

COWELL® DIGITAL PRODUCTS

Drive yourself to COWELLMEDI's Digital Transformation

Ver. 26

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CWA
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The pioneers in Dental Implant & E.rhBMP-2

COWELL® Digital Products

DIGITAL GUIDED SURGERY KIT

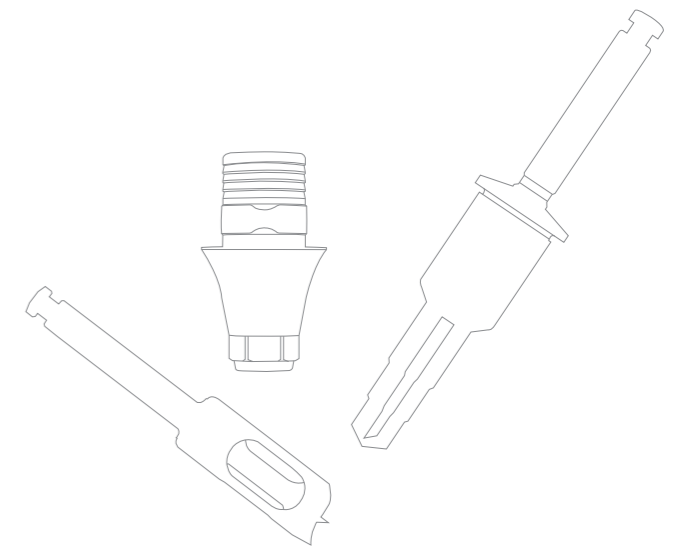
- 002 InnoFit® Lodestar Plus Kit
- 016 InnoFit® Lodestar Kit

DIGITAL PROSTHESIS

- 027 InnoFit® Hybrid Ti-Base & Block
- 028 InnoFit® Multi & Lock Hybrid Ti-Base
- 029 InnoFit® Hybrid Ti-Base (INNO Sub. Narrow)

COWELL® DIGITAL PRODUCTS

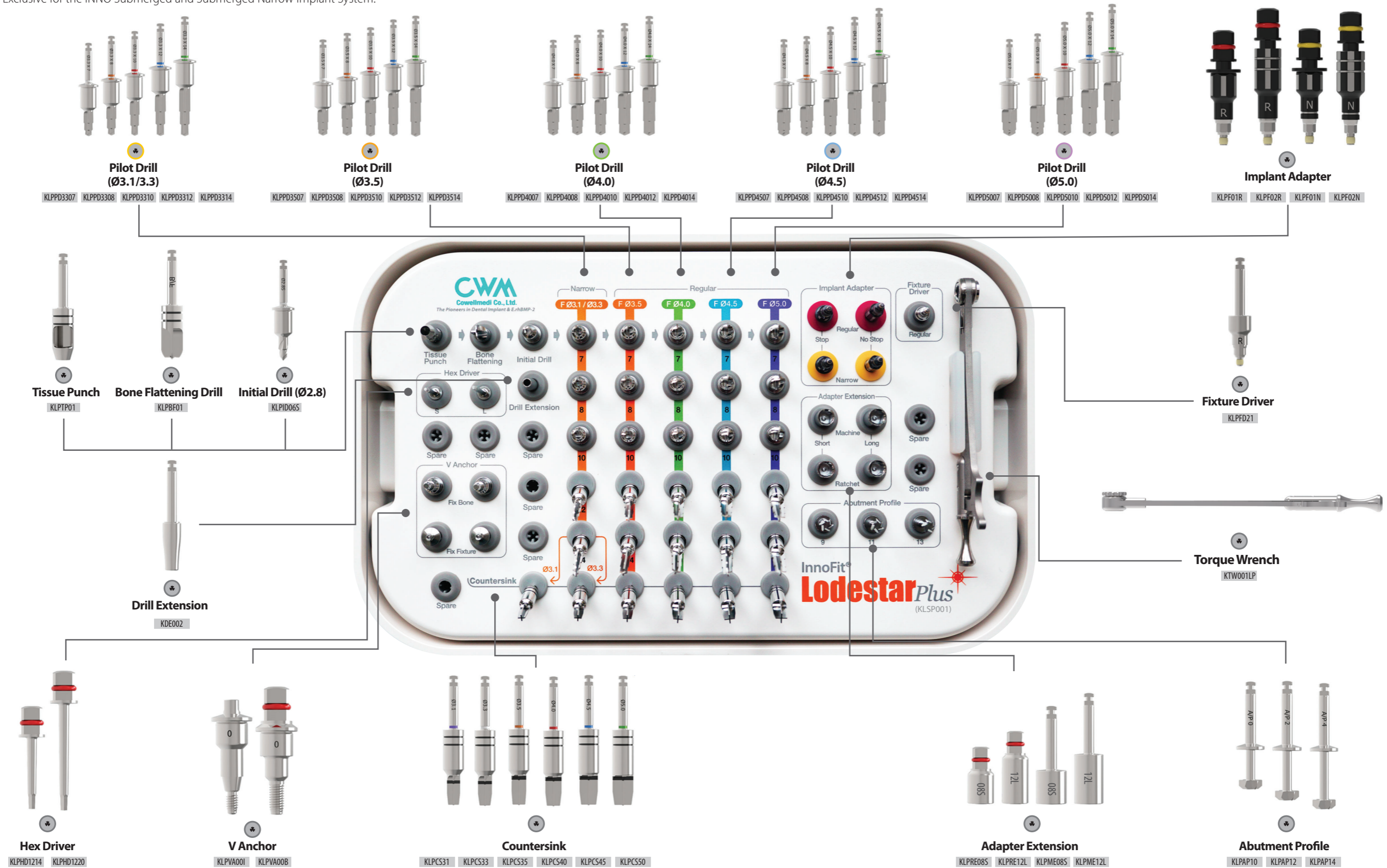
*Drive yourself to COWELLMEDI's
Digital Transformation*



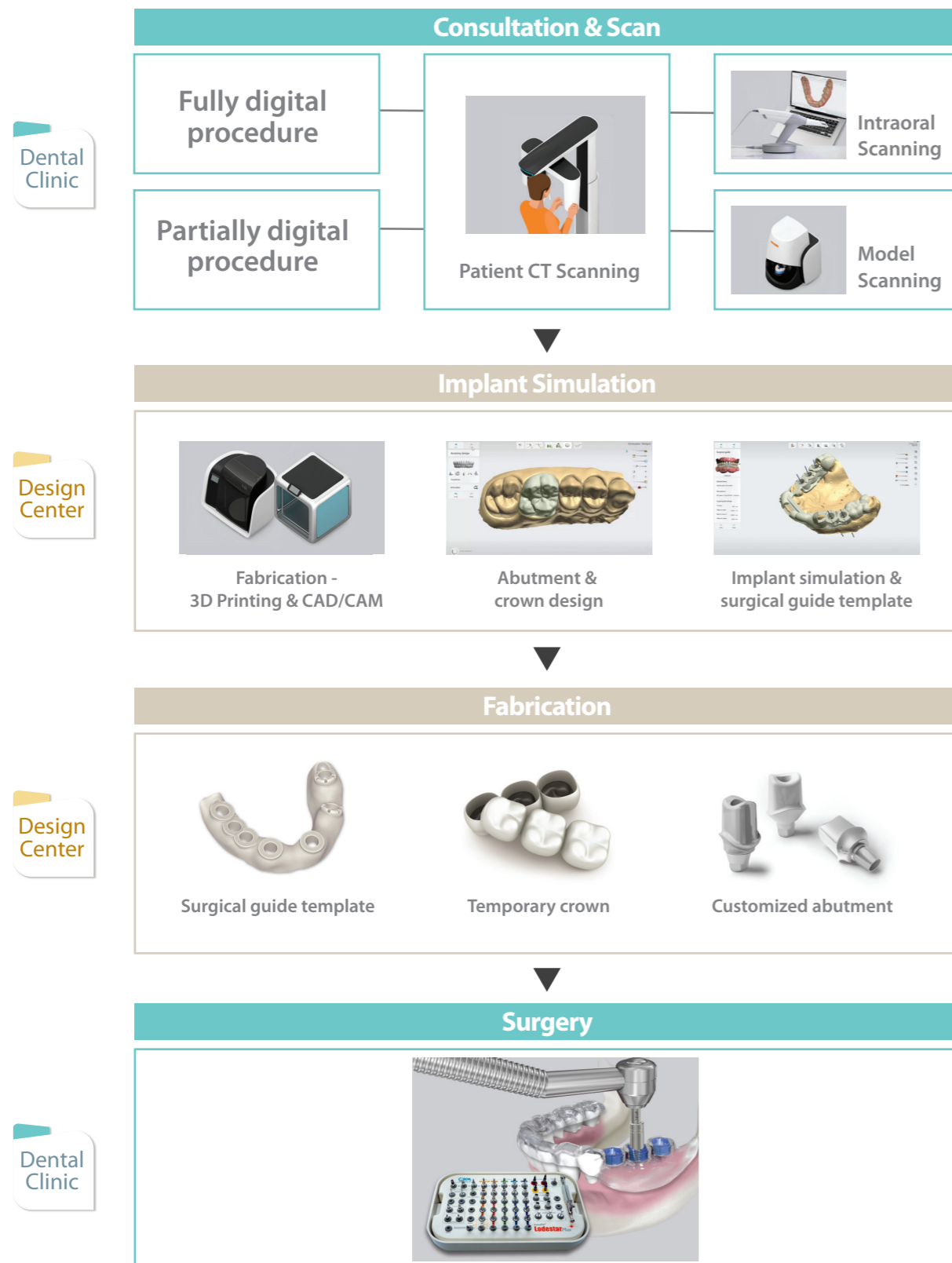
InnoFit® LODESTAR PLUS KIT

[KLSP001]

- > A total guided surgery solution applicable to various types of clinical cases.
- > Exclusive for the INNO Submerged and Submerged Narrow Implant System.



Workflow



Preparation before Operation

Disinfection of surgical guide template

Disinfection must be done before the operation. Immerse the surgical guide template into the alcohol and chlorhexidine solution in a ratio of 9:1 or disinfection fluids such as CidexOPA, betadine, etc. for more than 20 minutes. Then rinse with the saline solution and install in patient's oral cavity.

Installation of surgical guide template

- Check if inward of surgical guide and outward of teeth are accurately contacted through the windows of mounted surgical guide template. In case of insufficient scan data, delete and adjust the inner side of the surgical guide template to contact precisely.
- Install the surgical guide template while scanning CT to check implantation path and precision before the operation. (Implantation path may also be checked in post operation by scanning CT with installation of the surgical guide template).

Verification of dental implant

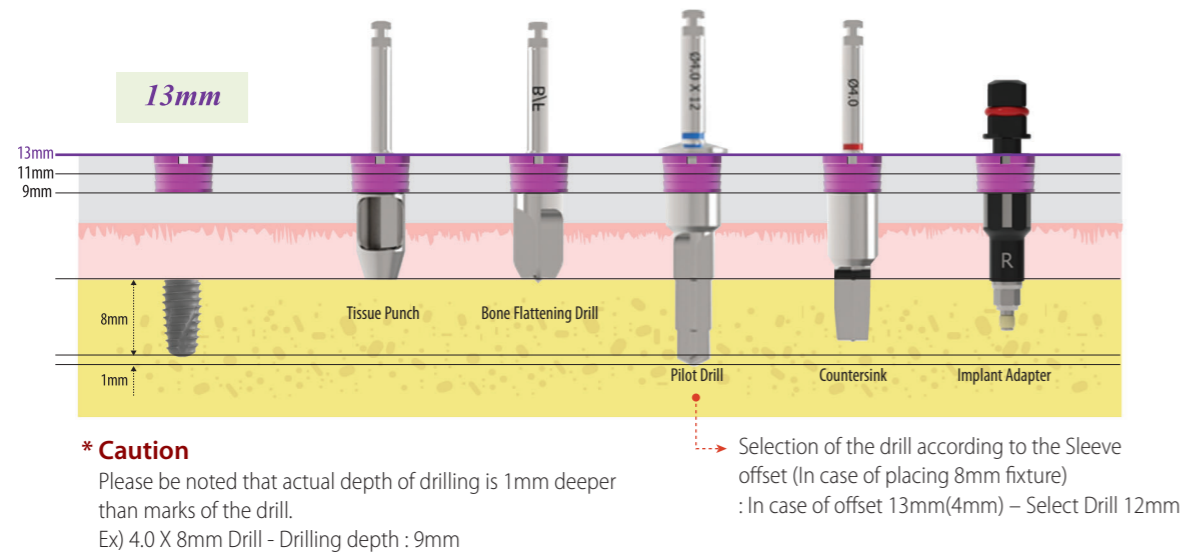
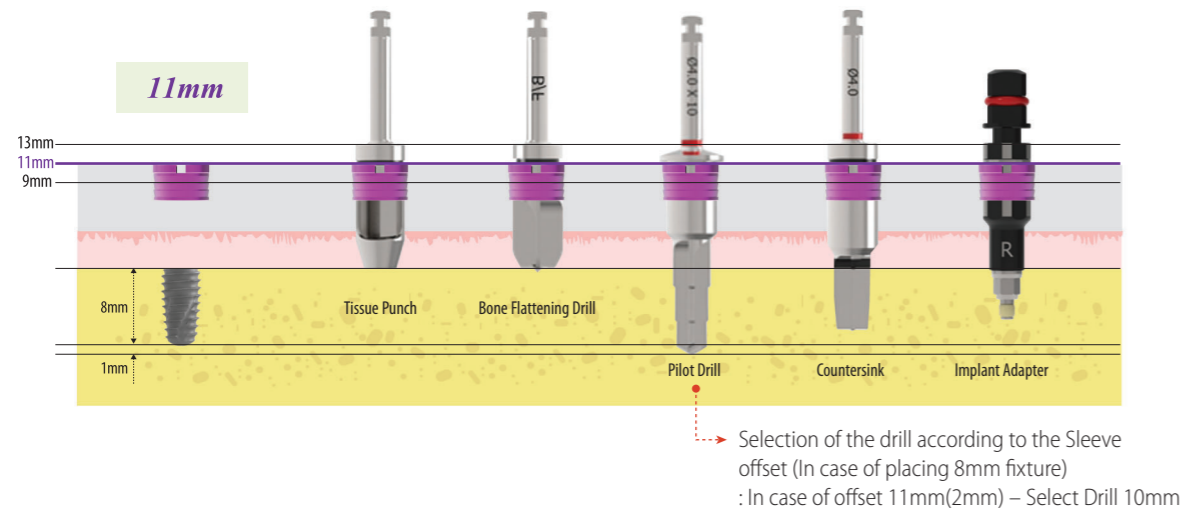
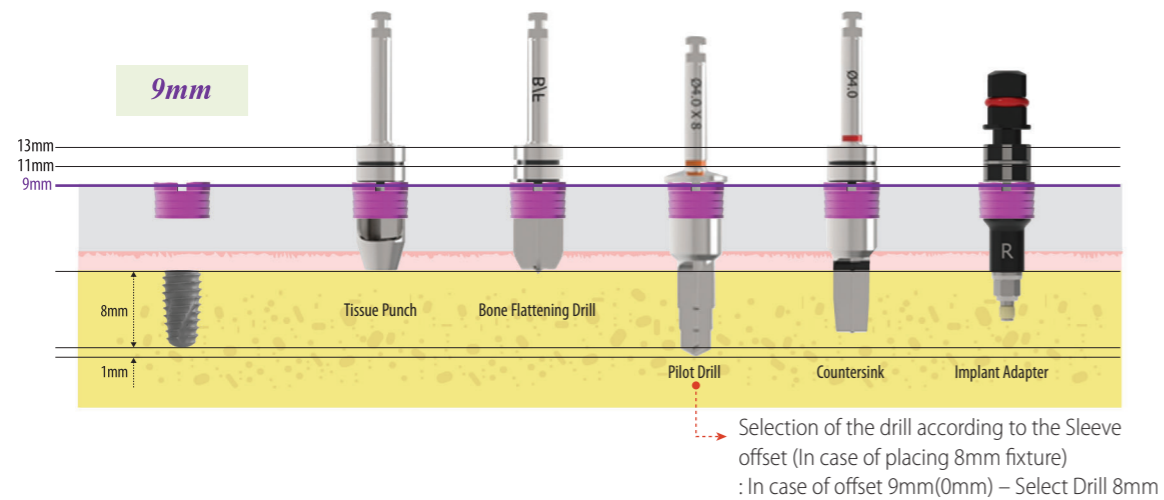
Check if marked dental implant is in the surgical report.

Confirmation of protocol

Confirm the surgical report and surgical protocol for the last time.

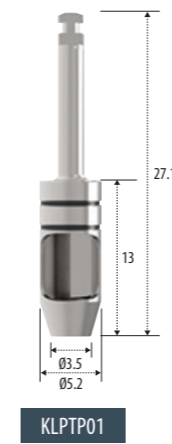
Comprehension and Usage of Offset

- > The basic length from the fixture platform to the top of the Sleeve is 9mm.
- > In case that gingival is thick or fixture needs to be placed deeper due to low bone density, use the Sleeve 2 or 4mm upright to the top.
- > The higher offset value, the less accurate it will be, so use 9 mm if possible.



*** Caution**
Please be noted that actual depth of drilling is 1mm deeper than marks of the drill.
Ex) 4.0 X 8mm Drill - Drilling depth : 9mm

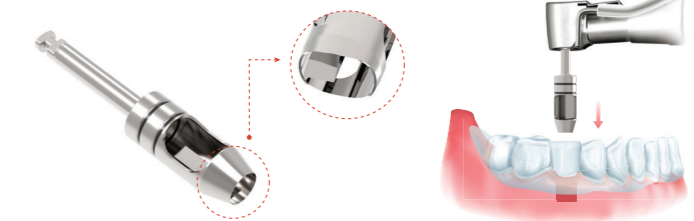
Tissue Punch



- > Used for soft tissue elimination (the gingiva in the position where the implant is to be placed can be incised in a circular shape).
- > Hemostatic effect, small scar, fast wound healing affect is occurred after the operation due to small diameter of tissue punch.
- > Able to apply offset (9mm, 11mm, 13mm).
- > 50rpm without irrigation.

Double blade

The internal cutting edge of the Tissue Punch cuts the gingiva into small pieces so that those can be removed by suction without extra work.

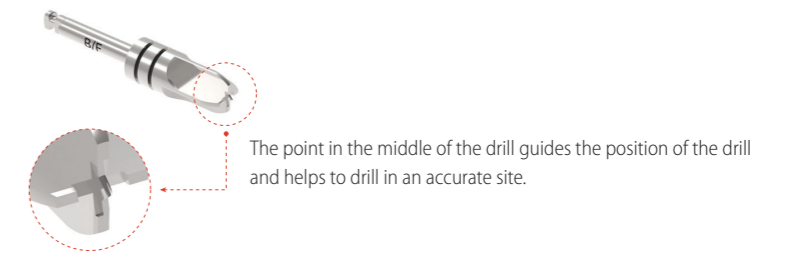


*** Caution** The Tissue Punch must be kept clean. Otherwise, it may cause rust or blade damage due to residual gingival pieces or others in the Tissue Punch after the operation (Remove the residual gingiva piece by explorer, steam and etc.).

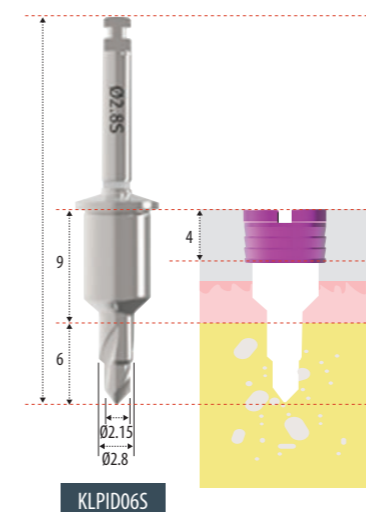
Bone Flattening Drill



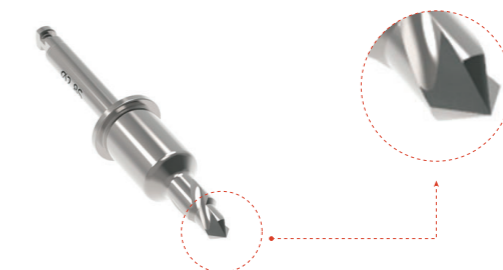
- > Flattens the bone level of operation site.
- > Inclined bone level may glide the drill and cannot drill as planned.
- > Eliminate the soft tissue after using the Tissue Punch.
- > The point in the middle of the drill guides the position of the drill and helps to drill in an accurate site.
- > Able to apply offset (9mm, 11mm, 13mm).
- > 400rpm without irrigation / 800 rpm with irrigation.



Initial Drill



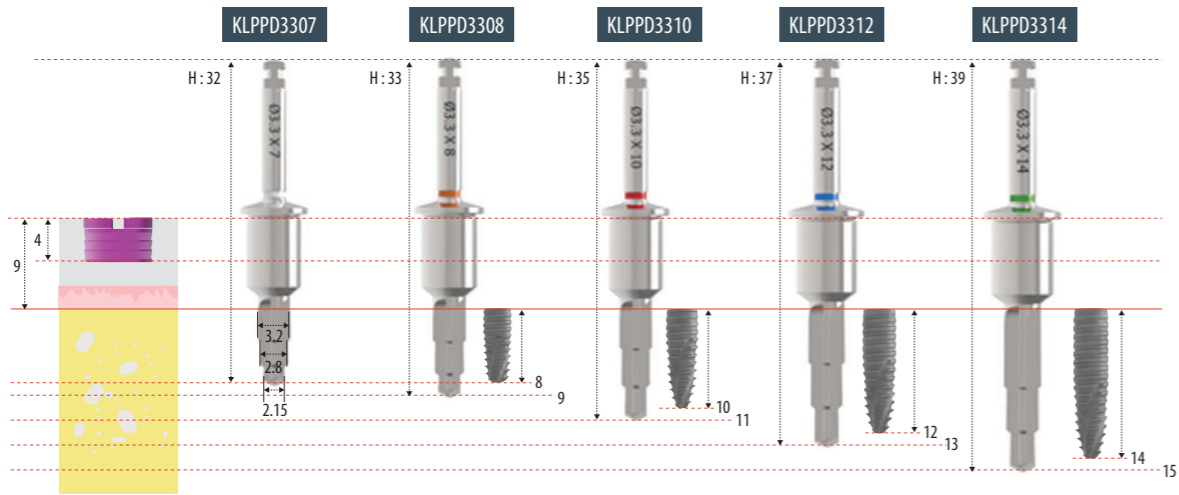
- > High speed, 1000rpm with irrigation



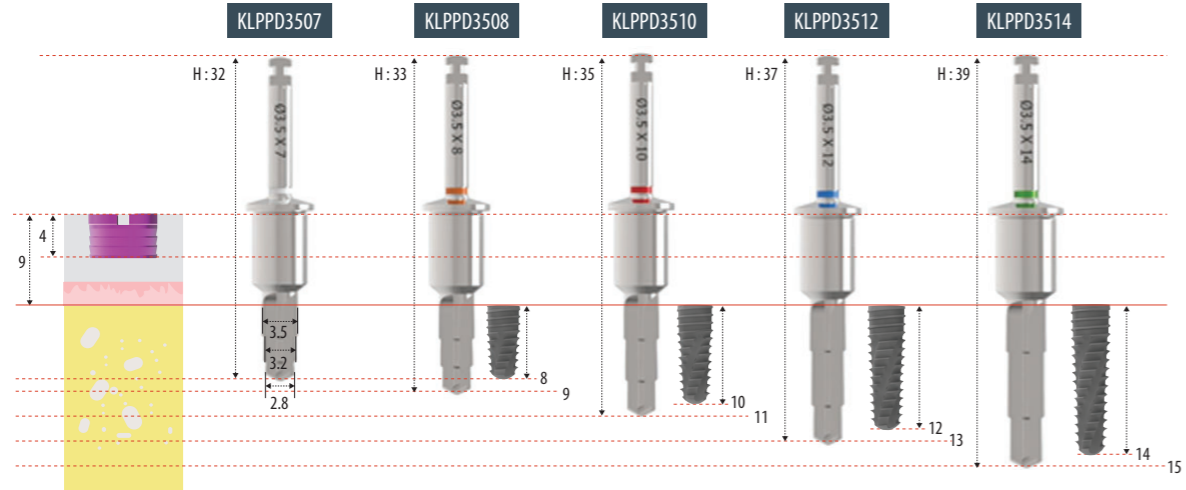
Point

Creates the hole on the bone surface so that the axis of the next step drill is not moved and it guides the drill position by preventing slip even at the inclined bone level.

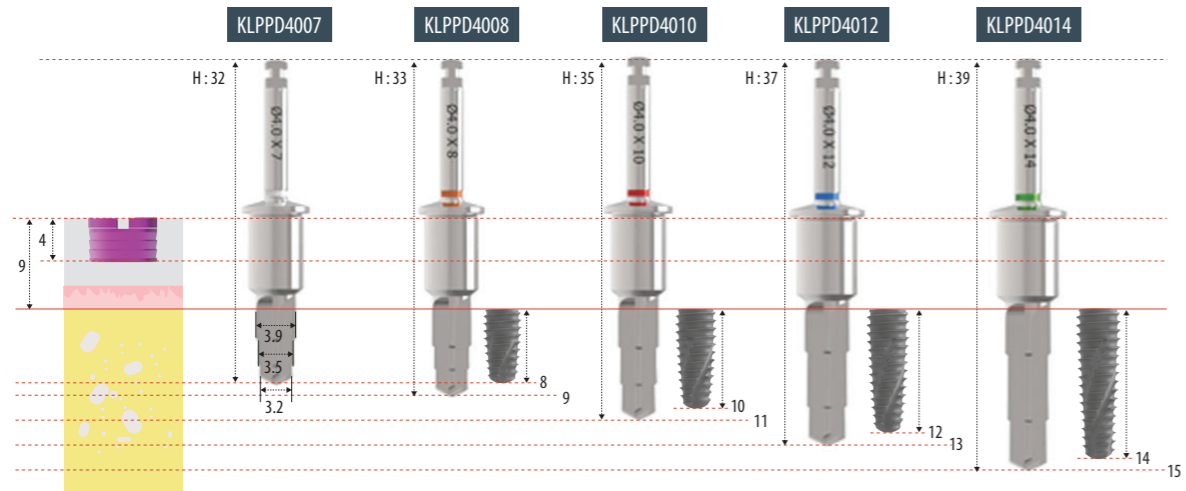
Ø3.1/Ø3.3 Fixture



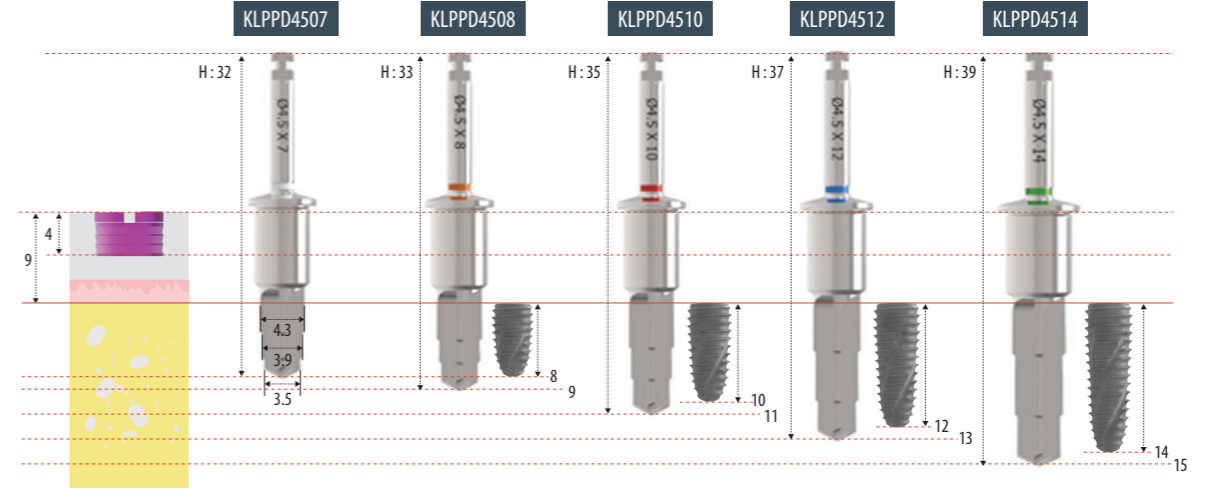
Ø3.5 Fixture



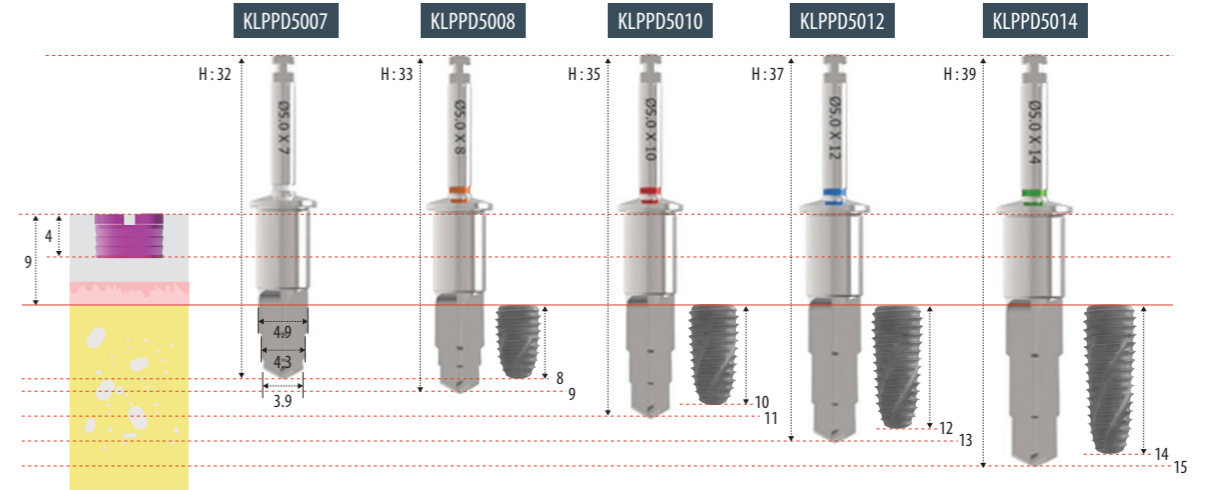
Ø4.0 Fixture



Ø4.5 Fixture

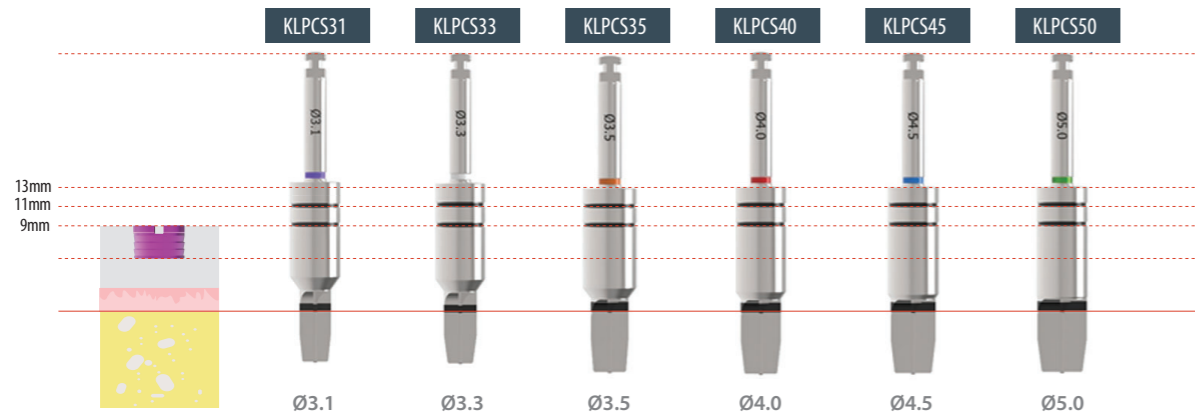


Ø5.0 Fixture



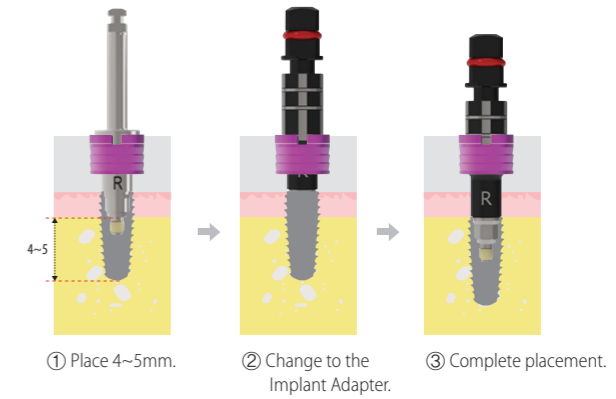
Countersink

- > Expand the cortical bone in D1/D2 bone to prevent excessive implantation of the fixture.
- > Able to apply offset (9mm, 11mm, 13mm).
- > 50rpm without irrigation.



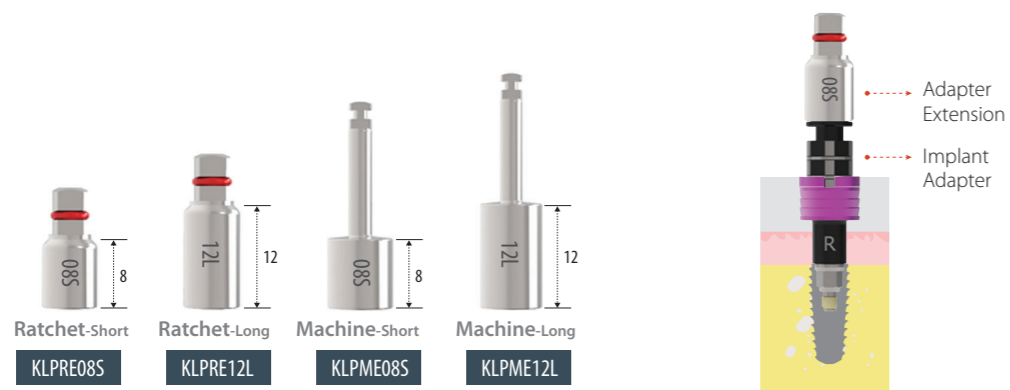
Fixture Driver - Molar

- > Use in case the Implant Adapter can not be used due to small size of opened mouth or narrow gap between antagonist tooth.
- > After implanting 4~5mm, change to the Implant Adapter to complete placement.



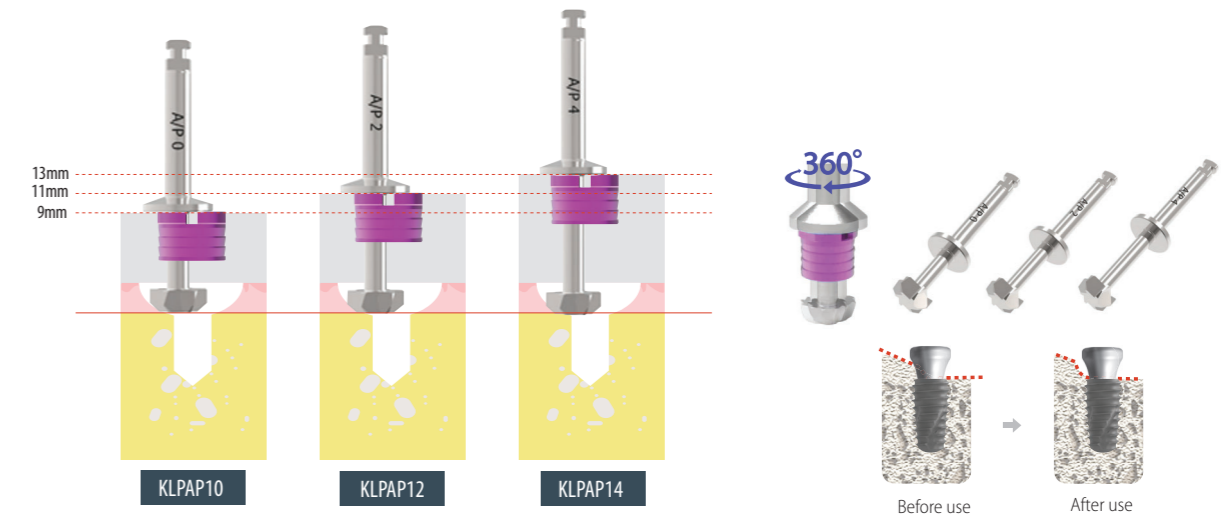
Adapter Extension

- > In case the Implant Adapter is too short to use, connect the Ratchet or Machine Adapter Extension to place the fixture.



Abutment Profile

- > Used for elimination of the alveolar bone that interferes with the accurate connection of abutment. Remove residual bone by rotating and drilling 360 degrees.
- > In case of thick cortical bone, higher the drilling rpm and use with irrigation (within 100rpm).



Implant Adapter

- > Move fixture to the Sleeve to implant safely.
- > Match the depth of laser marks of the Sleeve offset and Implant Adapter.
- > When implanting the fixture, the direction of the Implant Adapter and directional identification groove of the Sleeve are matched, it lines with the hex direction of temporary abutment.
- > In case the Implant Adapter cannot be removed by cold welding after placing the fixture, hang the crown remover on the groove to remove.



V Anchor - Fix Fixture

> Connect the 1.2 Hex Driver to implanted fixture to prevent the movement of the surgical guide template in cases as edentulous.

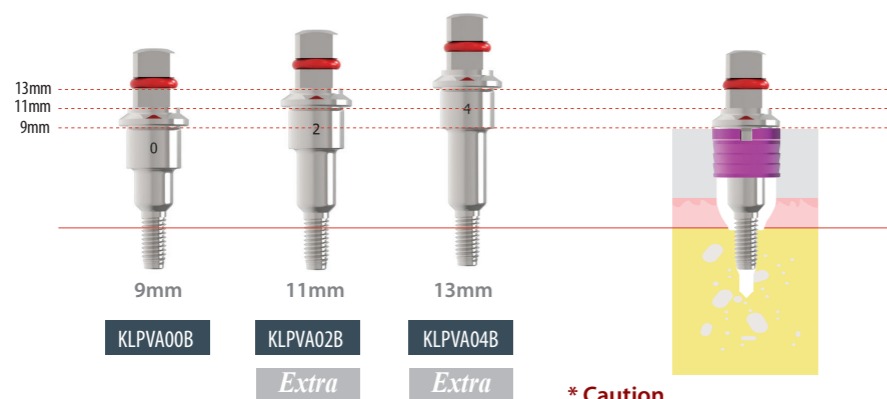


*** Caution**

- Connect by aligning to the Sleeve offset of connected fixture.
- Basic composition of the Sleeve offset 9mm (11, 13mm extra).

V Anchor - Fix Bone

> Fix the V Anchor using the Torque Wrench in the hole made after initial drilling to prevent the movement of the surgical guide template in cases as edentulous.



*** Caution**

- Connect by aligning to the Sleeve offset of connected fixture.
- Basic composition of the Sleeve offset 9mm (11, 13mm extra).

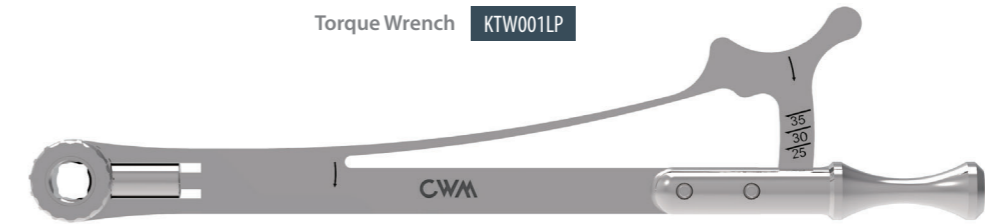
Ratchet 1.2 Hex Driver

> Use in case of connecting the Cover Screw or Healing Abutment.

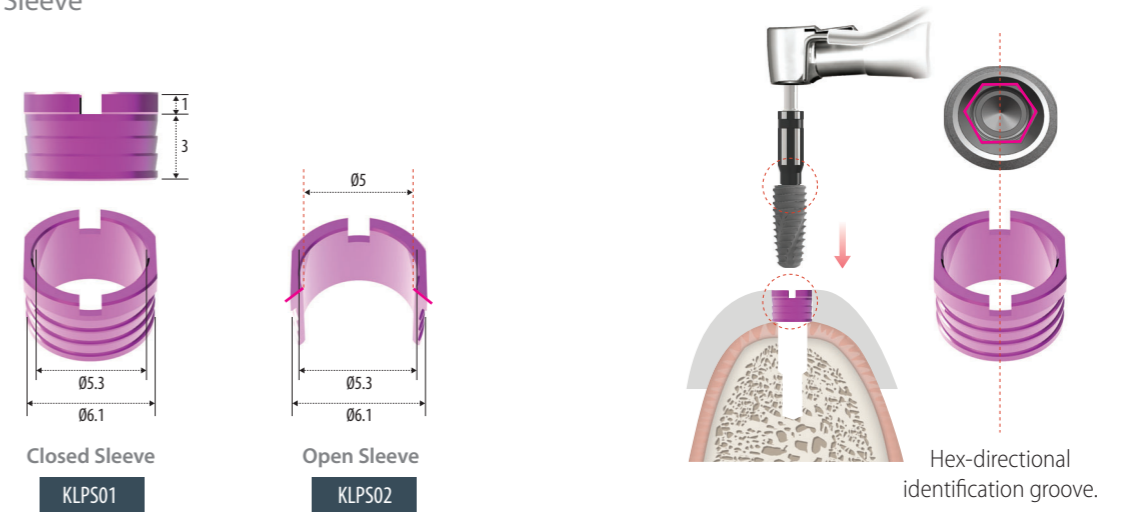


Torque Wrench(Square)

- > Use to implant the fixture (Connect to the Implant Adapter).
- > Use after connecting to the 1.2 Hex Driver.
- > Use after connecting to the V Anchor (Fix Bone).



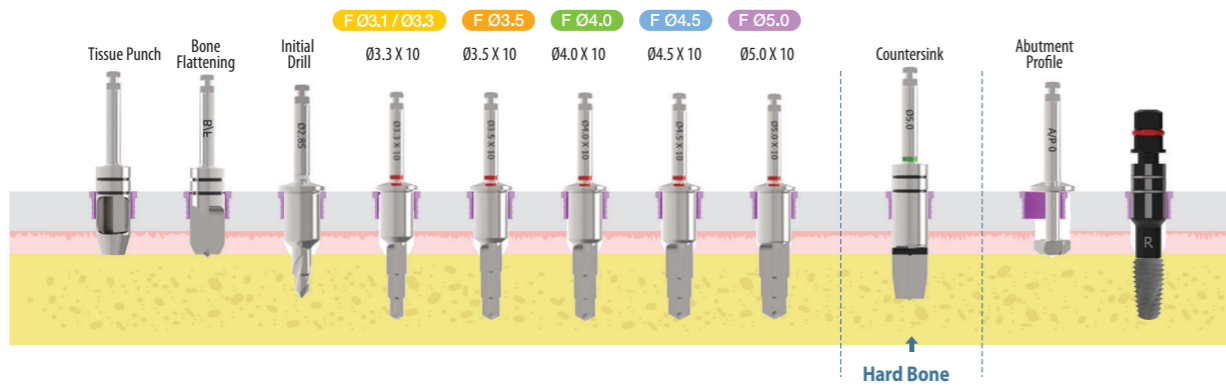
Sleeve



Drill Protocol

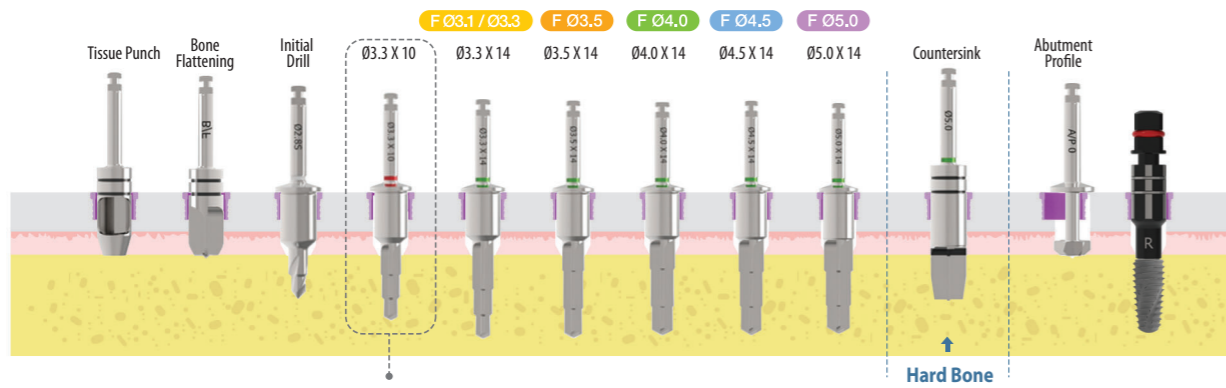
Drill Protocol (7~10mm)

INNO Sub Fixture Ø5 x 10mm



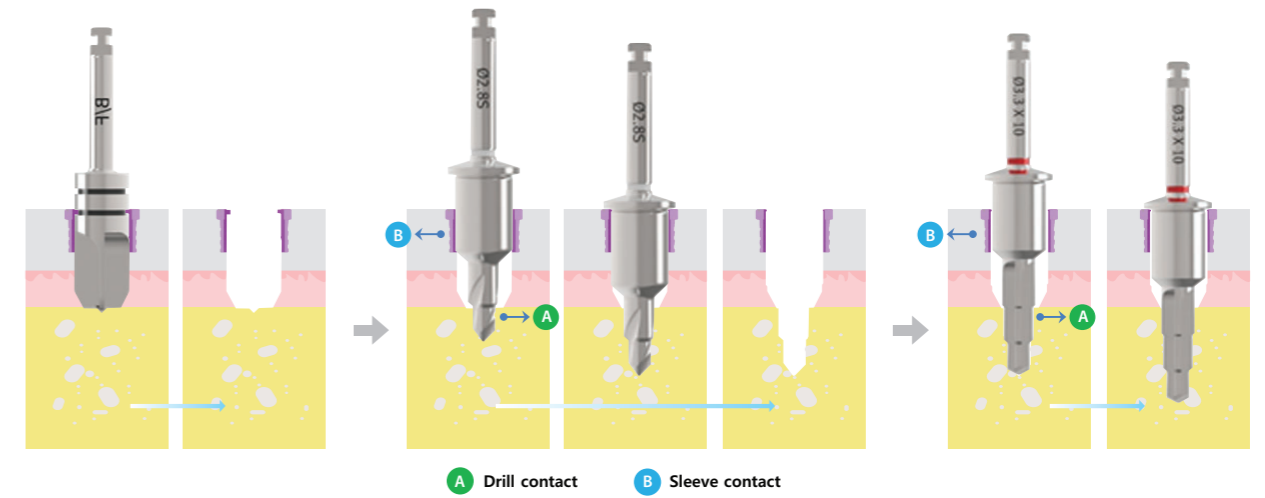
Drill Protocol (12~14mm)

INNO Sub Fixture Ø5 x 14mm



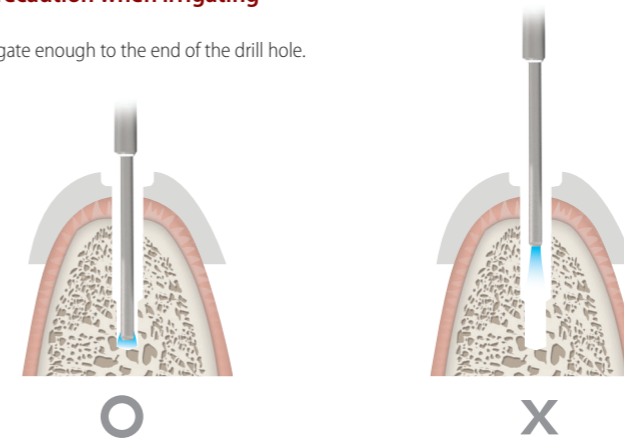
8~10mm drilling should be done in advance for the sleeve contact.

- * Drilling method**
- Make sure with drilling in a desired direction without a change in path through the primary drill contact (A) with the hole created by the previous drilling and the secondary contact (B) with the sleeve.
 - Create the hole using the initial drill and insert the next drill into the hole made during the previous step and drill after achieving the drill and sleeve contact (A&B).
 - If drilling only with the sleeve contact (B) without the drill contact (A), the path may not be correct.



*** Precaution when irrigating**

- Irrigate enough to the end of the drill hole.



InnoFit® LODESTAR KIT

[KLS001]

- > A cost-effective guided surgery solution applicable to various types of clinical cases.
- > Universal to any implant system.

Ø2.0 X 7 Ø2.0 X 8 Ø2.0 X 10 Ø2.0 X 12 Ø2.0 X 14



Pilot Drill(Ø2.0)

KLSPD2007 KLSPD2008 KLSPD2010 KLSPD2012 KLSPD2014

Ø2.7 X 7 Ø2.7 X 8 Ø2.7 X 10 Ø2.7 X 12 Ø2.7 X 14



Pilot Drill(Ø2.7)

KLSPD2707 KLSPD2708 KLSPD2710 KLSPD2712 KLSPD2714

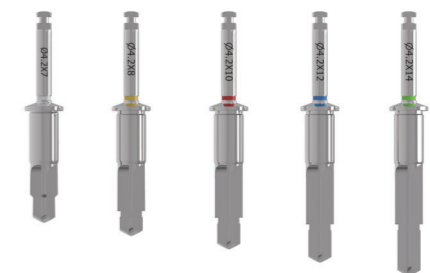
Ø3.4 X 7 Ø3.4 X 8 Ø3.4 X 10 Ø3.4 X 12 Ø3.4 X 14



Pilot Drill(Ø3.4)

KLSPD3407 KLSPD3408 KLSPD3410 KLSPD3412 KLSPD3414

Ø4.2 X 7 Ø4.2 X 8 Ø4.2 X 10 Ø4.2 X 12 Ø4.2 X 14



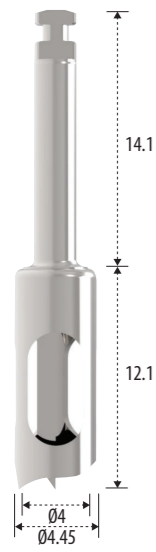
Pilot Drill(Ø4.2)

KLSPD4207 KLSPD4208 KLSPD4210 KLSPD4212 KLSPD4214

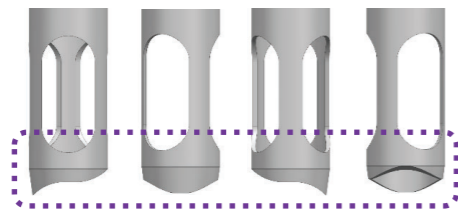


Tissue Punch

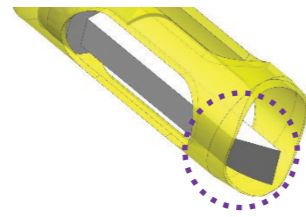
> The gingiva in the position where the implant is to be placed can be incised in a circular shape, and it can also be used in inclined bones (50 rpm without irrigation).



KLSTP45



The gingiva can be incised in a circular shape although bone level is inclined or not parallel.

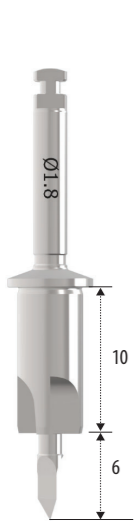


The internal cutting edge of the Tissue Punch cuts the gingiva into small pieces so that those can be removed by suction without extra work.

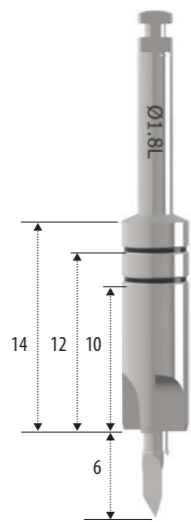


Initial Drill

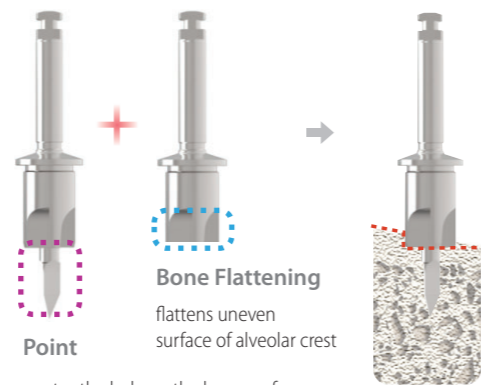
> The drill combined with bone flattening drill and point drill which no separate bone flattening drill is required provides simpler procedure and shorter chair time (1,000 rpm with irrigation).



KLSID18



KLSID18L



Point

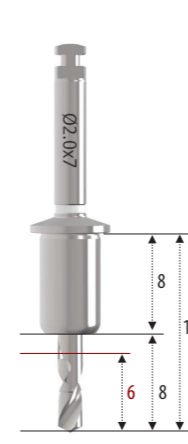
creates the hole on the bone surface so that the axis of the next step drill is not moved and it guides the drill position by preventing slip even at the inclined bone level.

Bone Flattening
flattens uneven surface of alveolar crest

Pilot Drill

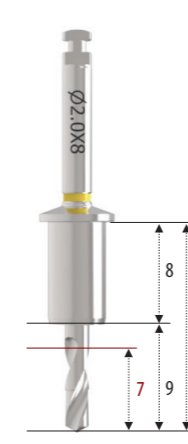
> Ø2.0 / Ø2.7 / Ø3.4 / Ø4.2.

Ø2.0 : High Speed - 600 rpm



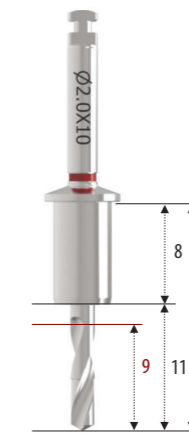
Pilot Drill 16mm(6mm)

KLSPD2007



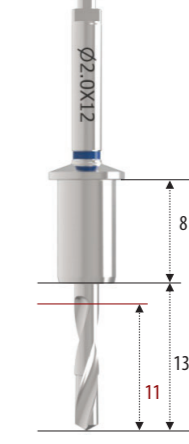
Pilot Drill 17mm(7mm)

KLSPD2008



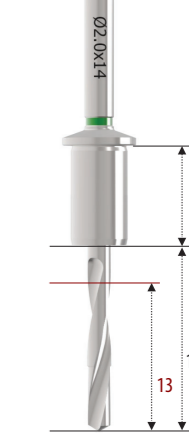
Pilot Drill 19mm(9mm)

KLSPD2010



Pilot Drill 21mm(11mm)

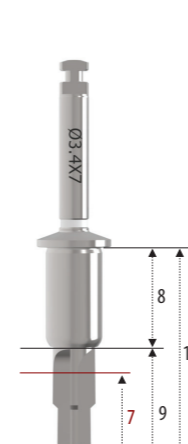
KLSPD2012



Pilot Drill 23mm(13mm)

KLSPD2014

Ø2.7 / Ø3.4 / Ø4.2 : Low Speed 50~200rpm/50Ncm

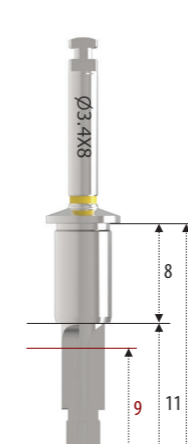


Pilot Drill 17mm(7mm)

KLSPD2707

KLSPD3407

KLSPD4207

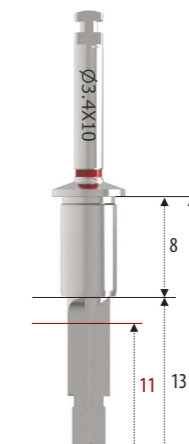


Pilot Drill 19mm(9mm)

KLSPD2708

KLSPD3408

KLSPD4208

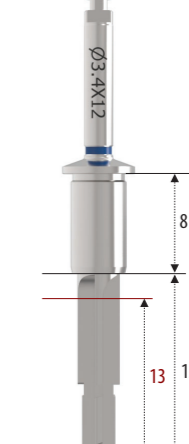


Pilot Drill 21mm(11mm)

KLSPD2710

KLSPD3410

KLSPD4210

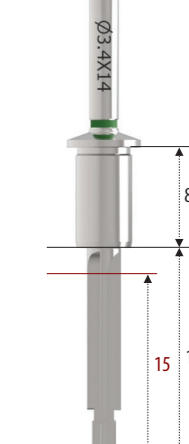


Pilot Drill 23mm(13mm)

KLSPD2712

KLSPD3412

KLSPD4212



Pilot Drill 25mm(15mm)

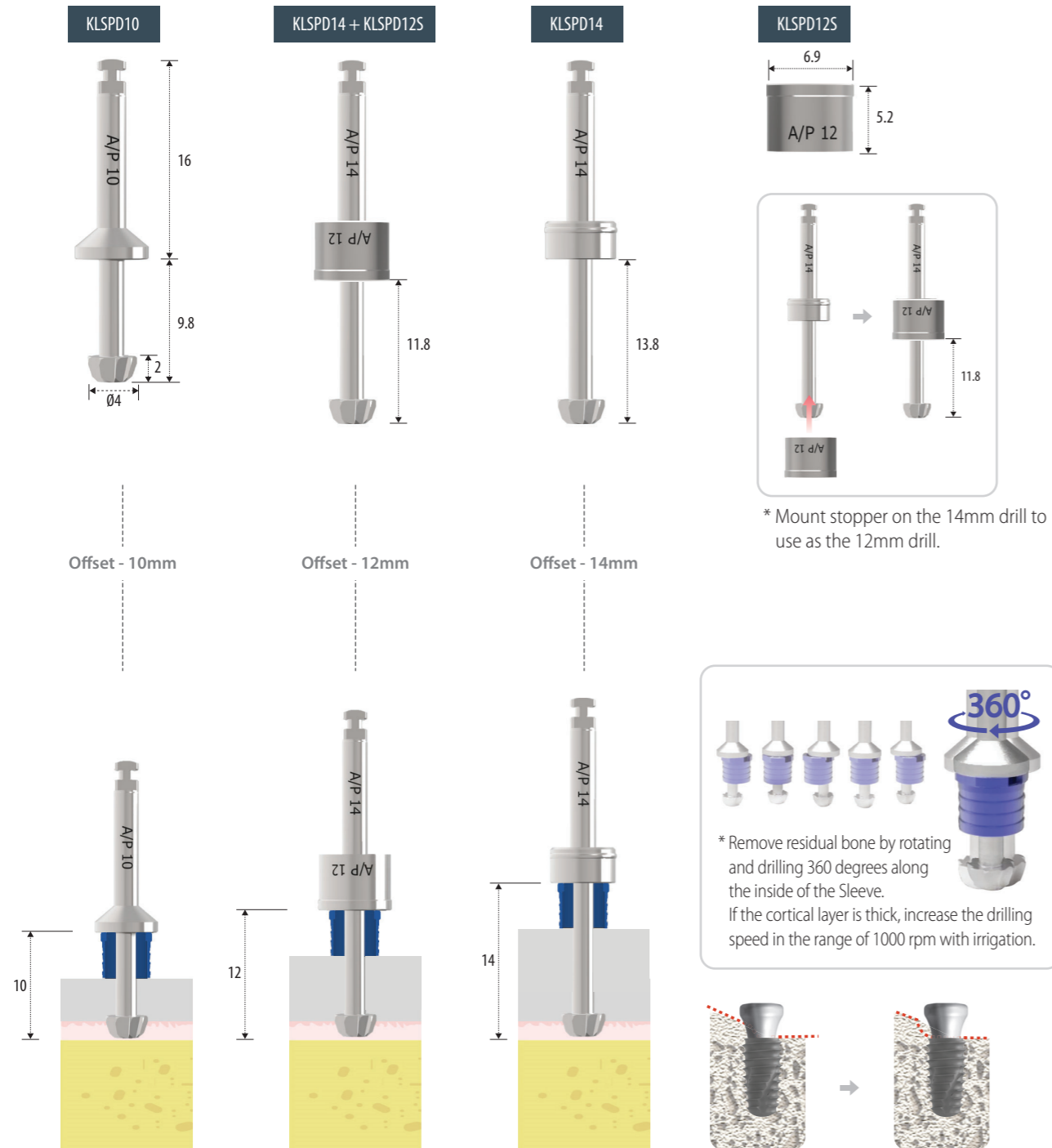
KLSPD2714

KLSPD3414

KLSPD4214

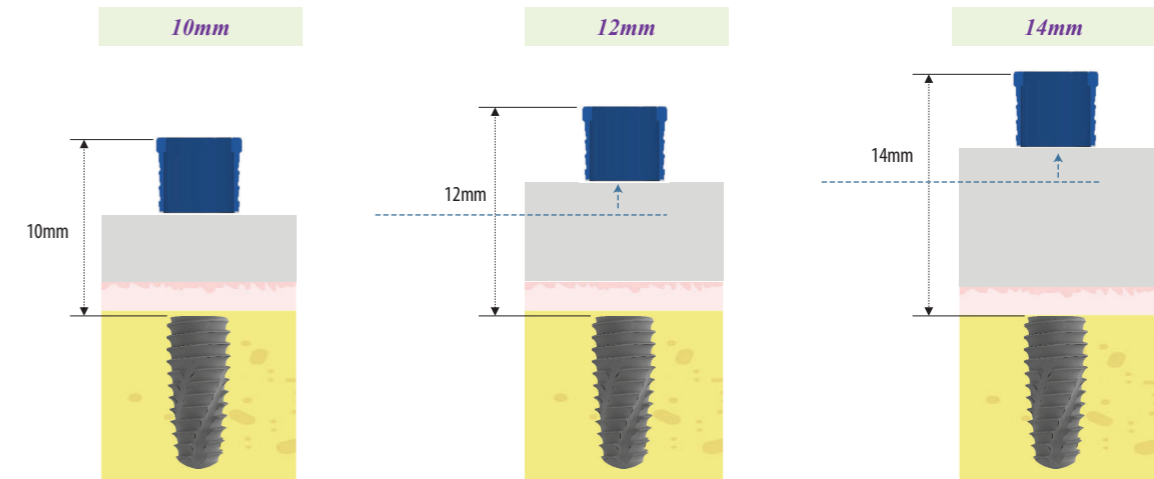
Abutment Profiler

> Used for elimination of the alveolar bone that interferes with the accurate connection of abutment.

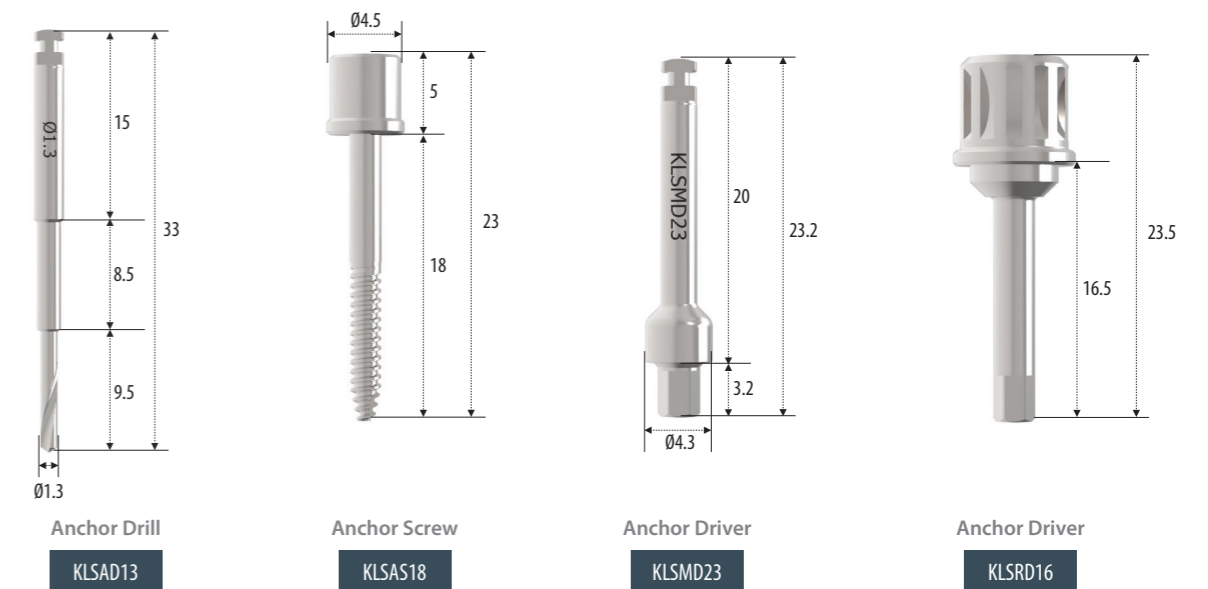


* Offset length setting

- The basic length from the fixture platform to the top of the Sleeve is 10mm.
- In case that gingival is thick or fixture needs to be placed deeper due to low bone density, use the Sleeve 2 or 4mm upright to the top.
- The higher offset value, the less accurate it will be, so use 10 mm if possible.



Anchor System



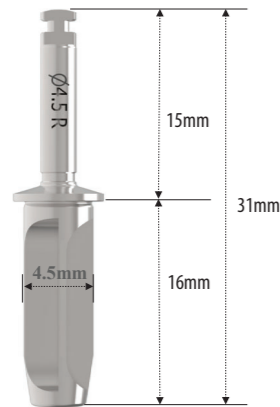
Optional

> These products are optional as extra ones which are not included in the kit

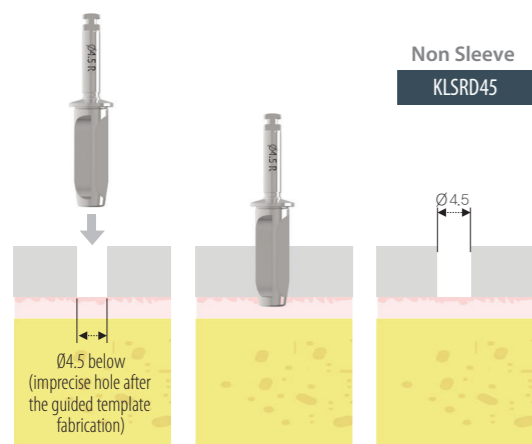
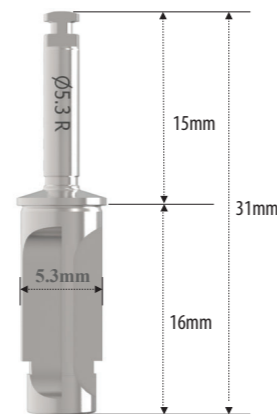
Guide Reamer *Extra*

Used for precise contact of drill and sleeve (sleeve/non sleeve).
Use the 4.5mm Guide Reamer for non sleeve, and the 5.3 Guide Reamer for sleeve (800 rpm without irrigation).

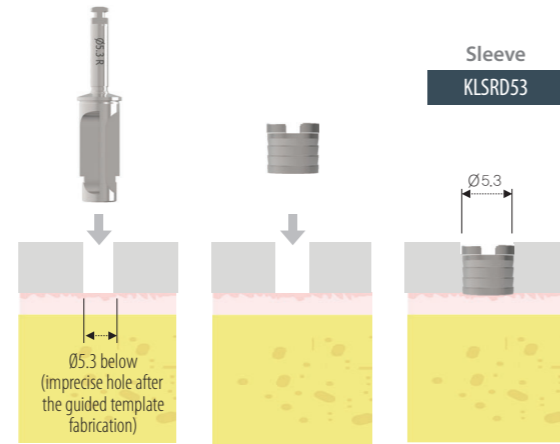
Guide Reamer
(Non Sleeve)
KLSRD45



Guide Reamer
(Sleeve)
KLSRD53



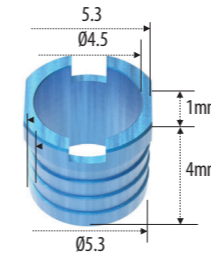
Revises imprecisely formed hole after the guided template fabrication using the 4.5 Guide Reamer to create the hole to be in exact contact with the drill.



Revises imprecisely formed hole after the guided template fabrication using the 5.3mm Guide Reamer to precisely insert the sleeve.

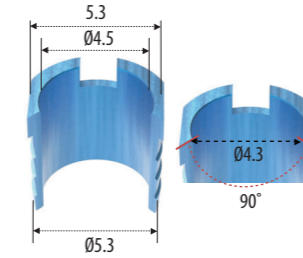
Sleeve

Extra



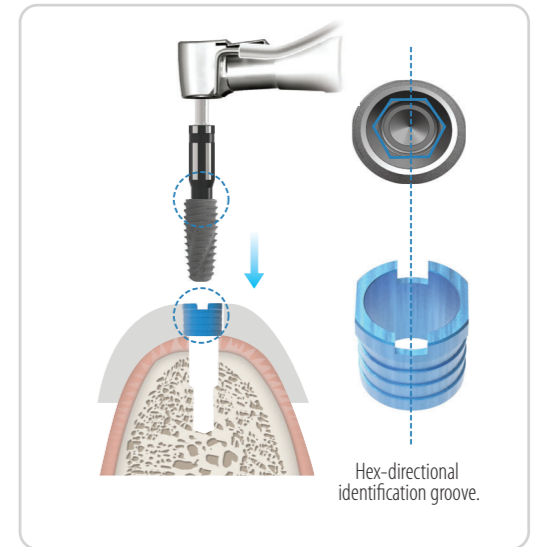
Closed Sleeve
KLSS01

* Packing Unit : 5 Sleeves



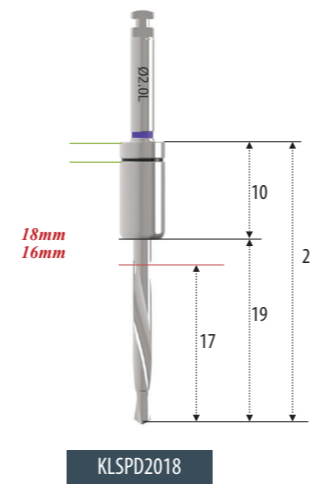
Open Sleeve
KLSS02

* Packing Unit : 5 Sleeves

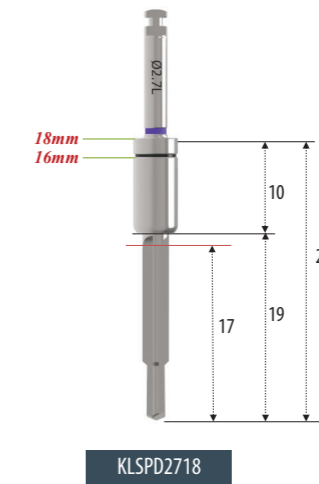


Pilot Drill – 16/18mm

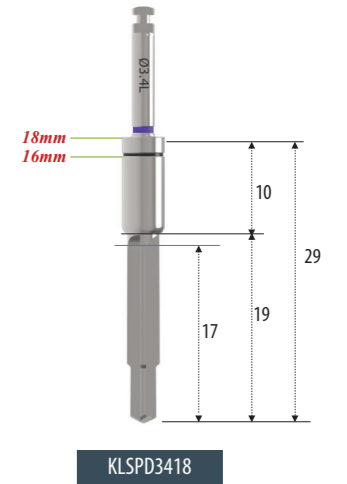
Extra



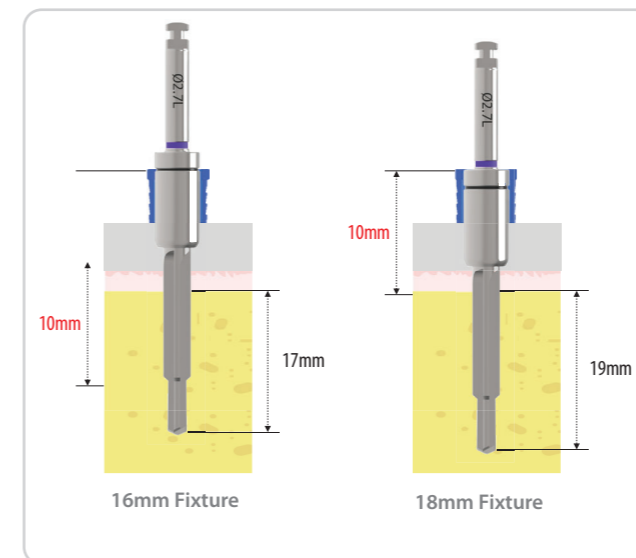
KLSPD2018



KLSPD2718

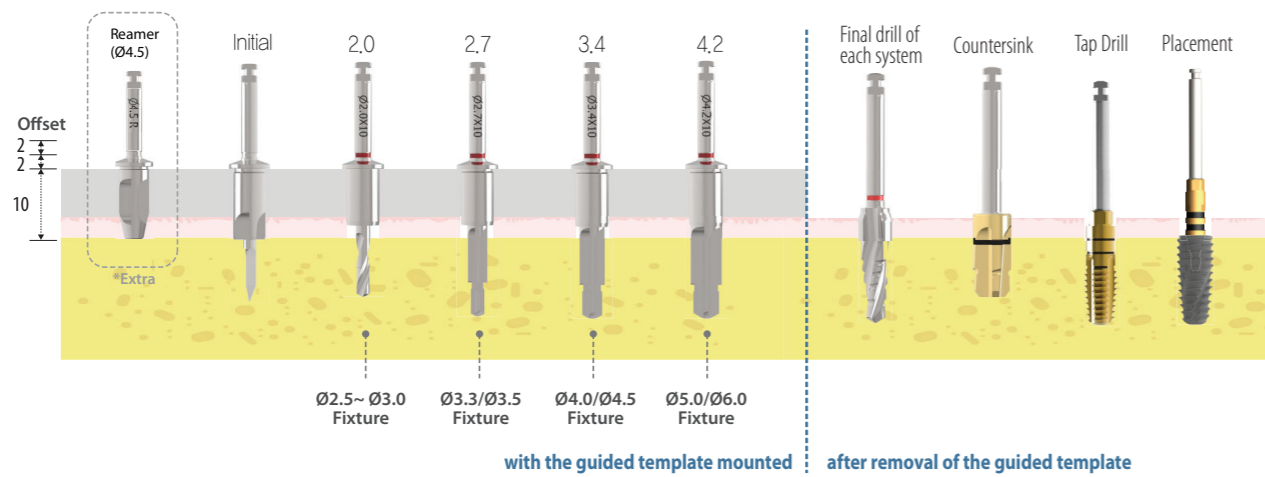


KLSPD3418

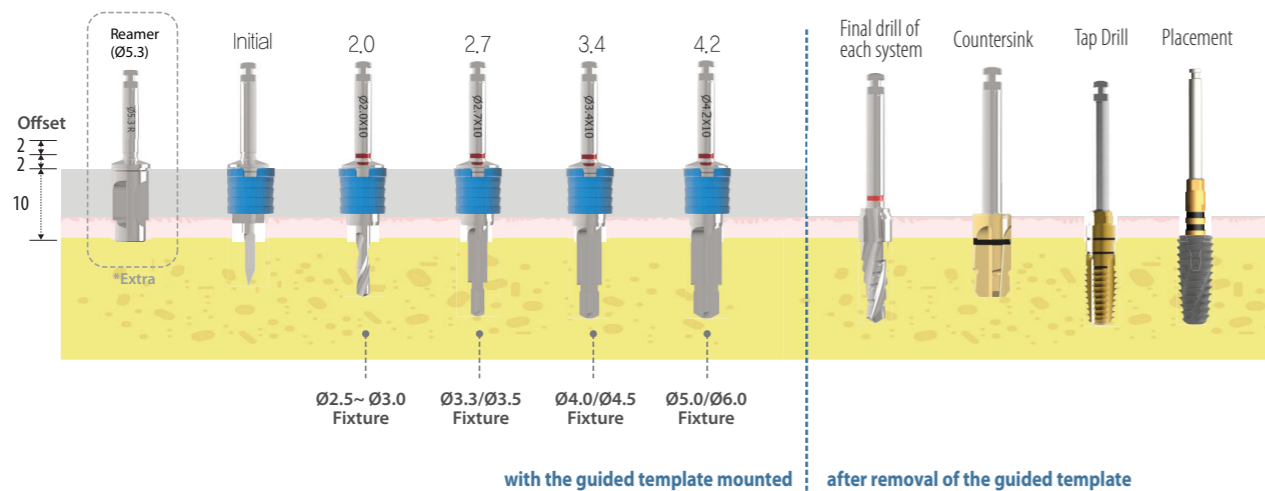


Drilling Sequence

Drill Protocol (Non Sleeve)



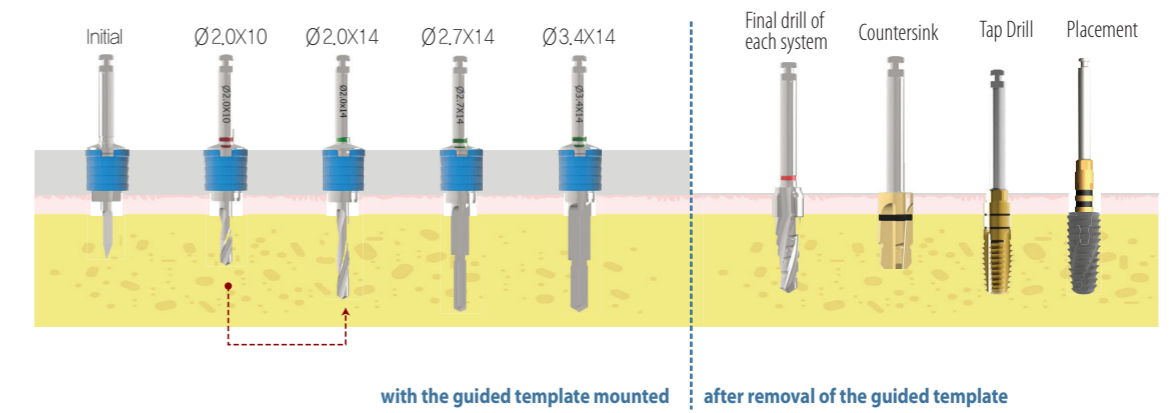
Drill Protocol (Sleeve)



* The 14mm drill must be used after using the 10mm drill to enable sleeve contact

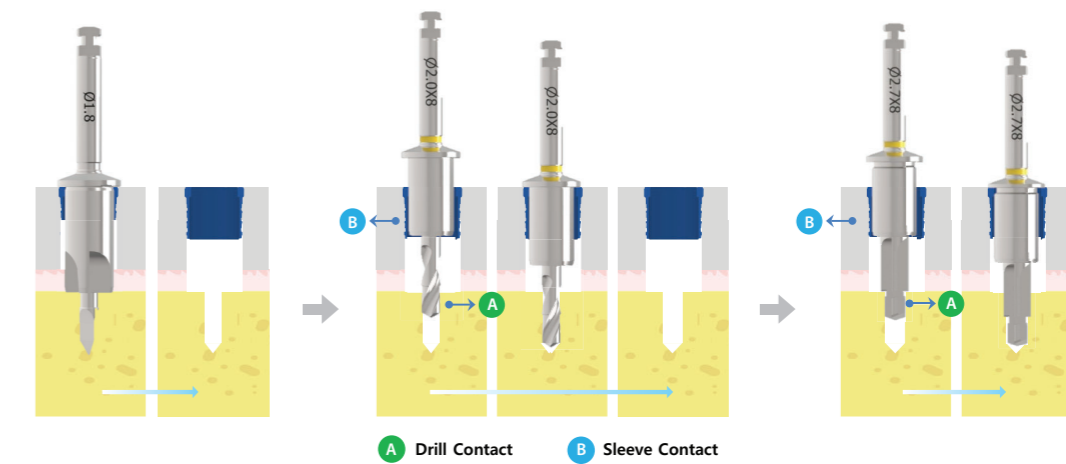
For the use of the 14mm drill with exact contact to the sleeve, use the Ø2.0x10mm drill first before using the 14mm drill.

e.g.) 3.4 X 14mm Drilling Sequence



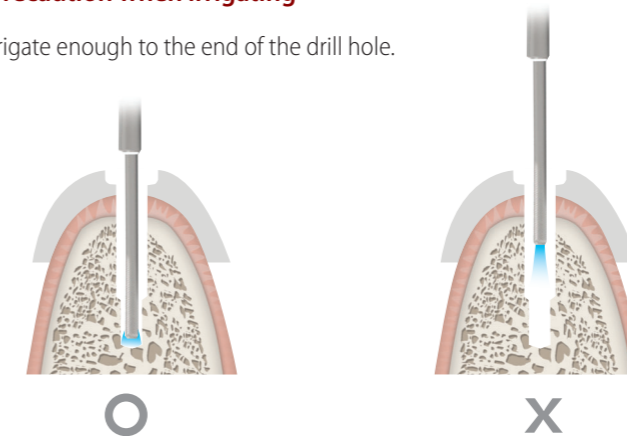
* Drilling method

- Make sure with drilling in a desired direction without a change in path through the primary drill contact (A) with the hole created by the previous drilling and the secondary contact (B) with the sleeve.
- Create the hole using the initial drill and insert the next drill into the hole made during the previous step and drill after achieving the drill and sleeve contact (A&B).
- If drilling only with the sleeve contact (B) without the drill contact (A), the path may not be correct.

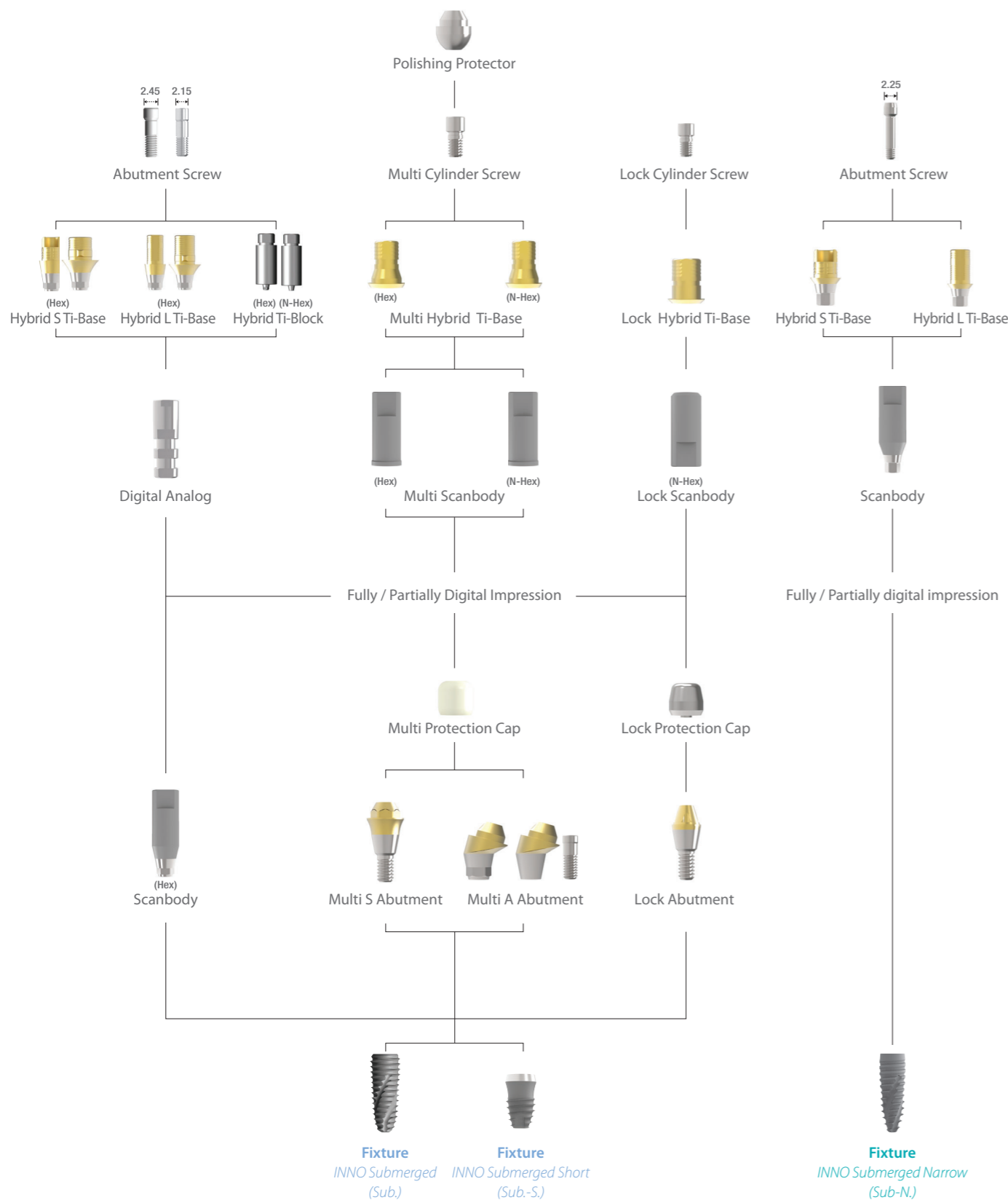


* Precaution when irrigating

- Irrigate enough to the end of the drill hole.

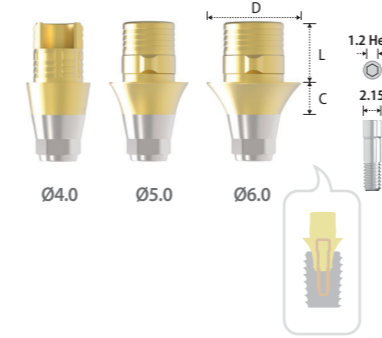


DIGITAL PROSTHESIS



InnoFit® Hybrid Ti-Base & Block(INNO Sub.)

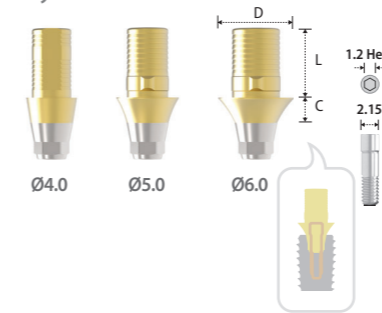
Hybrid S Ti-Base



Type	Hex		
Diameter	Ø4.0	Ø5.0	Ø6.0
Length / Cuff	3.75	3.75	3.75
0.8	2SLH404	2SLH504	2SLH604
2	2SLH424	2SLH524	2SLH624
3	2SLH434	2SLH534	2SLH634

- > Packing unit : 1 Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Lingual surface hole for more esthetic restoration (Ø4.0).
- > Right angled (Ø4.0) and humped design (Ø5.0, Ø6.0) for anti-rotation of prosthesis.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Abutment Screw (2SSHR200).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

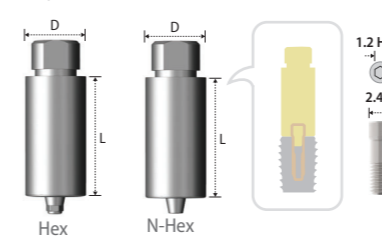
Hybrid L Ti-Base



Type	Hex		
Diameter	Ø4.0	Ø5.0	Ø6.0
Length / Cuff	5.5	5.5	5.5
1	2SLH415	2SLH515	2SLH615
2	2SLH425	2SLH525	2SLH625
3	2SLH435	2SLH535	2SLH635

- > Packing unit : 1 Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface (Ø4.0) and humped design (Ø5.0, Ø6.0) for anti-rotation of prosthesis.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Abutment Screw (2SSHR200).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

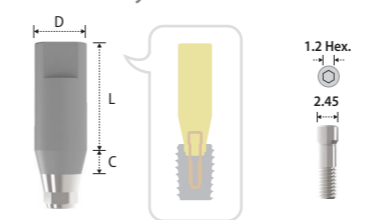
Hybrid Ti-Block



Type	Hex			N-Hex		
Diameter / Length	10	12	14	10	12	14
20	CSHH10S	CSHH12S	CSHH14S	CSHN10S	CSHN12S	CSHN14S

- > Packing unit : 1 Ti-Block + 2 Abutment Screws.
- > For Screw-Cement or Screw Retained Abutment.
- > Block abutment for CAD/CAM customized abutment.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Abutment Screw (2SSHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

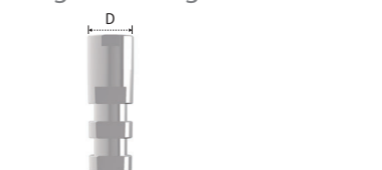
Scanbody



Diameter	Ø4.3
Length / Cuff	8
2	2SSB4329

- > Packing unit : 1 Scanbody + 1 Abutment Screw.
- > For both, model scanner and intra oral scanner.
- > For Hybrid S & L Ti-Base and Hybrid A Ti-Block.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Abutment Screw (2SSHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 15~20 N.cm.

Digital Analog

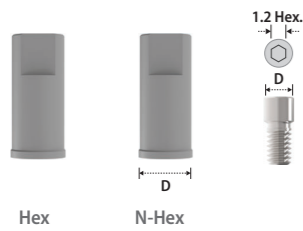


Diameter	Ø3.9
	2SDR001

- > Packing unit : 1 Analog.
- > Analog of fixture for working cast.
- > Use for 3D printing(RP) & Stone model.

InnoFit® Multi Hybrid Ti-Base(INNO Sub.)

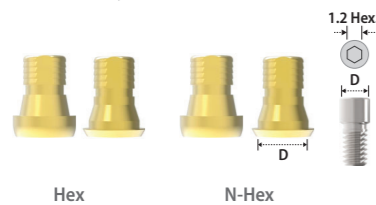
Multi Scanbody



Type	Hex	N-Hex
Diameter	Ø4.5	Ø4.5
	2SMB001H	2SMB001N

- > Packing unit : 1 Scanbody + 1 Cylinder Screw.
- > For both, model scanner and intra oral scanner.
- > For the Multi Hybrid Ti-Base.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Cylinder Screw (2SMCS100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 15~20 N.cm.

Multi Hybrid Ti-Base

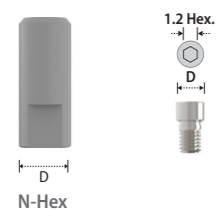


Type	Hex			N-Hex		
Diameter	Ø4.5	Ø4.5	Ø5.5	Ø4.5	Ø4.5	Ø5.5
Cuff	0.5	2SMHT45H	2SMHT55H	2SMHT45N	2SMHT55N	
	1.5	2SMHT40H		2SMHT40N		

- > Packing unit : 1 Ti-Base + 1 Cylinder Screw.
- > For Screw-Cement or Screw Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface for anti-rotation of prosthesis.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Cylinder Screw (2SMCS100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N/cm.
- > Use the Scanbody for 3D Work.
- > Abutment level impression.

InnoFit® Lock Hybrid Ti-Base(INNO Sub.)

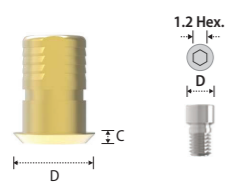
Lock Scanbody



Diameter	Ø4.5
	2SLB001H

- > Packing unit : 1 Scanbody + 1 Cylinder Screw.
- > For both, model scanner and intra oral scanner.
- > For the Lock Hybrid Ti-Base.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Cylinder Screw (2SMCS200).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 15~20 N.cm.

Lock Hybrid Ti-Base

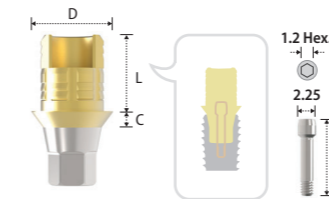


Diameter	Ø4.5
	2SLHT40N

- > Packing unit : 1 Ti-Base + 1 Cylinder Screw.
- > For Screw-Cement or Screw Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface for anti-rotation of prosthesis.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Cylinder Screw (2SMCS200).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Abutment level impression.

InnoFit® Hybrid Ti-Base(INNO Sub. Narrow)

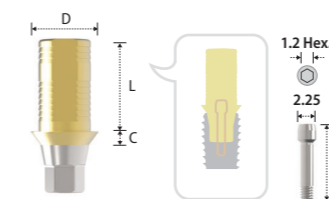
Hybrid S Ti-Base



Type	Hex
Diameter	Ø4.0
Length	3.75
Cuff	
0.8	SLH404N
2	SLH424N
3	SLH434N

- > Packing unit : 1 Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Lingual surface hole for more esthetic restoration.
- > Right angled for anti-rotation of prosthesis.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Abutment Screw (SSHR100N).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

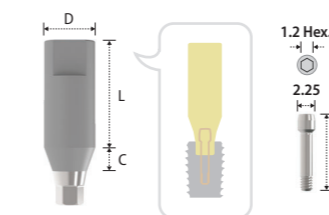
Hybrid L Ti-Base



Type	Hex
Diameter	Ø4.0
Length	5.5
Cuff	
1	SLH415N
2	SLH425N
3	SLH435N

- > Packing unit : 1 Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface for anti-rotation of prosthesis.
- > Library available for EXOCAD®, 3Shape®, Dental Wings® and others.
- > Connected with the Abutment Screw (SSHR100N).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

Scanbody



Diameter	Ø4.3
Length	8
Cuff	
2	SSB4329N

- > Packing unit : 1 Scanbody + 1 Abutment Screw.
- > For both, model scanner and intra oral scanner.
- > For the Hybrid S and L Ti-Base.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Abutment Screw (SSHR100N).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 15~20 N.cm.