

[www.dentis.co.kr](http://www.dentis.co.kr)



**Headquarters**

#951. Woram-Dong, Dalseo-Gu, Daegu, Korea / Tel. +82-53-583-2804~5 Fax. +82-53-583-2806

**Sales Head Office(Seoul)**

#907-908, Leaders Tower 60 -15, Gasan-Dong Geumcheon-Gu Seoul, Korea

**DENTIS USA**

5455 Wilshire Blvd #950 LA CA 90036 / Tel. +1-323-677-4363~5 Fax. +1-323-677-4366

**DENTIS TAIWAN**

11F-2, No.65, Songde Rd., Xinyi Dist., Taipei City 110, Taiwan / Tel : + 886-2-2729-6200

Issued date : 1<sup>th</sup> of June, 2012

Version : Rev.201206-1A

©2012 DENTIS CO.,LTD.

All Right reserved.

Specifications are subject to change without notice

Trademarks are the property of DENTIS CO.,LTD. or their respective owners



Cleanlant



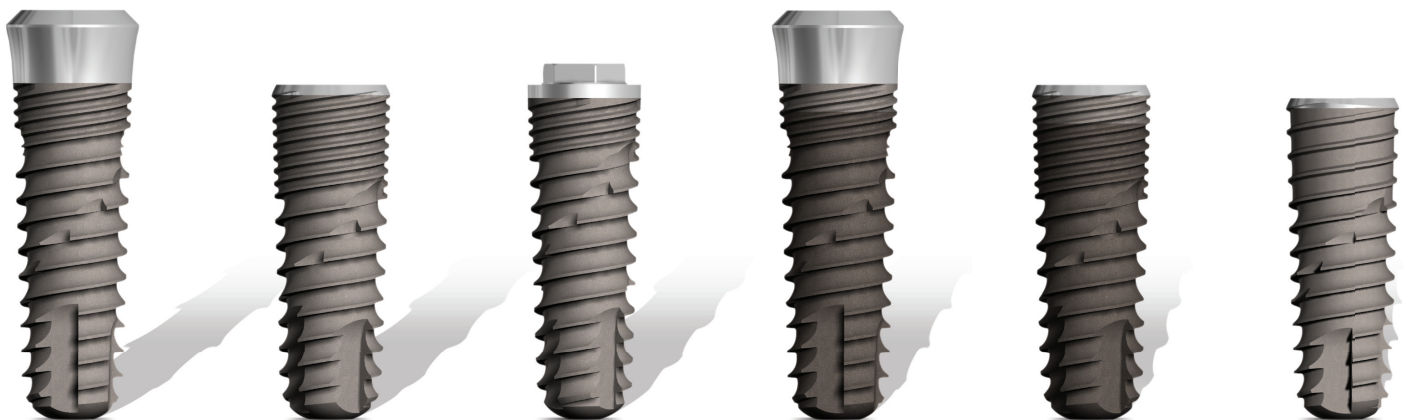
# Surgical Manual



# DENTIS

# Surgical Manual

## Contents



04

[ Introduction ]

05

[ Implant overview ]

06

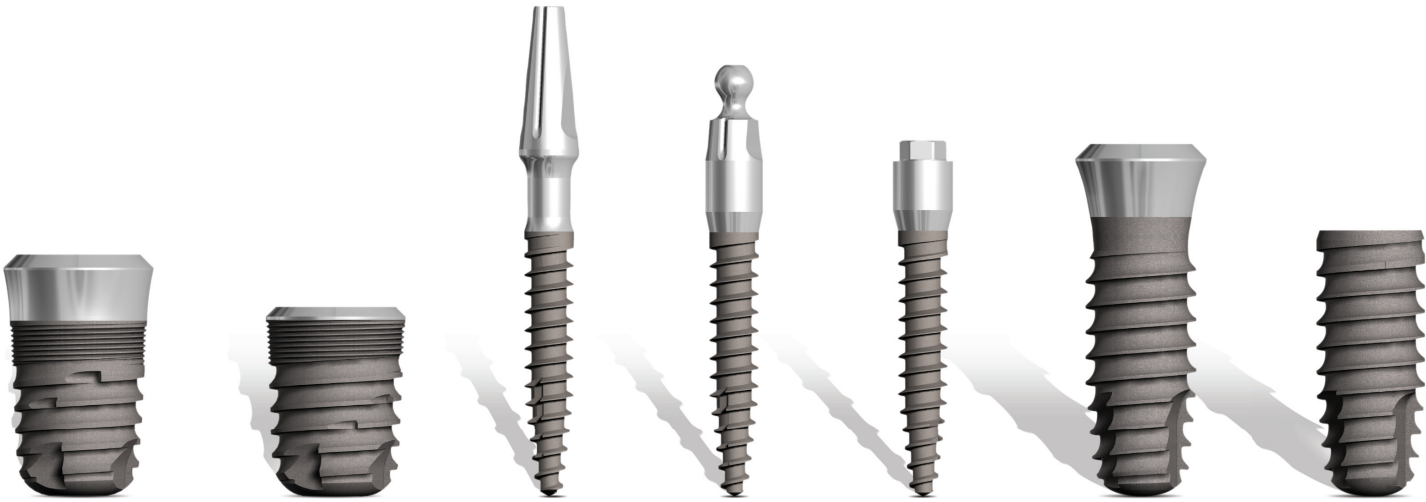
[ Drilling sequence overviews ]

- Taper type
- Straight type

08

[ Drilling sequences ]

- s-Clean & i-Clean tapered implants
- s-Clean & i-Clean straight implants
- e-Clean tapered implants
- SAVE implants



13

[ Implant surgery ]

19

[ Surgical drills, instruments and kits ]

31

[ Cleaning and sterilization ]

# Introduction

To ensure successful dental implantation, it is imperative to have a knowledgeable, skilled dental surgeon as well as precision analysis and performance of the procedure. Such requires both surgical and prosthetic success. The Dentis Surgical Manual (DSM) was prepared to offer elementary guidance to those planning to perform the procedure and to help them ensure successful surgical implantation.

## Pre-surgical preparation instructions

- Offer the patient a full explanation on the implantation procedure and secure his/her understanding and consent.
- Check the patient's overall health condition and oral cavity and its condition and bone quality via intra-oral x-ray examination.
- Explain to the patient his/her oral health condition and problems, if any, as well as the various treatment methods and their respective strengths and weaknesses to establish the treatment plan.

## Check if the patient has one of the following:

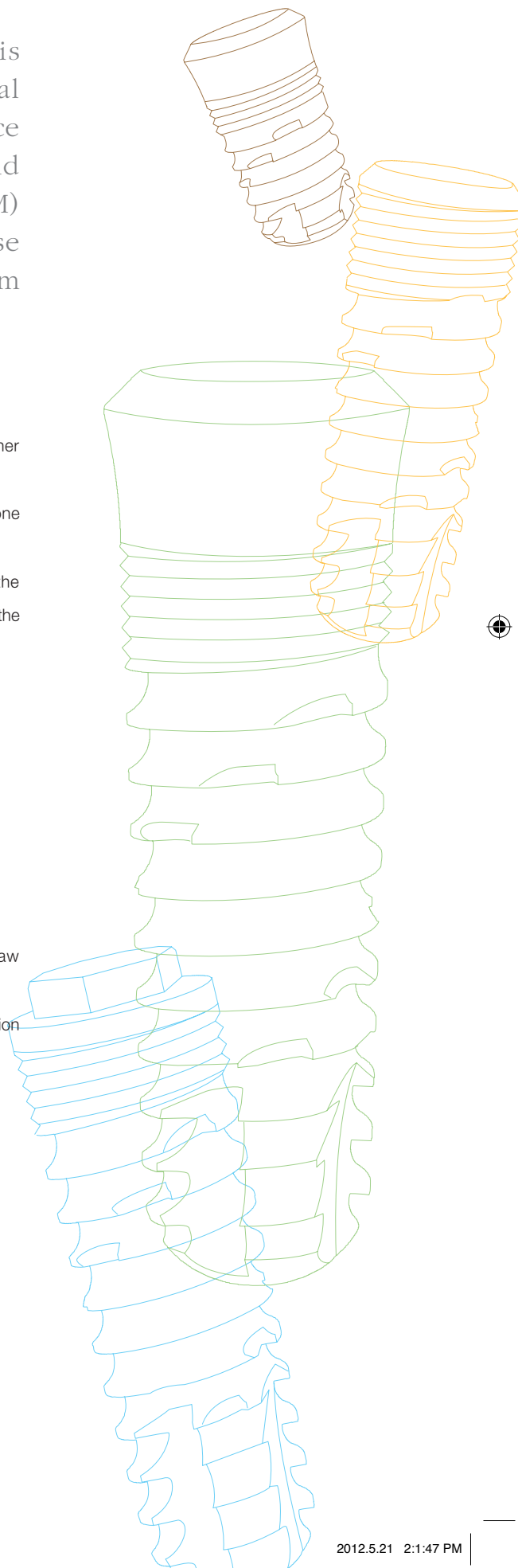
- High blood pressure
- Congenital or acquired heart disease
- Ischemic heart disease (angina, myocardial infarction, etc.)

## Loading time

- In general, a lower-jaw procedure requires 3 months of healing, and an upper-jaw procedure, 6 months.
- The surgeon may perform immediate loading or early loading depending on the condition of the patient. In such case, the initial fixture is considered when performing loading.

## Dentis implant







- Offers 3 types of system (s-Clean, i-Clean, e-Clean)
- Clean implant
- One-stage procedure and two-stage procedure available
- Convenient No-Mount system
- Implants with various surface configurations
- I-Fix implant allowing abutment selection
- Recovery, posterior tooth-pulling, SAVE implant for immediate implantation



# Implant Overview








We offer the s-Clean system, i-Clean system, e-Clean system, I-Fix, and SAVE system to accommodate better a wide range of inter-oral environments that we encounter clinically. We also offer the RBM (resorbable blast media) surface-treated and HA (hydroxyapatite)-coated implant systems selected by the surgeon in accordance with the patient's bone quality.



- Systems applicable to 1-stage surgery and 2-stage surgery
- Systems applicable to single-case and multiple-case
- No-Mount system available to enhance procedural convenience
- I-Fix system recommended for a mandibular anterior case, and SAVE implant, for posterior tooth extraction and/or failed case
- 50N<sub>cm</sub> of implantation torque recommended at below 20rpm

	Ø 3.5	Ø 3.7	Ø 4.1	Ø 4.3	Ø 4.8	Ø 5.1	Ø 5.5	Ø 6.0
<b>s-Clean</b> <sup>tapered</sup>		 I II RBM/HA	 I II RBM/HA	 I II RBM/HA	 I II RBM/HA		 RBM	 RBM
<b>s-Clean</b> <sup>straight</sup>			 RBM		 RBM			
<b>i-Clean</b> <sup>tapered</sup>		 RBM/HA	 RBM/HA	 RBM/HA	 RBM/HA		 RBM	 RBM
<b>i-Clean</b> <sup>straight</sup>			 RBM		 RBM			
<b>e-Clean</b> <sup>tapered</sup>	 RBM		 RBM			 RBM		

# Drilling Sequence Overviews



## Taper type

	Point Drill	Ø 2.2 Drill	Pilot Drill	Ø 2.8 Drill	Taper Drill								C'sink	
					Ø 3.5	Ø 3.7	Ø 4.1	Ø 4.3	Ø 4.8	Ø 5.1	Ø 5.5	Ø 6.0		
 Body Ø 3.7	○	○	○	○ option		○								○
 Body Ø 4.1	○	○	○	○ option		○	○							○
 Body Ø 4.3	○	○	○	○ option		○		○						○
 Body Ø 4.8	○	○	○	○ option		○		○	○					○
 Body Ø 3.5	○	○	○	○ option	○									○
 Body Ø 4.1	○	○	○	○ option	○		○							○
 Body Ø 5.1	○	○	○	○ option	○		○			○				○

	Point Drill	Ø 2.2 Drill	Pilot Drill	Ø 2.8 Drill	Taper Drill								C'sink
					Ø 3.5	Ø 3.7	Ø 4.1	Ø 4.3	Ø 4.8	Ø 5.1	Ø 5.5	Ø 6.0	
 Body Ø 5.5	○	○	○	○ option		○		○	○		○		
 Body Ø 6.0	○	○	○	○ option		○		○	○		○	○	

● D1 bone density: Use a tap.

### Straight type

	Point Drill	Ø 2.2 Drill	Pilot Drill	Ø 2.8 Drill	Pilot Drill	Ø 3.5 Drill	Pilot Drill	Ø 4.2 Drill	C'sink
 Body Ø 4.1	○	○	○	○	○	○			○
 Body Ø 4.8	○	○	○	○	○	○	○	○	○

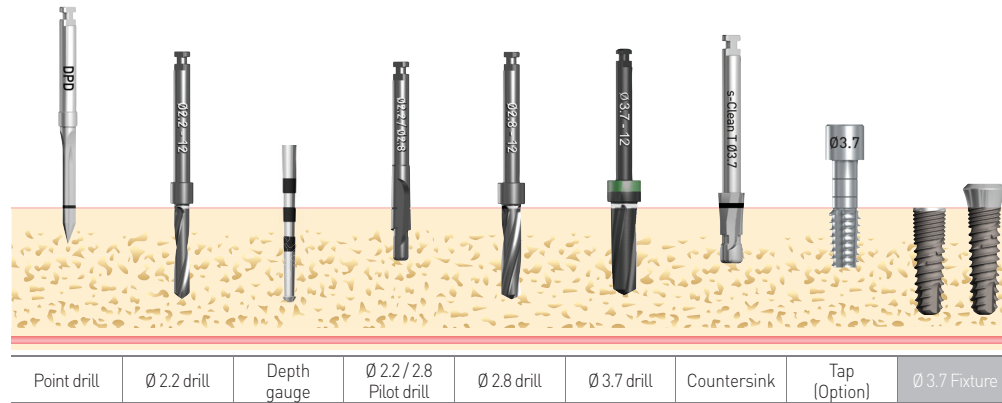
● D1 bone density: Use a tap.



# Drilling Sequences

## s-Clean & i-Clean tapered implants

### • Ø3.7x12mm Implant



### • Ø4.1x12mm Implant



• Ø4.3x12mm Implant



• Ø4.8x12mm Implant



## e-Clean tapered implants

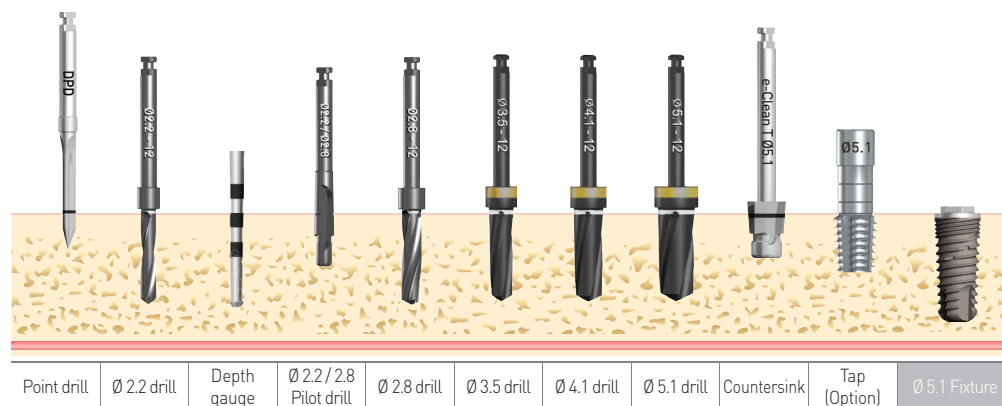
### ● Ø3.5 x 12mm Implant



### ● Ø4.1 x 12mm Implant

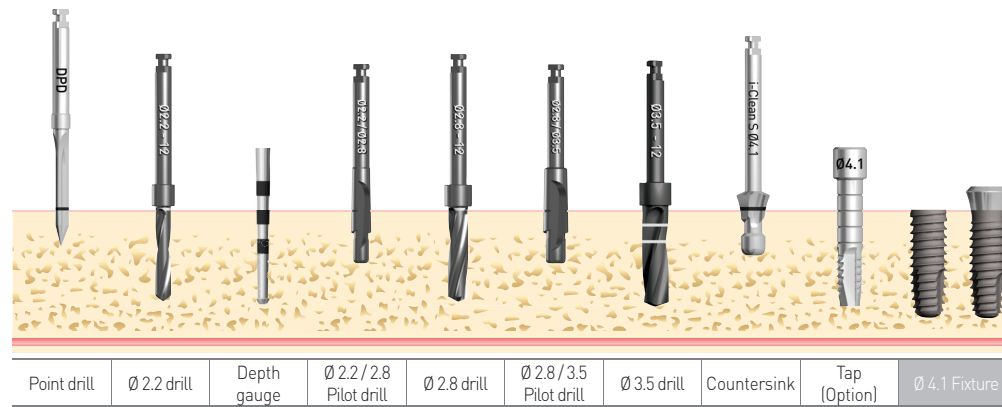


### ● Ø5.1 x 12mm Implant



## s-Clean & i-Clean straight implants

### ● Ø4.1 x 12mm Implant

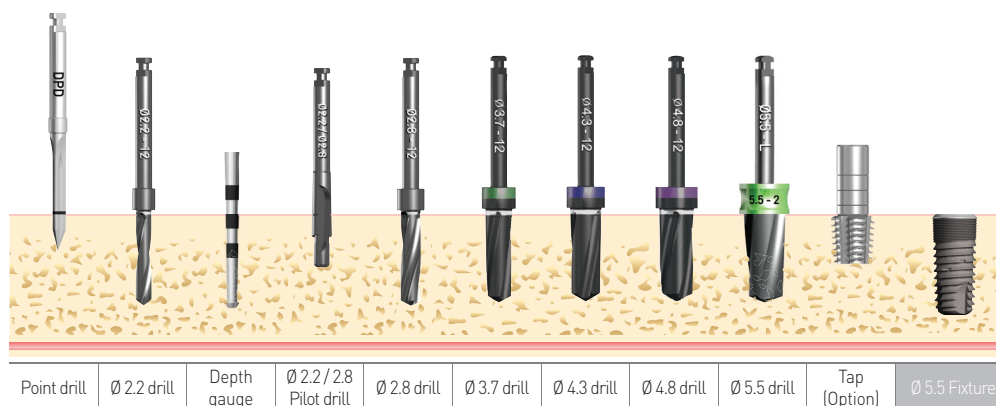


### ● Ø4.8 x 12mm Implant



## SAVE implants

### ● Ø5.5x12mm Implant



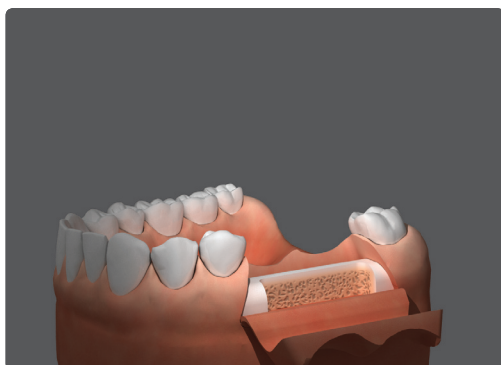
### ● Ø6.0x12mm Implant



# Implant Surgery

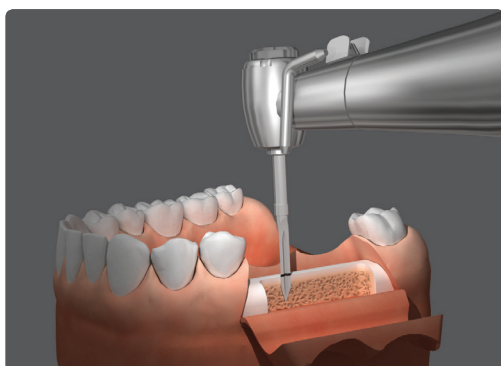
The illustration on this page is the surgical procedure for implanting an s-Clean tapered II model ( $\varnothing 4.8$ ). It walks you through the method and sequence of using the tool. If you are to implant an i-Clean or an e-Clean model, refer to the drilling sequence. If you are using the Dentis Implant System for the first time, we recommend that you familiarize yourself with the surgical procedure first.

## Primary surgery



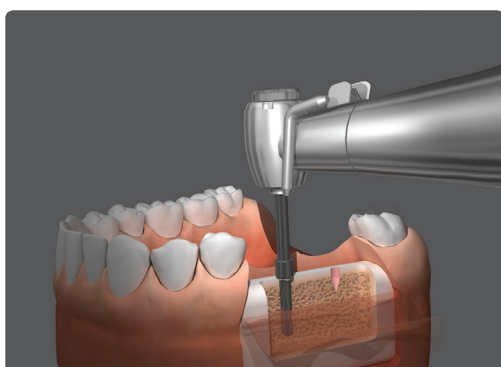
### 1. Incision

- Using a scalpel, make a very small cut where the implant will be placed.



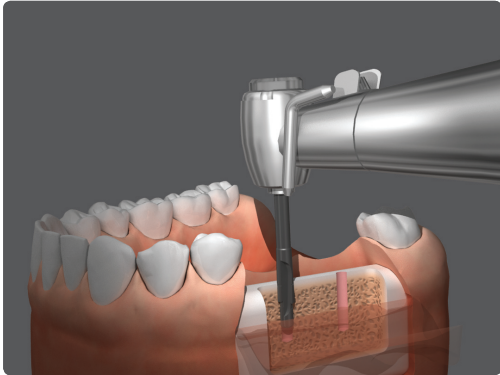
### 2. Point Drill

- Using a point drill, make a guide hole for the initial drilling.
- While drilling, cortical bone thickness and bone density will be determined.
- We recommend 1,200 rpm ~ 1,500 rpm as well as continued drilling that reaches the bottom of the laser-marked section.



### 3. Initial Drill ( $\varnothing 2.2$ Drill)

- Make a hole within the punched hole using a  $\varnothing 2.2$  drill whose length is equal to the length of the implant to be placed.
- Drilling that continues to the drill stopper will create a hole whose depth is 0.5mm greater than the actual implant length. Thus, be sure to drill until you reach the laser-marked spot to have a hole whose depth is equal to the implant's length.
- We recommend 1,200 rpm ~ 1,500 rpm. When drilling the hole, be sure to pump via sufficient liquid injection.



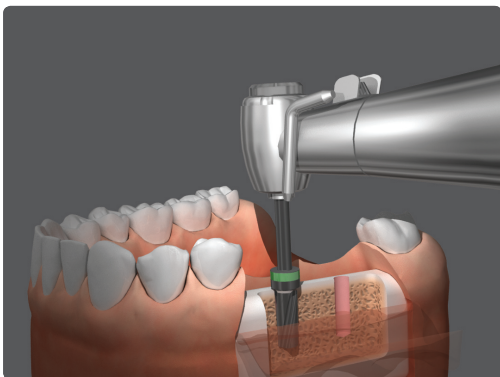
#### 4. $\varnothing 2.2 / \varnothing 2.8$ Pilot Drill

- Create a guide hole that will maintain the path of the hole made via  $\varnothing 2.2$  drilling and to perform  $\varnothing 2.8$  drilling.
- Place the guide onto the hole and drill.
- We recommend 800 rpm ~ 1,000 rpm. Continue drilling around the circumference until you reach the marked spot.



#### 5. $\varnothing 2.8$ Drill

- Make a hole within the punched hole using a  $\varnothing 2.8$  drill whose length is equal to the length of the implant to be placed.
- Drilling that continues to the drill stopper will create a hole whose depth is 0,5mm greater than the actual implant length. Thus, be sure to drill until you reach the laser-marked spot to have a hole whose depth is equal to the implant's length.
- We recommend 800 rpm ~ 1,000 rpm, although the rate may vary according to the bone density.
- When drilling, be sure to pump via sufficient liquid injection.



#### 6. $\varnothing 3.7$ Drill

- Make a hole within the punched hole using a  $\varnothing 3.7$  drill whose length is equal to the length of the implant to be placed.
- The  $\varnothing 3.7$  drill is tapered; thus requiring no pilot drill to maintain the path.
- Drilling that continues to the drill stopper will create a hole whose depth is 0,5mm greater than the actual implant length. Thus, be sure to drill until you reach the laser-marked spot to have a hole whose depth is equal to the implant's length.
- We recommend 800 rpm ~ 1,000 rpm. When drilling, be sure to pump via sufficient liquid injection.
- ※ Drilling at 50rpm or below will allow self-bone harvesting. In such case, no liquid injection is necessary.



## 7. Ø4.3 Drill

- Make a hole within the punched hole using a  $\varnothing$  4.3 drill whose length is equal to the length of the implant to be placed
- The  $\varnothing$  4.3 drill is tapered; thus requiring no pilot drill to maintain the path.
- Drilling that continues to the drill stopper will create a hole whose depth is 0.5mm greater than the actual implant length. Thus, be sure to drill until you reach the laser-marked spot to have a hole whose depth is equal to the implant's length.
- We recommend 800 rpm ~ 1,000 rpm. When drilling, be sure to pump via sufficient liquid injection.
- ※ Drilling at 50rpm or below will allow self-bone harvesting. In such case, no liquid injection is necessary.



## 8. Ø4.8 Drill

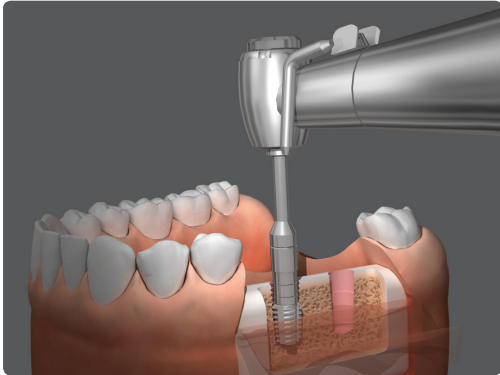
- This is the final drilling stage. Make a hole within the punched hole using a  $\varnothing$  4.8 drill whose length is equal to the length of the implant to be placed
- The  $\varnothing$  4.8 drill is tapered; thus requiring no pilot drill to maintain the path.
- Drilling that continues to the drill stopper will create a hole whose depth is 0.5mm greater than the actual implant length. Thus, be sure to drill until you reach the laser-marked spot to have a hole whose depth is equal to the implant's length.
- We recommend 800 rpm ~ 1,000 rpm. When drilling, be sure to pump via sufficient liquid injection.
- ※ Drilling at 50rpm or below will allow self-bone harvesting. In such case, no liquid injection is necessary.



## 9. Countersink

- With the guide established, place the countersink into the drilled hole after performing final drilling, and then drill.
- A drill is used to create a cortical bone hole; a countersink must be used for bone quality that is at or above normal levels.
- Drill until you reach the bottom of the laser-marked spot. Adjust the depth of drilling according to the bone quality.
- We recommend 800 rpm ~ 1,000 rpm. When drilling, be sure to pump via sufficient liquid injection.
- ※ Pay particular attention while drilling since there is no stopper available.





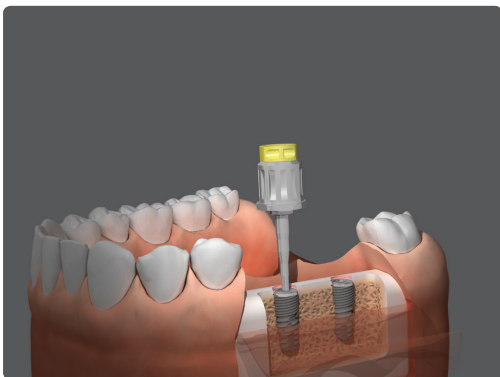
## 10. Surgical Tap

- Tapping must be used with hard bone but may be omitted with soft bone.
- Set the engine to torque mode when tapping. When the tapping stops, shift the mode back to reverse, and then tap.
- Continue tapping until you reach the spot where the screw threads begin.
- We recommend 25 rpm ~ 30 rpm.



## 11. Ø4.8 Fixture Placement

- Connect the s-Clean no-mount driver (a surgical kit component) to the fixture. To verify the connection accuracy, check if the bottom of the driver's laser-marked part is aligned with the fixture's bevel.
- When placing the fixture, make sure the engine is set to torque mode. Set the maximum torque to 40 N<sub>cm</sub>.
- When the engine stops, remove the no-mount driver, and then perform final placement using the ratchet driver.
- ※ With the torque set to 50 N<sub>cm</sub> or higher, make sure no bone necrosis occurs.

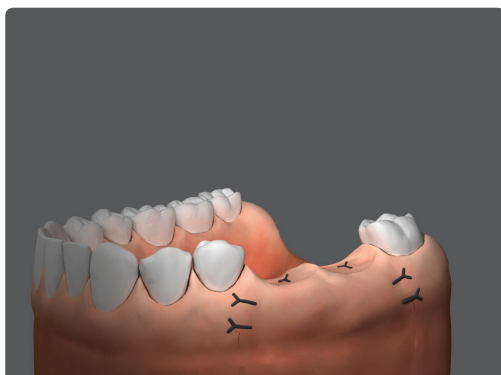


## 12. Cover Screw Connection

- Remove the cover screw from the Ampoule using a 1.25 hex hand driver, and then connect the screw to the fixture. When moving the screw into the inter-oral cavity, make sure the screw faces upward to prevent it from falling.
- When connecting the screw to the fixture, set the torque to 8N<sub>cm</sub> or below.
- With the 1-stage procedure, cover screw connection may be omitted. Move on to the healing abutment connection.
- ※ When performing the torque with surgical gloves on, take care not to exert too much force. Excessive force may interfere with cover screw removal during the secondary procedure.

### 13. Suturing

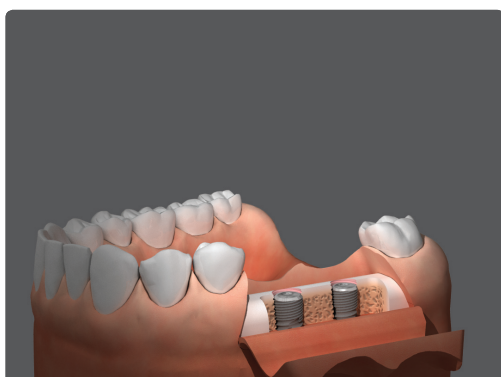
- After connecting the cover screw to the fixture, suture the incised gum. Make sure there is enough gum tissue for connection.



## Secondary surgery

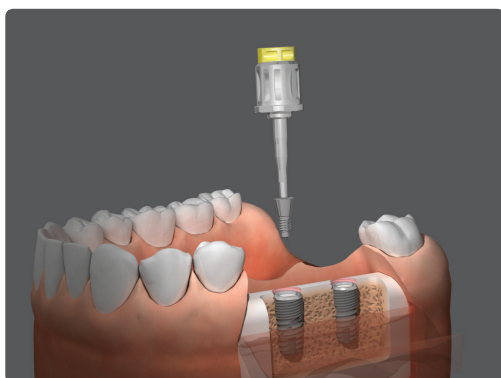
### 1. Incision

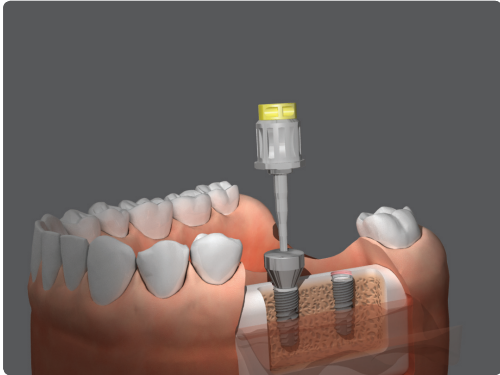
- Using a tool such as explorer, confirm the site of fixture implantation, and then make the cut using a scalpel.



### 2. Cover Screw Removal

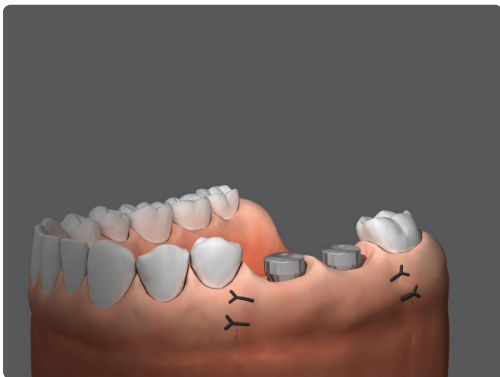
- Remove the cover screw using a 1,25 hex hand driver. If it does not work, use a 1,25 torque driver to ensure removal.
- ※ Make sure the patient does not swallow while removing the screw.





### 3. Healing Abutment Connection

- Considering the gingival height and abutment specification, select the optimal healing abutment, and then connect.
- Connect using a 1,25 hex hand driver and set the torque preferably to 8 N<sub>cm</sub> or below.



### 4. Suturing

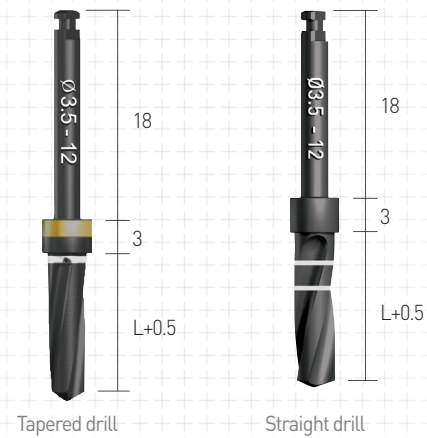
- Suture using the needle and dental floss.

# Surgical Drills, Instruments and Kits

## Surgical Drills

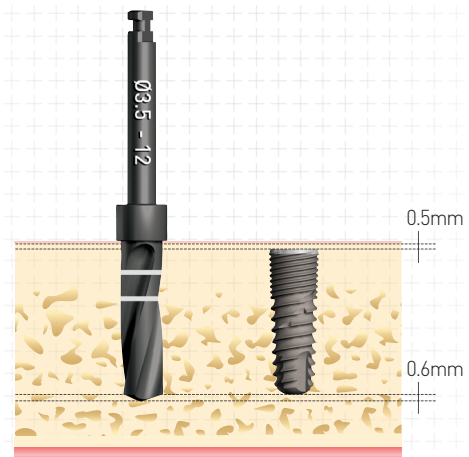
### ● Stopper Drills

- Stopper drills are divided into two types: tapered drills and straight drills.
  - Enhanced procedural convenience
  - Easier manipulation of drilling depth
  - Straight drills with additional dimension line on their blades allowing a drill to place the fixture, vary widely in length (reference line: at the bottom)
  - Allows posterior use without connecting to the drill extension
  - Capable of preventing a jam with the hand piece caused by applying excessive force
  - Drill blades designed to be 0,5mm shorter than their nominal dimension (except for the drill tip)

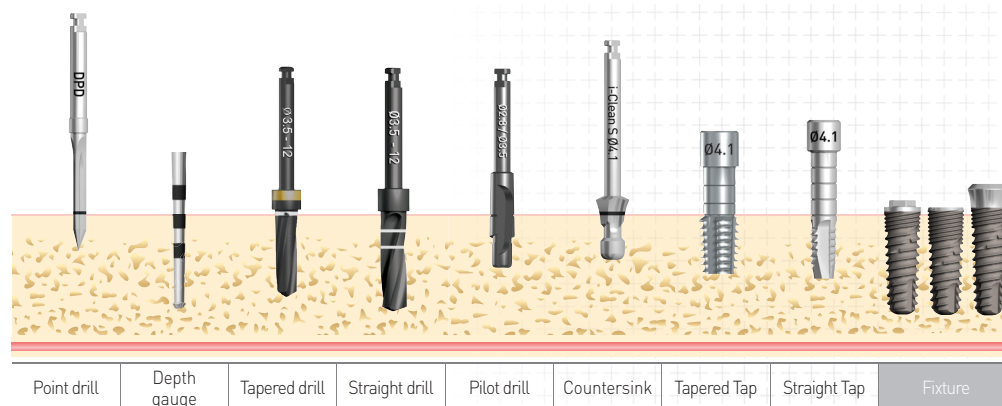


### ● Drill tip

- Though it is a part that affects the cutting performance of the drill the most, the drill tip creates a useless void during implant placement.
- All Dentis drills are designed to feature a uniform 0,6mm tip to cope with the fact that tip length varies with implant diameter.



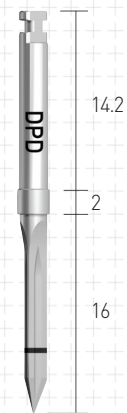
### ● Marking Line and Implant Placement Depth (Length : 12mm)



# Instruments

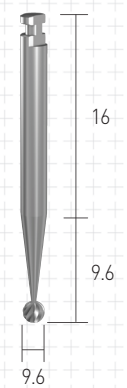
## ● Point Drill

- Marks the fixture placement site
- Allows the estimation of cortical bone thickness and bone density
- Serves as a guide to initial drilling
- Prevents a jam with the hand piece
- Uses an engine
- Recommended rate: 1,500 rpm
- Material: TrimRite



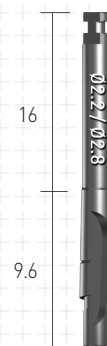
## ● Round Drill

- Has the same functions as those of the point drill
- Used when removing the ridge



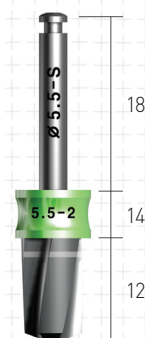
## ● Pilot Drill

- Creates the approach path for the next drill
- Corrects the path after drilling
- Must be used when drilling via straight drill
- Prevents a jam with the engine
- Recommended rate: 800 rpm - 1,000 rpm
- Material: TrimRite



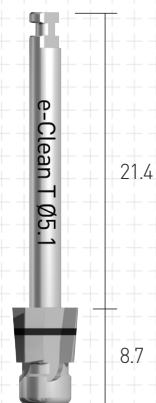
## ● Multi Stopper Drill

- Allows easier manipulation of drilling depth
- Used exclusively for the save fixture
- Has a removable stopper that can accommodate various lengths with a single drill
- Has a marking that lets you perform the procedure without the stopper (reference line: at the top)
- Prevents the ridge's interference in the vertical direction during stopper removal
- Offers chamfering for the flat surface to prevent a jam with the hand piece



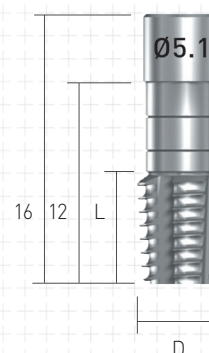
## ● CounterSink

- Forms the fixture flange/neck shape during fixture placement with hard bone
- Features a long-shank design that requires no drill extension in the posterior area
- Shank cross-section that prevents a jam with the engine
- Marking (0,5mm in thickness); reference line at the bottom
- Recommended rate: 800 rpm ~ 1,000 rpm
- Material: TrimRite



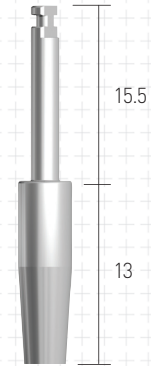
## ● Tap Drill

- Tool that realizes the fixture's screw threads for D1 bone quality
- Functions as a wrench by using the tap driver as adaptor
- Dimension: Taper type :  $\varnothing 3,5$ ;  $\varnothing 3,7$ ;  $\varnothing 4,1$ ;  $\varnothing 4,3$ ;  $\varnothing 4,8$ ;  $\varnothing 5,1$   
Straight type:  $\varnothing 3,5$ ;  $\varnothing 4,2$
- Performs tapping up to the L mark
- Recommended torque: 30N<sub>cm</sub>
- Material: TrimRite



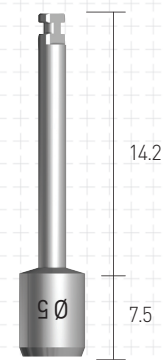
### ● Drill Extension

- Used when extending the length of a tool that includes a drill and other hand pieces
- Features increased holding strength via internal latch
- Align the tool shank's tip cross-section to that of the extension, and then connect the two. Make sure not to exert too much force on the contact point.



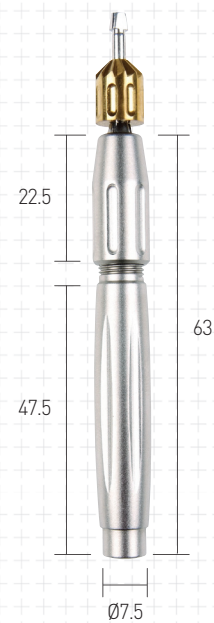
### ● Tissue Punch

- Tool used during flapless surgery
- Can be used for both primary and secondary surgeries
- Dimension:  $\varnothing 3$ ,  $\varnothing 4$ ,  $\varnothing 5$ ,  $\varnothing 5.5$ ,  $\varnothing 6$
- Recommended rate: 800 rpm
- Material: TrimRite



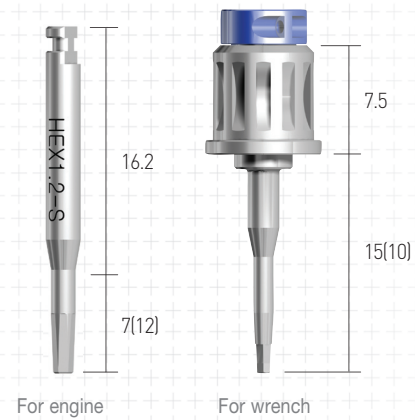
### ● Handle Reamer

- Used when removing the internal lip of the cast after plastic coping casting with the rigid-type internal connection
- Offers 4 types depending on the tip configuration
- The reamer bite's blade angle matches the coping angle.
- Material: TrimRite



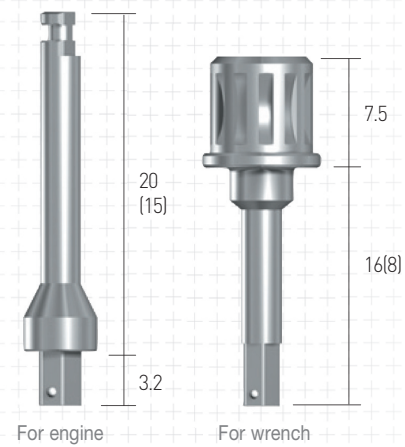
### ● Hex Driver

- Used to tighten screws with the engine or wrench
- Features added holding ability
- Specification: 0,9 hex; 1,2 hex; 1,25 hex
- Be sure to hold it so that its tip will face upward when carrying it inside the oral cavity.
- Maximum allowable torque: 20 N<sub>cm</sub> for 0,9 hex; 35 N<sub>cm</sub> for 1,2 hex; 45 N<sub>cm</sub> for 1,25 hex
- Material: TrimRite
- 0,9 - Blue Color   ■ 1,2 - Green Color   ■ 1,25 - Yellow Color



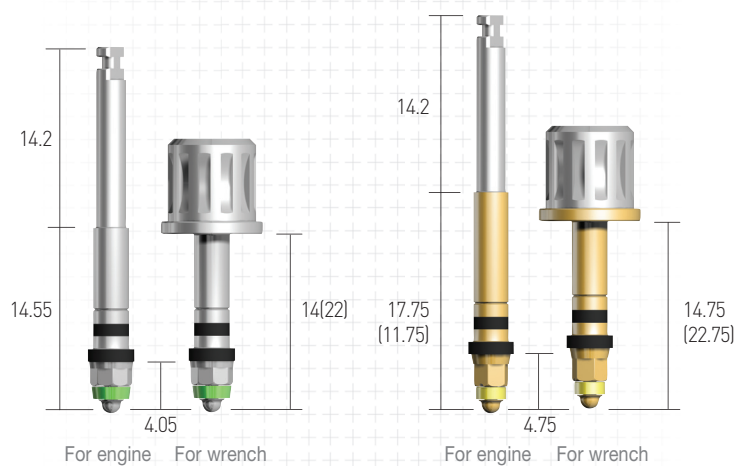
### ● Mount Driver

- Used as connected to the mount or tap via engine or wrench
- Features added holding ability
- Be sure to hold it so that its tip will face upward when carrying it inside the oral cavity.
- Recommended (allowable) torque: 50 N<sub>cm</sub>
- Material: TrimRite
- Hex 2,4 used exclusively for e-Clean Mount (ø 3,5) and for s-Clean MOA abutments and taps
- Hex 3,0 used exclusively for e-Clean Mount (ø 4,1 and ø 5,1)



### ● No Mount Driver

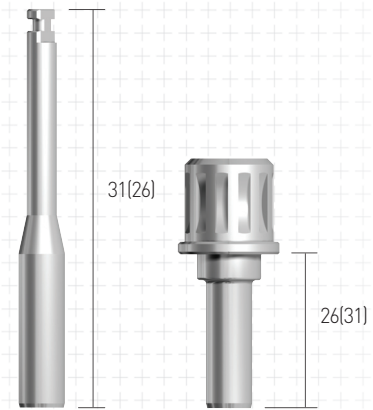
- Tool used for fixture placement
- Has a stopper that helps confirm precision fixture connection
- Features added holding ability
- Recommended torque: 50 N<sub>cm</sub>
- Material: TrimRite





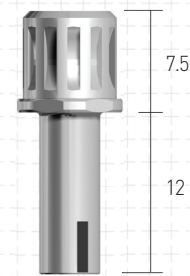
### ● I-FIX Driver

- Tool used for I-Fix placement
- Offers laser marking to help confirm the direction of connection
- Recommended torque: 50 N<sub>cm</sub>
- Material: TrimRite



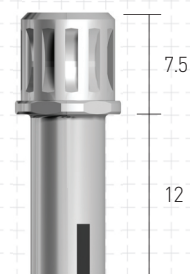
### ● Solid Abutment Driver

- Used exclusively for solid abutments
- Align the driver's laser-marked site (▼) and the solid abutment's groove, and then perform torque.
- Features added holding ability
- Can be used regardless of the abutment length
- Used as hand and ratchet
- Recommended torque: 35 N<sub>cm</sub>



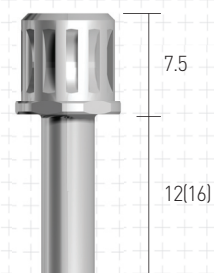
### ● Excellent Solid Abutment Driver

- Used exclusively for excellent solid abutments
- Align the driver's laser-marked site (▼) and the excellent solid abutment's groove, and then perform torque.
- Can be used regardless of the abutment length
- Features added holding ability
- Used as hand and ratchet
- Recommended torque: 35 N<sub>cm</sub>



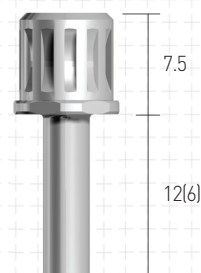
### ● Octa Abutment Driver

- Used exclusively for octa-abutments
- Offers no holding ability
- Categorized into short driver and long driver depending on the length
- Used as hand and ratchet
- Recommended torque: 35 N<sub>cm</sub>



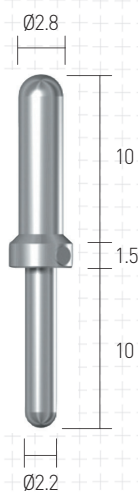
### ● O-Ring Abutment Driver

- Used exclusively for O-ring abutments
- Used as hand and ratchet
- Categorized into short driver and long driver depending on the length



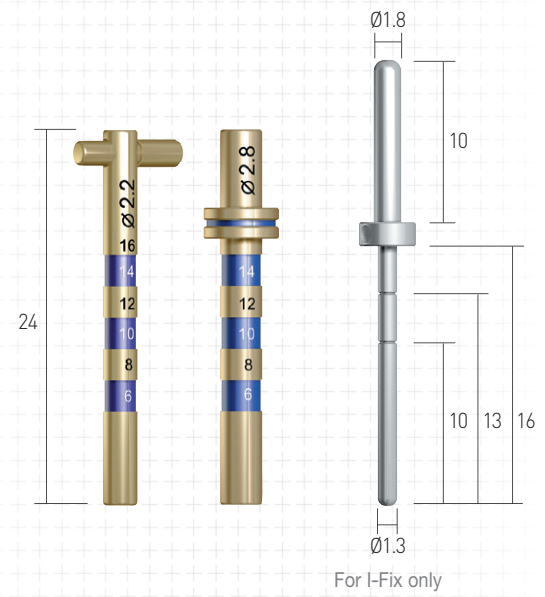
### ● Parallel Pin

- Tool used to confirm the path after drilling ( $\varnothing$  2,2 and  $\varnothing$  2,8)
  - Helps estimate the buccolingual width (BL)
  - Helps estimate the fixture implantation distance
  - Helps confirm the occlusion on the tooth in the opposite arch
- ※Note: Connect dental floss to the hole in the diameter dimension area to prevent the patient from swallowing.



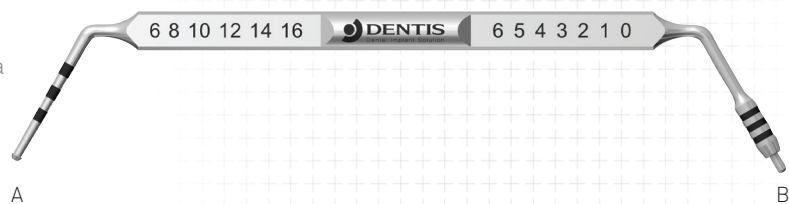
## ● Depth Gauge

- Tool used to confirm the depth after drilling ( $\varnothing 2,2$  and  $\varnothing 2,8$ )
- Features outstanding depth identification via length-specific dimension marking
- Dimension:  $\varnothing 2,2$ ;  $\varnothing 2,8$
- The I-Fix depth gauge ( $\varnothing 1,2$ ;  $\varnothing 1,7$ ) serves as both depth gauge and parallel pin.



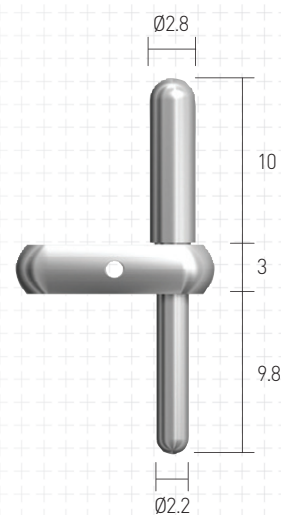
## ● Probe Depth Gauge

- Confirms the depth after drilling ( $\varnothing 2,2$ ) (A)
- Has the ability to measure the gingival depth for the s-Clean system (B)
- Features outstanding depth identification via length-specific dimension marking



## ● Positioning Guide

- Used after drilling ( $\varnothing 2,2$ ;  $\varnothing 2,8$ )
  - Helps estimate the post-drilling distance
  - Enables effective drilling for the next fixture placement by using a vertical hole
- ※Note: Connect dental floss to the hole in the diameter dimension area to prevent the patient from swallowing.



## ● Open Wrench

- Holds down the mount's square plane during mount screw removal after fixture placement and prevents fixture rotation
- Helps prevent shaking while maneuvering the ratchet drive using the holding key



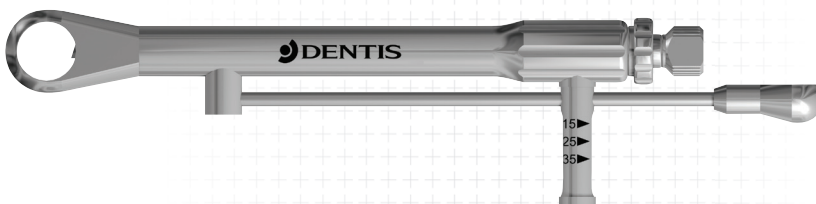
## ● Ratchet Wrench

- Used when performing unlimited torque



## ● Torque Wrench

- Capable of performing 15 N<sub>cm</sub> ~ 35 N<sub>cm</sub> torque
- Can be used as ratchet during fixture placement and tapping
- Single wrench that enables 15 N<sub>cm</sub>, 25 N<sub>cm</sub>, and 35 N<sub>cm</sub> torque as well as unlimited torque
- Features holding ability
- Be sure to eliminate all residual blood after use, since the blood remaining after implantation could lead to inaccurate torque or system failure.

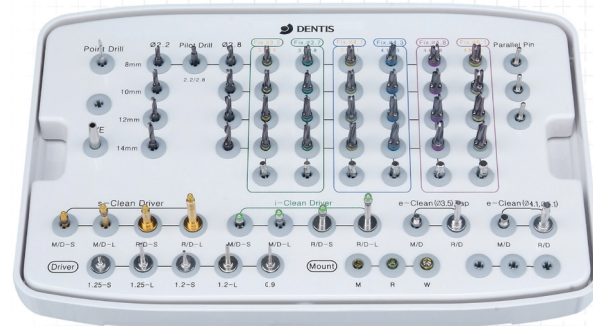


※ With all Dentis tools, the recommended maximum number of use is 50.

# Surgical Kits

## ● Combined Kit

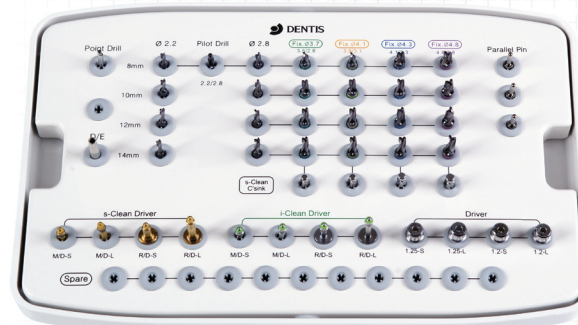
- Kit designed for tapered-body implant systems
- Features all the necessary implantation tools for the primary surgery
- Used for various cases with its wide variety of drill options
- Offers a stopper drill to enhance procedural convenience
- Allows active steam emissions during autoclave sterilization
- Made from engineering plastics with excellent durability and heat resistance



Code : DCK

## ● i-Clean/s-Clean Kit

- Kit used exclusively for i-Clean or s-Clean tapered-body implantation
- Features all the necessary implantation tools for the primary surgery
- Offers a stopper drill to enhance procedural convenience
- Provides a spare hole to allow extra tools
- Its simple layout offers outstanding visual recognition,
- Allows active steam emissions during autoclave sterilization
- Made from engineering plastics with excellent durability and heat resistance



Code : DIK

## ● e-Clean Kit

- Kit used exclusively for e-Clean tapered-body implantation
- Features all the necessary implantation tools for the primary surgery
- Offers a stopper drill to enhance procedural convenience
- Provides a spare hole to allow extra tools
- Its simple layout offers outstanding visual recognition
- Allows active steam emissions during autoclave sterilization
- Made from engineering plastics with excellent durability and heat resistance



Code : DEK

### ● Straight Kit

- Kit used exclusively for straight fixture placement
- Features all the necessary tools for straight fixture implantation during the primary surgery
- Offers a stopper drill to enhance procedural convenience
- Adopts a color line to enhance procedural convenience
- Provides a spare hole to allow extra tools
- Made from engineering plastics with excellent durability and heat resistance



Code : DCSK

### ● SAVE Kit

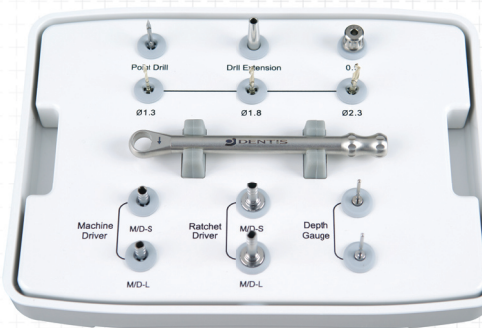
- Kit used exclusively for SAVE implant placement
- Offers a drill stopper to enhance procedural convenience
- Allows active steam emissions during autoclave sterilization
- Features a semi-transparent top case (cover) that facilitates the observation of internal components
- Offers simple design
- Made from engineering plastics with excellent durability and heat resistance



Code : DSK

### ● I-Fix Kit

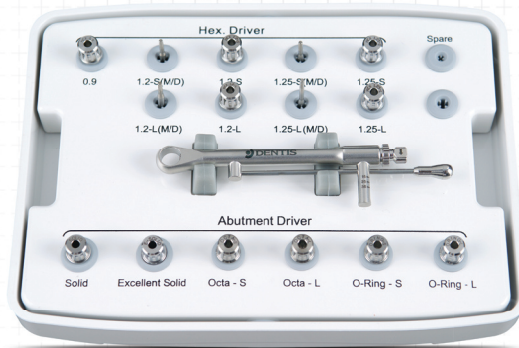
- Kit used exclusively for mini-implant placement
- Enables post, o-ring, and angle-type procedures
- Allows active steam emissions during autoclave sterilization
- Features a semi-transparent top case (cover) that facilitates the observation of internal components
- Offers a simple design
- Made from engineering plastics with excellent durability and heat resistance



Code : DMK

## ● Restorative Kit

- Features all the necessary tools for the secondary surgery
- Has tools used exclusively for abutment and screw fixture
- The 0.9 hex driver is used for tightening external C/S and I-Fix mount screws.
- Allows active steam emissions during autoclave sterilization
- Features a semi-transparent top case (cover) that facilitates the observation of internal components
- Made from engineering plastics with excellent durability and heat resistance



Code : DRK

## ● Pro Kit

- Confirms post-i Fixture placement implant size and soft tissue thickness
- Made from plastics that allow easy removal from the fixture
- Capable of accommodating various product groups
- Can be used semi-permanently
- Features a semi-transparent top case (cover) that facilitates the observation of internal components
- Made from engineering plastics with excellent durability and heat resistance



Code : DPK

## ● GBR Kit

- Features fixed screws that are used to prevent bone detachment after the GBR procedure and tools to perform the procedure
- Enhances procedural convenience via various screw length options (4mm; 6mm; 8mm)
- Offers storage space for the mesh (sold separately)
- Helps minimize tissue damage by adopting cross-head design
- Provides the machine and hand driver to enhance procedural convenience
- Offers autoclave sterilization



Code : DGK

## ● Tissue Punch

- Allows incision-free procedure during the primary and secondary surgeries
- Makes tissue removal easier by creating a hole of the appropriate size during use
- Features outstanding cutting efficiency
- Helps heal fast after the procedure
- Offers easier product identification via marking in the head area



※ Dentis offers one (1) year warranty from the date the packing is opened.

# Cleaning and sterilization

If you have purchased the Dentis surgical kit or Dentis surgical tool(s), and you will be using it(them) for surgery, be sure to perform autoclave sterilization (15 minutes at 132°C or 30 minutes at 121°C) prior to the surgery. You must also pay attention to the warnings below.

- Keep the post-procedural tools in distilled water or alcohol. After implant placement is completed, be sure to rinse the surface of the tools thoroughly with distilled or running water.
- DO NOT use peroxide for storing or washing the tools since it could cause discoloration and/or corrosion on the coating or marking of the tools. Be sure to remove the blood from the tools' surface thoroughly.
- After washing, completely eliminate the moisture from the tools' surface and place them inside the surgical kit case. Storing the tools outside the case will expose them to an ambient environment conducive for corrosion and may compromise their service life.
- When completing autoclave sterilization, immediately remove the tools or the kit from the sterilization agent, remove the moisture from the surface of the tools or kit, and store them in an ambient environment. Leaving the products in the agent long after sterilization is completed will compromise the products' service life due to ambient moisture and could cause corrosion to set in early.
- Drills, gauges, and hex drivers may not be subjected to ultrasonic sterilization.
- Our torque ratchets allow easy assembly and disassembly. When washing, make sure you disassemble them before subjecting them to ultrasonic sterilization. When no ultrasonic sterilizer is available, disassemble the ratchet and thoroughly remove the bone residues and other matters from the head and spring of the ratchet before putting it away for storage.
- We prohibit our tools from being used for purposes other than dental implantation procedures.

