.

- The offset is measured from the implant platform to the top of the guide sleeve
- The prolongation is measured from the implant platform to the bottom of the guide sleeve



### POST-PLACEMENT PROCEDURES

The following considerations should be reviewed prior to the restorative phase:

- Implant stability
- Implant position and abutment selection

# **FULLY GUIDED IMPLANT SELECTION**

# TAPERED IMPLANTS

EXTERNAL HEX					
	8.5mm	10mm	11.5mm	13mm	15mm
Ø3.25mm	IBNT8.5	IBNT10	IBNT11.5	IBNT13	IBNT15
	MSc-IBNT-8.5	MSc-IBNT-10	MSc-IBNT-11.5	MSc-IBNT-13	MSc-IBNT-15
Ø4.0mm	IBT8.5	IBT10	IBT11.5	IBT13	IBT15
	MSc-IBT-8.5	MSc-IBT-10	MSc-IBT-11.5	MSc-IBT-13	MSc-IBT-15
Ø5.0mm	BAT8.5	BAT10	BAT11.5	BAT13	BAT15
	MSc-BAT-8.5	MSc-BAT-10	MSc-BAT-11.5	MSc-BAT-13	MSc-BAT-15

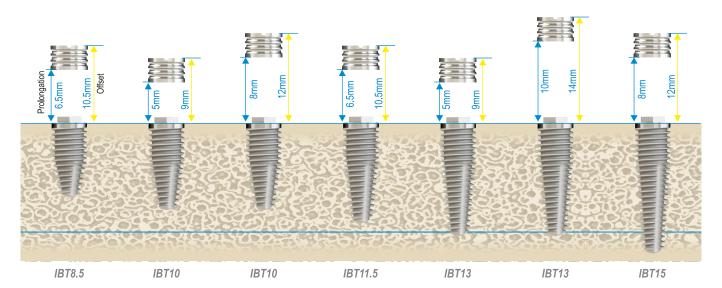
PROVATA™					
	8.5mm	10mm	11.5mm	13mm	15mm
Ø4.0mm	PRO408	PRO410	PRO411	PRO413	PRO415
	MSc-PRO408	MSc-PRO410	MSc-PRO411	MSc-PRO413	MSc-PRO415
Ø5.0mm	PRO508	PRO510	PRO511	PRO513	PRO515
	MSc-PRO508	MSc-PRO510	MSc-PRO511	MSc-PRO513	MSc-PRO515

Guide sleeves have a specific inner diameter,  $\emptyset$ 5.2, which accommodates all Southern Implants instruments used during the guided procedure. Tapered implants can be placed through closed sleeves, GSS. The instruments used to prepare a site and place an implant is determined by the offset of the guide sleeves. It is therefore crucial that cases are planned using the specific offset heights.



Order Number	Sleeve inner diameter	Sleeve outer diameter	Sleeve height
GSS	Ø5.2mm	Ø6.2mm	4mm

External Hex IBT implants used for illustration



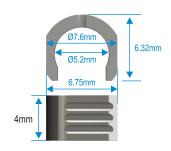
EX	KTERNAL HEX					
		8.5mm	10mm	11.5mm	13mm	15mm
•	Ø3.25mm Co-Axis	IBNT12d-8.5 MSc-IBNT12d-8.5	IBNT12d-10 MSc-IBNT12d-10	IBNT12d-11.5 MSc-IBNT12d-11.5	IBNT12d-13 MSc-IBNT12d-13	IBNT12d-15 MSc-IBNT12d-15
3	Ø4.0mm Co-Axis REDUCED PLATFORM	IBR12d-8.5 MSc-IBR12d-8.5	IBR12d-10 MSc-IBR12d-10	IBR12d-11.5 MSc-IBR12d-11.5	IBR12d-13 MSc-IBR12d-13	IBR12d-15 MSc-IBR12d-15
3	Ø5.0mm Co-Axis REDUCED PLATFORM	BAR12d-8.5 MSc-BAR12d-8.5	BAR12d-10 MSc-BAR12d-10	BAR12d-11.5 MSc-BAR12d-11.5	BAR12d-13 MSc-BAR12d-13	BAR12d-15 MSc-BAR12d-15

PROVATA™					
	8.5mm	10mm	11.5mm	13mm	15mm
Ø4.0mm	PRO12D408	PRO12D410	PRO12D411	PRO12D413	PRO12D415
Co-Axis	MSc-PRO12D408	MSc-PRO12D410	MSc-PRO12D411	MSc-PRO12D413	MSc-PRO12D415
Ø5.0mm	PRO12D508	PRO12D510	PRO12D511	PRO12D513	PRO12D515
Co-Axis	MSc-PRO12D508	MSc-PRO12D510	MSc-PRO12D511	MSc-PRO12D513	MSc-PRO12D515

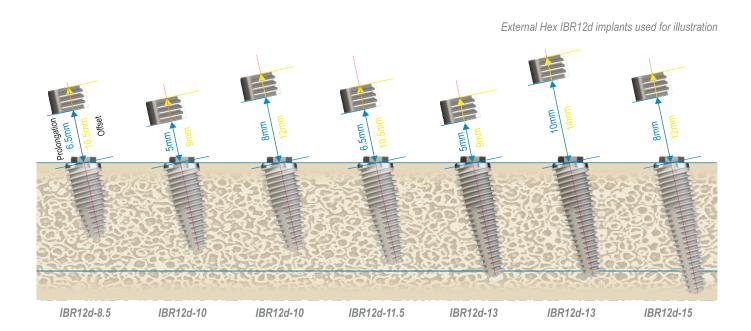
Guide sleeves have a specific inner diameter,  $\varnothing$ 5.2, which accommodates all Southern Implants instruments used during the guided procedure. Co-Axis implants can be placed through open sleeves, GSS-C, to allow access for placement and removal of the Co-Axis fixture mount.

The instruments used to prepare a site and place an implant is determined by the offset of the guide sleeves. It is therefore crucial that cases are planned using the specific offset heights.

**Note:** Offset & Prolongation for the Co-Axis implants are indicated through the centre of the guide sleeve and implant.



Order Number	Sleeve inner diameter	Sleeve outer diameter	Sleeve height
GSS-C	Ø5.2mm	Ø7.6mm	4mm



# GUIDED SURGICAL PLACEMENT

# Step 1: Preparing for the osteotomy

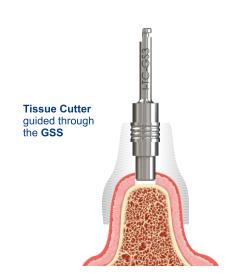
 $\textbf{Note:} \ \textbf{It is recommended to raise a full-thickness mucoperiosteal flap.} \ \textbf{Alternatively, a tissue cutter can be used.}$ 

The Tissue Cutter is used to remove the soft tissue to the required diameter as indicated in the table below.

Recommended tissue cutting speed: 1200rpm.

Insert the Tissue Cutter, I-TC-GSx, through the guide sleeve.





# TISSUE CUTTER (Optional)

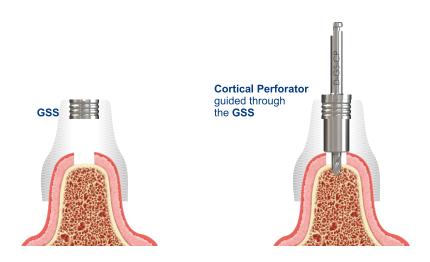
	Order Number	Used with	D1	D2	D3
I-IC-G\$3_1	I-TC-GS3	Ø3.25mm implants	Ø5.1	Ø3.9	Ø3.5
I-TC-G\$4	I-TC-GS4	Ø4.0mm implants	Ø5.1	Ø4.5	Ø4.1
I-TC-G\$5_1	I-TC-GS5	Ø5.0mm implants	Ø5.1	Ø5.1	Ø4.7



# Step 2: Initiate the osteotomy

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

Drill at a speed of 1000-1500rpm with copious irrigation. An intermittent technique is highly recommended to avoid overheating the bone.

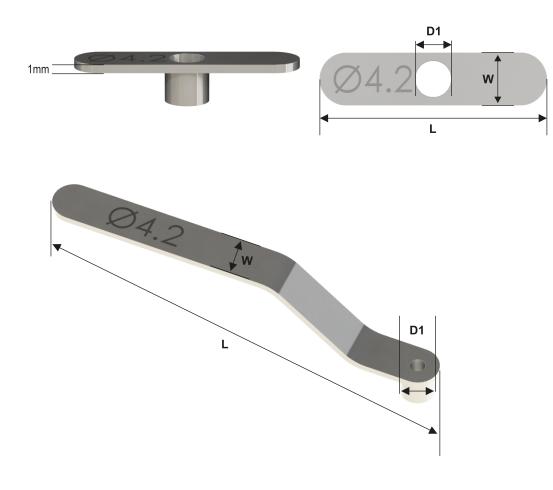


# **CORTICAL PERFORATOR**

	Order Number	Used with	D1	D2	L1	
D-GS-CP	D-GS-CP	All implants	Ø5.1	Ø1.95	4.7mm	



Long Guide Spoons	Order Number	Used with	D1	Width	Length
22.0	DGS-L-2	Ø2.0mm Pilot drills	Ø2.0	6mm	56.65mm
02.8	DGS-L-2.8	Ø2.8mm Twist drills	Ø2.8	6mm	56.65mm
04.2	DGS-L-4.2	Ø3.25mm, Ø4.0mm External Hex implants during fully guided implant placement	Ø4.2	6mm	56.65mm
Short Guide Spoons	Order Number	Used with	D1	Width	Length
	DGS-S-2	Ø2.0mm Pilot drills	Ø2.0	6mm	26mm
	DGS-S-2.8	Ø2.8mm Twist drills	Ø2.8	6mm	26mm
	DGS-S-4.2	Ø3.25mm, Ø4.0mm External Hex implants during fully guided implant placement	Ø4.2	6mm	26mm



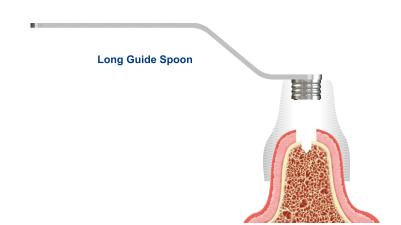
Guide spoons are placed through the guide sleeve, GSS/GSS-C, to assist with guiding the different diameter drills during the site preparation.

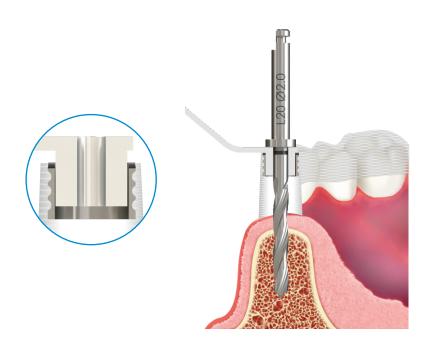


# Guide Spoon inserted into GSS

**Short Guide Spoon** 

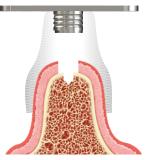






### Step 3: Pilot drilling – Ø2mm Pilot Drill

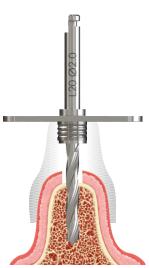
 $Place\ either\ the\ short\ or\ long\ \varnothing 2.0mm\ guide\ spoon,\ DGS-S-2/DGS-L-2,\ through\ the\ guide\ sleeve.$ 



Drill through the spoon and guide sleeve in the pre-determined direction with the  $\emptyset 2.0$ mm pilot drill.

The  $\emptyset$ 2.0mm drills are length specific and are available in lengths related to the planned implant length and guide offset.

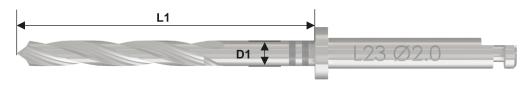
The built-in drill stop prevents the drill from drilling past the planned depth.



### **PILOT DRILLS**

Pilot drills are available in three lengths.

			Implant Length	Prolongation	Offset	Order Number	Spoon	D1	L1	
			8.5mm	6.5mm	10.5mm	D-20T-GS-20	DGS-L-2 DGS-S-2	Ø1.95	20mm	
8 0220	10mm	5mm	9mm	D-20T-GS-20	DGS-L-2 DGS-S-2	Ø1.95	20mm			
02.0	123 Ø2.0		10mm	8mm	12mm	D-20T-GS-23	DGS-L-2 DGS-S-2	Ø1.95	23mm	
120		' <b> </b>		11.5mm	6.5mm	10.5mm	D-20T-GS-23	DGS-L-2 DGS-S-2	Ø1.95	23mm
			D-20T-GS-23	DGS-L-2 DGS-S-2	Ø1.95	23mm				
			13mm	10mm	14mm	D-20T-GS-28	DGS-L-2 DGS-S-2	Ø1.95	28mm	
20mm	23mm	28mm	15mm	8mm	12mm	D-20T-GS-28	DGS-L-2 DGS-S-2	Ø1.95	28mm	



NOTE: The number of laser marked rings around the pilot drill help to identify the drill length.

### Step 4: Gradually enlarge the osteotomy - Ø2.8mm Twist Drill

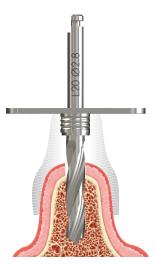
 $Place\ either\ the\ short\ or\ long\ \varnothing 2.8mm\ guide\ spoon,\ DGS-S-28/DGS-L-28,\ through\ the\ guide\ sleeve.$ 



 $Gradually \,enlarge \,the \,osteotomy \,by \,drilling \,through \,the \,spoon \,and \,guide \,sleeve \,with \,the \,\varnothing 2.8mm \,twist \,drill.$ 

The  $\emptyset$ 2.8mm Twist drills are length specific and are available in lengths related to the planned implant length and guide offset.

The built-in drill stop prevents the drill from drilling past the planned depth.



# **TWIST DRILLS**

Twist drills are available in three lengths.

			Implant Length	Prolongation	Offset	Order Number	Spoon	D1	L1
8.02.8		8.5mm	6.5mm	10.5mm	D-28T-GS-20	DGS-L-2.8 DGS-S-2.8	Ø2.75	20mm	
	28 Ø2.8	10mm	5mm	9mm	D-28T-GS-20	DGS-L-2.8 DGS-S-2.8	Ø2.75	20mm	
0.2.8	123 Ø2.8		10mm	8mm	12mm	D-28T-GS-23	DGS-L-2.8 DGS-S-2.8	Ø2.75	23mm
120			11.5mm	6.5mm	10.5mm	D-28T-GS-23	DGS-L-2.8 DGS-S-2.8	Ø2.75	23mm
j			13mm	5mm	9mm	D-28T-GS-23	DGS-L-2.8 DGS-S-2.8	Ø2.75	23mm
			13mm	10mm	14mm	D-28T-GS-28	DGS-L-2.8 DGS-S-2.8	Ø2.75	28mm
20mm	23mm	28mm	15mm	8mm	12mm	D-28T-GS-28	DGS-L-2.8 DGS-S-2.8	Ø2.75	28mm



NOTE: The number of laser marked rings around the twist drill help to identify the drill length.

# DRILL STABILISERS

After initial drilling, the drilling sequence will continue with the use of drill stabilisers.

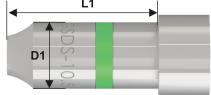
The drill stabilizer is placed over the tapered drill shaft, and secured with the hand piece. The stabiliser is used to guide the drill through the guide sleeve, GSS / GSS-C. The drill stabilisers have set stopper heights which are dependent on the guide offset.

NOTE: Drill stabilisers are colour coded for ease of identification. The colour coding does not correspond to diameter, but to prolongation and offsets.



# **DRILL STABILIZERS**

Ø5.0mm	Prolongation	Offset	Order Number	D1	L1			
55DS-9	5mm	9mm	GSDS-5-9	Ø5.1	9mm			
3DS-10	6.5mm	10.5mm	GSDS-5-10.5	Ø5.1	10.5mm			
55DS-12	8mm	12mm	GSDS-5-12	Ø5.1	12mm			
SSDS 14	10mm	14mm	GSDS-5-14	Ø5.1	14mm			
14								



### Step 4: Gradually enlarge the osteotomy with Tapered drills

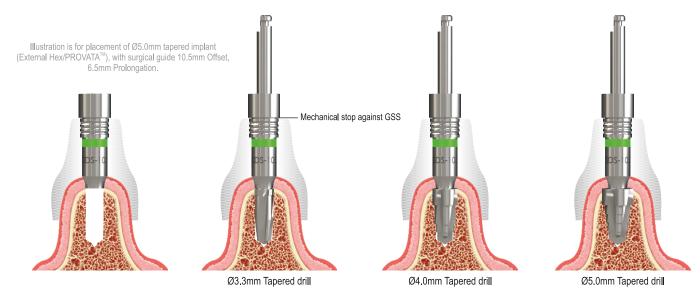
Tapered shaping drills are length and diameter specific. **Note:** Southern Implants tapered drills do not have built-in drill stops. Tapered drills used for guided surgery have "L" in the product code for identification (e.g. D-40TP-8.5-L)

Use the appropriate length and diameter drills, corresponding to the selected implant. Slide the drill stabilizer, GSDS-5-xx, over the drill shaft.

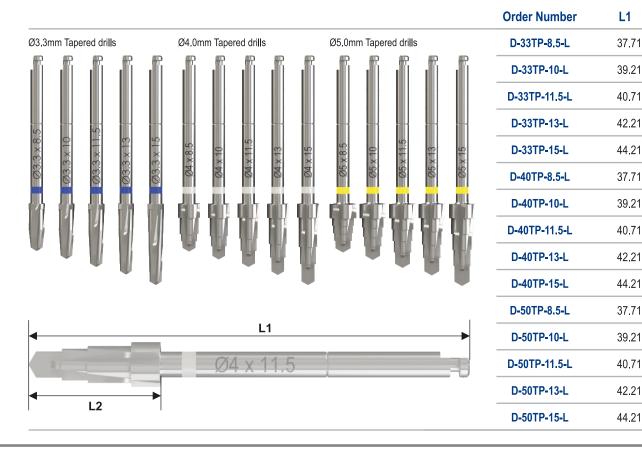
See page 16 for drill stabiliser selection. Connect the drill to the hand piece.

Widen the osteotomy intermittently, with copious irrigation, with the tapered drill and stabiliser through the guide sleeve, GSS/GSS-C. Drilling speed is recommended at max. 800rpm.





### **TAPERED DRILLS**



L2

8.5

10

11.5

13

15

8.5

10

11.5

13

15

8.5

10

11.5

13

15



# **GUIDED SURGERY**

# IMPLANT PLACEMENT EXTERNAL HEX

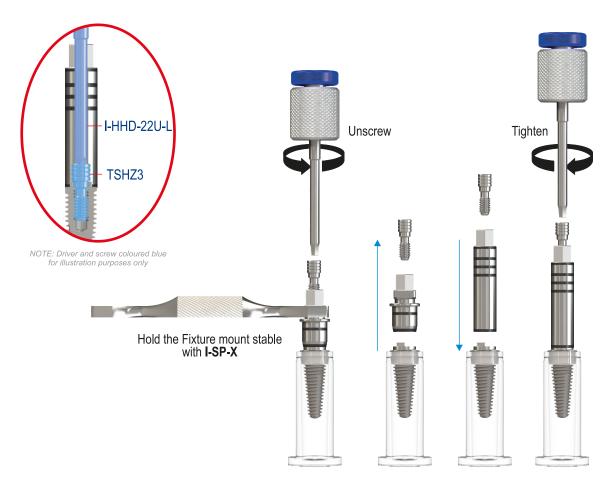
# IMPLANT PLACEMENT - EXTERNAL HEX FIXTURE MOUNTS

External Hex implants are supplied with a standard fixture mount. The standard fixture mount must be replaced with the guided surgery fixture mount. Keep the implant stable, with the I-SP-X (spanner) when removing the fixture mount screw.

The fixture mount screw, TSHZ3, is removed by using a long universal hex driver, I-HHD-22U-L. The guided surgery fixture mount is then attached and tightened using the TSHZ3 screw.

### Tighten screw to:

- 15Ncm for straight External Hex implants.
- **25Ncm** for Co-Axis® External Hex implants.



**Note:** Due to the length of the guided fixture mount, only long drivers can be used. Available in handheld, hand-piece and wrench insert versions.

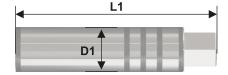
# **TAPERED IMPLANTS**

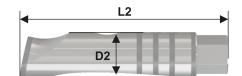
Laser ma	rkings									Order Number	Used with implant	D1	L1 (Total Length)
										IBN-GS-FMU	IBNT	Ø4.1	18.5mm
		*			•	1	1		Offset	IB-GS-FMU	IBT	Ø4.1	18.5mm
	Ш	10 11.5	13 15		9	10.5	12	14	Guided	BA-GS-FMU	BAT	Ø5.1	20.9mm
IBN-GS-FMU	IB-GS-FMU	<del>* * </del>	<u> </u>	BA-GS-FMU		Imp	lant pla	atform					

# CO-AXIS<sup>™</sup> IMPLANTS

IBNT12D-GS-FMU IBR12D-GS-FMU

Co-Axis Laser markings	Order Number	Used with implant	D2	L2 (Total Length)
	IBNT12D-GS-FMU	IBNT12d	Ø4.1	19.2mm
	IBR12D-GS-FMU	IBR12d	Ø4.1	19.2mm
10 11.5 13 15 9 10.5 12 14 <sup>9</sup> / <sub>10</sub>	BAR12D-GS-FMU	BAR12d	Ø5.1	21.8mm
Implant platform				





### Step 7: Placement of External Hex Ø3.25 & Ø4.0mm implants (Tapered and Co-Axis®).

Once the guided fixture mount is attached, connect the Hand Piece insertion tool, I-CON-X/XS, to the hand piece.

Engage the fixture mount and carefully remove the implant from the sterile vial.



Place either the long or short  $\emptyset$ 4.2mm guide spoon, DGS-L-4.2 / DGS-S-4.2, into the guide sleeve, (GSS / GSS-C). Carry the implant to the prepared implant site.

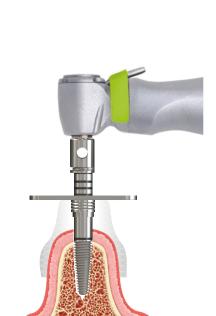
Insert the implant at low speed (15-25rpm), set the maximum torque to 70Ncm.

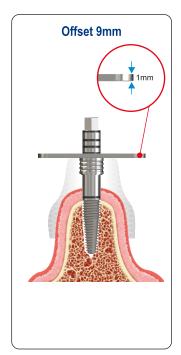
### Guided fixture mounts do not have a drill stop. The stop is a visual stop only.

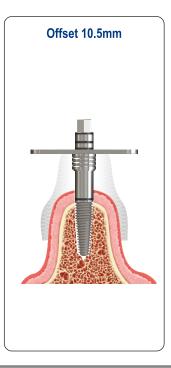
The laser markings on the guided fixture mounts correspond to the surgical guide offset. Place the implant so that the bottom line of the appropriate laser marking is in line with the spoon, DGS-L-4.2 / DGS-S-4.2.

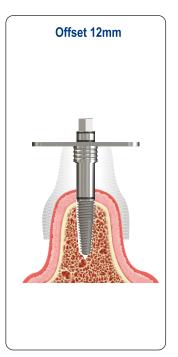
Avoid applying bending moments to the fixture mount while inserting the implant. Check the fixture mount screw for loosening periodically and re-tighten if necessary.

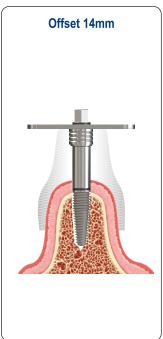
Detach the insertion tool from the fixture mount. Then use the long universal driver, I-HHD-22U-L, to remove the fixture mount screw. Slide the guide spoon, DGS-L-4.2 / DGG-S-4.2, over the fixture mount and remove the fixture mount.









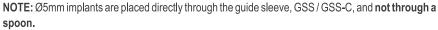


### Step 7: Placement of External Hex Ø5mm implants (Tapered and Co-Axis®).

Once the guided fixture mount has been attached, connect the hand piece insertion tool, I-CON-X / XS, to the hand piece.

Engage the fixture mount and carefully remove the implant from the sterile vial.





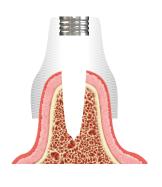
Carry the implant to the prepared implant site.

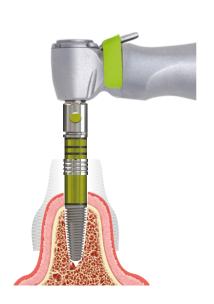
Insert the implant at low speed (15-25rpm), set the maximum torque to 70Ncm.

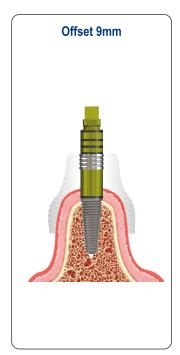
**Guided fixture mounts do not have a stop on them, the stop is a visual stop.** The laser markings correspond to the offset selected during the planning phase. Place the implant with the bottom line of the laser marking in line with the guide sleeve, GSS/GSS-C. The planned depth is now reached.

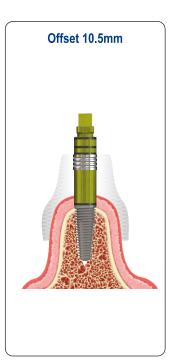
Avoid applying bending moments to the fixture mount while inserting the implant. Check the fixture mount screw for loosening periodically and re-tighten if necessary.

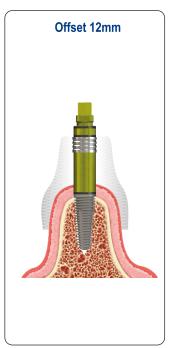
Use the long universal driver, I-HHD-22U-L, to remove the fixture mount screw and remove the guided fixture mount.

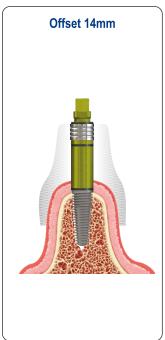




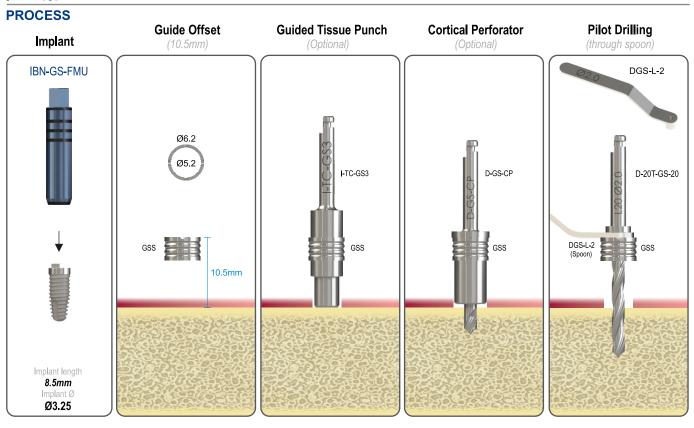






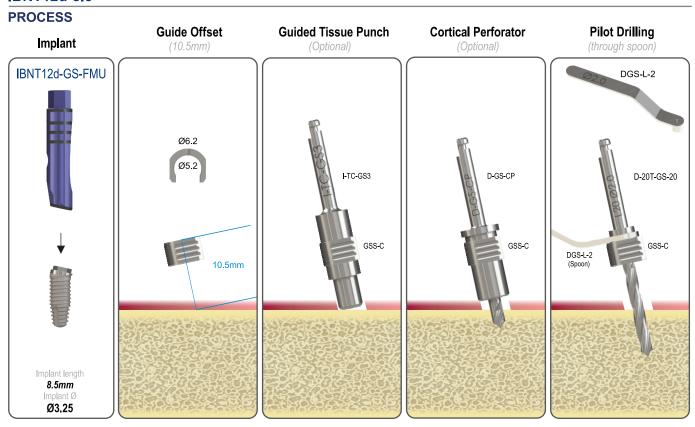


# **IBNT8.5**

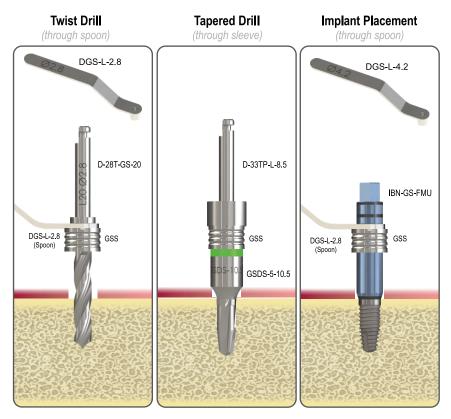


NOTE: IBNT8.5 is shown with an offset of 10.5mm to illustrate the workflow for Ø3.25mm implants.

### IBNT12d-8.5

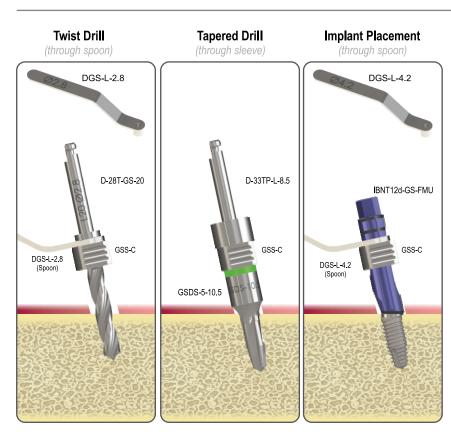


NOTE: IBNT12d-8.5 is shown with an offset of 10.5mm to illustrate the workflow for Ø3.25mm Co-Axis implants.



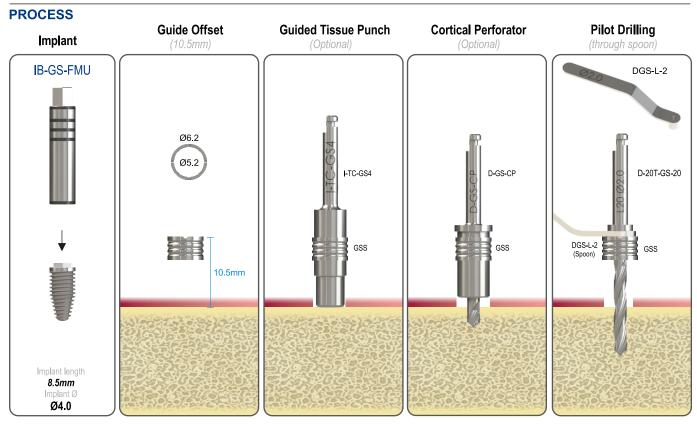
Refer to pages 8 & 9 for full implant range, offsets and prolongations

### Ø3.25mm External Hex Co-Axis®



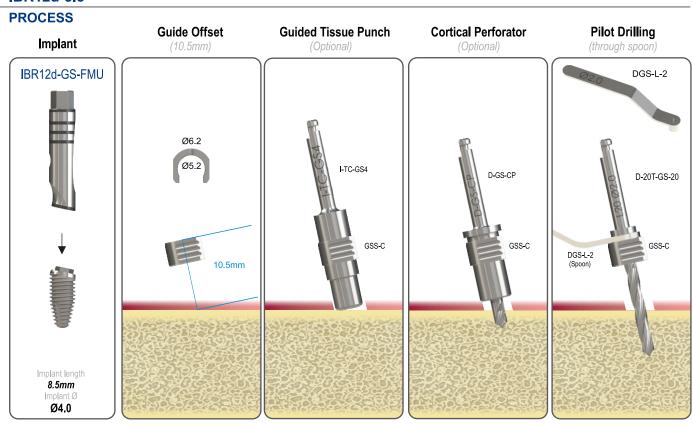
Refer to pages 10 & 11 for full Co-Axis implant range, offsets and prolongations

### **IBT8.5**



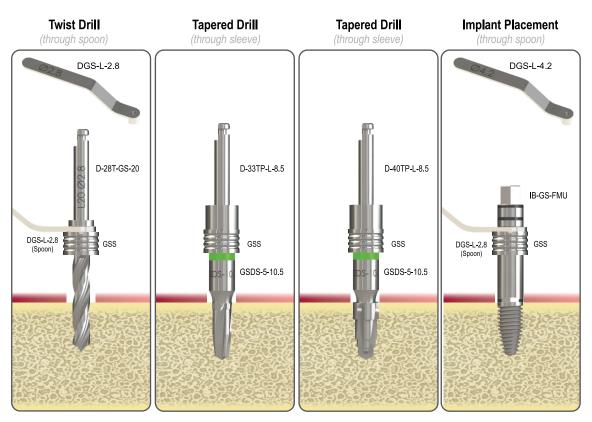
NOTE: IBT8.5 is shown with an offset of 10.5mm to illustrate the workflow for Ø4.0mm implants.

### IBR12d-8.5



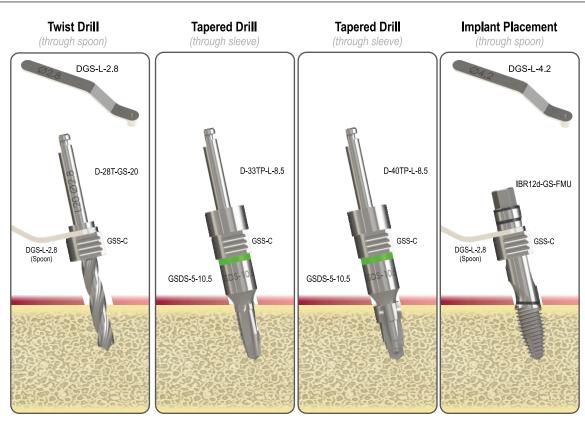
NOTE: IBR12d-8.5 is shown with an offset of 10.5mm to illustrate the workflow for Ø4.0mm Co-Axis implants.

### Ø4.0mm External Hex



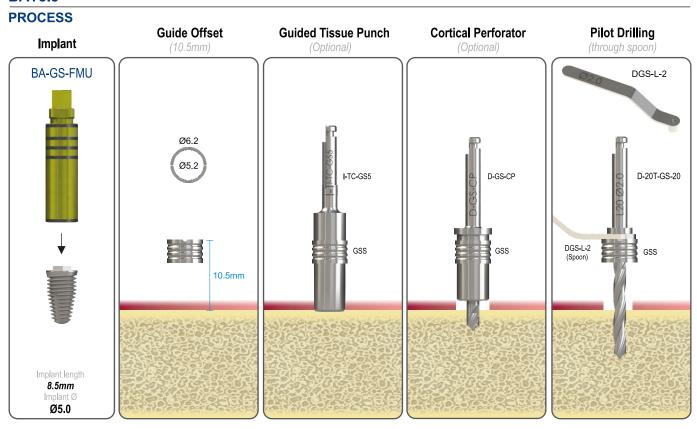
Refer to pages 8 & 9 for full implant range, offsets and prolongations

### Ø4.0mm External Hex Co-Axis®



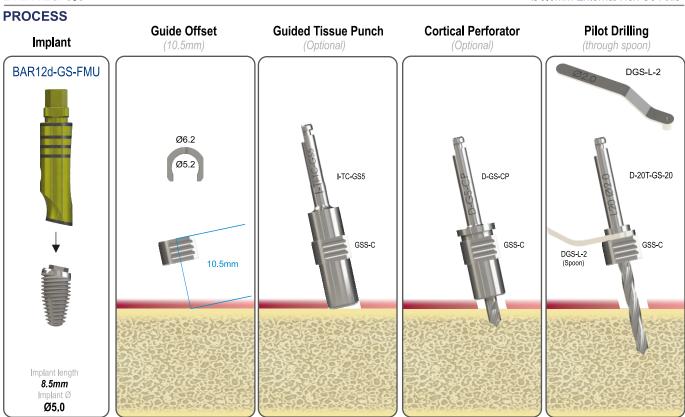
Refer to pages 10 & 11 for full Co-Axis implant range, offsets and prolongations

# **BAT8.5**



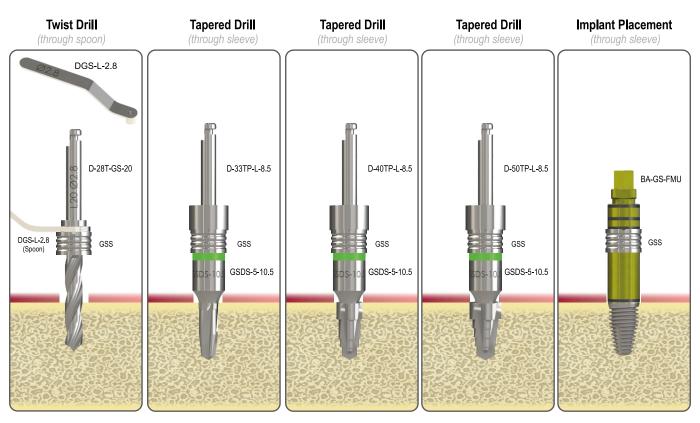
NOTE: BAT8.5 is shown with an offset of 10.5mm to illustrate the workflow for Ø5.0mm implants.

# **BAR12d-8.5** Ø5.0mm External Hex Co-Axis<sup>®</sup>



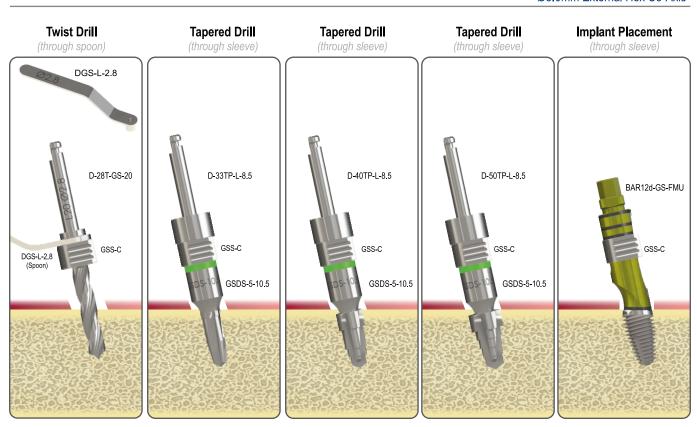
NOTE: BAR12d-8.5 is shown with an offset of 10.5mm to illustrate the workflow for Ø5.0mm Co-Axis implants.

### Ø5.0mm External Hex



Refer to pages 8 & 9 for full implant range, offsets and prolongations

### Ø5.0mm External Hex Co-Axis®



Refer to pages 10 & 11 for full Co-Axis implant range, offsets and prolongations

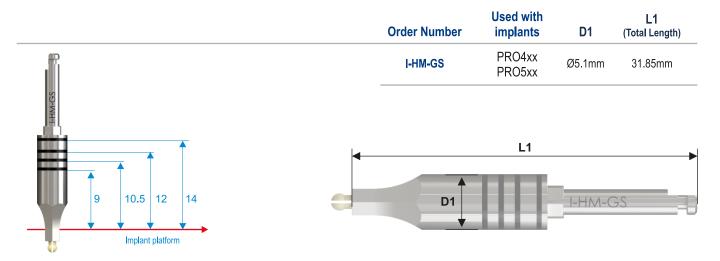


# **GUIDED SURGERY**

# $\begin{array}{c} \textbf{IMPLANT PLACEMENT} \\ \textbf{PROVATA}^{\text{TM}} \end{array}$

PROVATA tapered implants are supplied without a fixture mount. The placement tool, I-HM-GS, is used for guided implant placement.

### **GUIDED SURGERY PLACEMENT TOOL**



### **IMPLANT PLACEMENT - PROVATA**

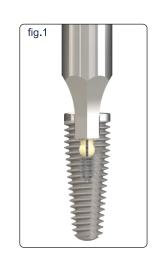
Step 7: Placement of PROVATA Ø4mm & Ø5mm Tapered implants.

Connect the hand piece insertion tool, I-HM-GS, to the hand piece. Engage the implant and carefully remove from the sterile vial.



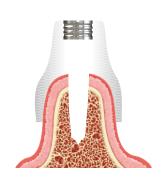
**NOTE:** The insertion tool must be fully engaged in the implant before torque is applied, to prevent any damage, to the internal hex.

The hexagon is fully engaged when the straight portion of the hexagon tool is almost completely sunken in the implant (fig.1).



PROVATA tapered implants are placed directly through the guide sleeve, GSS, and **not through a spoon**. Carry the implant to the prepared implant site.





Insert the implant at low speed (15-20rpm), set the maximum torque to 70Ncm.

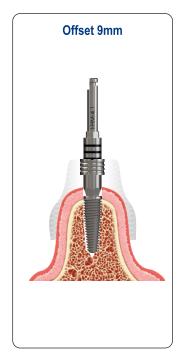
The Guided Placement tool do not have a stop, the stop is a visual stop. The laser markings correspond to the offset selected during the planning phase.

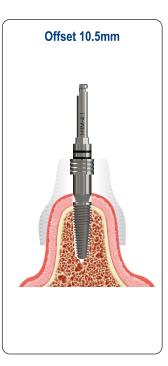
The laser markings on the placement tool correspond to the surgical guide offset. Place the implant so that the bottom line of the appropriate laser marking is in line with the guide sleeve, GSS.

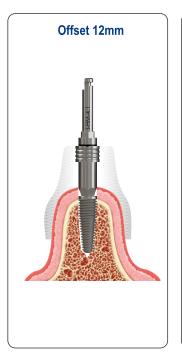
Avoid applying bending moments while inserting the implant.

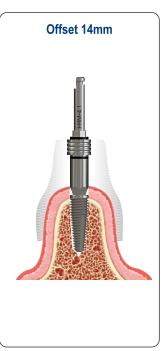
Detach the insertion tool from the implant.







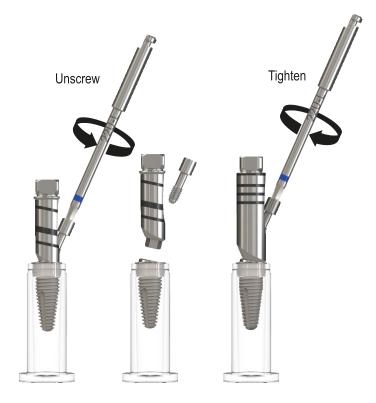




PROVATA Co-Axis implants are supplied with a fixture mount. The standard fixture mount must be replaced with the guided surgery fixture mount.

The fixture mount screw, TS-Z-18, is removed by using a long universal hex driver, I-HHD-22U-L, the guided surgery fixture mount is then attached and tightened using the same TS-Z-18 screw.



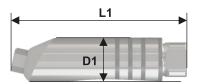


Note: Due to the length of the guided fixture mount, only long drivers can be used. Available in handheld, hand-piece and wrench insert versions.

### **FIXTURE MOUNTS**

Co-Axis Laser markings	Order Number	Used with IMPLANT	D1	L1 (Total Length)
	PRO12D-GS-FMU	PRO12D4xx PRO12D5xx	Ø5.1	20.40mm





### Step 7: Placement of PROVATA Co-Axis Ø4mm & Ø5mm implants.

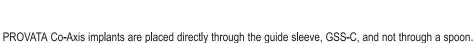
Once the guided fixture mount is attached, connect the standard hand piece insertion tool, I-HM-S / M/L, to the hand piece.

Engage the fixture mount and carefully remove the implant from the sterile vial.



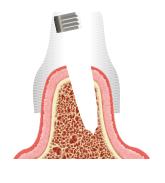
Carry the implant to the prepared implant site.

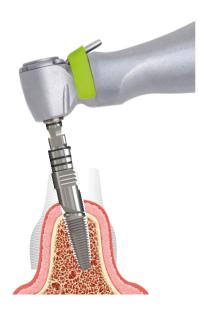




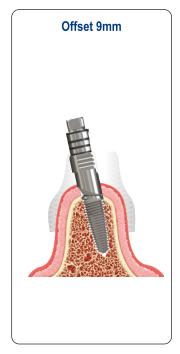
Insert the implant at low speed (15-25 rpm), set the maximum torque to 70 Ncm.

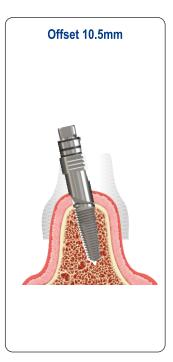
**Guided fixture mounts do not have a physical stop, but a visual stop.** The laser markings correspond to the offset selected during the planning phase. Place the implant with bottom line of the laser marking in line with the guide sleeve, GSS-C. The planned depth is now reached.

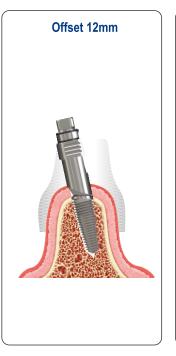


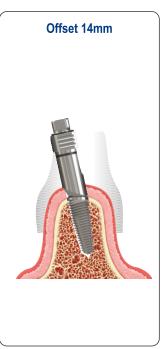


Important Note: Check the fixture mount screw for loosening periodically and re-tighten if necessary.

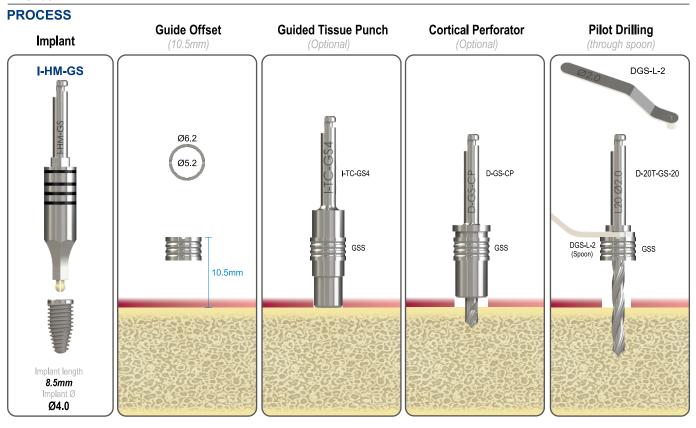






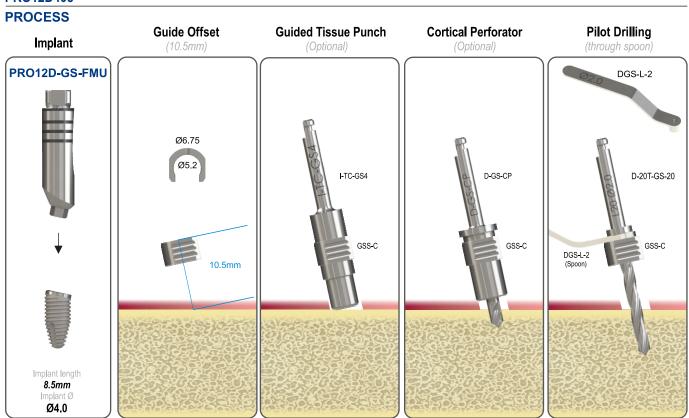


# **PRO408**



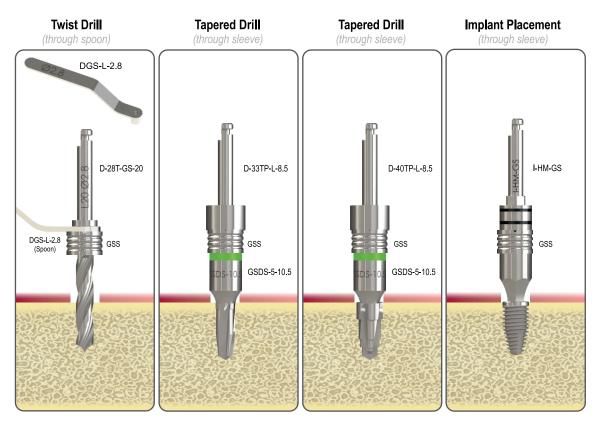
NOTE: PRO408 is shown with an offset of 10.5mm to illustrate the workflow for Ø4.0mm PROVATA implants.

# PRO12D408



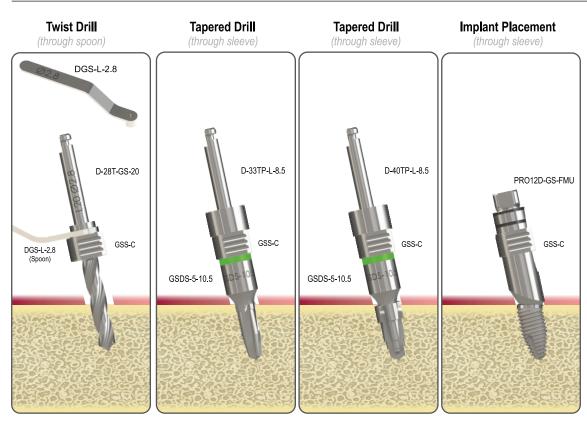
NOTE: PRO12D408 is shown with an offset of 10.5mm to illustrate the workflow for Ø4.0mm PROVATA Co-Axis implants.

# Ø4.0mm PROVATA



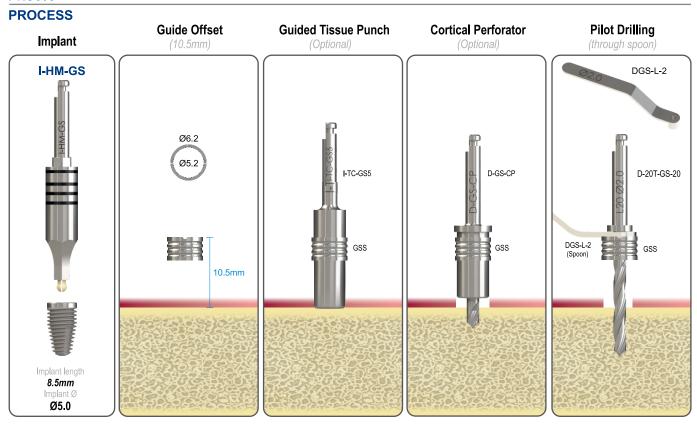
Refer to pages 8 & 9 for full implant range, offsets and prolongations

# Ø4.0mm PROVATA Co-Axis®



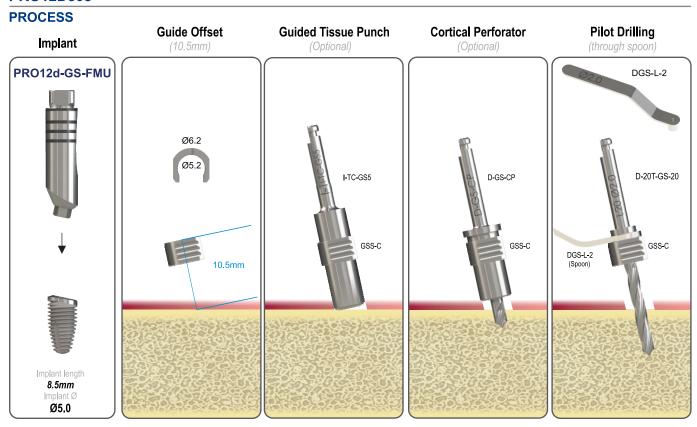
Refer to pages 10 & 11 for full Co-Axis implant range, offsets and prolongations

# **PRO508**



NOTE: PRO508 is shown with an offset of 10.5mm to illustrate the workflow for Ø5.0mm PROVATA implants.

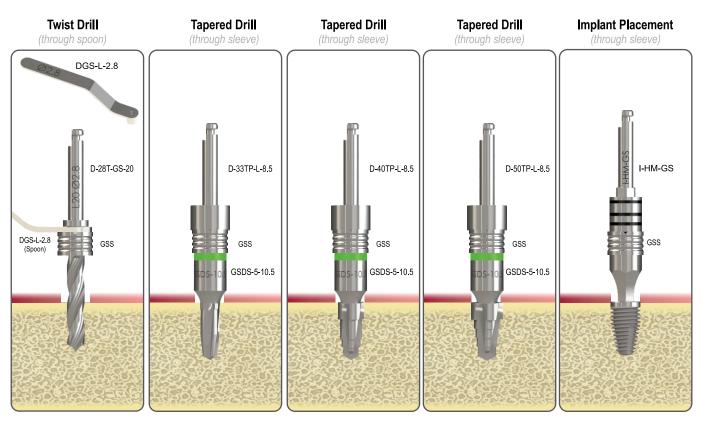
# PRO12D508



NOTE: PRO12D508 is shown with an offset of 10.5mm to illustrate the workflow for Ø5.0mm PROVATA Co-Axis implants.

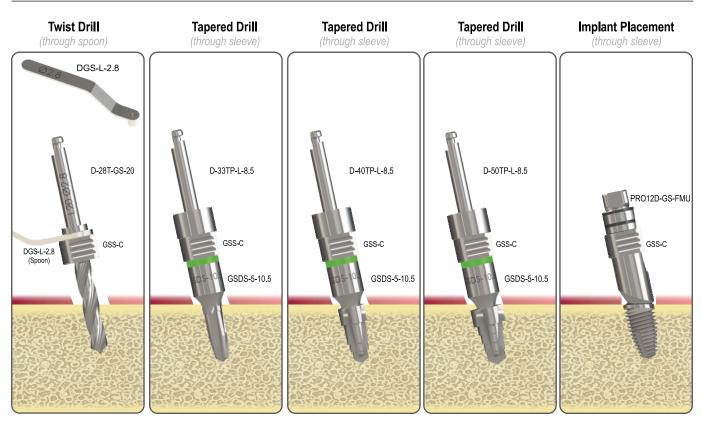


# Ø5.0mm PROVATA



Refer to pages 8 & 9 for full implant range, offsets and prolongations

# Ø5.0mm PROVATA Co-Axis®



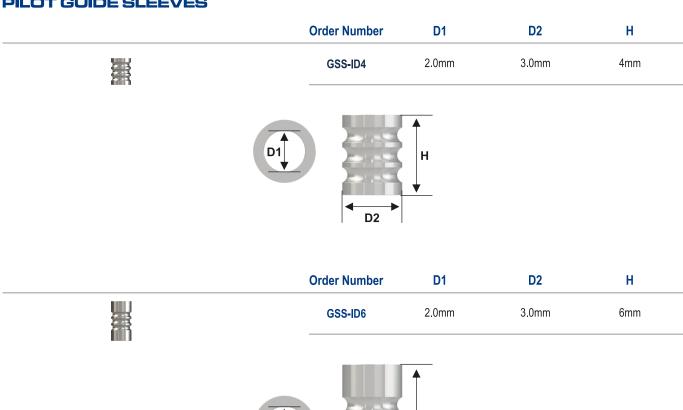
Refer to pages 10 & 11 for full Co-Axis implant range, offsets and prolongations

Pilot sleeve guided surgery ensures correct angulation, direction and depth from the very first drill and allowing the dental practitioner to confidently continue with freehand surgery.

Pilot drill guide sleeves have a specific inner diameter of Ø2.0mm, that accommodates Ø2.0mm pilot drills.



# **PILOT GUIDE SLEEVES**



D2

The instruments used to prepare a site and place the implant is determined by the implant length and guide offset. It is therefore crucial that cases are planned using the specific prolongation and guide offset heights.

<b>MPLAN</b>	IT SELECTIO	N: GSS-ID4			EXTE	RNAL HEX
				Implant Length		
Implant	Implant Ø	10	11.5	13	13	15
IP	Ø3.00mm	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
IBN	Ø3.25mm	<b>/</b>	1	<b>✓</b>	<b>✓</b>	<b>/</b>
IBNT	Ø3.25mm	<b>✓</b>	1	<b>✓</b>	<b>✓</b>	<b>/</b>
IBS	Ø4.00mm	<b>✓</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>
IBT	Ø4.00mm	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
BA	Ø5.00mm	<b>✓</b>	<b>/</b>	<b>\</b>	<b>\</b>	<b>/</b>
BAT	Ø5.00mm	<b>✓</b>	<b>/</b>	<b>^</b>	<b>\</b>	<b>/</b>
BBBS	Ø6.00mm	<b>/</b>	<b>/</b>	<b>\</b>	<b>/</b>	<b>/</b>
BBBT	Ø6.00mm	<b>✓</b>	1	<b>✓</b>	<b>✓</b>	<b>/</b>
IBNT12D	Ø3.25mm	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
IBT12D	Ø4.00mm	<b>✓</b>	<b>/</b>	<b>\</b>	<b>/</b>	<b>/</b>
IBR12D	Ø4.00mm	<b>✓</b>	<b>/</b>	<b>\</b>	<b>/</b>	<b>/</b>
IBR24D	Ø4.00mm	<b>/</b>	1	<b>✓</b>	<b>✓</b>	<b>/</b>
BAT12D	Ø5.00mm	<b>/</b>	<b>/</b>	<b>\</b>	<b>\</b>	<b>/</b>
BAR12D	Ø5.00mm	<b>/</b>	<b>/</b>	<b>\</b>	<b>/</b>	<b>/</b>
BAR24D	Ø5.00mm	<b>✓</b>	<b>/</b>	<b>\</b>	<b>/</b>	<b>/</b>
BAR36D	Ø5.00mm	<b>✓</b>	<b>/</b>	<b>\</b>	<b>/</b>	<b>/</b>
BBBT12D	Ø6.00mm	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
BBBT24D	Ø6.00mm	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>/</b>
PROLONGAT	TIONS	6	4,5	3	6	4
OFFSETS		10	8,5	7	10	8
PILOT DRILL		D-20T-GS-20	D-20T-GS-20	D-20T-GS-20	D-20T-GS-23	D-20T-GS-23

MPLAN	T SELECTIO	N				PROVATA™
				Implant Length		
Implant	Implant Ø	10	11.5	13	13	15
PRO4	Ø4.00mm	<b>✓</b>	/		/	<b>✓</b>
PRO5	Ø5.00mm	<b>✓</b>	/	/	/	<b>✓</b>
PRO12D4	Ø4.00mm	<b>✓</b>	/	/		<b>✓</b>
PRO12D5	Ø5.00mm	<b>✓</b>	/	/		<b>✓</b>
PROLONGAT	IONS	6	4,5	3	6	4
OFFSETS		10	8,5	7	10	8
PILOT DRILL		D-20T-GS-20	D-20T-GS-20	D-20T-GS-20	D-20T-GS-23	D-20T-GS-23

VIPLAN	TSELECT	ION: GSS-I	D6			EXTER	NAL HE
				Impl	ant Length		
Implant	Implant Ø	8.5	10	11.5	11.5	13	15
IP	Ø3.00mm	<b>/</b>	<b>/</b>		<b>/</b>	<b>/</b>	<b>/</b>
IBN	Ø3.25mm	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	_/
IBNT	Ø3.25mm	<b>\</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	_/
IBS	Ø4.00mm	<b>✓</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	_/
IBT	Ø4.00mm	<b>✓</b>		/	<b>/</b>	_/	_/
BA	Ø5.00mm	<b>✓</b>	<b>/</b>	_/		_/	_/
BAT	Ø5.00mm	<b>✓</b>	<b>/</b>	_/		_/	_/
BBBS	Ø6.00mm	<b>/</b>	<b>/</b>	_/		_/	_/
BBBT	Ø6.00mm	<b>/</b>	<b>/</b>	/	_/	_/	/
IBNT12D	Ø3.25mm	<b>/</b>		/	/	/	/
IBT12D	Ø4.00mm	<b>/</b>	<b>/</b>	<b>/</b>	_/	_/	/
IBR12D	Ø4.00mm	<b>/</b>	<b>/</b>	<b>/</b>			/
IBR24D	Ø4.00mm	<b>/</b>	<b>/</b>	<b>/</b>			/
BAT12D	Ø5.00mm	<b>/</b>	<b>/</b>	<b>/</b>			/
BAR12D	Ø5.00mm	<b>/</b>	<b>/</b>	/			/
BAR24D	Ø5.00mm	<b>/</b>	/	/	/		_/
BAR36D	Ø5.00mm	<b>/</b>	<b>/</b>	/	/	_/	/
BBBT12D	Ø6.00mm	<b>✓</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	/
BBBT24D	Ø6.00mm	<b>/</b>	<b>/</b>	<b>/</b>	<b>/</b>	<b>✓</b>	1
PROLONGAT	IONS	5,5	4	2,5	5,5	4	2
OFFSETS		11,5	10	8,5	11,5	10	8
PILOT DRILL		D-20T-GS-20	D-20T-GS-20	D-20T-GS-20	D-20T-GS-23	D-20T-GS-23	D-20T-GS-23

MPLAN	T SELECT	ION				PF	<b>ROVATA</b> ™			
			Implant Length							
Implant	Implant Ø	8.5	10	11.5	11.5	13	15			
PRO4	Ø4.00mm	_/	_/	<b>/</b>	/		<b>/</b>			
PRO5	Ø5.00mm	/	_/	_/	/	_/	<b>/</b>			
PRO12D4	Ø4.00mm	/	_/	<b>/</b>	/	<b>/</b>	1			
PRO12D5	Ø5.00mm		_/	<b>/</b>	_/	<b>✓</b>	<b>/</b>			
PROLONGAT	IONS	5,5	4	2,5	5,5	4	2			
OFFSETS		11,5	10	8,5	11,5	10	8			
PILOT DRILL		D-20T-GS-20	D-20T-GS-20	D-20T-GS-20	D-20T-GS-23	D-20T-GS-23	D-20T-GS-23			

### Step 1: Initiate the osteotomy

Note: It is recommended to raise a full-thickness mucoperiosteal flap.



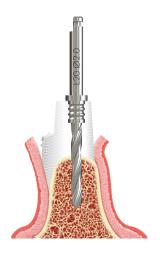
## Step 2: Pilot drilling - Ø2mm pilot drill

Pilot drills are available in three lengths, the 20mm, 23mm & 28mm, and are used with pilot guide sleeves. The drill length corresponds to the planned implant length and guide offset.

Drill through the pilot guide sleeve in the predetermined guided direction. The drill has a stop that will prevent the drill from drilling past the planned depth.

All drilling should be performed at speed of 1000-1500rpm with copious irrigation, an intermitted technique should be used to avoid overheating of the bone.

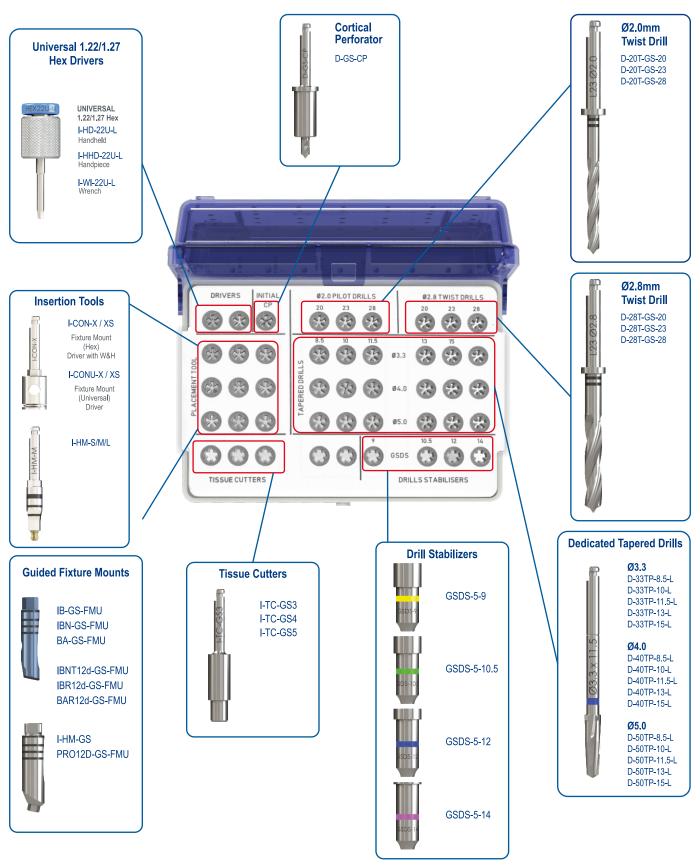




NOTE: The number of laser marked rings around the pilot drill help to identify the drill length.

If fully guided surgery is not possible, or if only pilot drill guided surgery is performed, consult CAT-2020 (External Hex) or CAT-2060 (PROVATA™).

# **I-HEX-GS-EG** For surgical placement of External Hex & PROVATA™ Implants -



The surgical kit has an intuitive layout to guide the surgeon through the drill sequence.

All instruments and tooling used during the procedure must be maintained in good condition, and cleaned and sterilized prior to to use. Please consult the Southern Implants Cleaning and Sterilization Procedure Guidelines (CAT-1039) for guidance concerning the maintenance of drills, instruments, and surgical trays.



# **EXTERNAL HEX**

Implant Code	Prolongation	Offset	Master sleeve	Cortical Perforator	Pilot Drill	Spoon for Pilot Dill (Long or Short)	Twist Dri <b>ll</b>	Spoon for Twist Dill (Long or Short)	Tapered drill Ø3.3	Drill stabilizer to use with Tapered drill
IBNT8.5	6,5	10,5	GSS	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
IBNT10	5	9	GSS	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
IBNT10	8	12	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
IBNT11.5	6,5	10,5	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
IBNT13	5	9	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
IBNT13	10	14	GSS	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
IBNT15	8	12	GSS	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
IBNT12D-8.5	6,5	10,5	GSS-C	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
IBNT12D-10	5	9	GSS-C	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
IBNT12D-10	8	12	GSS-C	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
IBNT12D-11.5	6.5	10,5	GSS-C		D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
IBNT12D-13	5	9	GSS-C	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
IBNT12D-13	10	14	GSS-C	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
IBNT12D-15	8	12	GSS-C	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
IBT8.5	6,5	10,5	GSS	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8,5	GSDS-5-10.5
IBT10	5	9	GSS	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
IBT10	8	12	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
IBT11.5	6,5	10,5	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
IBT13	5	9	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
IBT13	10	14	GSS	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
IBT15	8	12	GSS	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
IBR12D-8.5	6,5	10,5	GSS-C	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
IBR12D-10	5	9	GSS-C	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
IBR12D-10	8	12	GSS-C	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
IBR12D-11.5	6,5	10,5	GSS-C	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
IBR12D-13	5	9	GSS-C	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
IBR12D-13	10	14	GSS-C	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
IBR12D-15	8	12	GSS-C	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
BAT8.5	6,5	10,5	GSS	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
BAT10	5	9	GSS	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
BAT10	8	12	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
BAT11.5	6,5	10,5	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
BAT13	5	9	GSS	D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
BAT13	10	14	GSS	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
BAT15	8	12	GSS	D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
BAR12D-8.5	6,5	10,5	GSS-C	D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
BAR12D-10	5	9		D-GS-CP	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
BAR12D-10	8	12		D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
BAR12D-11.5		10,5		D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
BAR12D-13	5	9		D-GS-CP	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
BAR12D-13	10	14		D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
BAR12D-15	8	12		D-GS-CP	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12

# **EXTERNAL HEX**

Tapered drill Ø4.0	Drill stabilizer to use with Tapered drill	Tapered drill Ø5.0	Drill stabilizer to use with Tapered drill	Implant placed with guided fixture mount or Placement tool	Through spoon (Long or Short)	Through Master sleeve	Place up to
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		4th line on Fixture Mount
				IBN-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		4th line on Fixture Mount
				IBNT12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
D-40TP-L-8.5	GSDS-5-10.5			IB-GS-FMU	DGS-L-4,2 / DGS-S-4,2		2nd line on Fixture Mount
D-40TP-L-0.5	GSDS-5-10.5 GSDS-5-9			IB-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
D-40TP-L-10	GSDG-5-9			IB-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
D-40TP-L-10.5	GSDS-5-12 GSDS-5-10.5			IB-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
D-40TP-L-11.5 D-40TP-L-13	GSDS-5-10.5 GSDS-5-9			IB-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
D-40TP-L-13	GSDS-5-9 GSDS-5-14			IB-GS-FMU	DGS-L-4.2 / DGS-S-4.2		4th line on Fixture Mount
D-40TP-L-15	GSDS-5-14 GSDS-5-12			IB-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
D-401F-L-13	G3D3-3-12			IB-G3-FWU	DG3-L-4.2 / DG3-3-4.2		Sid line on Fixture Mount
D-40TP-L-8.5	GSDS-5-10.5			IBR12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9			IBR12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12			IBR12D-GS-FMU	DGS-L-4,2 / DGS-S-4,2		3rd line on Fixture Mount
D-40TP-L-11,5	GSDS-5-10,5			IBR12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		2nd line on Fixture Mount
D-40TP-L-13	GSDS-5-9			IBR12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		1st line on Fixture Mount
D-40TP-L-13	GSDS-5-14			IBR12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		4th line on Fixture Mount
D-40TP-L-15	GSDS-5-12			IBR12D-GS-FMU	DGS-L-4.2 / DGS-S-4.2		3rd line on Fixture Mount
D-4011 -L-10	0000-0-12			IBICI2D-00-I WO	DOG-E-4.27 DOG-G-4.2		ord line of thickine would
D-40TP-L-8.5	GSDS-5-10.5	D-50TP-L-8.5	GSDS-5-10.5	BA-GS-FMU		GSS	2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9	D-50TP-L-10	GSDS-5-9	BA-GS-FMU		GSS	1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12	D-50TP-L-10	GSDG-5-12	BA-GS-FMU		GSS	3rd line on Fixture Mount
D-40TP-L-11,5	GSDS-5-10.5	D-50TP-L-11.5	GSDS-5-10.5	BA-GS-FMU		GSS	2nd line on Fixture Mount
D-40TP-L-13	GSDS-5-9	D-50TP-L-13	GSDS-5-9	BA-GS-FMU		GSS	1st line on Fixture Mount
D-40TP-L-13	GSDS-5-14	D-50TP-L-13	GSDS-5-14	BA-GS-FMU		GSS	4th line on Fixture Mount
D-40TP-L-15	GSDS-5-12	D-50TP-L-15	GSDS-5-12	BA-GS-FMU		GSS	3rd line on Fixture Mount
D-40TP-L-8.5	GSDS-5-10,5	D-50TP-L-8.5	GSDS-5-10,5	BAR12D-GS-FMU		GSS-C	2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9	D-50TP-L-10	GSDS-5-9	BAR12D-GS-FMU		GSS-C	1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12	D-50TP-L-10	GSDG-5-12	BAR12D-GS-FMU		GSS-C	3rd line on Fixture Mount
D-40TP-L-11.5	GSDS-5-12.5	D-50TP-L-11.5	GSDS-5-12 GSDS-5-10.5	BAR12D-GS-FMU		GSS-C	2nd line on Fixture Mount
	GSDS-5-10,5 GSDS-5-9	D-50TP-L-13	GSDS-5-10.5 GSDS-5-9	BAR12D-GS-FMU		GSS-C	1st line on Fixture Mount
D-40TP-L-13	2000 0-0	D 0011 -F-10	3000 0-0	D/ 11 1 1 2 D - 0 0 - 1 1 1 1 1 0		000-0	TOURING OFF FIXAGE MOUTE
D-40TP-L-13 D-40TP-L-13	GSDS-5-14	D-50TP-L-13	GSDS-5-14	BAR12D-GS-FMU		GSS-C	4th line on Fixture Mount

# $PROVATA^{TM}$

Implant Code	Prolongation	Offset	Master sleeve	Pilot Drill	Spoon for Pilot Dill (Long or Short)	Twist Drill	Spoon for Twist Dill (Long or Short)	Tapered drill Ø3.3	Drill stabilizer to use with Tapered drill
PRO408	6,5	10,5	GSS	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
PRO410	5	9	GSS	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
PRO410	8	12	GSS	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
PRO411	6,5	10,5	GSS	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
PRO413	5	9	GSS	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
PRO413	10	14	GSS	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
PRO415	8	12	GSS	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
PRO12D408	6,5	10,5	GSS-C	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
PRO12D410	5	9	GSS-C	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
PRO12D410	8	12	GSS-C	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
PRO12D411	6,5	10,5	GSS-C	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
PRO12D413	5	9	GSS-C	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
PRO12D413	10	14	GSS-C	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
PRO12D415	8	12	GSS-C	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
PRO508	6,5	10,5	GSS	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
PRO510	5	9	GSS	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
PRO510	8	12	GSS	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
PRO511	6,5	10,5	GSS	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
PRO513	5	9	GSS	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
PRO513	10	14	GSS	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
PRO515	8	12	GSS	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12
PRO12D508	6,5	10,5	GSS-C	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-8.5	GSDS-5-10.5
PRO12D510	5	9	GSS-C	D-20T-GS-20	DGS-L-2 / DGS-S-2	D-28T-GS-20	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDS-5-9
PRO12D510	8	12	GSS-C	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-10	GSDG-5-12
PRO12D511	6,5	10,5	GSS-C	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-11.5	GSDS-5-10.5
PRO12D513	5	9	GSS-C	D-20T-GS-23	DGS-L-2 / DGS-S-2	D-28T-GS-23	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-9
PRO12D513	10	14	GSS-C	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-13	GSDS-5-14
PRO12D515	8	12	GSS-C	D-20T-GS-28	DGS-L-2 / DGS-S-2	D-28T-GS-28	DGS-L-2.8 / DGS-S-2.8	D-33TP-L-15	GSDS-5-12

# **PROVATA**

Tapered drill Ø4.0	Drill stabilizer to use with Tapered drill	Tapered drill Ø5.0	Drill stabilizer to use with Tapered drill	Implant placed with guided fixture mount or Placement tool	Through spoon (Long or Short)	Through Master sleeve	Place up to
D-40TP-L-8.5	GSDS-5-10.5			I-HM-GS		GSS	2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9			I-HM-GS		GSS	1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12			I-HM-GS		GSS	3rd line on Fixture Mount
D-40TP-L-11.5	GSDS-5-10.5			I-HM-GS		GSS	2nd line on Fixture Mount
D-40TP-L-13	GSDS-5-9			I-HM-GS		GSS	1st line on Fixture Mount
D-40TP-L-13	GSDS-5-14			I-HM-GS		GSS	4th line on Fixture Mount
D-40TP-L-15	GSDS-5-12			I-HM-GS		GSS	3rd line on Fixture Mount
D-40TP-L-8.5	GSDS-5-10.5			PRO12D-GS-FMU		GSS-C	2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9			PRO12D-GS-FMU		GSS-C	1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12			PRO12D-GS-FMU		GSS-C	3rd line on Fixture Mount
D-40TP-L-11.5	GSDS-5-10.5			PRO12D-GS-FMU		GSS-C	2nd line on Fixture Mount
D-40TP-L-13	GSDS-5-9			PRO12D-GS-FMU		GSS-C	1st line on Fixture Mount
D-40TP-L-13	GSDS-5-14			PRO12D-GS-FMU		GSS-C	4th line on Fixture Mount
D-40TP-L-15	GSDS-5-12			PRO12D-GS-FMU		GSS-C	3rd line on Fixture Mount
D-40TP-L-8.5	GSDS-5-10.5	D-50TP-L-8.5	GSDS-5-10.5	I-HM-GS		GSS	2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9	D-50TP-L-10	GSDS-5-9	I-HM-GS		GSS	1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12	D-50TP-L-10	GSDG-5-12	I-HM-GS		GSS	3rd line on Fixture Mount
D-40TP-L-11.5	GSDS-5-10.5	D-50TP-L-11.5	GSDS-5-10.5	I-HM-GS		GSS	2nd line on Fixture Mount
D-40TP-L-13	GSDS-5-9	D-50TP-L-13	GSDS-5-9	I-HM-GS		GSS	1st line on Fixture Mount
D-40TP-L-13	GSDS-5-14	D-50TP-L-13	GSDS-5-14	I-HM-GS		GSS	4th line on Fixture Mount
D-40TP-L-15	GSDS-5-12	D-50TP-L-15	GSDS-5-12	I-HM-GS		GSS	3rd line on Fixture Mount
D-40TP-L-8.5	GSDS-5-10.5	D-50TP-L-8.5	GSDS-5-10.5	PRO12D-GS-FMU		GSS-C	2nd line on Fixture Mount
D-40TP-L-10	GSDS-5-9	D-50TP-L-10	GSDS-5-9	PRO12D-GS-FMU		GSS-C	1st line on Fixture Mount
D-40TP-L-10	GSDG-5-12	D-50TP-L-10	GSDG-5-12	PRO12D-GS-FMU		GSS-C	3rd line on Fixture Mount
D-40TP-L-11.5	GSDS-5-10.5	D-50TP-L-11.5	GSDS-5-10.5	PRO12D-GS-FMU		GSS-C	2nd line on Fixture Mount
D-40TP-L-13	GSDS-5-9	D-50TP-L-13	GSDS-5-9	PRO12D-GS-FMU		GSS-C	1st line on Fixture Mount
D-40TP-L-13	GSDS-5-14	D-50TP-L-13	GSDS-5-14	PRO12D-GS-FMU		GSS-C	4th line on Fixture Mount
D-40TP-L-15	GSDS-5-12	D-50TP-L-15	GSDS-5-12	PRO12D-GS-FMU		GSS-C	3rd line on Fixture Mount



### **EXPLANATION OF SYMBOLS**

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



Manufacturer



Colour code indicating platform diameter



4 Implant details and size

5

STERILE | R | Sterilization using Irradiation



Do not Resterilize



Consult instruction for use



Do not reuse



CE mark and notified body number



**Expiry date** 



Sterile unless package is opened or damaged

6 2D Bar coding

Contains the GTIN, Expiry 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.







## **WARNINGS**

All Southern Implants products are intended to be used by appropriately trained and licensed professionals. For safe and effective use, it is strongly suggested that specialised training be undertaken, including hands-on training to learn proper technique and radiographic evaluations. THESE INSTRUCTIONS ARE NOT INTENDED AS A SUBSTITUTE FOR ADEQUATE TRAINING. Responsibility for proper patient selection, adequate training, experience in the placement of implants, and providing appropriate information for informed consent, rests with the practitioner. Improper technique can result in damage to anatomical structures during placement, implant failure and/or loss of supporting bone. Southern Implants will not accept liability for damage caused by improper implant treatment.

Failure to recognize actual lengths of drills relative to radiographic measurements can result in permanent injury to nerves or other vital structures. Drilling beyond the depth intended in the mandible may potentially result in permanent numbness to the lower lip and/or chin or lead to a haemorrhage in the floor of the mouth.

Blunt drills may cause damage to the bone, which can compromise osseointegration.

The SIGuided solution has only been approved for use with NSK and W&H hand pieces

Southern Implants' Dental Implants have only been validated for use with the corresponding Southern Implants' abutments and accessories. Although care has been taken to create interfaces that are equivalent to similar products on the market, Southern Implants cannot guarantee outcomes obtained using components from other manufacturers. Please refer to individual product catalogues for interface requirements. Southern Implants will not accept liability for damage caused by selection of incompatible abutments and accessories.

Do not re-use Implants, Cover screws, Temporary or Permanent Abutments. These are single-use products. DO NOT re-sterilize or autoclave these components unless otherwise indicated. Re-using these components may result in damage on the surface or critical dimensions. This may result in performance and compatibility issues. The removal of proteins from metal (such as Titanium) is extremely difficult and re-use can lead to secondary infections. Electro-surgery should not be attempted around metal implants, as they are conductive.

## GENERAL INFORMATION AND WARNINGS

One hundred percent implant success cannot be guaranteed. Non-observance of the indicated limitations of use and working steps may result in failure.

#### **CAUTION**

#### Before surgery:

A thorough radiological and clinical assessment must be done to determine the psychological and physical health of the patient.

Take care when treating patients with local or systemic factors that could affect the healing process of the tissues or interfere with the osseointegration process (i.e. smoking, uncontrolled diabetes, radiotherapy treatment, steroid therapy, poor oral hygiene, infection of nearby tissue, systemic bi-phosphonate therapy).

Treatment planning (surgical and prosthetic design) must accommodate patient specific conditions. In cases of bruxism or unfavorable jaw relationships the treatment option may have to be reassessed and adjusted.

Implant treatment is not recommended in juvenile patients, until the mature jaw bone growth phase has been reached.

Hard or soft tissue defects may result in compromised treatment outcomes.

#### At surgery:

Validate the guide fit and trajectory.

Do not place narrow implants in the posterior region, Avoid the risk of prosthetic overload, that could lead to implant failure or fracture.

All instruments and tooling used during procedures must be maintained in good condition, and care must be taken not to damage the implant or other components.

#### Surgical procedure:

Assess bone quality during drilling procedures and follow the appropriate drill sequence to ensure optimal primary stability.

Drill at 1000 -1500 rpm for twist drills and 800 rpm for tapered drills. Use copious irrigation (saline at room temperature), and drill with a continuous intermittent motion, to avoid overheating of the bone. The laser marking on the shaft of the Pilot and Twist drills indicate drill diameters and length.

The implants are ideally placed with low speed, max. 25 rpm, when using an implant motor unit and Hand-Piece insert.

Never exceed insertion torque of 70Ncm when placing these implants. Over tightening an implant may lead to damage of the implant or fracture of the bone.

If the implant gets stuck during implant placement or 70Ncm of insertion torque is reached before the implant is fully seated, rotate the implant counter clockwise (handpiece in reverse mode) and remove implant from site. Adjust the osteotomy before placing the implant again.

## **HANDLING**

Refer to the individual product packaging label and the corresponding IFU's for special handling instructions.

IMPLANTS MUST NOT BE TOUCHED DIRECTLY. They must be handled and placed by the instruments provided. If an implant is dropped onto a non-sterile surface, it should not be used.

## **PACKAGING**

- 1) Implants: The outer packaging consists of a rigid, clear box which acts as protection for the inner packaging. The inner packaging consists of a clear plastic-formed bubble-type base with a "peel-back" lid. The contents of this inner package are sterile. Labeling Information is located on the surface of the peel-back lid and on the outside of the rigid box. Within the inner packaging there is a hollow tube which contains one implant. Sterility is assured unless the container or seal is damaged or opened.
- 2) Other sterile components are packed in a peel pouch and sterilized by gamma irradiation. Labeling information is located on the bottom half of the pouch, inside the packet. Sterility is assured unless the pouch is damaged or opened.
- 3) Other non-sterile components used in the laboratory are supplied clean but not sterile. These are laboratory analogues, some Ti abutments, CIA abutments, TIB abutments, cast waxing sleeves and gold abutments with plastic sleeves. Labeling information is located on the bottom half of the pouch, inside the packet.

Implants and abutments are supplied sterile and intended for single use. DO NOT re-sterilize or autoclave these components.

### GENERAL INFORMATION AND WARNINGS

#### **CLEANING**

- Refer to CAT-1039
- Used instruments should be soaked immediately in instrument cleaning solution to avoid the drying of blood, saliva and tissue residue.
- Used surgical trays including grommets must be cleaned with suitable disinfectants.
- Multiple-part instruments must be disassembled prior to cleaning and sterilization.
- Internal debris/residue on instruments must be removed with a soft brush.
- Instruments should be inspected, cleaned separately and discarded if damaged.
- Best results are achieved if surgical instruments are cleaned by material type.
- Instruments and trays can be cleaned and disinfected in a dedicated instrument washer or alternatively by hand, followed by an ultrasonic bath with a detergent appropriate for surgical instruments.
- Instruments and trays must be rinsed and dried thoroughly.

#### **STERILIZATION**

- Products provided non-sterile must be cleaned and sterilized prior to use.
- Pre-vacuum sterilization method: Steam sterilise the component at 132°C (270°F) at 180-220 kPa for 4 minutes, or at 135°C (275°F) at 180-220 kPa for 3 minutes. Dry for at least 20 minutes in the chamber. Only an appropriate regulatory authority approved sterilizer and wrap or pouch for steam sterilization must be used
- It is the responsibility of the user to establish whether or not their sterilizer is appropriate regulatory authority approved to meet the recommended parameters.
- The product must be stored in a dry place in the original packaging at room temperature and not exposed to direct sunlight. Incorrect storage may influence device characteristics.

## MAGNETIC RESONANCE (MR) SAFETY INFORMATION

External Hex & PROVATA<sup>™</sup> implants have not been evaluated for safety and compatibility in the MR environment. It has not been tested for heating, migration or image artefact in the MR environment. The safety of External Hex and PROVATA<sup>™</sup> implants in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

### CAUTION: (USA ONLY)

United States Federal Law restricts this device to sale to, or on the order of, a licensed dentist or physician.

#### **DISCLAIMER OF LIABILITY**

This product is part of the Southern Implants product range and should only be used with the associated original products and according to the recommendations as in the individual product catalogues. The user of this product has to study the development of the Southern Implants product range and take full responsibility for the correct indications and use of this product. Southern implants does not assume liability for damage due to incorrect use. Please note that some Southern Implants products may not be cleared or released for sale in all markets.

For more information, please call your Southern Implants Representative or visit southernimplants.com

For more information, please visit your Southern Implants Representative or visit southernimplants.com



South Africa - Headquarters: 1 Albert Road, Irene, 0062, RSA T: +27-12-667-1046 | E: info@southernimplants.com

### **Subsidiaries**

Australia

Southern Implants Australia T: +61-(0)-8-9466-2627 E: info@southernimplants.com.au United Kingdom

Southern Implants UK
T: +44 20 8899 6845 / 6 / 7
E: info@southernimplants.co.uk

**USA** and Canada

Southern Implants North America Inc.
T: +1-561-472-0990
E: customercare@southernimplants.com

Southern Implants are distributed world-wide, please visit southernimplants.com for a list of Distributors.

©2019 Southern Implants (Pty) Ltd, All rights reserved, Co-Axis, Southern Implants, and Subcrestal Angle Correction are registered trademarks and Body-Shift, INVERTA and PROVATA are trademarks of Southern Implants (Pty) Ltd.

Not all implants are available in all markets.