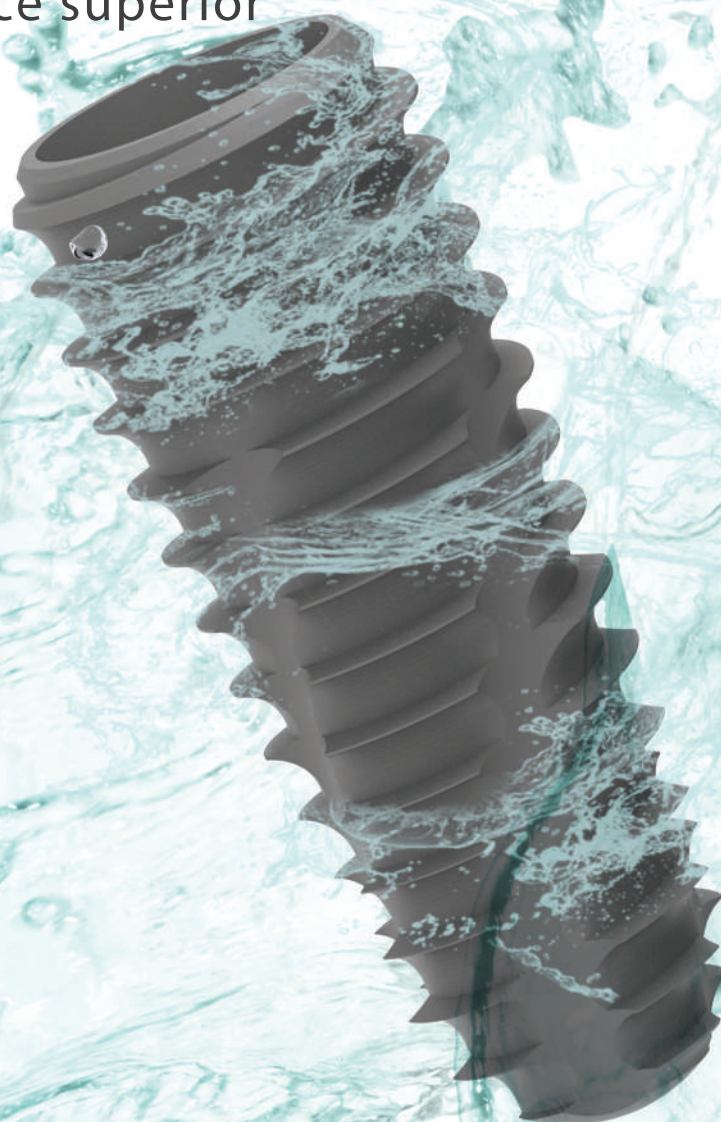




COWELL® Implant Solution

Help your daily practice superior

Ver.28



CWM

Cowellmedi Co., Ltd.

The pioneers in Dental Implant & E.rhBMP-2

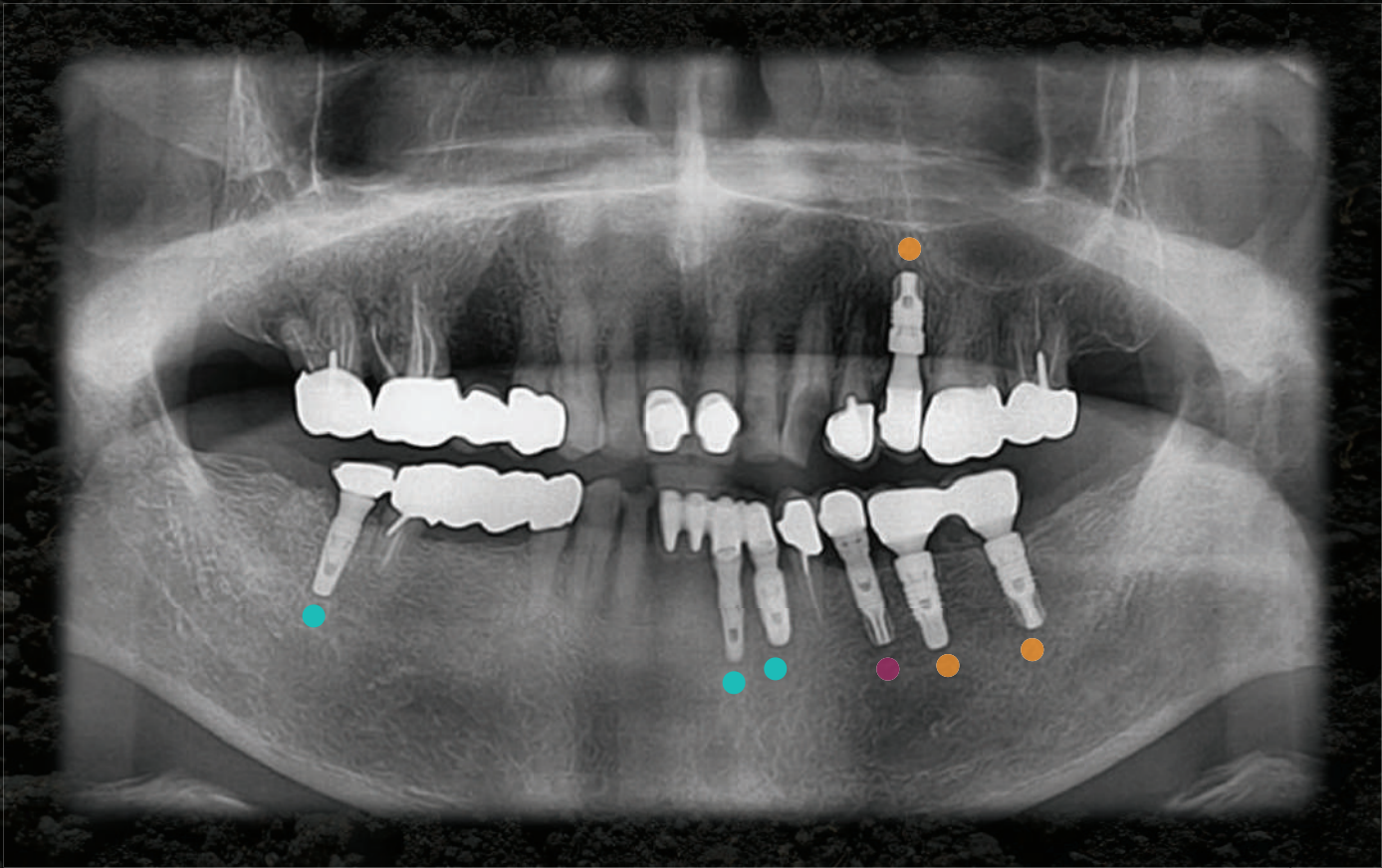


SINCE
1994

THE OLDEST IMPLANT CASE IN KOREA

COWELL®
Implant Solution

Help your daily practice superior



BioPlant™



Atlas™



INNO Implant™

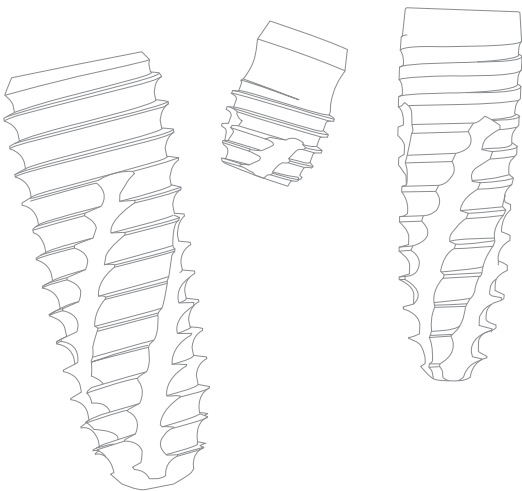
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#25, 36 & 37: ATLAS Implant System™, 2nd generation of the COWELL® Implant, Korea's first ASD treated Implant.
#32, 33 & 47: INNO Implant System™, 3rd generation of the COWELL® Implant, Nano/CaP soaking technology applied.

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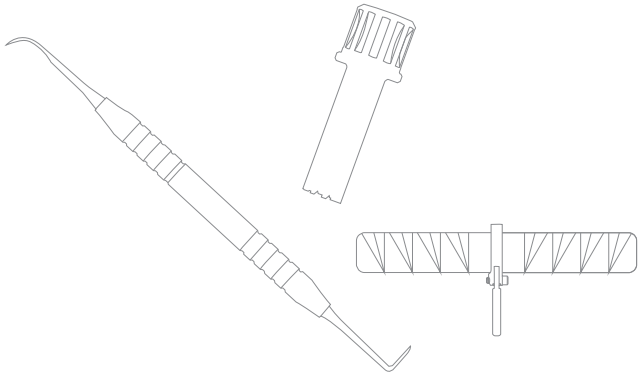
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COWELL® Implant System



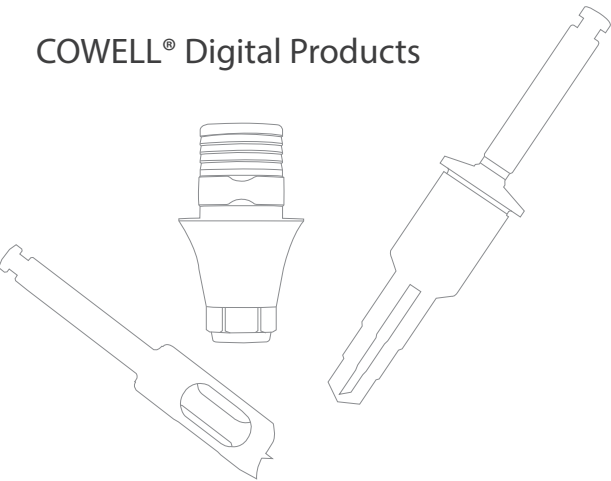
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COWELL® Expert Instruments



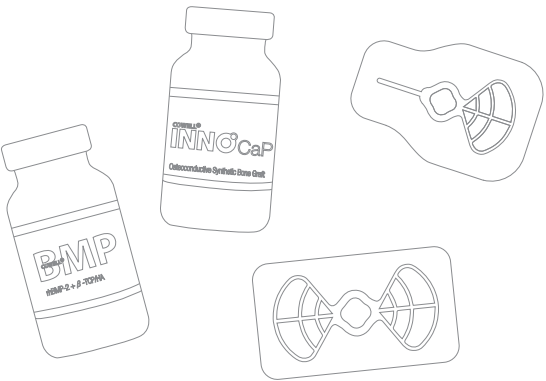
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COWELLMEDI HISTORY

For the first time in Korea,

Beginning with Korea's First Dental Implant, the COWELLMEDI has been leading the way to the future biomedical industry with the fusion technology to its E.rhBMP-2 developed for the first time in the world.



- | | | | |
|-------------|--|-------------|--|
| 1994 | • Developed Korea's First Dental Implant, the BIOPLANT™ and localized it for the first time in Korea. | 2010 | • Obtained MFDS manufacturing & sales approval for the COWELL® BMP and held Korea's First BMP Symposium in Seoul, Korea. |
| 1998 | • Founded Asrahi Medical. | 2011 | • Obtained US patent for E.rhBMP-2 Coated Implant. |
| 1999 | • Established R&D corporation with PNU's Oral and Biotechnology Research Center. | 2012 | • Obtained MFDS Approval for E.rhBMP-2 Spinal Fusion Clinical Test Plan and launched the INNO SLA Implant System™. |
| 2000 | • Converted to COWELLMEDI corporation (Cowellmedi Co., Ltd.) and obtained ISO9001 certificate. | 2013 | • Obtained US FDA approval for the INNO SLA Implant System™. |
| 2002 | • Developed ASD surface treatment technology for dental implant and applied for the first time in Korea. | 2014 | • Established a R&D and Education Organization, REID (Research & Education in Implant Dentistry). |
| 2003 | • Obtained US-FDA approval for the BIOPLANT™ Implant System. | 2015 | • Applied SLA-SH® surface treatment on the INNO SLA Implant System™ → INNO SLA-SH® Implant System.
(*SLA-SH® Surface Treatment : the world's first superhydrophilic surface made by dry process using Nano/CaP soaking technology. For the details, refer to the pages 16 to 21). |
| 2004 | • Medaled for contribution of developing Korea's first dental implant, the BIOPLANT™, from Korea Government. | 2016 | • Established a subsidiary in China (COWELLMEDI China) and a training course, ACID(Advance Course in Implant Dentistry) with MMS (Miami Medical Seminars). |
| 2005 | • Obtained GMP, ISO13485 certificate, US FDA approval for the ATLAS Implant System™ and CE (EC) certificate. | 2017 | • Developed Collagen based bone graft materials and launched Sonator™ 80's System. |
| 2006 | • Established subsidiaries in USA (COWELLMEDI USA) & Taiwan (COWELL Biotech) and COWELLMEDI Tissue Engineering Institute for Growth Factors. | 2018 | • Launched the InnoGenic™ Wifi-Mesh and InnoGenic™ PTFE-Mesh. |
| 2007 | • Obtained a patent for E.rhBMP-2 coated dental implant in Korea. | 2019 | • Launched the InnoFit Lodestar Plus Kit, InnoGenic Autobone Harvester Kit, InnoGenic Bone Carrier. |
| 2008 | • Established COWELL Training Center in L.A, USA. | 2020 | • Launched the InnoGenic™ GBR Kit and Spread Fit™ SFIT Ti-Base System. |
| 2009 | • Obtained MFDS approval for clinical test of E.rhBMP-2, the COWELL® BMP. | | |

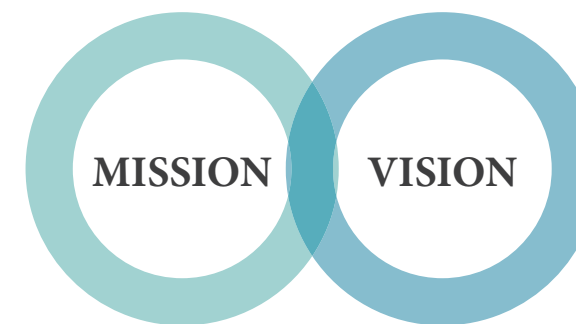


Research and Education in Implant Dentistry.

The REID is a global institute, standing for Research and Education in Implant Dentistry.

The REID has been dedicated to researching technology and knowledge from the past to the future, to creating more predictable concepts of treatment, and to developing cutting edge products in implant dentistry and related fields as its first objective of the establishment.

As its second objective of the establishment, the REID also has been committed to training dental professionals with world-class clinicians, lecturers and education curricula.



To improve how the world dental community treats implant dentistry by providing dental professionals with internationally multidisciplinary education service and state of the art treatment concepts as well as comprehensive quality research for the benefits of patients.

- Constructing the future of implant dentistry and related fields.
- The world-class education provider and research institute.
- Sharing more know-hows to have better ideas by expending worldwide network of members.
- Providing training system accessible to any dental professional across the globe.

Process Flow Chart

CNC Machining



Precise machining process using state of the art computer numerical control system fused to the COWELL® Class 1000, operated by world-class technical unit.



Surface Treatment



The SLA-SH® Surface treatment with biologically active materials to achieve the ideal Osseointegration.



Inspection



Absolutely accurate test and quality control system with cutting edge equipment such as optical profiling measurer, stereoscopic microscope, micrometer scope and other specialized devices for dental implant manufacturing.

Cleansing



Cleansing process by ultrasonic wave using the 3rd still distilled, vacuum dry and heating dry sterilization enable ultimately sterilized products and no residues are left on products.



Packing / Sterilization



Sanitarily packed products at Class 10,000 clean room are sterilized by gamma-ray using radiation isotope.



Shipping Warehouse



Finished products are sorted and stored in warehouse for immediate delivery.

COWELL® Warranty

* For more details, visit our website at www.cowellmedi.com

1. Guarantee beneficiary and scope

Products	Period	Conditions	Remarks
Implant	Lifetime	Replacement with equivalent Implant	The period shall begin from the sale date

2. Scope of Warranty

- 1) Quality benefits
> In case the product material or the manufacture process is flawed.
- 2) Surgical benefits
> In case implants fail to be grafted to the bone.

3. Claim Procedure

- 1) In case certain faults occur after transplanting implants (procedure), the staff in charge shall be contacted within 30 days thereafter.
- 2) When such contact is made, the Customer Complaint Report shall be written out, and shall be submitted together with the concerned product.

4. Exclusions from Warranty Service

- 1) In case implants are transplanted onto patients with diabetics and alcohol addiction.
- 2) In case implants are transplanted onto patients for whom surgical procedures are difficult to perform due to the history of systematic disease.
- 3) In case implants are transplanted onto patients who depend on habitual medications.
- 4) In case the procedure is not conducted according to the protocol of the COWELLMEDI.
- 5) In case the procedure is not performed in compliance with biological indication :
(E.g. distance between buccal wall and implant should be at least 2mm).
- 6) In case the procedure is conducted using contaminated surgical devices.
- 7) In case implants are transplanted onto patients who sustain or are infected with cell issue contamination.
- 8) In case other materials from other companies are mix used with Implants, prosthetic parts and instruments of the COWELLMEDI.
- 9) In case the result of investigation by COWELL R&D Institute, Div. of QA and QC shows the issue is not related to the products manufactured and provided by the COWELLMEDI.
- 10) In case the information hereby requested, especially, product Lot no., Serial no. or X-ray photos, is missing.
- 11) In case that the concerned products are not returned.
- 12) In case the product is damaged due to negligence of handling.
- 13) In case the product is opened and fails to remain sterilized.
- 14) In case that the expiry date of the concerned product (not opened products only) is not longer than 1/4.

Package System

1. Color classification (Coding) by fixture type and external label marking

A. Color classification by fixture type

Fixture type	Submerged (Sub.)	Submerged Short (Sub.)	Internal (Int.)	External (Ext.)	Submerged Narrow (Sub-N.)	Mini Cement (1P-C.)	Mini Ball (1P-B.)
Package							
Connection	 Blue	 Orange	 Green	 Emerald	 Pink		

B. External label marking and color coding by fixture diameter & fixture type

- > Color coding by diameter on the external label.
- > Reuse is prohibited after opening as the product is sterilized.
- > After the ampule is opened, care should be taken from dropping which may cause by incomplete fastening.
- > Care should be taken from infection after the product is opened and store at room temperature and in a dry place.
- > Discard expired products.



20A060040A0004
INNO Sub. Fixture
ST4010SM
Ø4.0X10mm

INNO Fixture
(No-Mount)
PRODUCT NAME : COWELL® INNO Implant System
CATALOG No. (REF) : ST4010SM
SIZE : Ø4.0X10mm(Sub.Hex.Taper)
LOT NO. (LOT) : 20A060040A
DATE OF MANUFACTURE (M) : 2020-01-06
USE BY : 2025-01-05
PACKING UNIT : 1EA
STORAGE CONDITION : Store at room temperature and in a dry place.


Manufacturer  **Cowellmedi Co., Ltd.**
48, Hakgam-daero 221beon-gil, Sasang-gu, Busan,
46986, Republic of Korea TEL.: +82-51-312-2027~8
Website: <http://www.cowellmedi.com>
D/T : 218 Trianon LN Villanova PA 19085-1442 USA
EC-Representative (EC REP) : Certification Experts B.V.
Amerlandsseweg 7, 3621 ZC Breukelen, The Netherlands


(01) 08800016106725
(11) 200106
(10) 20A060040A
(21) 0004

Rx Only
MEDICAL DEVICE
CE 0123
CWM-L-004 (Ver.3)

* Ex.) INNO SLA-SH® Sub. Fixture (No-Mount)
Dimension : Ø4.0X10mm

 Do Not Reuse		 1°C ~ 30°C		 Caution		 STERILE R Sterilized Using Irradiation		 Consult Instructions for Use		
Diameter Fixture Type(abbr.)	Ø2.5	Ø3.0	Ø3.1	Ø3.3	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5	Ø6.0
										
Submerged (Sub.)	–	–	–	–	✓	✓	✓	✓	–	✓
Submerged Short (Sub.)	–	–	–	–	–	✓	✓	✓	✓	✓
Internal (Int.)	–	–	–	–	✓	✓	✓	✓	–	✓
External (Ext.)	–	–	–	–	✓	✓	✓	✓	–	✓
Submerged Narrow (Sub-N.)	–	–	✓	✓	–	–	–	–	–	–
Mini Cement (1P-C.)	✓	✓	–	–	–	–	–	–	–	–
Mini Ball (1P-B.)	✓	✓	–	–	–	–	–	–	–	–

2. Fixture user guide (Embedded in the packaging)

COWELL® IMPLANT SYSTEM

Instructions for Use

1. Device Description

The COWELLMEDI implant system includes a variety of precision-machined fixtures manufactured from titanium. These implants are surgically inserted into a mandible (the lower jawbone) or a maxillary bone (the upper jawbone) and serve as a replacement for patient's tooth root providing a stable foundation for restoration.

2. Intended for use

To support dental prosthesis as a dental device, which is implanted into alveolar bone to recover masticatory function and give better esthetics in patients with partially or full edentulous jaws.

3. Directions for use

1) Surgery - The first stage

a. According to the patient's condition, appropriate dental cleaning operations may be performed and preventive antibiotics may be administered prior to implant operation.

b. Clean and disinfect the operative site, administer local anesthesia in the area and expose the alveolar bone by making appropriate incisions and reflecting the gingival tissues along the alveolar crest in the area from where teeth were extracted.

c. Drill into the gum in order to implant a fixture into the planned place with various dental operation tools. The speed of revolution of the drill should be adjusted by the condition of the bone and the kinds of operation tools. Saline solution should be poured onto the area so that necrosis doesn't occur by heating of the bone (The speed for all drilling should be less than 1,200 rpm).

d. Remove the external sterile package cover sheet : open the cap of the ampule: affix the Fixture Driver (in case of No-mount Fixture) or the Mount Driver (in case of Pre-mount Fixture) to the Hand-piece and connect it to the fixture : move the assembled piece to the osteotomy site for the implant using care to prevent the assembled piece from being separated or contaminated with foreign materials.

e. A fixture is implanted into the bone as planned depth by turning (25~30 rpm) a hand-piece clockwise with 15~50 N.cm torque. In event that it is hard to insert, extend width of bone by Tap Drill or Countersink (less than 1,200 rpm) in order to facilitate better implantation.

f. After finishing implantation, the treated part should be sutured by using a hex driver to connect to the Cover Screw with torque 5 N.cm to prevent the intrusion of a foreign substance in the fixture.

2) Surgery - The second stage

a. Incise gingival of upper part of fixture subsequent to bone fusion and remove Cover Screw, tighten up Healing Abutment and start gingival curing for prosthesis.

b. In general, surgery is done by a method that makes prosthesis.

4. Contraindication

The operation should be reconsidered when the patient has any of the following conditions.

a. Patient with oral infection or inflammation.

b. In the case of low quality bone which will result in an unstable implant.

c. Patients who have a drinking problem or mental disease or substance or medicine abuse.

d. Internal disease such as hematomycrasia or diabetes and undernourishment.

e. Any patient who is not suitable for operation.

5. Warnings

Implant surgery and restoration involves complex dental procedures. For safe and effective use of the COWELLMEDI fixtures, it is strongly suggested that specialized training be undertaken since the surgical techniques required to place dental implants are highly specialized and complex procedures. Improper patient selection and technique can contribute to fixture failure and/or loss of supporting bone. the COWELLMEDI fixtures are intended for use only in the indicated applications. Dental fixtures must not be altered in any way. The use of electro-surgical instruments or lasers around metallic fixtures and their abutments is not recommended due to the risk of electric shock and/or burns. Fixture mobility, bone loss, or chronic infection may indicate fixture failure. The treatment should be done in an aseptic condition by an operator who wears an aseptic costume. If the fixture becomes contaminated by the patient's body fluids in any way, the fixture cannot be used in any other patient.

6. Precautions

The surgical techniques required to place endosseous dental fixtures require specialized and complex procedures. Formal training for placement of fixtures is recommended.

Important : Determine local anatomy and suitability of the available bone for fixture placement. Thorough screening of prospective fixture candidates must be performed. Visual inspection as well as panoramic and periapical radiographs are essential to determine anatomical landmarks, occlusal conditions, periodontal

status, and adequacy of bone. Lateral cephalometric radiographs, CT scans and tomograms may also be beneficial. Adequate radiographs, direct palpation and visual inspection of the fixture site are necessary prior to treatment, planning and use of the COWELLMEDI fixtures.

7. Adverse Effects

Some of the complications (loss of fixture anchorage, prosthesis etc.) are possible occurrences after surgery. Lack of quantity or poor quality of remaining bone, infections, poor patient oral hygiene or cooperation, patient discomfort, fixture mobility, local soft tissue degeneration, and unfavorable fixture placement or alignment are some potential causes for loss of anchorage.

8. Surgical complications

The implant procedure has risk, including localized swelling, dehiscence, tenderness of short duration, edema, hematoma or bleeding. Numbness of the lower lip and chin region following lower jaw surgery, and of the tissue beside the nose following upper jaw surgery, is a possible side-effect of the surgery. Though it would most probably be of a temporary nature, in very rare cases, the numbness has been permanent. Gingival-mucosal (gum tissue) ulceration, tissue reaction or infection may occur, but generally responds to local care.

9. How to manage after implanting the Product

a. The upper jaw requires a healing period of 6~8 months depending on the bone quality and the lower jaw requires a healing period of 3~5 months depending on the bone quality. If pressures such as mastication would be applied to the fixture during the healing period, early fixation may not be obtained or osseointegration may not occur for the fixture within the healing period.

b. Once the operator clinically determines that sufficient osseointegration has been achieved, he/she should begin the stages to produce the dental prosthesis.

c. The Lot number identification tag should be attached to a patient's chart and X-ray film in order to pursue the product when needs be.

d. The operator should determine the osseointegration status of the implant through X-ray and clinical methods such as percussion and/or reverse torquing.

10. Storage / Sterilization and Handling

a. Store at room temperature and in a dry place.

b. The fixture, fixture mount and cover screw have been cleaned and sterilized by radiation (gamma irradiation) and are ready to use.

c. Product packages should be opened just before their use during operation and any product beyond the expiration date should not be used.

d. Only appropriate sterilized surgical tools made specifically for dental implants should be used during the operation.

11. Expiration date

Expiration date of the product is 5 years from manufacturing.

12. Cleaning & Sterilization

Cleaning of surgical instruments supplied non-sterile should be performed according to current dental standard practices. Select a suitable method of cleaning that removes all visible contamination from the product in sterilized and distilled water. After cleaning, package the product appropriately and then sterilized by autoclave at the minimum condition of 250°F (121°C/15 mins).

13. Caution

a. As this product is sterilized by Gamma radiation, should not be used under any circumstances if is open.

b. Every product is disposable. It should not be reused.

COWELLMEDI Co., Ltd.

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https://www.cowellmedi.com

D/T

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Tel. +1-623-939-1344 Fax. +1-623-939-1472

EC-REPRESENTATIVE

Certification Experts B.V. Amerlandseweg 7, 3621 ZC Breukelen, The Netherlands

CE 0123

GMP

2

Do Not Reuse

1°C

30°C

!

Caution

STERILE R

Sterilized Using Irradiation

1

Consult Instructions for Use

2020. 01. 30 / CWM-I-007 (Ver.3)

3. Fixture packaging opening and the sequence of the product extraction

Taking out the ampule

1 To open, press the upper dotted area and take out the sterilized blister.

2 Remove the moisture-resistant paper on the back of the blister, and drop the ampule lightly on the palm of a practitioner or surgical clothes.

Fixture separation

1 Hold the ampule with both hands, twist it 45°, and separate the middle part. Care should be taken so that the fixture will not fall.

2 Fasten in two ways.
1) No Mount -> Fasten the Fixture Driver.
2) Pre Mount -> Fasten the Mount Driver.

Cover Screw separation

1 Separate the upper part of the ampule.

2 Fasten the Hex Driver to the Cover Screw completely. Care must be taken to prevent patient from swallowing the Cover Screw at the time of placing.

012 Package System

Package System 013

COWELLMEDI HISTORY

REID

COWELL® IMPLANT SYSTEM

COWELL® DIGITAL PRODUCTS

COWELL® EXPERT INSTRUMENTS

COWELL® REGENERATIVE SOLUTION

4. Abutment packaging and external label marking



5. Surgical Kit packaging and external label marking



Implant Innovation
When INNOVATION meets Dental Implant.

Experience the difference of **SLA-SH[®]**

made by "Nano/CaP soaking technology"



Superhydrophilicity, Uniform micro-surface geometry,
Maximized BIC and Acceleration of osseointegration

Aspiring for 100% perfection with SLA-SH[®]

by Nano/CaP soaking technology

SLA-SH[®] Surface Treatment

by Nano/CaP soaking technology

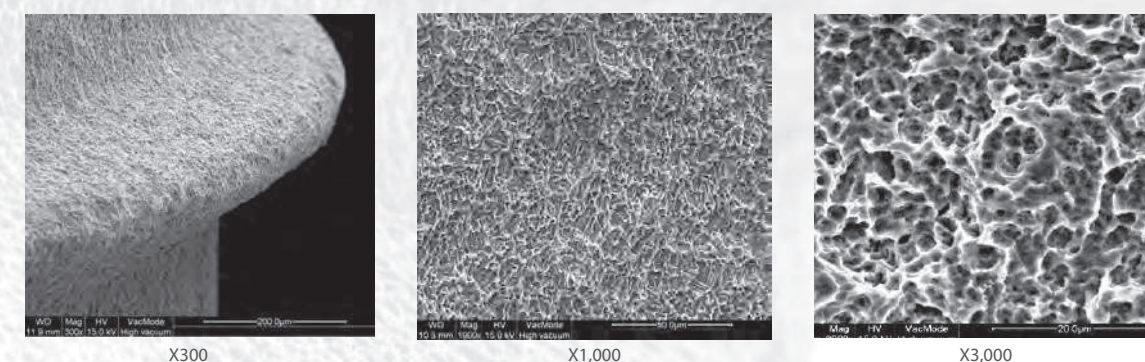
SLA-SH[®]:

Sandblasted, Large-grit, Acid-etched and Super-Hydrophilised

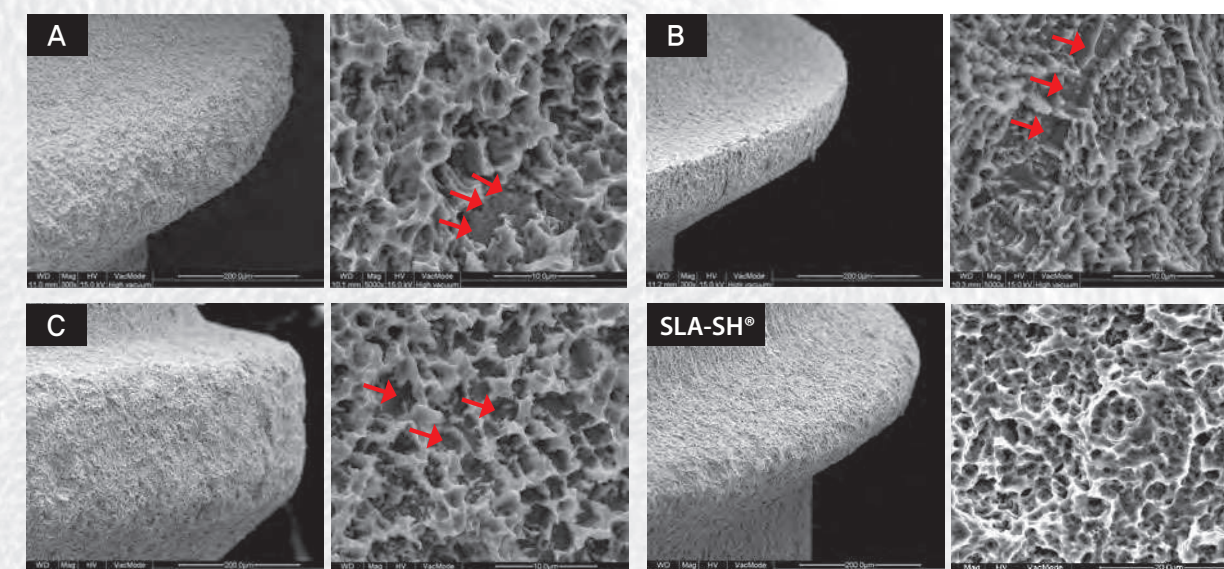
- > Hydrophilicity by activation with neutralization solution & Nano/CaP soaking technology.
- > Sandblasted with biocompatible grits unlike majority of other implants in market are done with Alumina.
- > Macro-pore & micro-pore of Ti-oxide layer mimicking the etched enamel rod of tooth.
- > Even distribution of roughness through the whole portion of implant surface.
- > No destruction or alternation of the surface are caused even with torque force of 120 N.cm.
- > Acceleration of osseointegration and maximization of BIC.
- > The SLA-SH[®] is applied for all types of the COWELL[®] Implant Systems.

1. Evaluation using SEM (Scanning Electron Microscope) Images

A. SLA-SH[®] Surface magnified X300, 1,000 and 3,000



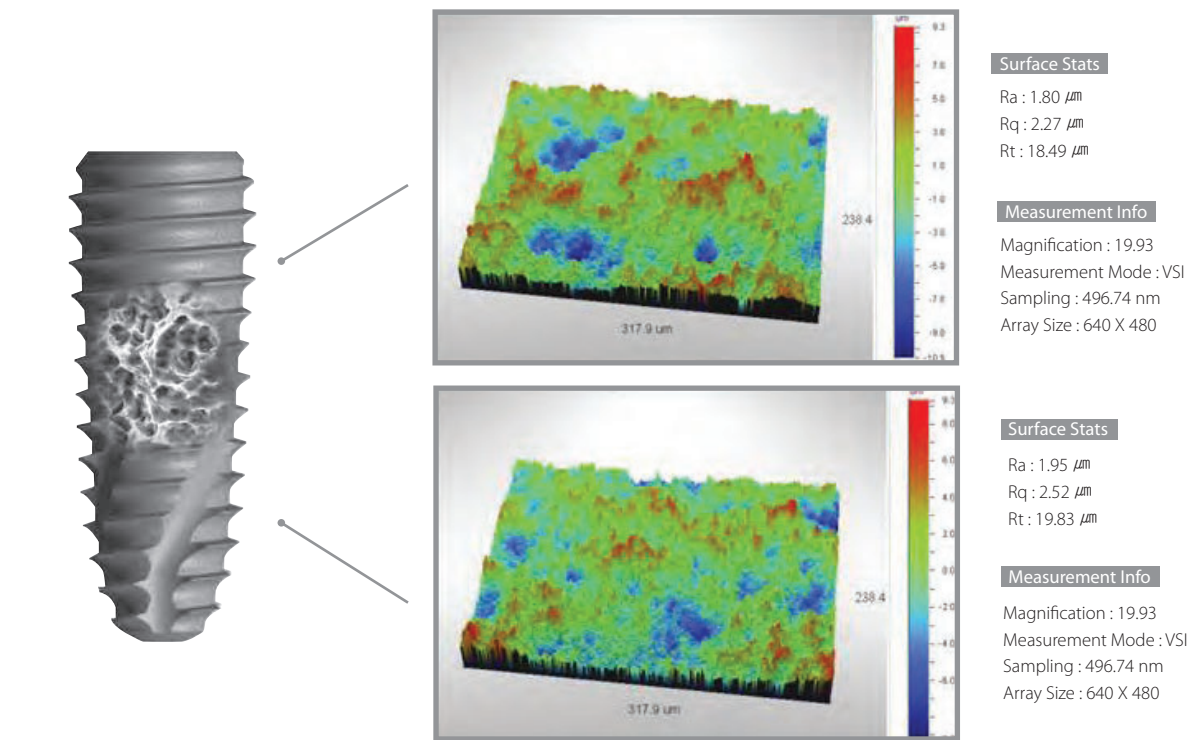
B. Comparison to other SLA treated implants currently sold in the market



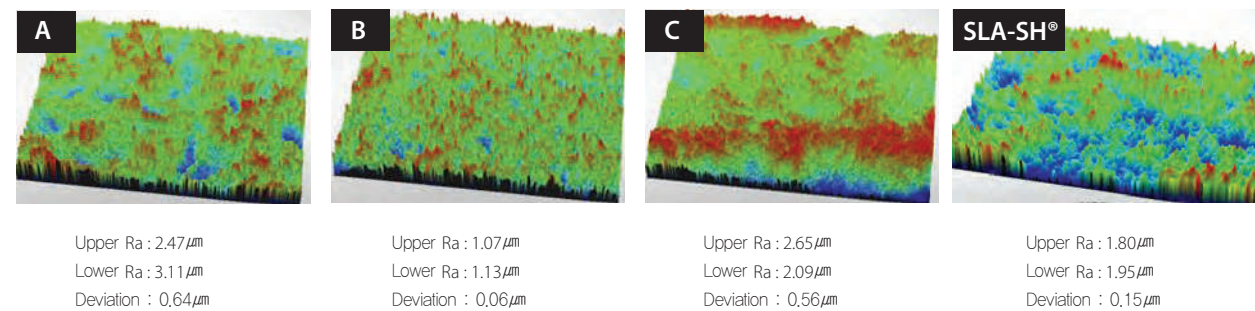
- > Surface treatment patterns were observed on electron microscope photographs of 5,000 magnifications for top parts of the implants.
- > Sand-blasted surface conditions were observed in the product A, B and C due to insufficient acid etching patterns in deep parts as the SLA-SH[®] is sandblasted with biocompatible grits with even particle size unlike others are done with alumina.
- > The entire surface of the SLA-SH[®] treated implant showed uniform acid etching patterns. This implies that the acid etching of the SLA-SH[®] surface is perfect.

2. Evaluation using SSEM (Stereo Scanning Electron Microscope) 3D images

A. SLA-SH® Surface



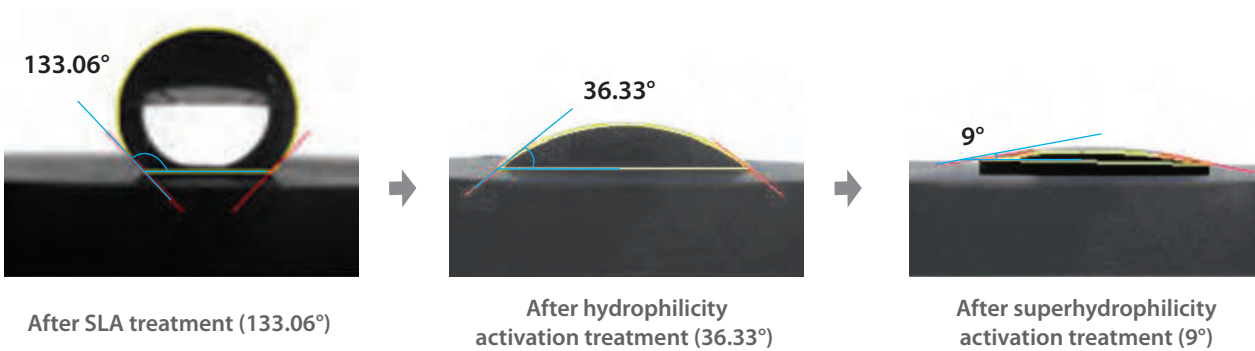
B. Comparison to other SLA treated implants currently sold in the market



- > Uniform distribution of Macro-pore and micro-pore.
- > Roughness of the SLA-SH® showed 1.90 μm while the others were 1.08~3.11 μm .

3. The surface activity increased due to the great surface wetness

A. Contact angle measurement evaluation result for the saline solution

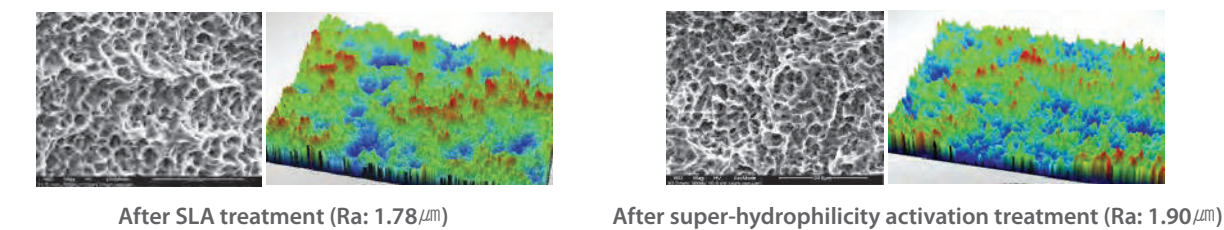


After neutralization process and Nano/CaP soaking treatment, the sample became extremely hydrophilic and the surface energy increased, which facilitated expedition of osteoblast activation to be fused to the bone faster.



Capillarity in the actual clinical setting, which accelerated the penetration of blood.
※ Quoted from the website of Cowellmedi Clinical Research Group (www.e-cowellmedi.com)

B. Relation between surface wetness and roughness



> There was almost no difference of surface roughness and micro-geometry, and the difference of surface wetness took place in the same physicochemical properties as surface energy increased by hydrophilicity activation treatment.

C. Physicochemical alternation of surface by hydrophilicity activation treatment

Name	Start BE	Peak BE	End BE
C1s	290	284.6	280.5
O1s	535.3	530.42	525.6
Ti2p	468.1	458.78	450.4

After SLA treatment

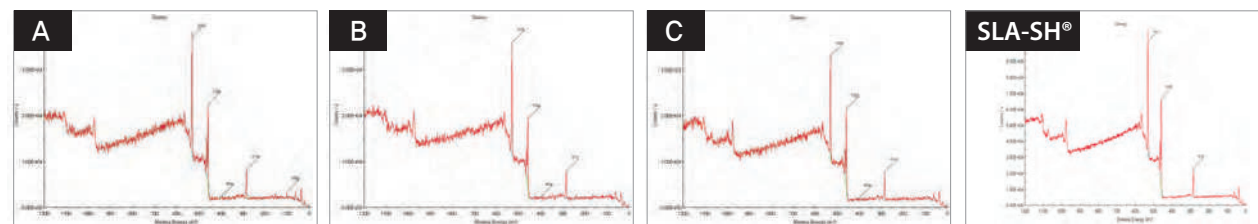
Name	Start BE	Peak BE	End BE
C1s	290.46	284.6	284.6
O1s	538.8	533.73	529.3
Ti2p	468.2	456.76	453.4

After hydrophilicity activation treatment

- > Surface wetness was improved by increased surface energy of C1s, O1s and Ti2p after hydrophilicity activation treatment.
- > To maintain and even to enhance surface wetness, superhydrophilicity activation treatment was carried out and contamination by carbon in the atmosphere is prevented during packing and sterilization.

4. Its safety has been proven through perfect cleaning with an automated system

A. Comparison of surface element tests through X-ray diffraction



> Cutting-edge automated system that produces the 3rd distilled water.

B. Comparison of surface element tests (X-ray Photo-electron Spectroscopy, XPS)

Unit : %					
Sample	C1s	O1s	Ti2p	Si2p	N1s
A	34.12	45.05	15.11	5.24	0.47
B	31.84	46.49	15.22	4.87	1.57
C	32.19	47.58	17.58	2.65	N.D
SLA-SH®	27.19	50.81	17.61	N.D	N.D

> Quantitative analysis of each surface element found 30% carbon, 47% oxygen, 16% titanium and 4% silicon in all products.

> For the SLA-SH®, they only consisted of carbons(C1s), oxygen(O1s) and titanium(Ti2p).

> Sodium hydroxide, the main element of the alkali washing solution, combined with silicon(Si) to form water-soluble $\text{Na}_2\text{SiO}_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$ (water glass), which removed the other elements.

C. Comparison of elution tests using combustion ion chromatography

Unit : ppm							
Sample	F ⁻	Cl ⁻	NO ₂ ⁻	SO ₄ ²⁻	Br ⁻	NO ₃ ⁻	PO ₄ ³⁻
A	N.D	0.024	0.027	0.002	N.D	0.031	N.D
B	N.D	0.027	0.019	0.002	N.D	0.030	N.D
C	N.D	0.071	0.020	N.D	N.D	0.023	N.D
SLA-SH®	N.D	N.D	N.D	N.D	N.D	0.032	N.D

> Similar ions were detected in all the products, but they are not harmful to human because their elements and quantities do not affect the human body and those have been proven in many studies.

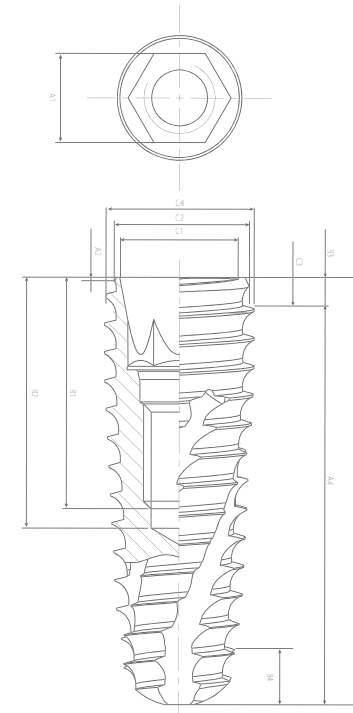
> For the SLA-SH®, no other elements except for NO_3^- were detected. Alkali washing completely removed the SO_4^{2-} and Cl^- ions of sulfuric acid and hydrochloric acid, which are used for heated acid etching because they form water-soluble salts of Na_2SO_4 and NaCl .

> No elements that interfere with osteo anagenesis were found from both the surface and elution elements, which showing that the cleansing process was perfectly carried out.

COWELL® CLASS 1000

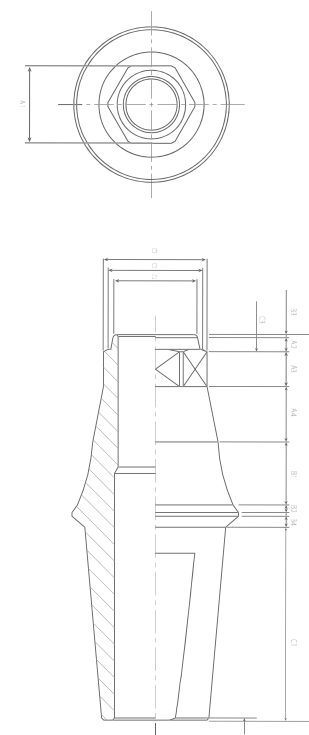
A SUBTLE DIFFERENCE MAKES THE DENTAL IMPLANT OR NOT

1. Fixture manufacturing tolerance evaluation



Evaluation Item	Manufacturing Tolerance				
Method	a. The specimen was fixed in Jig. b. Each dimensional difference of 3 inner hexagonal connection sides (Hex-1, Hex-2, Hex-3) of 5 specimens was measured.				
Used Equipment	Measuring Microscope and Jig				
Criteria	Each dimensional difference of 3 inner hexagonal sides should be no more than $\pm 0.001\text{mm}$ ($1.000\mu\text{m}$) from 2.500mm.				
Specimen	INNO SLA-SH® Submerged Fixture (5 Pieces of ST4510S)				
	#1	#2	#3	#4	#5
Hex-1	2.499	2.500	2.500	2.500	2.500
Hex-2	2.500	2.500	2.501	2.500	2.500
Hex-3	2.500	2.500	2.500	2.501	2.499
Average	2.500	2.500	2.500	2.500	2.500
Total Average	2.500				
Result (Pass/Fail)	Pass				
Manufacturing Tolerance	No more than $\pm 0.001\text{mm}$ ($1.000\mu\text{m}$)				

2. Prosthetic component manufacturing tolerance evaluation



Evaluation Item	Manufacturing Tolerance				
Method	a. The specimen was fixed in Micro-Measuring Instrument. b. Each dimensional difference of 3 outer hexagonal connection sides (Hex-1, Hex-2, Hex-3) of 5 specimens was measured.				
Used Equipment	Micro-Measuring Instrument				
Criteria	Each dimensional difference of 3 outer hexagonal connection sides should be no more than $\pm 0.001\text{mm}$ ($1.000\mu\text{m}$) from 2.490mm.				
Specimen	INNO SLA-SH® Sub. Cemented Abutment (5 Pieces of 2SCH4515)				
	#1	#2	#3	#4	#5
Hex-1	2.489	2.490	2.490	2.490	2.490
Hex-2	2.490	2.490	2.490	2.490	2.490
Hex-3	2.490	2.490	2.490	2.490	2.491
Average	2.490	2.490	2.490	2.490	2.490
Total Average	2.490				
Result (Pass/Fail)	Pass				
Manufacturing Tolerance	No more than $\pm 0.001\text{mm}$ ($1.000\mu\text{m}$)				

COWELL® IMPLANT SYSTEM

Help your daily practice superior

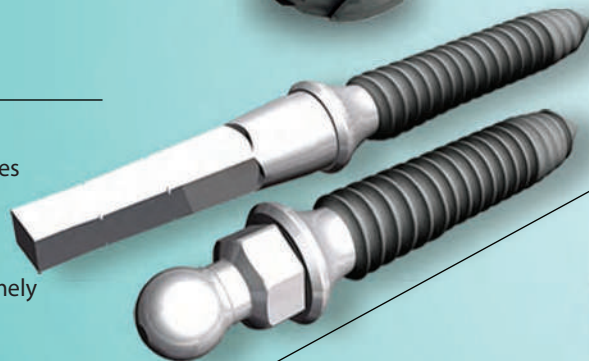


INNO Submerged Narrow Fixture
Designed for anterior esthetic zone with narrow alveolar ridge. Double tapered thread acquires higher primary stability through a wedge action.



INNO Submerged Short Fixture
Designed for severe bone resorption. Wide and deep upper thread prevents the compressive necrosis of the cortical bone.

Miniplus®
For mandible anterior spaces and edentulous arch. Semi-permanent or temporary solution for anterior spaces with extremely narrow ridge.



INNO External Fixture
Stable engraftment of periosteum in the boundary surface of bone and implant.

INNO Submerged Fixture
Designed for all clinical cases including immediate implant placement, immediate loading, implant depth adjustment, maxillary sinus and etc. Simply doing more for your implant treatment.

INNO Internal Fixture
One stage restoration with state of the art design. 4 spiral round cutting edges maximize the efficiency of self tapping with a sharp edge and accommodates bone chips as ideal cutting edge pocket space.

Volume-up™ Healing Abutment
Devised for preventing food penetration and forming aesthetical cervical area by restoring contracted buccal alveolar bone & gingiva to the original shape and width.

Meta G UCLA Abutment
Modification to angulated abutment, customized abutment and telescopic abutment.

Easy Temporary Abutment
Temporary restoration for anterior esthetic zone. For simpler and speedier chair-side process.

Angulated Abutment
Simple solution for anterior esthetic zone.

Milling Abutment
Block abutment to customize contouring.

Multi S&A and Lock Abutment
Designed for both edentulous and partially edentulous arches. A broad range of prosthetic options allows to meet individual requirements of your patients.

Ball Abutment
Designed for use with removable overdentures or partial dentures retained in whole or in part by endosseous implants in the maxilla and mandible.

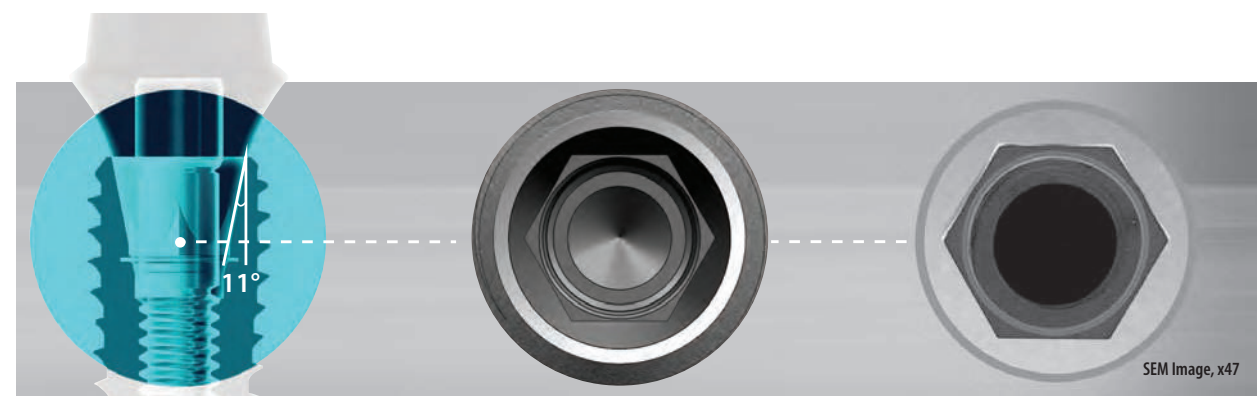
Cemented Abutment
Cutting surface is designed for anti-rotation of prosthesis.

Sonator 80's S&A Abutment
Allows you to treat your patients with minimum standard of care of an implant supported overdenture at affordable cost with great satisfaction.

Beauty-up™ Abutment
Specially designed to solve esthetical and functional challenges when SCRP with angulated screw channel is required in the anterior portion.



INNO-Fixture Design



11° Tapered and 2.5 Hex Connection

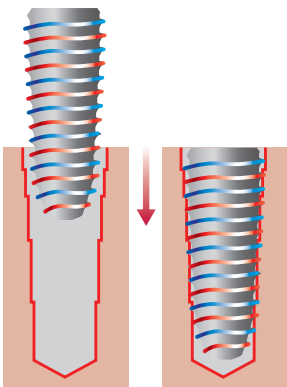
- > Allows the ideal cold welding between the fixture and the abutment.
- > Prevents micro-sinking of the abutment.
- > Excellent compatibility.

Wide and deep upper thread

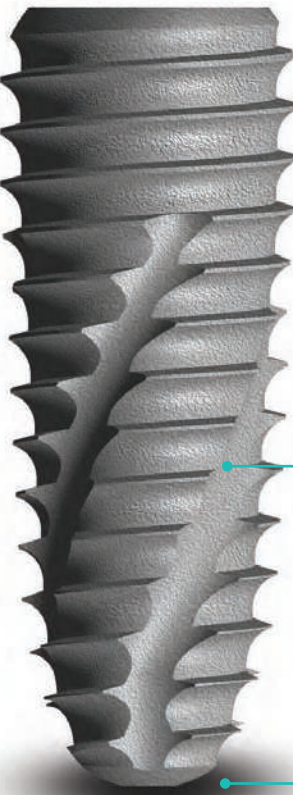
- > Prevents the compressive necrosis of the cortical bone.
- > Minimizes the need for Countersink Drills.
- > Reinforces mechanical strength by reinforcing thickness.

Double Tapered Thread

- > Secures early fixation even for an alveolar socket or parts with weak bone quality.
- > Allows placement to be completed with only 2-4 rotation with half the length of the fixture inserted in the drill hole.
- > Acquires higher primary stability through a wedge action even with an additional half turn.



Shortens the placement time with 5mm or more of already entered depth as well as double thread.



Platform Neck

- > Stable engraftment of periosteum in the boundary surface of bone and implant.
- > Prevents possible infections around the implant.

Open Thread

- > Possible to place deeper even without additional drilling.

4 spiral round cutting edges

- > Maximize the efficiency of self tapping with a sharp edge.
- > Accommodate bone chips as ideal cutting edge pocket space.
- > Allow soft placement but higher initial stability (refer to the test table below).

Apex Thread with a sharp cutting edge

- > Prevents schneiderian membrane from being ripped.
- > Allows soft placement but higher initial stability (refer to the test table below).

※ Placement torque force (Unit: for 4pcs of Ø4.5X10mm implants from 4 different manufacturers in 5.0 & 5.5mm depth hole of type 2 bone quality test block.

Classification	INNO	A	B	C
Depth 5.0mm	26.2 N.cm	29.2 N.cm	26.8 N.cm	28.4 N.cm
Depth 5.5mm	44.0 N.cm	38.0 N.cm	34.4 N.cm	38.5 N.cm

An advantageous design for all clinical cases including immediate implant placement & immediate loading, implant depth adjustment, maxillary sinus and etc.

Fixture type	Submerged (Sub.)	Submerged Short (Sub.)	Internal (Int.)	External (Ext.)	Submerged Narrow (Sub-N.)
Fixture Design					
Connection					

Simpler, Speedier and Safer Surgical Kit

Sub. / Sub-N. / Int. / Ext. / provide different types of exclusive kits, respectively.



All in One Drill : Minimal drilling frequency with Initial and Final Drill

Chair time for implantation is shortened because the fixture can be implanted with just three drillings for general bone quality (when implanting Ø3.5-Ø4.5 fixtures).



Abutment Prosthetic Protocol

> For digital procedure, refer to the COWELL® Digital Products.

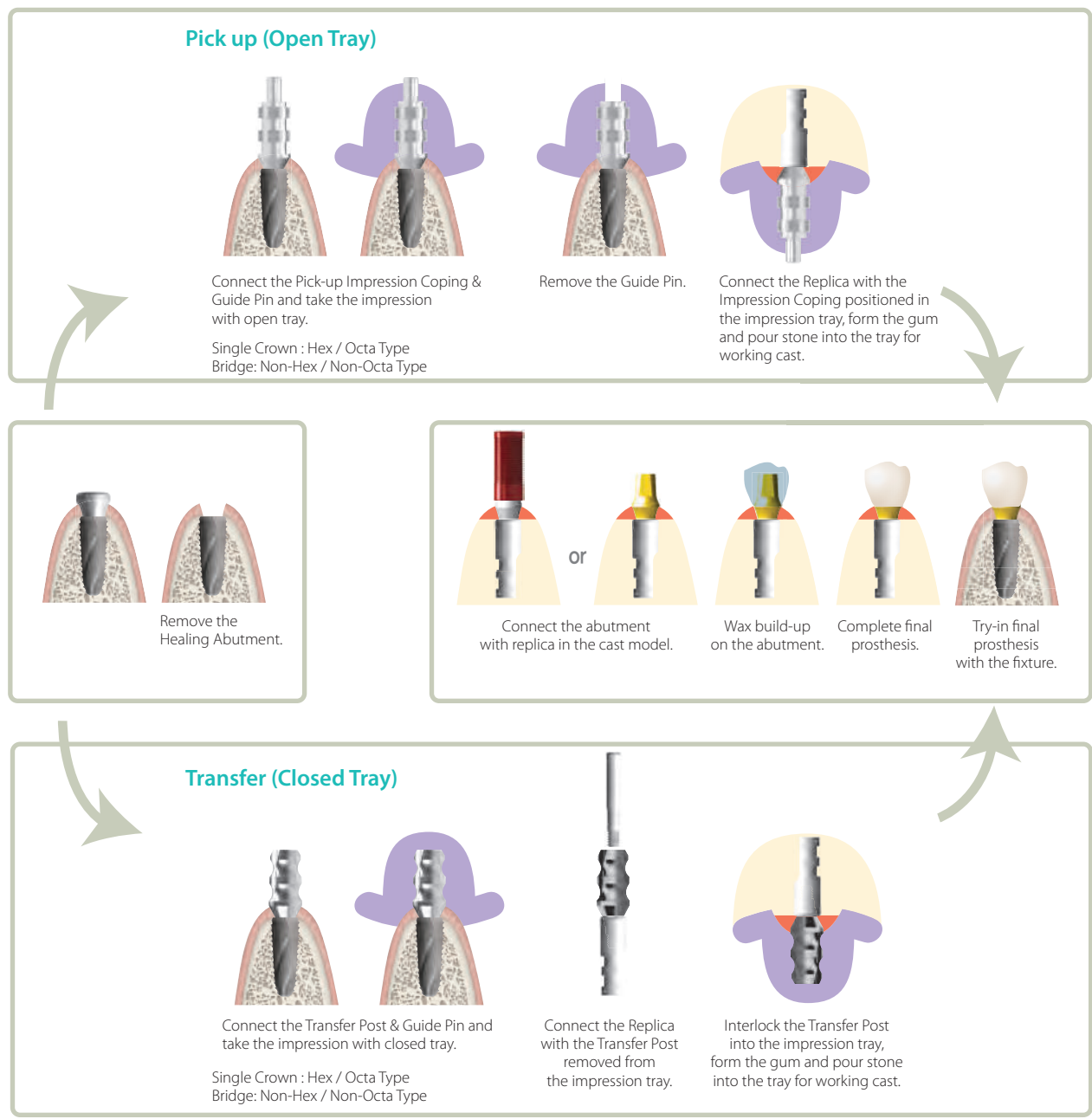
1. Fixture Level Impression - Prosthesis Fabrication

* Two Piece Screw Retained Abutment

Submerged & Submerged Short : Temporary | Easy Temporary | SFIT S | SFIT A
Internal : SFIT S | SFIT A
External : Temporary

* Two Piece Screw-Cement Retained / Cement Retained Abutment

Submerged & Submerged Short : Cemented | Angulated | Beauty-up™ | Milling | Meta G UCLA | Plastic UCLA
Hybrid S | Hybrid L | Hybrid A | Ti-Block
Submerged Narrow : Cemented | Angulated | Temporary | Meta G UCLA | Hybrid S | Hybrid L | Hybrid A
Internal : Cemented | Angulated | Meta G UCLA | Hybrid S | Hybrid L
External : Cemented | Angulated | Temporary | Meta G UCLA | Plastic Sleeve



2. Abutment Level Impression - Prosthesis Fabrication

* Two / One Piece Screw Retained Abutment

Submerged & Submerged Short : Multi S | Multi A | Lock | SFIT Absolute
Submerged Narrow : Multi S | Multi A

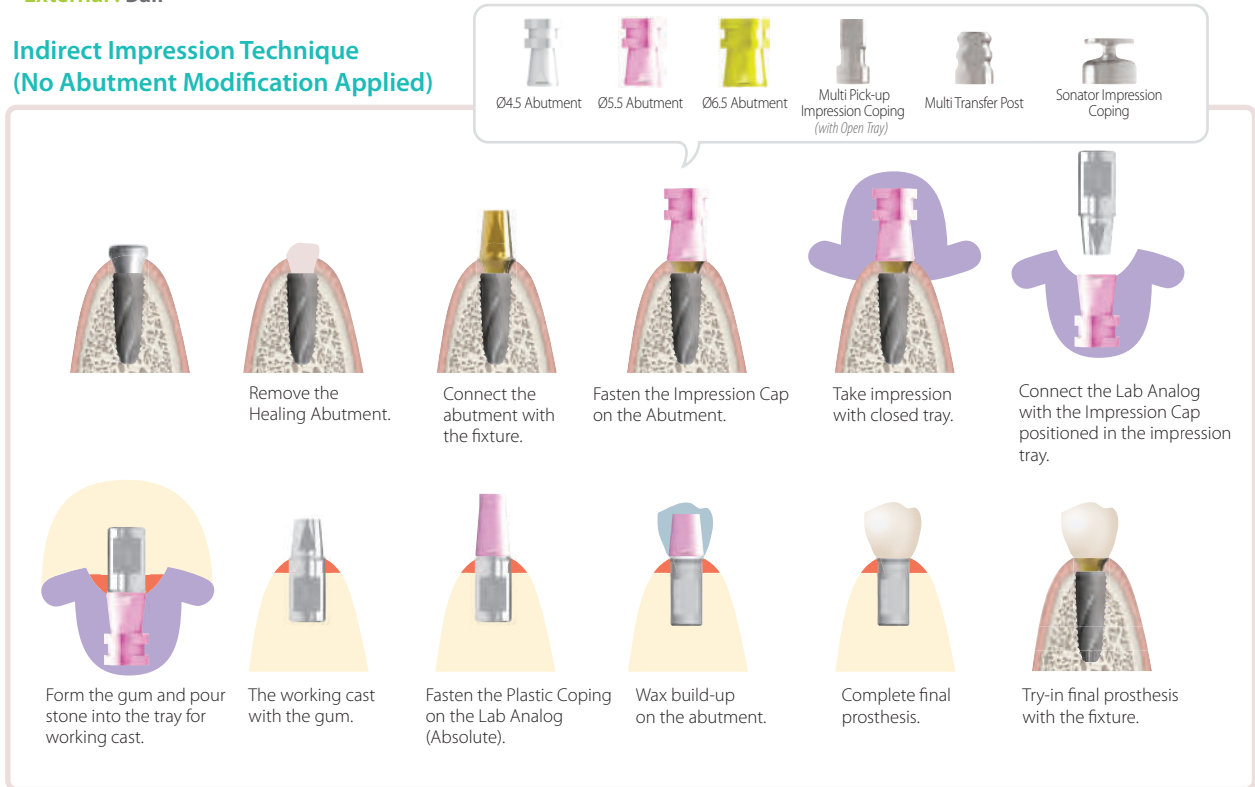
* One Piece Cemented Retained Abutment

Submerged & Submerged Short : Absolute | Straight (Direct)
Submerged Narrow : Straight
Internal : Solid | Shoulder
External : Shoulder

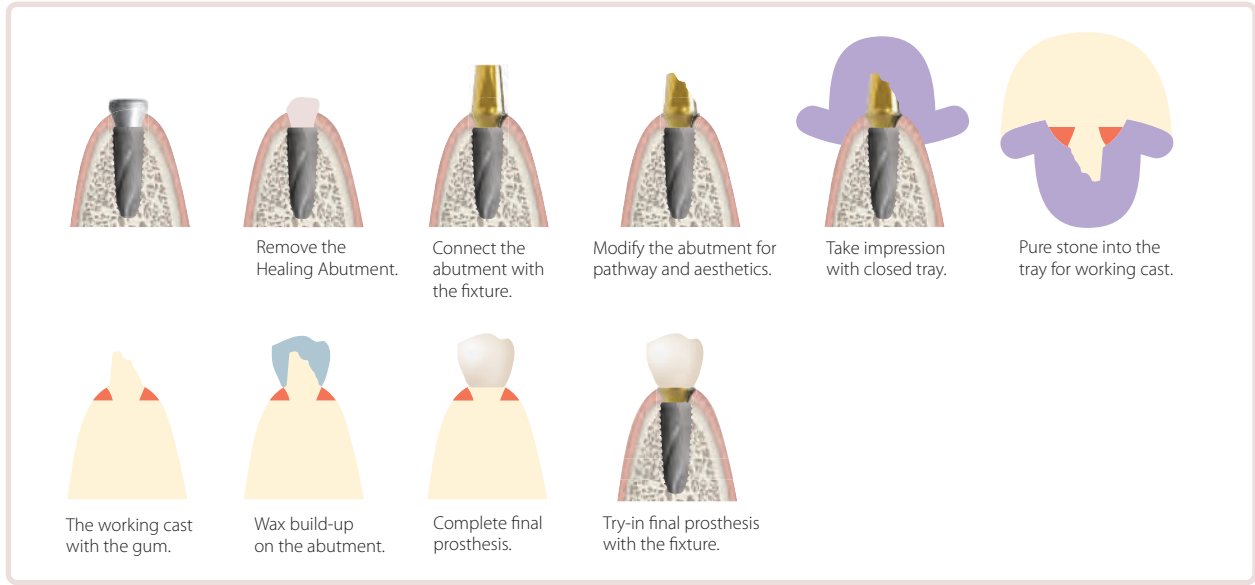
* Two / One Piece Attachment Retained Abutment

Submerged & Submerged Short : Sonator S | Sonator A | Ball
Internal : Sonator S | Ball
External : Ball

Indirect Impression Technique (No Abutment Modification Applied)



Direct Impression Technique (Abutment Modification Applied)



INNO SUBMERGED IMPLANT (Sub.)

System Flow

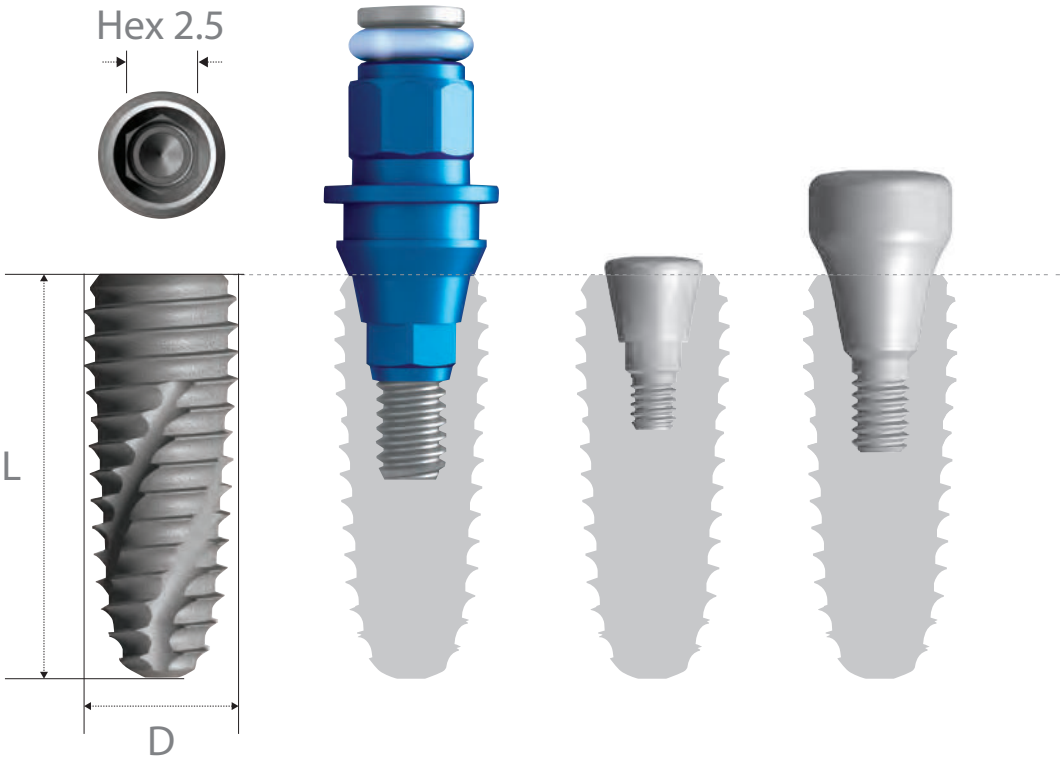
Fixture		Abutment		Impression																			
Hex 2.5 Length 7 / 8 / 10 12 / 14 16 / 18mm Diameter Ø3.5 / 4.0 / 4.5 / 5.0 / 6.0 Hex 2.5 Length 4mm Diameter Ø4.0 / 4.5 / 5.0 / 5.5 / 6.0 <tr><td>Prosthetic Procedure I</td><td> 036p Cemented 036p Angulated 037p Beauty-up™ 037p Milling 037p Easy Temporary 038p Temporary 038p Meta G UCLA 038p Plastic UCLA </td><td rowspan="7">Fixture Level Impression</td><td> 039p Replica 040p Bite Impression Coping 040p Pick-up Impression Coping 040p Transfer Post </td></tr><tr><td>Prosthetic Procedure II</td><td> 042p Multi S 042p Multi A </td><td rowspan="5">Abutment Level Impression</td><td> 043p Multi Protection Cap 043p Multi Impression Coping 043p Multi Transfer Post 044p Multi Lab Analog 044p Multi Meta G ULCA Cylinder 044p Multi Plastic UCLA Cylinder 045p Multi Titanium Cylinder 045p Multi Polishing Protector </td></tr><tr><td>Prosthetic Procedure III</td><td> 048p Lock </td><td> 048p Lock Protection Cap 048p Lock Pick-up Impression Coping 049p Lock Lab Analog 049p Lock Meta G UCLA Cylinder 049p Lock Titanium Cylinder </td></tr><tr><td>Prosthetic Procedure IV</td><td> 052p Absolute </td><td> 052p Absolute Protection Cap 052p Absolute Impression Cap 052p Absolute Lab Analog 052p Absolute Plastic Coping </td></tr><tr><td>Prosthetic Procedure V</td><td> 053p Straight </td><td> Direct Impression </td></tr><tr><td>Prosthetic Procedure VI</td><td> 055p Sonator S 055p Sonator A </td><td> 056p Sonator Impression Coping 057p Sonator Analog </td></tr><tr><td>Prosthetic Procedure VII</td><td> 059p Ball </td><td> 059p Ball Analog </td></tr>	Prosthetic Procedure I	036p Cemented 036p Angulated 037p Beauty-up™ 037p Milling 037p Easy Temporary 038p Temporary 038p Meta G UCLA 038p Plastic UCLA	Fixture Level Impression	039p Replica 040p Bite Impression Coping 040p Pick-up Impression Coping 040p Transfer Post	Prosthetic Procedure II	042p Multi S 042p Multi A	Abutment Level Impression	043p Multi Protection Cap 043p Multi Impression Coping 043p Multi Transfer Post 044p Multi Lab Analog 044p Multi Meta G ULCA Cylinder 044p Multi Plastic UCLA Cylinder 045p Multi Titanium Cylinder 045p Multi Polishing Protector	Prosthetic Procedure III	048p Lock	048p Lock Protection Cap 048p Lock Pick-up Impression Coping 049p Lock Lab Analog 049p Lock Meta G UCLA Cylinder 049p Lock Titanium Cylinder	Prosthetic Procedure IV	052p Absolute	052p Absolute Protection Cap 052p Absolute Impression Cap 052p Absolute Lab Analog 052p Absolute Plastic Coping	Prosthetic Procedure V	053p Straight	Direct Impression	Prosthetic Procedure VI	055p Sonator S 055p Sonator A	056p Sonator Impression Coping 057p Sonator Analog	Prosthetic Procedure VII	059p Ball	059p Ball Analog
	Prosthetic Procedure I	036p Cemented 036p Angulated 037p Beauty-up™ 037p Milling 037p Easy Temporary 038p Temporary 038p Meta G UCLA 038p Plastic UCLA		Fixture Level Impression	039p Replica 040p Bite Impression Coping 040p Pick-up Impression Coping 040p Transfer Post																		
	Prosthetic Procedure II	042p Multi S 042p Multi A			Abutment Level Impression	043p Multi Protection Cap 043p Multi Impression Coping 043p Multi Transfer Post 044p Multi Lab Analog 044p Multi Meta G ULCA Cylinder 044p Multi Plastic UCLA Cylinder 045p Multi Titanium Cylinder 045p Multi Polishing Protector																	
	Prosthetic Procedure III	048p Lock				048p Lock Protection Cap 048p Lock Pick-up Impression Coping 049p Lock Lab Analog 049p Lock Meta G UCLA Cylinder 049p Lock Titanium Cylinder																	
	Prosthetic Procedure IV	052p Absolute				052p Absolute Protection Cap 052p Absolute Impression Cap 052p Absolute Lab Analog 052p Absolute Plastic Coping																	
	Prosthetic Procedure V	053p Straight				Direct Impression																	
	Prosthetic Procedure VI	055p Sonator S 055p Sonator A				056p Sonator Impression Coping 057p Sonator Analog																	
Prosthetic Procedure VII	059p Ball	059p Ball Analog																					

INNO Submerged Implant



Submerged Fixture
Surface Treatment : **SLA-SH®**

- > Interchangeable with hexagonal morse tapered fixture
- > Internal hex connection (Taper 11°/ Hex 2.5)



INNO Fixture Code

S Type Submerged
T body Taper
40 Diameter **Ø4.0**
10 Length **10mm**
S Surface Treatment **SLA**
M Mount No-Mount

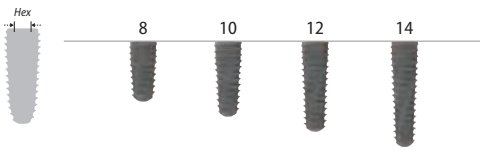
* Ex.)
SLA No-Mount **ST4010SM**

S Type Submerged
T body Taper
40 Diameter **Ø4.0**
10 Length **10mm**
S Surface Treatment **SLA**
 Mount Pre-Mount

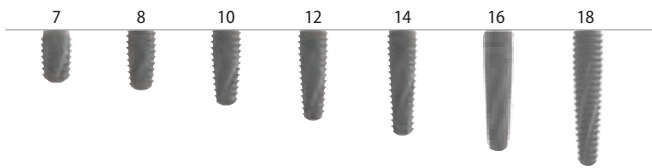
* Ex.)
SLA Pre-Mount **ST4010S**

No-Mount > Packing unit : 1 Fixture + 1 Cover Screw.

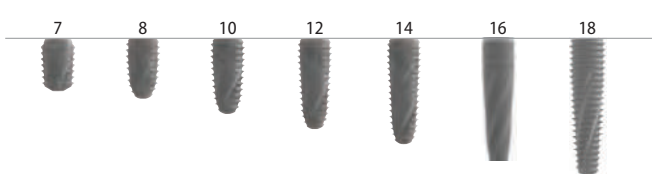
Diameter	Length
Ø3.5	
7	-
8	ST3508SM
10	ST3510SM
12	ST3512SM
14	ST3514SM



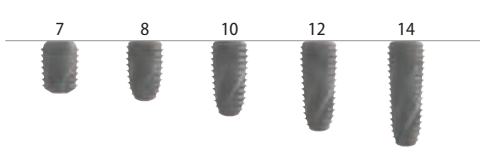
Diameter	Length
Ø4.0	
7	ST4007SM
8	ST4008SM
10	ST4010SM
12	ST4012SM
14	ST4014SM
16	ST4016SM
18	ST4018SM



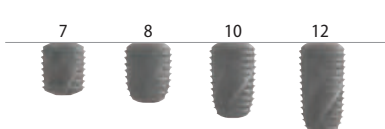
Diameter	Length
Ø4.5	
7	ST4507SM
8	ST4508SM
10	ST4510SM
12	ST4512SM
14	ST4514SM
16	ST4516SM
18	ST4518SM



Diameter	Length
Ø5.0	
7	ST5007SM
8	ST5008SM
10	ST5010SM
12	ST5012SM
14	ST5014SM

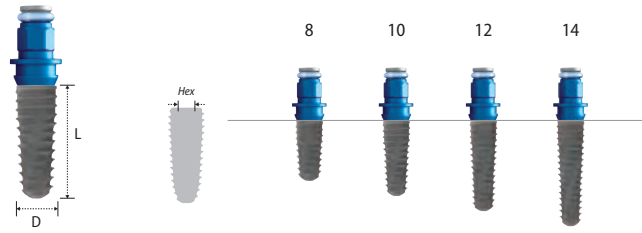


Diameter	Length
Ø6.0	
7	ST6007SM
8	ST6008SM
10	ST6010SM
12	ST6012SM
14	-

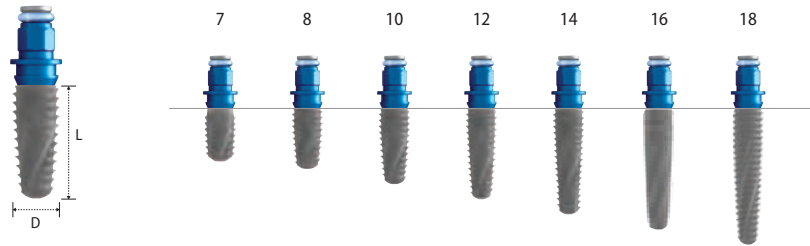


Pre-Mount > Packing unit : 1 Fixture + 1 Cover Screw + 1 Mount.

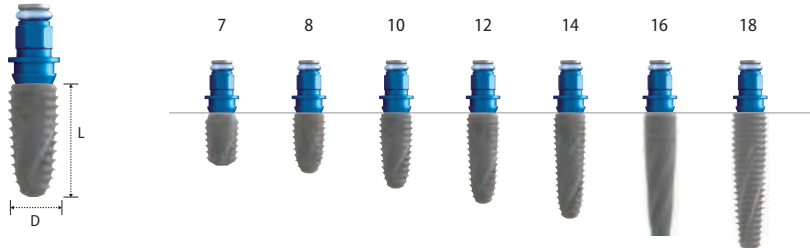
Diameter	Ø3.5
Length	
7	-
8	ST3508S
10	ST3510S
12	ST3512S
14	ST3514S



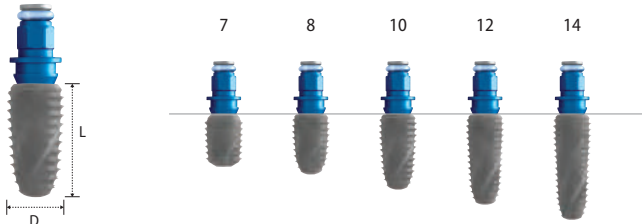
Diameter	Ø4.0
Length	
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8	ST4008S
10	ST4010S
12	ST4012S
14	ST4014S
16	ST4016S
18	ST4018S



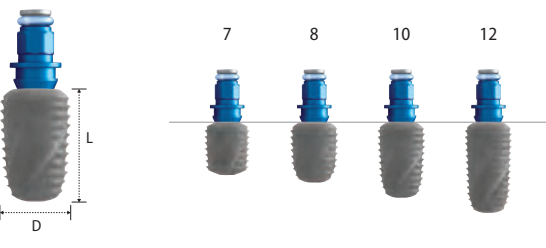
Diameter	Ø4.5
Length	
7	ST4507S
8	ST4508S
10	ST4510S
12	ST4512S
14	ST4514S
16	ST4516S
18	ST4518S



Diameter	Ø5.0
Length	
7	ST5007S
8	ST5008S
10	ST5010S
12	ST5012S
14	ST5014S



Diameter	Ø6.0
Length	
7	ST6007S
8	ST6008S
10	ST6010S
12	ST6012S
14	-

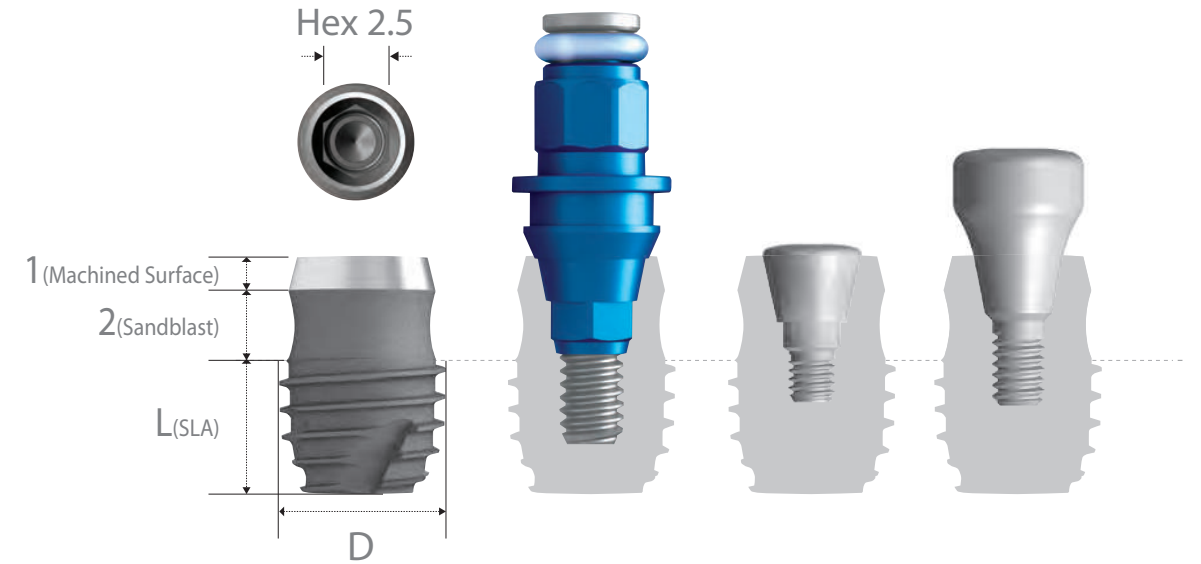


INNO Submerged Short Implant



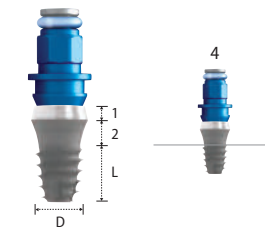
Submerged Short Fixture
Surface Treatment : **SLA-SH®**

- > Interchangeable with Hexagonal Morse Tapered Fixture.
- > Internal hex connection (Taper 11°/ Hex 2.5).

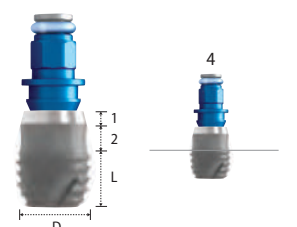


Pre-Mount > Packing Unit : 1 Fixture + 1 Cover Screw + 1 Mount.

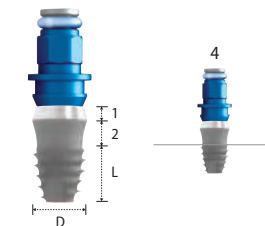
Diameter	Ø4.0
Length	
4	2ST4004S



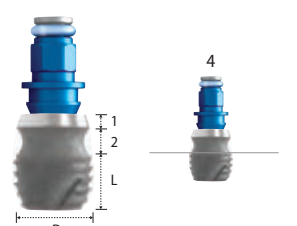
Diameter	Ø5.5
Length	
4	2ST5504S



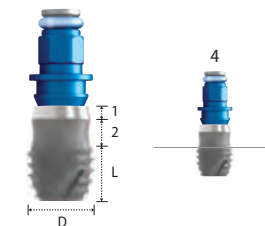
Diameter	Ø4.5
Length	
4	2ST4504S



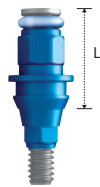
Diameter	Ø6.0
Length	
4	2ST6004S



Diameter	Ø5.0
Length	
4	2ST5004S



Fixture Mount



Length	5.4
	2SMHR001

- > Packing unit : 1 Mount + 1 Mount Screw.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Cover Screw

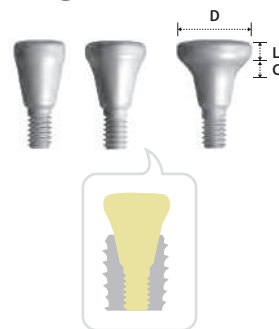


Diameter Length	Ø3.35	Ø3.75	Ø4.15
3	2SCS000		
4.2		* 2SCS001	
5.2			* 2SCS002

- > Packing unit : 1 Cover Screw.
- > To seal the conical interface of fixture.
- > The longer Cover Screw for deeply inserted fixture.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

*Extra Product

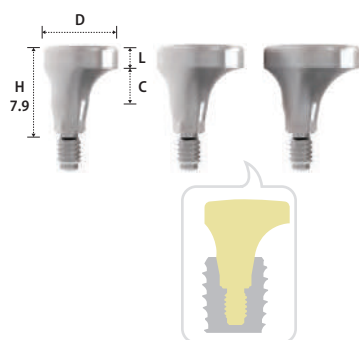
Healing Abutment



Diameter	Ø4.5		Ø5.5		Ø6.5	
Length Cuff	1	2	1	2	1	2
1	2HS4511		2HS5511		2HS6511	
2		2HS4522		2HS5522		2HS6522
3		2HS4532		2HS5532		2HS6532
4		2HS4542		2HS5542		2HS6542
5		2HS4552		2HS5552		2HS6552
7		2HS4572		2HS5572		2HS6572
Diameter	Ø7.5		Ø8.5		Ø9.5	
Length Cuff	2		2		2	
3	2HS7532		2HS8532		2HS9532	

- > Packing unit : 1 Abutment.
- > For remodeling gingival contour during soft tissue healing.
- > Recommended to use with the Volume-up™ Guide System.
- > Select according to gingival height and abutment type.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Volume-up™ Healing Abutment



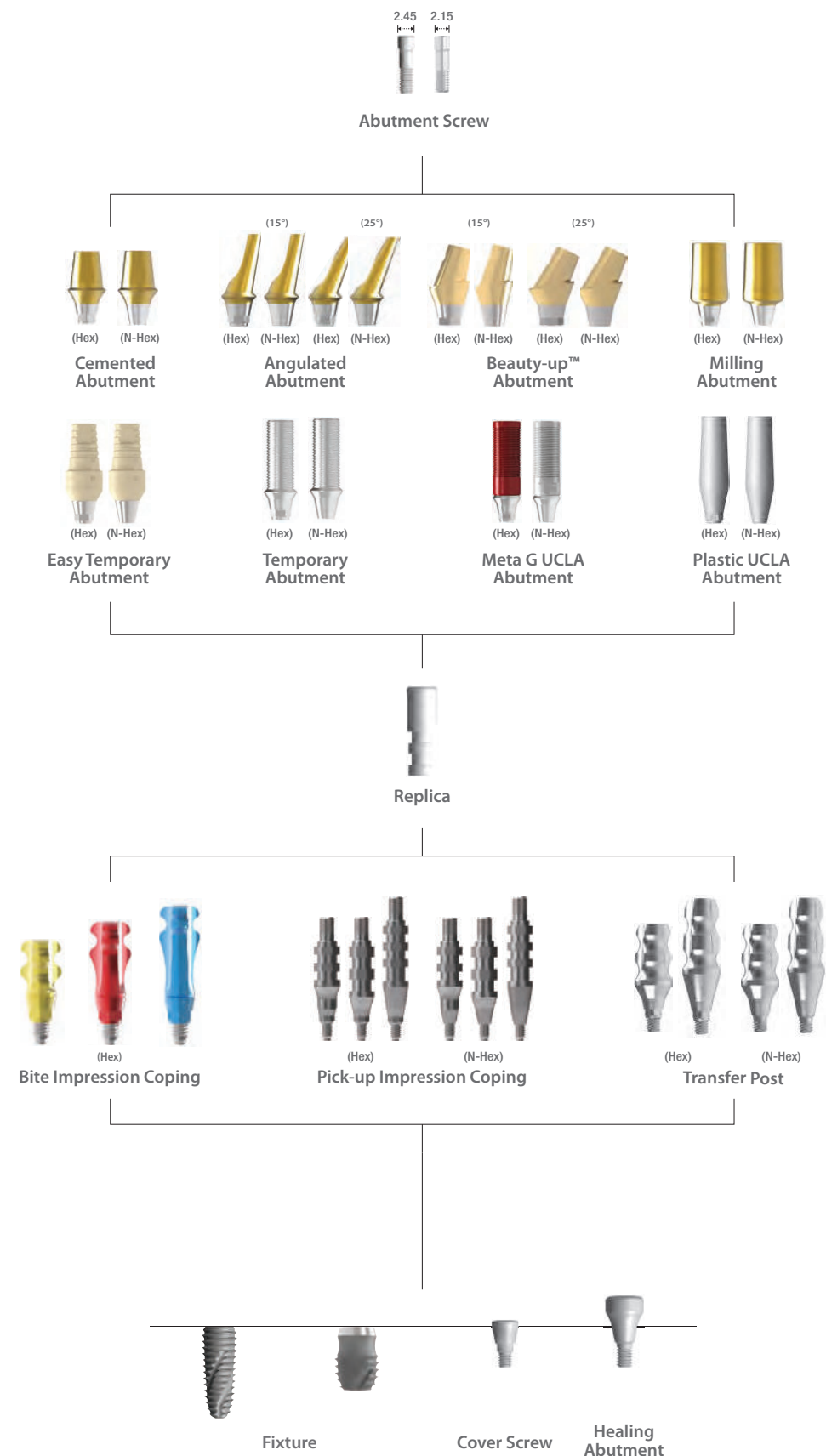
Diameter	Ø6.5	Ø7.5	Ø8.5
Length Cuff	2	2	2
3	VUHN6532	VUHN7532	VUHN8532

- > Packing unit : 1 Abutment(Inbuilt Abutment Screw).
- > Used for an implant procedure to form the gingival tissue and alveolar bone in the form of natural teeth and gums by prevention or minimizing the food penetration.
- > Extremely effective when used with the COWELL® BMP.
- > Recommended to use with the Volume-up™ Guide System.
- > Select according to gingival height and abutment type.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 25~35 N.cm.

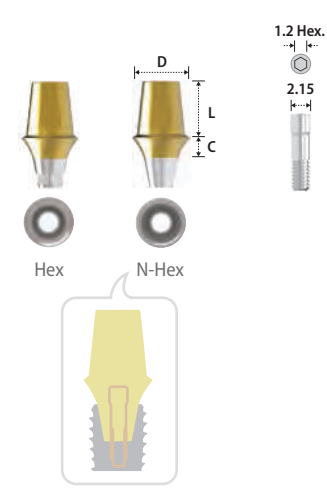


Prosthetic Procedure I

Components Selection Guide for Cemented and UCLA Abutment



Cemented Abutment

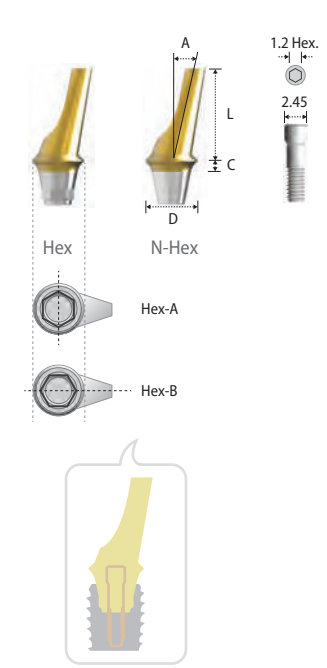


Type	Hex								
Diameter	Ø4.5			Ø5.5			Ø6.5		
Length Cuff	4	5.5	7	4	5.5	7	4	5.5	7
1	2SCH4514	2SCH4515	2SCH4517	2SCH5514	2SCH5515	2SCH5517	2SCH6514	2SCH6515	2SCH6517
2	2SCH4524	2SCH4525	2SCH4527	2SCH5524	2SCH5525	2SCH5527	2SCH6524	2SCH6525	2SCH6527
3	2SCH4534	2SCH4535	2SCH4537	2SCH5534	2SCH5535	2SCH5537	2SCH6534	2SCH6535	2SCH6537
4	2SCH4544	2SCH4545	2SCH4547	2SCH5544	2SCH5545	2SCH5547	2SCH6544	2SCH6545	2SCH6547
5	2SCH4554	2SCH4555	2SCH4557	2SCH5554	2SCH5555	2SCH5557	2SCH6554	2SCH6555	2SCH6557

Type	N-Hex								
Diameter	Ø4.5			Ø5.5			Ø6.5		
Length Cuff	4	5.5	7	4	5.5	7	4	5.5	7
1	2SCN4514	2SCN4515	2SCN4517	2SCN5514	2SCN5515	2SCN5517	2SCN6514	2SCN6515	2SCN6517
2	2SCN4524	2SCN4525	2SCN4527	2SCN5524	2SCN5525	2SCN5527	2SCN6524	2SCN6525	2SCN6527
3	2SCN4534	2SCN4535	2SCN4537	2SCN5534	2SCN5535	2SCN5537	2SCN6534	2SCN6535	2SCN6537
4	2SCN4544	2SCN4545	2SCN4547	2SCN5544	2SCN5545	2SCN5547	2SCN6544	2SCN6545	2SCN6547
5	2SCN4554	2SCN4555	2SCN4557	2SCN5554	2SCN5555	2SCN5557	2SCN6554	2SCN6555	2SCN6557

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of prosthesis.
- > Gold color for more translucent restoration and classification with N-Hex.
- > Library available for EXOCAD®, 3Shape® & 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.

Angulated Abutment

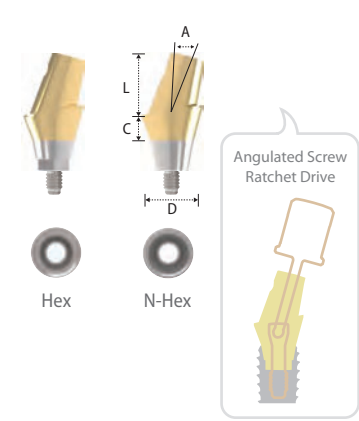


Type	Hex-A				Hex-B			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(25°)	Ø5.5(15°)	Ø5.5(25°)	Ø4.5(15°)	Ø4.5(25°)	Ø5.5(15°)	Ø5.5(25°)
Length Cuff	8	8	8	8	8	8	8	8
1	2SAH45151	2SAH45251	2SAH55151	2SAH55251	2SAH45151B	2SAH45251B	2SAH55151B	2SAH55251B
2	2SAH45152	2SAH45252	2SAH55152	2SAH55252	2SAH45152B	2SAH45252B	2SAH55152B	2SAH55252B
3	2SAH45153	2SAH45253	2SAH55153	2SAH55253	2SAH45153B	2SAH45253B	2SAH55153B	2SAH55253B
4	2SAH45154	2SAH45254	2SAH55154	2SAH55254	2SAH45154B	2SAH45254B	2SAH55154B	2SAH55254B

Type	N-Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(25°)	Ø5.5(15°)	Ø5.5(25°)
Length Cuff	8	8	8	8
1	2SAN45151	2SAN45251	2SAN55151	2SAN55251
2	2SAN45152	2SAN45252	2SAN55152	2SAN55252
3	2SAN45153	2SAN45253	2SAN55153	2SAN55253
4	2SAN45154	2SAN45254	2SAN55154	2SAN55254

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Prosthesis.
- > Solution for anterior esthetic zone.
- > Connected with the Abutment Screw (2SSHR100).
- > Gold color for more translucent restoration and classification with N-Hex.
- > Select Hex-A or Hex-B according to case.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Fixture level impression.

Beauty-up™ Abutment



Type	Hex	N-Hex	Hex	N-Hex
Diameter(Angle)	Ø3.8 (15°)	Ø3.8 (15°)	Ø3.8 (25°)	Ø3.8 (25°)
Length Cuff	5	5	5	5
2	2SBH381525	2SBN381525	2SBH382525	2SBN382525

- > Packing unit : 1 Abutment (Inbuilt Abutment Screw).
- > For Screw-Cement Retained Prosthesis with angulated screw channel.
- > Solution for anterior esthetic zone.
- > The gingival line of the Beauty-up™ Abutment allows more esthetic prosthesis.
- > Oval design allows lower incisal application (Mesiodistal diameter : 3.8mm).
- > Tightened with the Angulated Screw Ratchet Drive and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

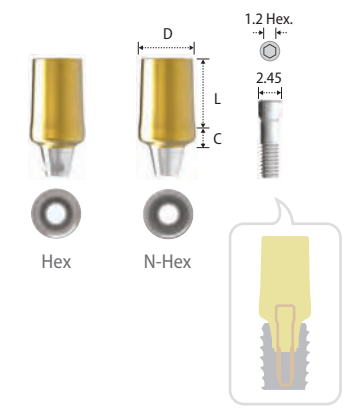
* Angulated Screw Ratchet Driver

Height	Type	Ratchet
24(Short)		KRBUD15
29(Long)		KRBUD20

> Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.

> Tightening torque force : 30 N.cm (50 N.cm Max.).

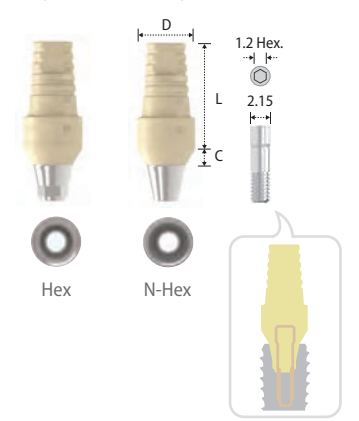
Milling Abutment



Type	Hex			N-Hex		
Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Length Cuff	7	7	7	7	7	7
2	2SMH4527	2SMH5527	2SMH6527	2SMN4527	2SMN5527	2SMN6527
4	2SMH4547	2SMH5547	2SMH6547	2SMN4547	2SMN5547	2SMN6547

- > Packing unit : 1 Milling Abutment + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Prosthesis.
- > Block abutment for customized contouring.
- > Gold color for more translucent restoration and classification with N-Hex.
- > Connected with the Abutment Screw (2SSHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Fixture level impression.

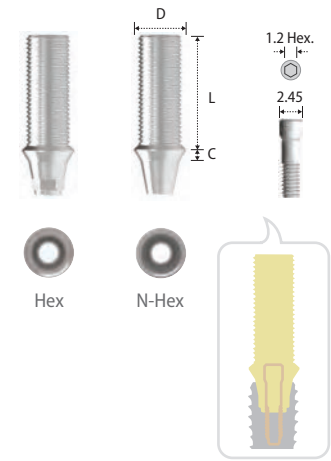
Easy Temporary Abutment



Type	Hex		N-Hex	
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length Cuff	10	10	10	10
2	2STHA45C	2STHA55C	2STNA45C	2STNA55C

- > Packing unit : 1 Easy Temporary Abutment + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > For simpler and speedier chair-side process.
- > Vaneerable polymer material.
- > Temporary restoration for anterior esthetic zone.
- > Titanium core for strength.
- > Connected with the Abutment Screw (2SSHR200).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 20 N.cm.
- > Fixture level impression.

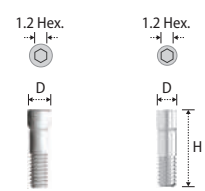
Temporary Abutment



Type	Hex		N-Hex	
Diameter	Ø4.5		Ø4.5	
Length	10		10	
Cuff				
1	2STHA45		2STNA45	

- > Packing unit : 1 Temporary Abutment + 1 Abutment Screw.
- > For Screw-Cement Retained Prosthesis.
- > For provisional restoration.
- > Connected with the Abutment Screw (2SSHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 20 N.cm.
- > Fixture level impression.

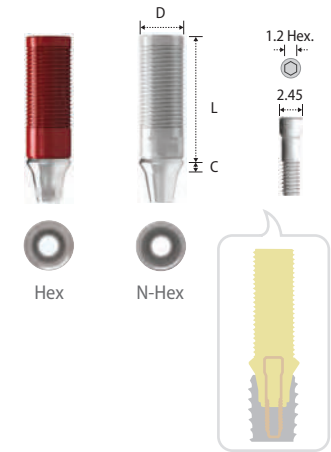
Abutment Screw



Diameter	Ø2.45	Ø2.15
Height	8.5	8.5
	2SSHR100	2SSHR200

- > Packing unit : 1 Abutment Screw.
- > 2SSHR100 : Hybrid Block / Scanbody / Angulated / Milling / Temporary / Meta G UCLA / Plastic UCLA Abutment.
- > 2SSHR200 : Hybrid S & L Ti-Base / Cemented / Easy Temporary Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Meta G UCLA Abutment



Type	Hex		N-Hex	
Diameter	Ø4.5		Ø4.5	
Length	12		12	
Cuff				
1	2SGH45N		2SGN45N	
2	2SGH452N		2SGN452N	
3	2SGH453N		2SGN453N	

- > Packing unit : 1 Meta G UCLA Abutment + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Prosthesis.
- > Modification to angulated abutment, Customized abutment and telescopic abutment.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Abutment Screw (2SSHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Fixture level impression.

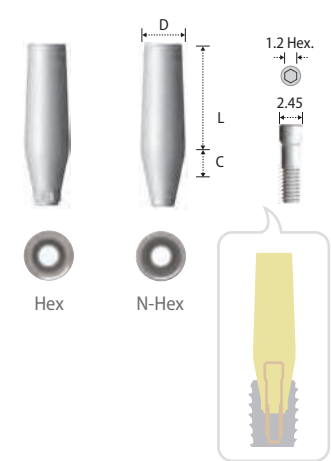
Replica



Diameter	Ø4
Height	12
	2SRHR001

- > Packing unit : 1 Replica.
- > Mimicking of conical interface of fixture.
- > Analog of fixture for working cast.

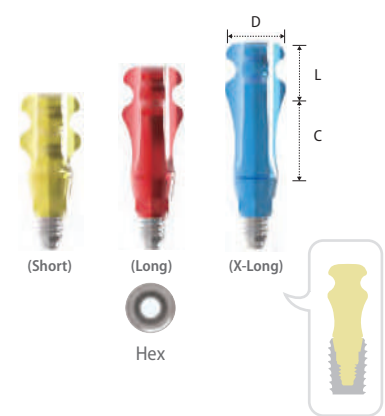
Plastic UCLA Abutment



Type	Hex		N-Hex	
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length	11	11	11	11
Cuff				
3	2SPHR001	2SPHW001	2SPNR001	2SPNW001

- > Packing unit : 1 Plastic UCLA Abutment + 1 Abutment Screw.
- > Same purpose of use as the Meta G UCLA Abutment but low accuracy of connection during lab procedure.
- > PMMA material.
- > Connected with the Abutment Screw (2SSHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : Finger light force during wax pattern fabrication, 30 N.cm after casting.
- > Fixture level impression.

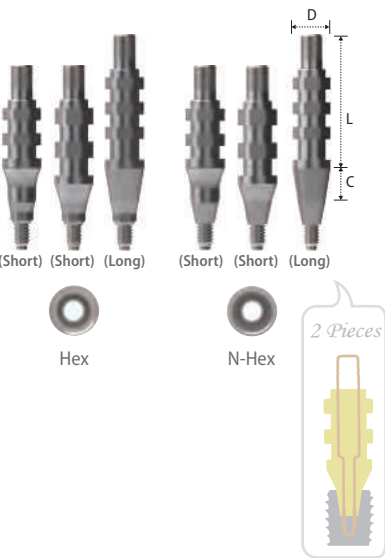
Bite Impression Coping



Type	Hex(Short)	Hex(Long)	Hex(X-Long)
Diameter	Ø4.5	Ø4.5	Ø4.5
Cuff	2	4	6
Length	4.0	2SBIC45S	2SBIC45L
			2SBIC45X

- > Packing unit : 1 Bite Impression Coping (Inbuilt Guide Pin).
- > Designed to simultaneously take bite and impression.
- > For Closed Tray Impression (Bite Impression).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

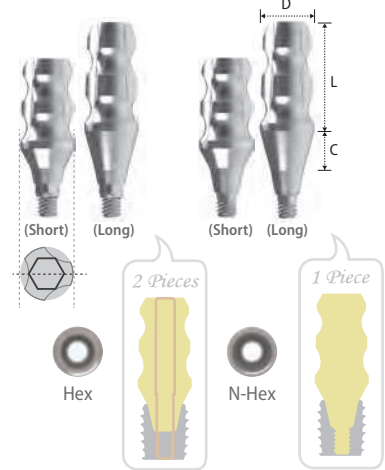
Pick-up Impression Coping



Type	Hex			N-Hex		
Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Length / Cuff	14 (Short) / 4	2SIH454S	2SIH554S	2SIH654S	2SIN454S	2SIN554S
	2SIN654S					
	14 (Short) / 2	2SIH45S	2SIH55S	2SIH65S	2SIN45S	2SIN55S
	2SIN65S					
	16 (Long) / 4	2SIH45L	2SIH55L	2SIH65L	2SIN45L	2SIN55L
	2SIN65L					

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (2SISR001SS / 2SISR001SL).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Transfer Post

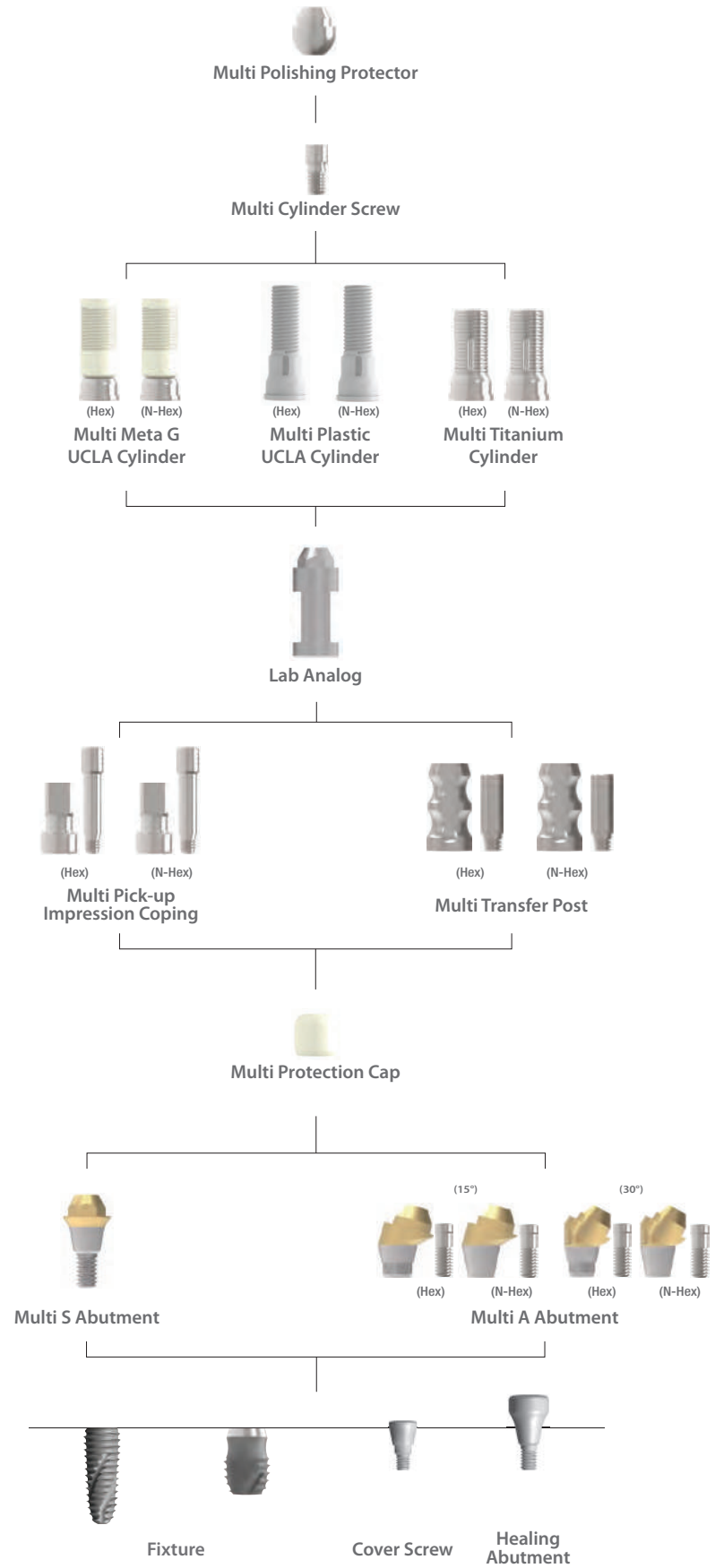


Type	Hex			N-Hex		
Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Length / Cuff	9 (Short) / 2	2STH45S	2STH55S	2STH65S	2STN45S	2STN55S
	2STN65S					
	11 (Long) / 4	2STH45L	2STH55L	2STH65L	2STN45L	2STN55L
	2STN65L					

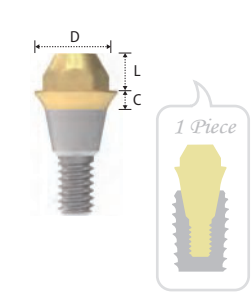
- > Packing unit : Hex - 1 Transfer Post + 1 Guide Pin (2STH001SS / 2STH001SL)
- N-Hex - 1 Transfer Post (Solid Type).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Prosthetic Procedure II

Component Selection Guide for Multi S&A Abutment



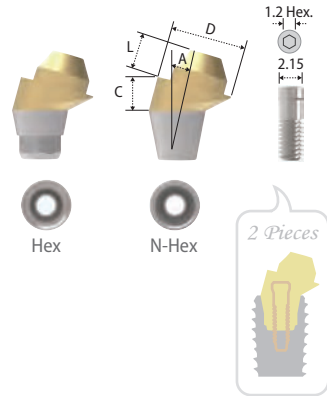
Multi S Abutment



Diameter	Ø4.5	Ø5.5
Cuff Length	2	2
1	2SMS451	2SMS551
2	2SMS452	2SMS552
3	2SMS453	2SMS553
4	2SMS454	2SMS554
5	2SMS455	2SMS555

- > Packing unit : 1 Multi S Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Integrated with screw and abutment.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Use the S Holder for more stable position.
- > Tightened with the S Machine & S Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

Multi A Abutment

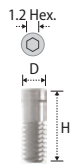


Type	Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2
2	● 2SMAH45152			
3	★ 2SMAH45153	● 2SMAH45303	★ 2SMAH55153	★ 2SMAH55303
4	★ 2SMAH45154	★ 2SMAH45304	★ 2SMAH55154	★ 2SMAH55304
5			★ 2SMAH55155	★ 2SMAH55305

Type	N-Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2
2	● 2SMAN45152			
3	★ 2SMAN45153	● 2SMAN45303	★ 2SMAN55153	★ 2SMAN55303
4	★ 2SMAN45154	★ 2SMAN45304	★ 2SMAN55154	★ 2SMAN55304
5			★ 2SMAN55155	★ 2SMAN55305

- > Packing unit: 1 Multi A Abutment + 1 Abutment Screw.
- > For Screw-Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Use the A Holder for more stable position.
- > Connected with the Abutment Screw (2SSHR300 : ★ / 2SSHR400 : ●).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Multi Scanbody for digital flow.
- > Abutment level impression.

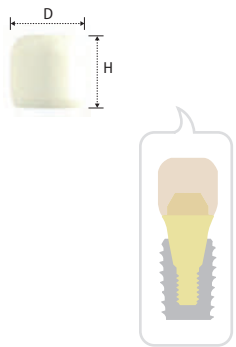
Abutment Screw



Height Diameter	7.5	6.5
2.15	★ 2SSHR300	● 2SSHR400

- > Packing unit: 1 Abutment Screw.
- > To connect the Multi A Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

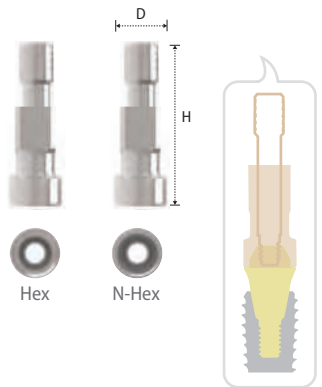
Multi Protection Cap



Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter Height	Ø5.2	Ø6.2
5	2SMPC45	2SMPC55

- > Packing unit : 1 Multi Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.
- > Alternative usage for sub-structure of temporary prosthesis.

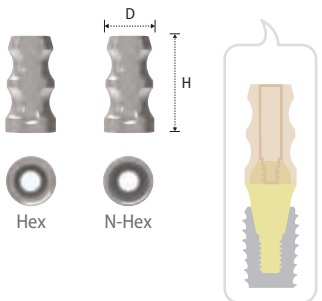
Multi Pick-up Impression Coping



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter Height	Ø4.65	Ø5.65	Ø4.65	Ø5.65
14.8	2SMIH45	2SMIH55	2SMIN45	2SMIN55

- > Packing unit: 1 Multi Pick-up Impression Coping + 1 Guide Pin (2SMGP012).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Multi Transfer Post



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter Height	Ø4.5	Ø5.5	Ø4.5	Ø5.5
8.5	2SMTH45	2SMTH55	2SMTN45	2SMTN55

- > Packing unit: 1 Multi Transfer Post + 1 Guide Pin (2SMTHS100).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

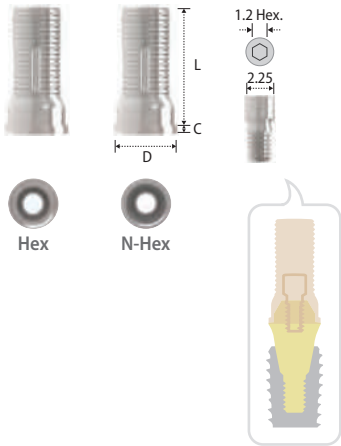
Multi Lab Analog



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length	2	2	2	2
Cuff	2SMA45	2SMA55	2STCN45	2STCN55

- > Packing unit : 1 Multi Lab Analog.
- > Replacement of abutment shape in working cast.
- > Choose by abutment size.

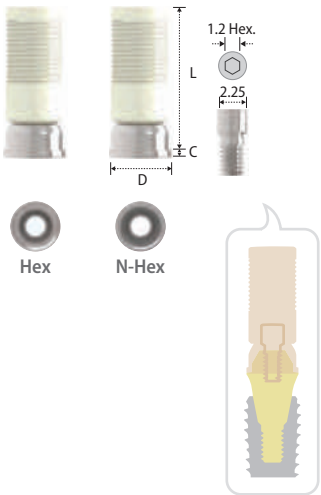
Multi Titanium Cylinder



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length	8.5	8.5	8.5	8.5
Cuff	0.5	0.5	0.5	0.5
	2STCH45	2STCH55	2STCN45	2STCN55

- > Packing unit : 1 Multi Titanium Cylinder + 1 Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Connected with the Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

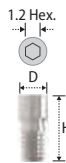
Multi Meta G UCLA Cylinder



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length	10.9	10.9	10.9	10.9
Cuff	0.5	0.5	0.5	0.5
	2SCCH45	2SCCH55	2SCCN45	2SCCN55

- > Packing unit : 1 Multi Meta G UCLA Cylinder + 1 Multi Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Modification to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Multi Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

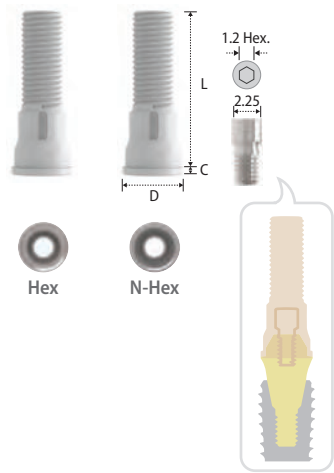
Multi Cylinder Screw



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø2.25	Ø2.25
Diameter	Ø2.25	Ø2.25
Length	5	5
Cuff	2SMCS100	2SMCS100

- > Packing unit : 1 Multi Cylinder Screw.
- > Connected with the Meta G UCLA, Plastic UCLA and Titanium Cylinder.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

Multi Plastic UCLA Cylinder



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length	11.5	11.5	11.5	11.5
Cuff	0.5	0.5	0.5	0.5
	2SMPH45	2SMPH55	2SMPN45	2SMPN55

- > Packing unit : 1 Multi Plastic UCLA Cylinder + 1 Multi Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Same purpose of use as the Meta G UCLA Cylinder but low accuracy of connection.
- > PMMA material.
- > Connected with the Multi Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

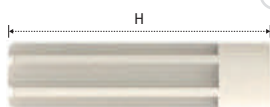
Multi Polishing Protector



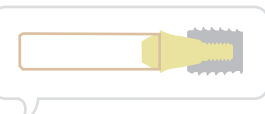
Type	Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5
Length	2	2
Cuff	2SMPP45	2SMPP55

- > Packing unit : 1 Protector.
- > For polishing work during lab procedure.

Multi Holder

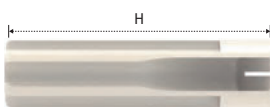


S Holder



Type	Hand
Height 20	KMHS01

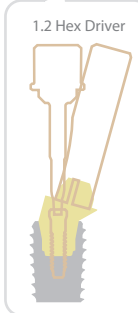
- > Packing unit : 1 Holder.
- > To position the Multi S Abutment more stably.



A Holder

Type	Hand
Height 20	KMHA01

- > Packing unit : 1 Holder.
- > To position the Multi A Abutment more stably.



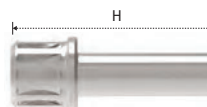
Multi S Machine Driver



Type	Machine
Height 27.5	KMMSD21L

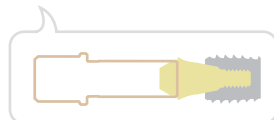
- > Packing unit: 1 Multi S Machine Driver.
- > To install the Multi S Abutment by machine.

Multi S Ratchet Driver



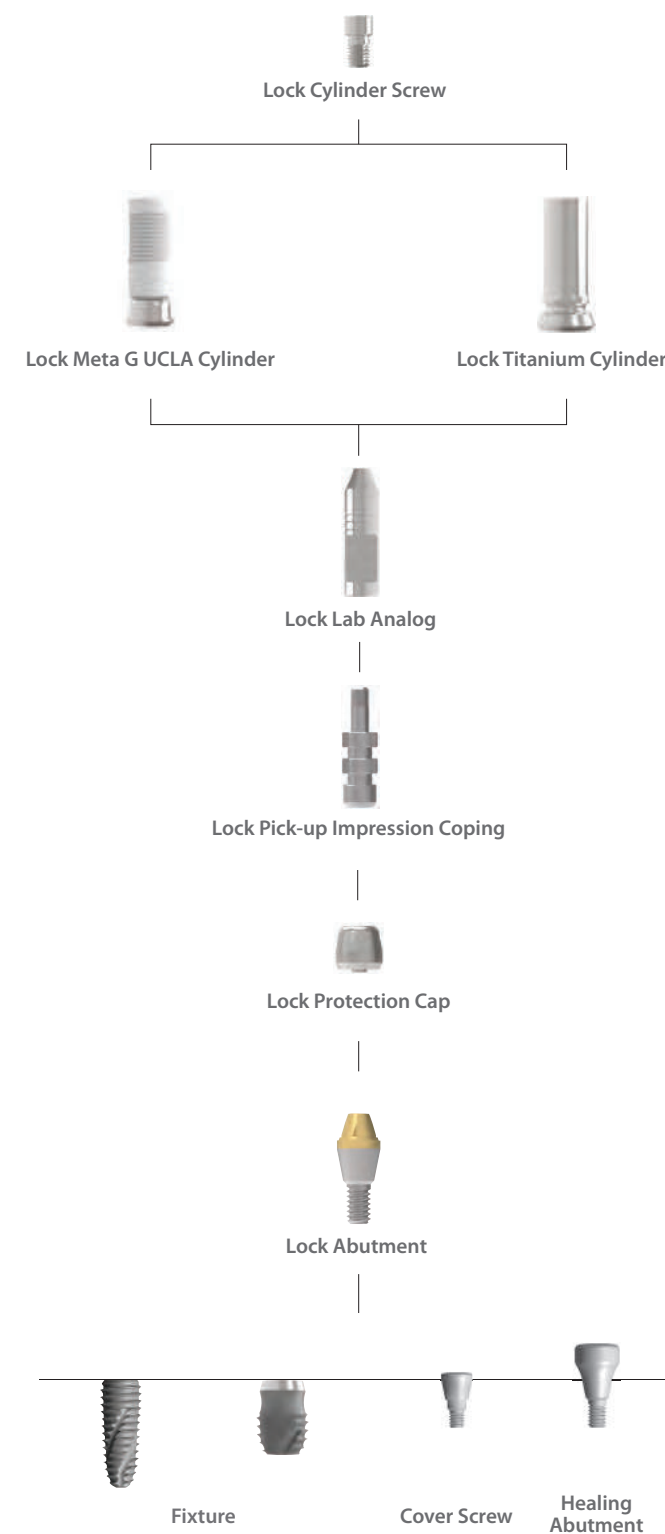
Type	Ratchet
Height 22	KRMSD15L

- > Packing unit: 1 Multi S Ratchet Driver.
- > To install the Multi S Abutment by hand.

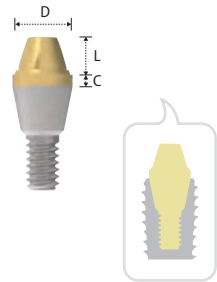


Prosthetic Procedure III

Component Selection Guide for Lock Abutment



Lock Abutment



Diameter	Ø4.5
Cuff Length	2.15
0.5	2SLA400
1	2SLA410
2	2SLA420
3	2SLA430
4	2SLA440

- > Packing unit : 1 Lock Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for cylinder.
- > Gold color for more translucent restoration.
- > Integrated with screw and abutment.
- > Tightened with the Lock Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

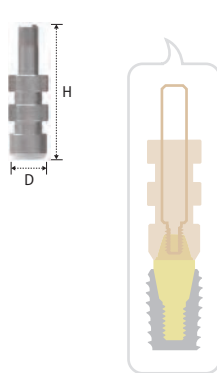
Lock Protection Cap



Diameter Height	Ø4.5
4.3	2SLP45

- > Packing unit : 1 Lock Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.

Lock Pick-up Impression Coping



Diameter Height	Ø4.5
16	2SLIH45

- > Packing unit : 1 Lock Pick-up Impression Coping + 1 Guide Pin (2SLIH45S).
- > For open tray impression.

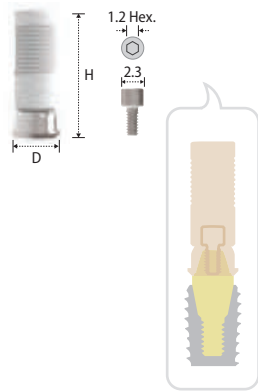
Lock Lab Analog



Diameter Length	Ø4.5
2.15	2SLA45

- > Packing unit : 1 Lock Lab Analog.
- > Replacement of abutment shape in working cast.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

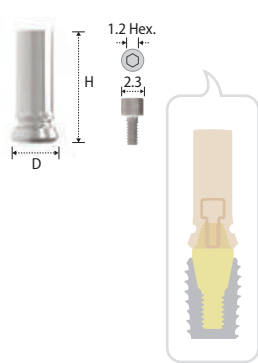
Lock Meta G UCLA Cylinder



Diameter Height	Ø4.5
11.2	2SLCH45

- > Packing unit : 1 Lock Meta G UCLA Cylinder + 1 Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Modification to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

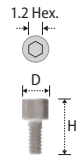
Lock Titanium Cylinder



Diameter Height	Ø4.5
10	2SLTH45

- > Packing unit : 1 Lock Titanium Cylinder + 1 Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Connected with the Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

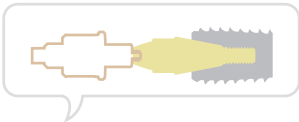
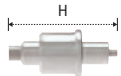
Lock Cylinder Screw



Diameter	Ø2.3
Height	4.8
2SLCS200	

- > Packing unit : 1 Cylinder Screw.
- > Connected with the CCM Cylinder or Titanium Cylinder.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

Lock Ratchet Driver



Type	Ratchet
Height	14.2
	KRLRD18
Height	28.5
	KRLRD28

- > Packing unit : 1 Lock Ratchet Driver.
- > To install the Lock Abutment by hand.



Prosthetic Procedure IV

Component Selection Guide for Absolute Abutment



Absolute Abutment



Diameter	Ø4.5			Ø5.5		
Length Cuff	4	5.5	7	4	5.5	7
1	2SAC4514	2SAC4515	2SAC4517	2SAC5514	2SAC5515	2SAC5517
2	2SAC4524	2SAC4525	2SAC4527	2SAC5524	2SAC5525	2SAC5527
3	2SAC4534	2SAC4535	2SAC4537	2SAC5534	2SAC5535	2SAC5537
4	2SAC4544	2SAC4545	2SAC4547	2SAC5544	2SAC5545	2SAC5547
5	2SAC4554	2SAC4555	2SAC4557	2SAC5554	2SAC5555	2SAC5557

Diameter	Ø6.5		
Length Cuff	4	5.5	7
1	2SAC6514	2SAC6515	2SAC6517
2	2SAC6524	2SAC6525	2SAC6527
3	2SAC6534	2SAC6535	2SAC6537
4	2SAC6544	2SAC6545	2SAC6547
5	2SAC6554	2SAC6555	2SAC6557

- > Packing unit : 1 Absolute Abutment + 1 Production Cap.
- > For Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of prosthesis.
- > Integrated with the Screw and Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

Absolute Protection Cap



Abut. Diameter	Ø4.5	Ø5.5	Ø6.5
Diameter Height	Ø5.0	Ø6.0	Ø7.0
6	2SHPC454	2SHPC554	2SHPC654
7.5	2SHPC455	2SHPC555	2SHPC655
9	2SHPC457	2SHPC557	2SHPC657

- > Packing unit : 1 Absolute Protection Cap .
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.
- > Alternative usage for sub-structure of temporary prosthesis.

Absolute Impression Cap



Abut. Diameter	Ø4.5	Ø5.5	Ø6.5
Diameter Height	Ø5.5	Ø6.5	Ø7.5
10.3	2SIC45	2SIC55	2SIC65

- > Packing unit : 1 Absolute Impression Cap.
- > Confirm locking with abutment by rotation of clockwise and anti-clockwise direction.

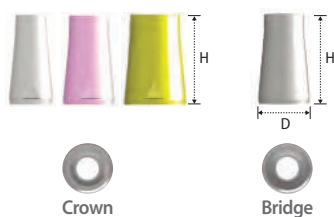
Absolute Lab Analog



Abut. Diameter	Ø4.5	Ø5.5	Ø6.5
Length	Ø4.5	Ø5.5	Ø6.5
4.1	2SHLA454	2SHLA554	2SHLA654
5.6	2SHLA455	2SHLA555	2SHLA655
7.1	2SHLA457	2SHLA557	2SHLA657

- > Packing unit : 1 Absolute Lab Analog.
- > Replacement of abutment shape in working cast.
- > Choose according to width and length of abutment.

Absolute Plastic Coping (Burn Out Cylinder)

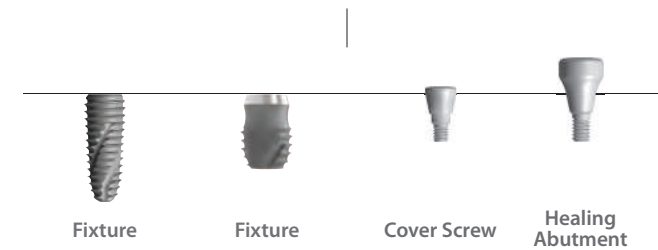


Type	Crown			Bridge		
Abut. Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Diameter Height	Ø5.1	Ø6.1	Ø7.1	Ø5.1	Ø6.1	Ø7.1
10	2SHBC45	2SHBC55	2SHBC65	2SHBB45	2SHBB55	2SHBB65

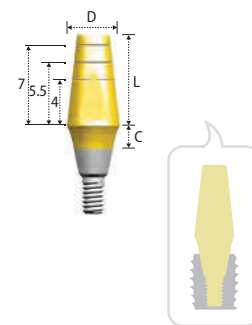
- > Packing unit : 1 Absolute Plastic Coping.
- > Connected with the Lab Analog.
- > Burn out and casting for metal framework.

Prosthetic Procedure V

Component Selection Guide for Straight Abutment



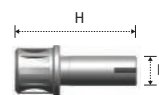
Straight Abutment



Diameter	Ø3.5	Ø4.5
Length Cuff	8	8
0.5	2SSCM308	2SSCR408
1	2SSCM318	2SSCR418
2	2SSCM328	2SSCR428
3	2SSCM338	2SSCR438
4	2SSCM348	2SSCR448

- > Packing unit : 1 Straight Abutment.
- > For Cement Retained Prosthesis.
- > Integrated with screw and abutment.
- > Tightened with the Shoulder Driver.
- > Tightening torque force : 30 N.cm.
- > Direct impression.

Shoulder Driver

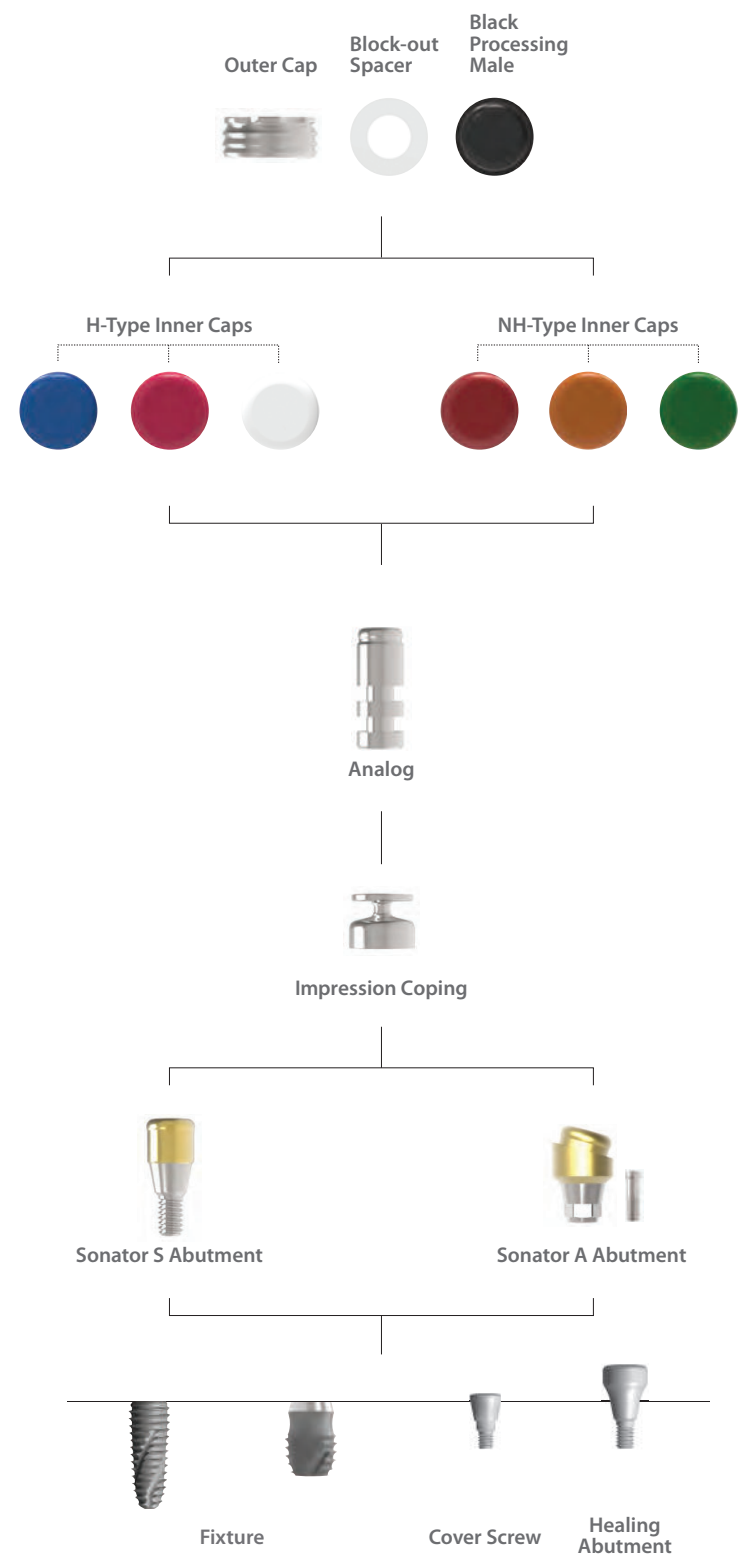


Diameter Height	Ø4.5
19	KRR19L

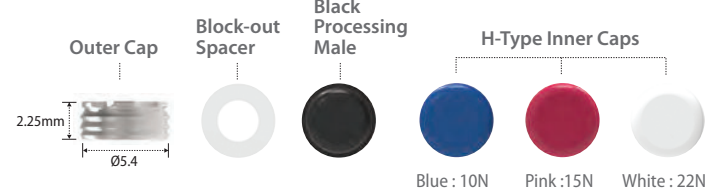
- > Packing unit : 1 Driver.
- > To install the Straight Abutment.

Prosthetic Procedure VI

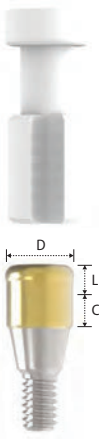
Component Selection Guide for Sonator Abutment



Sonator S Abutment



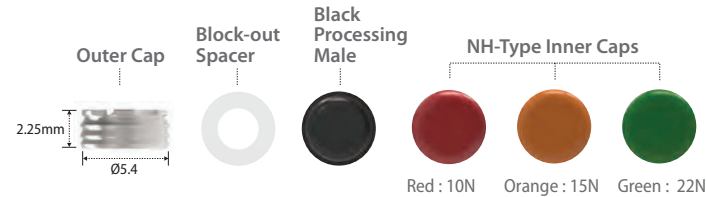
Carrier



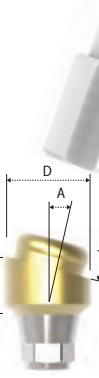
Diameter	Ø4.0					
Length	1	2	3	4	5	6
Cuff	SONS401	SONS402	SONS403	SONS404	SONS405	SONS406

- > Packing unit : Sonator S Abutment + Carrier + 3 H-Type Inner Caps + Outer Cap + Block-out Spacer + Black Processing Male.
- > For Implant Supported Over-denture Prosthesis.
- > Stable with low vertical height.
- > 6 kinds of the Inner Caps give various holding force (Both, H and NH-Type Inner Caps are used for the Sonator S Abutment).
- > Path compensation up to 20° based on 2 implants.
- > Carrier : Used for delivery of the abutment.
- > Tightened with the Sonator S Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

Sonator A Abutment



Carrier



Diameter	Ø4.0	
Length	1.5	3.0
Angle	3	3
Cuff	SONA415	SONA430

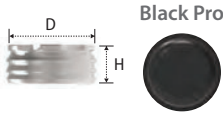
- > Packing unit : Sonator A Abutment + Abutment Screw + Carrier + 3 NH-Type Inner Caps + Outer Cap + Block-out Spacer + Black Processing Male.
- > For Implant Supported Over-denture Prosthesis.
- > Stable with low vertical height.
- > 6 kinds of Inner Caps give various holding force (Both, H and NH-Type Inner Caps are used for Sonator A Abutment).
- > Path compensation up to 40° based on 2 Implants.
- > Connected with the Abutment Screw (2SSHR300).
- > Carrier : Used for delivery of the abutment.
- > Tightened with the 1.2 Hex Driver and Torque wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

Abutment Screw



Diameter	Ø2.15
Height	7.5
2SSHR300	

Outer Cap



Black Processing Male

Diameter Height	Ø5.4
2.25	SONOC01

> Packing unit : 2 Outer Caps and 2 Black Processing Males.

> Black Processing Male: Inserted and removed with the I&R Driver.

H-Type Inner Cap



Block-out Spacer

Inner Cap

Blue : Retention Force About 10N

Pink : Retention Force About 15N

White : Retention Force About 22N

Code	SONIC01
------	---------

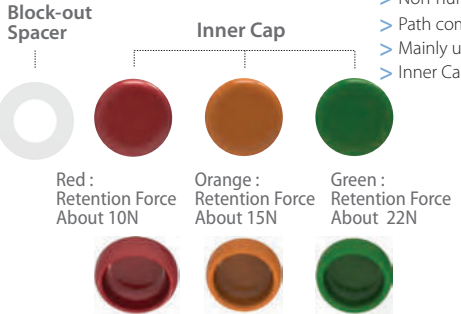
> Packing unit : 3 Block-out Spacers + 3 Inner Caps (1 Blue, 1 Pink and 1 White).

> Path compensation up to 20° based on 2 implants.

> Mainly used for the Sonator S Abutment.

> Inner Caps: Inserted and removed with the I&R Driver.

NH-Type Inner Cap



Block-out Spacer

Inner Cap

Red : Retention Force About 10N

Orange : Retention Force About 15N

Green : Retention Force About 22N

Code	SONIC02
------	---------

> Packing unit : 3 Block-out Spacers + 3 Inner Caps (1 Red, 1 Orange and 1 Green).

> Non-humped design.

> Path compensation up to 40° based on 2 implants.

> Mainly used for the Sonator A Abutment.

> Inner Caps : Inserted and removed with the I&R Driver.

Sonator Impression Coping



Black Processing Male

Diameter Length	Ø4.8
3	SONIP04

> Packing unit : 4 Impression Copings and 4 Black Processing Males.

> Connected over the Sonator Abutment after placing the Block-out Spacer.

> For close tray impression.

Sonator Lab Analog

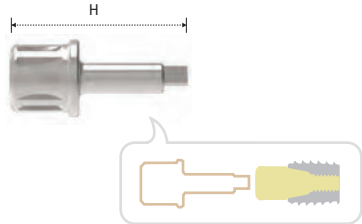


Diameter Length	Ø4
1.4	SONLA04

> Packing unit : 4 Lab Analogs.

> Replacement of abutment shape in working cast.

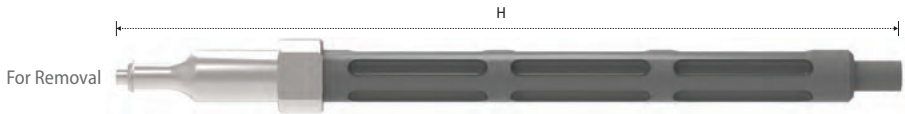
Sonator S Ratchet Driver



Type Height	Ratchet
18	SONRD19L

> Used to tighten and untighten the Sonator S Abutment.

I & R Driver



For Removal

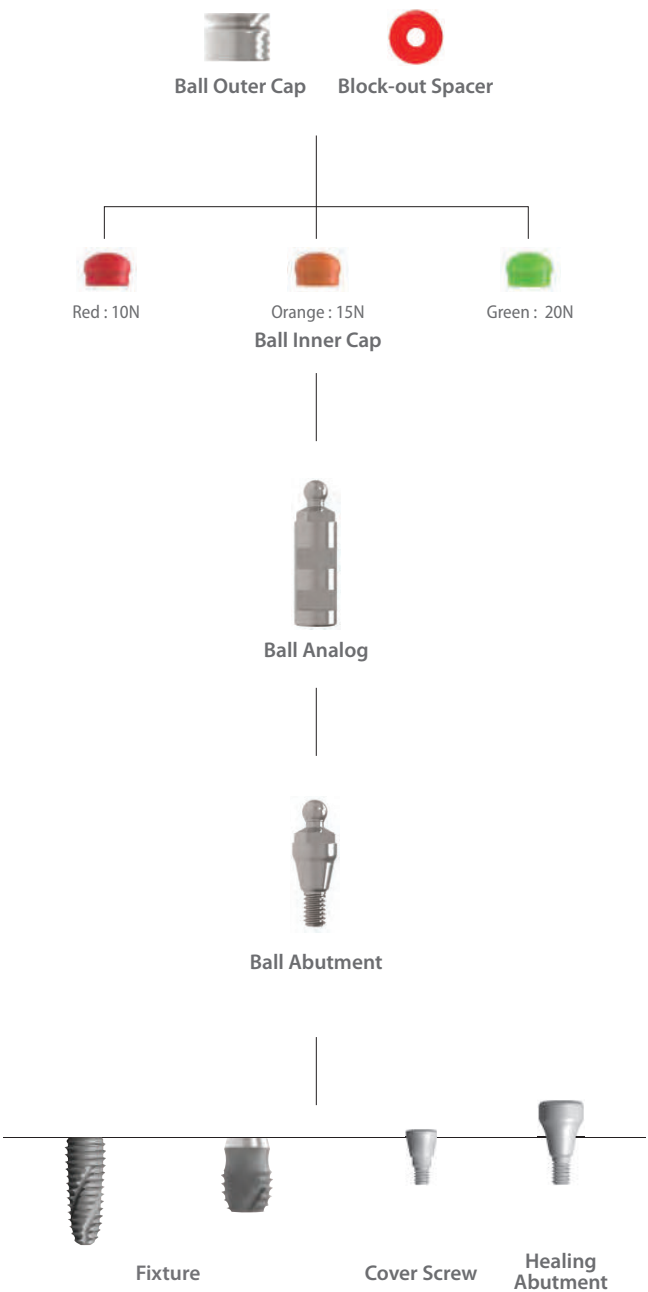
For Insertion

Height	95.4
	SONIR002

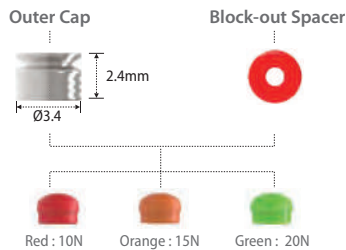
> Used to insert and remove the Inner Caps and Block Processing Male.

Prosthetic Procedure VII

Component Selection Guide for Ball Abutment



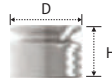
Ball Abutment



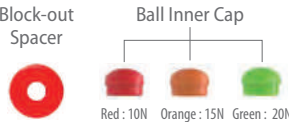
Ball Inner Cap



Ball Outer Cap



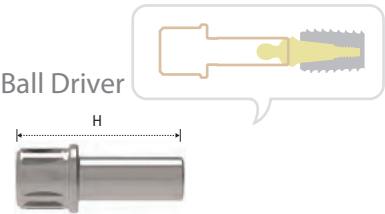
Ball Inner Cap



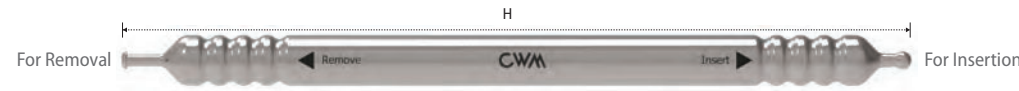
Ball Analog



Ball Driver



I&R Driver



Diameter	Ø4.0
Length Cuff	4
1	2SBAT414R
2	2SBAT424R
3	2SBAT434R
4	2SBAT444R
5	2SBAT454R

- > Packing unit : 1 Ball Abutment + 3 Inner Caps (1 per each colour) + 1 Block-out Spacer + 1 Outer Cap.
- > For Implant Supported Over-denture Prosthesis.
- > Tightened with the Ball Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Direct impression.

Diameter Height	Ø3.4 2.4
	BATC003C

- > Packing unit : 2 Outer Caps.

	BATC003I
--	----------

- > Packing unit: 2 Block-out Spacers + 6 Inner Caps (2 per each color).
- > Retention force: Red 10N, Orange 15N & Green 20N.

Diameter Length	Ø4.0 4
	SBAL400

- > Packing unit : 4 Lab Analogs.
- > Replacement of abutment shape in working cast.

Height Type	Ratchet KRB19L
----------------	-------------------

- > Packing unit : 1 Ball Driver.
- > Used with the Torque Wrench to tighten and untighten the Ball Abutment.

*Extra Product

Height	100 KBIR01
--------	---------------

- > Packing unit : 1 I&R Driver.
- > Used to insert and remove the Inner Caps into and out of the Outer Cap.

INNO SUBMERGED NARROW IMPLANT (Sub-N.)

System Flow

Fixture		Abutment		Impression
Hex 2.1  Length 8 / 10 / 12 / 14mm  Diameter Ø3.1 / 3.3	Prosthetic Procedure I	065p  Cemented 065p  Angulated 065p  Temporary 066p  Meta G UCLA Fixture Level Impression	066p  Replica 067p  Pick-up Impression Coping 067p  Transfer Post	
	Prosthetic Procedure II	063p  Multi S 063p  Multi A Abutment Level Impression	070p  Multi Protection Cap 070p  Multi Impression Coping 070p  Multi Transfer Post 071p  Multi Lab Analog 071p  Multi Meta G ULCA Cylinder 071p  Multi Plastic UCLA Cylinder 072p  Multi Titanium Cylinder 072p  Multi Polishing Protector	
	Prosthetic Procedure III	074p  Straight	Direct Impression	

INNO Submerged Narrow Implant (Sub-N.)

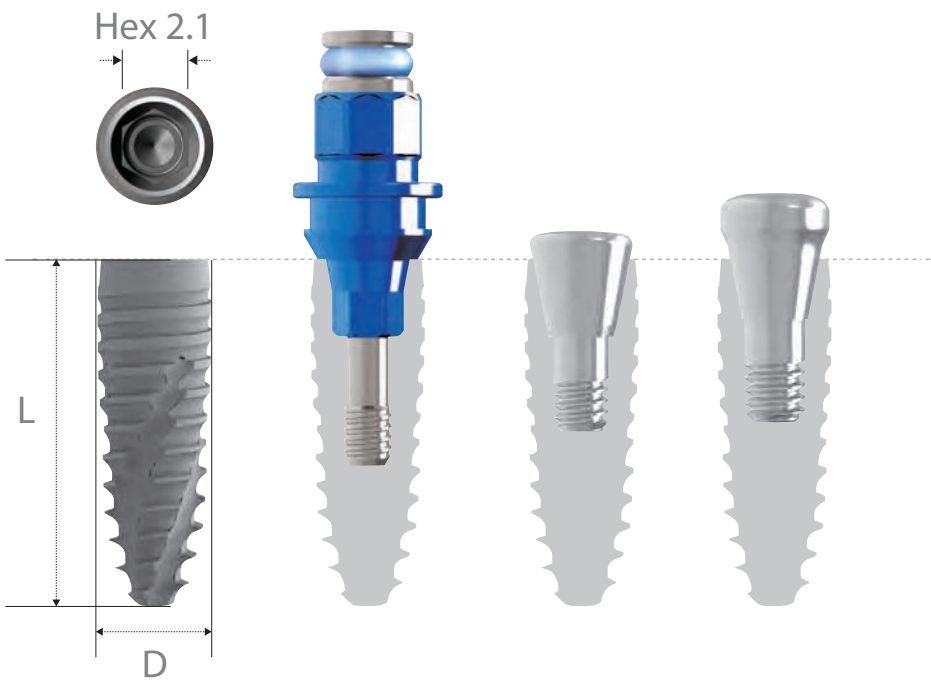


Submerged Fixture
Surface Treatment : **SLA-SH®**

- > Interchangeable with hexagonal morse tapered fixture.
- > Internal hex connection (Taper 11°/ Hex 2.1).

※ Note

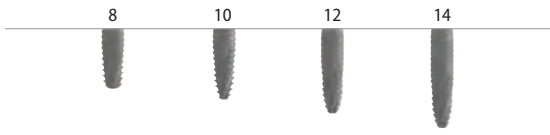
> The INNO Sub. Narrow System is not compatible with the INNO Submerged System as hexagon size is different.



No-Mount > Packing unit : 1 Fixture + 1 Cover Screw.

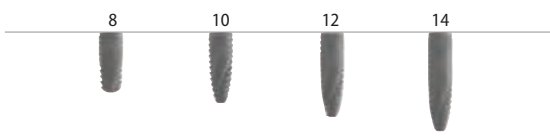
Diameter **Ø3.1**
Length

8	SR3108NSM
10	SR3110NSM
12	SR3112NSM
14	SR3114NSM



Diameter **Ø3.3**
Length

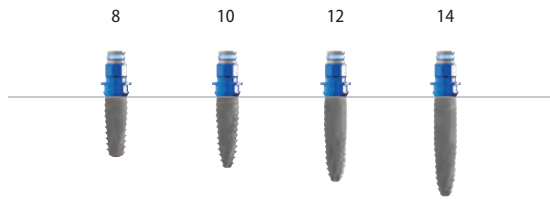
8	SR3308NSM
10	SR3310NSM
12	SR3312NSM
14	SR3314NSM



Pre-Mount > Packing unit : 1 Fixture + 1 Cover Screw + 1 Mount.

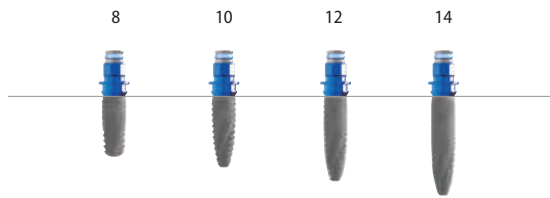
Diameter **Ø3.1**
Length

8	SR3108NS
10	SR3110NS
12	SR3112NS
14	SR3114NS

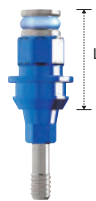


Diameter **Ø3.3**
Length

8	SR3308NS
10	SR3310NS
12	SR3312NS
14	SR3314NS



Fixture Mount



Length	5.4
	RSM001

- > Packing unit : 1 Mount + 1 Mount Screw.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

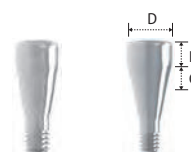
Cover Screw



Diameter Length	Ø2.85	Ø3.25	Ø3.6
1.7	RCS000		
2.7		RCS001	
3.7			RCS002

- > Packing unit : 1 Cover Screw.
- > To seal the conical interface of fixture.
- > The longer the Cover Screw for deeply inserted fixture.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Healing Abutment

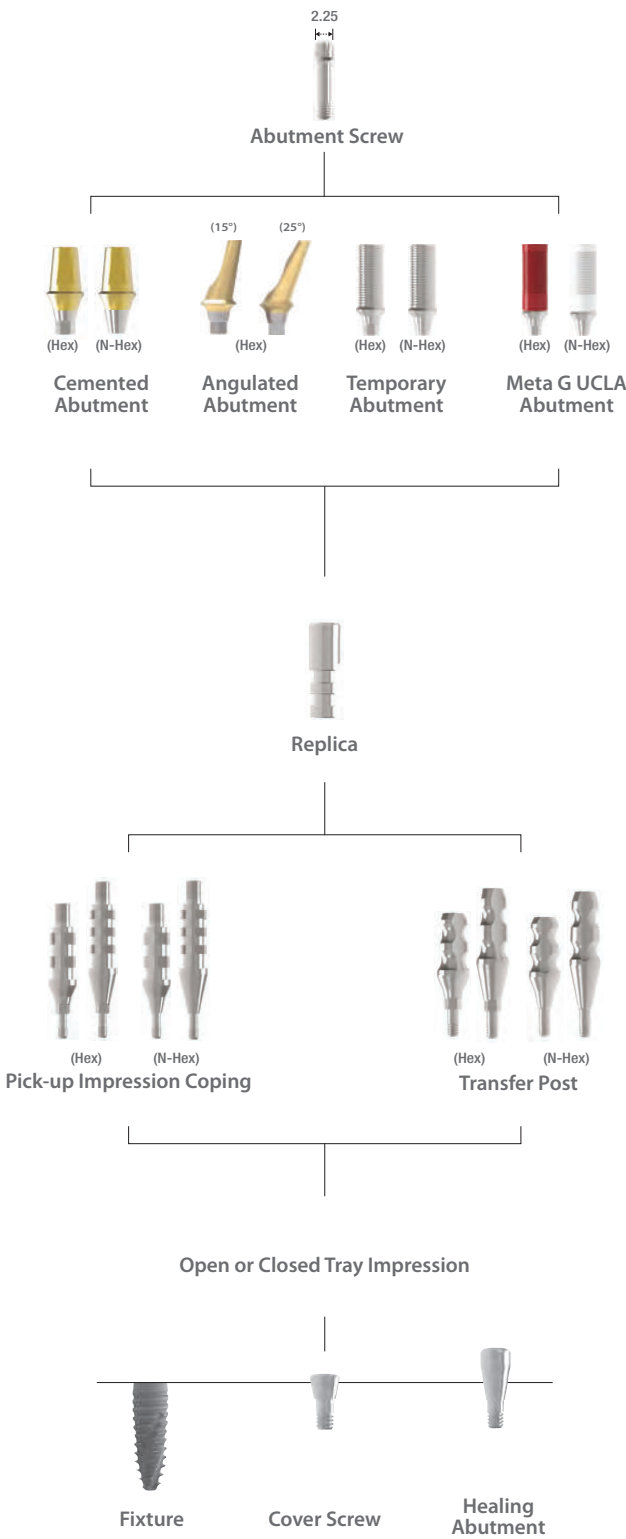


Diameter	Ø3.5		Ø4.5	
Cuff Length	1	2	1	2
0.5	HR3501			
1	HR3511		HS4511N	
2		HR3522		HS4522N
3		HR3532		HS4532N
4		HR3542		HS4542N
5				HS4552N
7				HS4572N

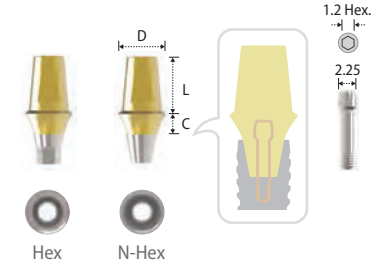
- > Packing unit : 1 Abutment.
- > For remodeling gingival contour during soft tissue healing.
- > Select according to gingival height and abutment type.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Prosthesis Procedure I

Components Selection Guide for Cemented and UCLA Abutment



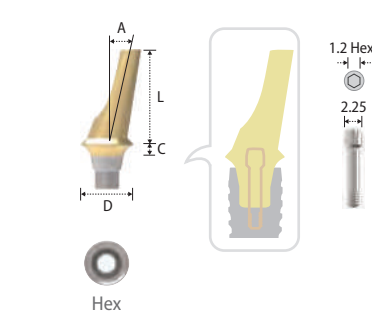
Cemented Abutment



Type	Hex			N-Hex		
Diameter	Ø4.5			Ø4.5		
Length Cuff	4	5.5	7	4	5.5	7
1	SCH4514N	SCH4515N	SCH4517N	SCN4514N	SCN4515N	SCN4517N
2	SCH4524N	SCH4525N	SCH4527N	SCN4524N	SCN4525N	SCN4527N
3	SCH4534N	SCH4535N	SCH4537N	SCN4534N	SCN4535N	SCN4537N
4	SCH4544N	SCH4545N	SCH4547N	SCN4544N	SCN4545N	SCN4547N
5	SCH4554N	SCH4555N	SCH4557N	SCN4554N	SCN4555N	SCN4557N

- > Packing unit : 1 Cemented Abutment + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of prosthesis.
- > Gold color for more translucent restoration and classification with N-Hex.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with the Abutment Screw.
- > 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.

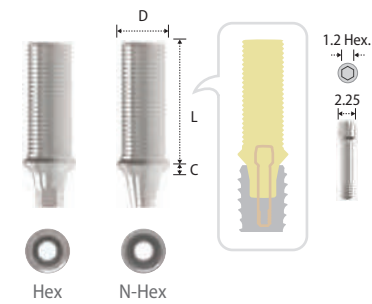
Angulated Abutment



Type	Hex	
Diameter(Angle)	Ø4.5(15°)	Ø4.5(25°)
Length Cuff	8	8
1	SAH45151NA	SAH45251NA
2	SAH45152NA	SAH45252NA
3	SAH45153NA	SAH45253NA
4	SAH45154NA	SAH45254NA

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Prosthesis.
- > Solution for anterior esthetic zone.
- > Gold color for esthetics.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Fixture level impression.

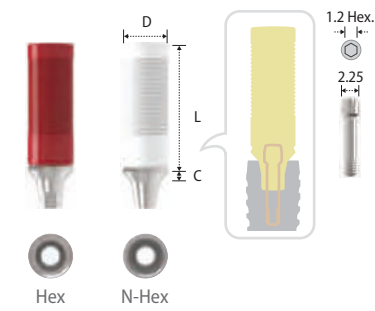
Temporary Abutment



Type	Hex	N-Hex
Diameter	Ø4.5	Ø4.5
Length Cuff	10	10
1	STHA45N	STNA45N

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement Retained Prosthesis.
- > For provisional restoration.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 20 N.cm.

Meta G UCLA Abutment



Type	Hex	N-Hex
<i>Diameter</i>	Ø4.5	Ø4.5
<i>Length / Cuff</i>	12	12
1	SGH45N	SGN45N
2	SGH452N	SGN452N
3	SGH453N	SGN453N

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > Modification to angulated abutment, customized abutment and telescopic abutment.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Fixture level impression.

Abutment Screw



<i>Diameter</i>	2.25
<i>Height</i>	10.2
	SSHR100N

- > Packing unit : 1 Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

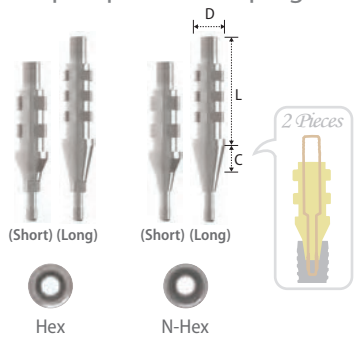
Replica



<i>Diameter</i>	Ø4
<i>Height</i>	12.1
	SRHR001N

- > Packing unit : 1 Replica.
- > Mimicking of conical interface of fixture.
- > Analog of fixture for working cast.

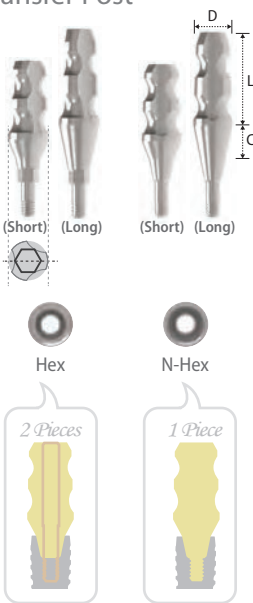
Pick-up Impression Coping



Type	Hex	N-Hex
<i>Diameter</i>	Ø4.5	Ø4.5
<i>Length / Cuff</i>	14 (Short) / 2	SIN45SN
	16 (Long) / 4	SIN45LN

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with the Guide Pin (SIS001SN / SIS001LN).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Transfer Post

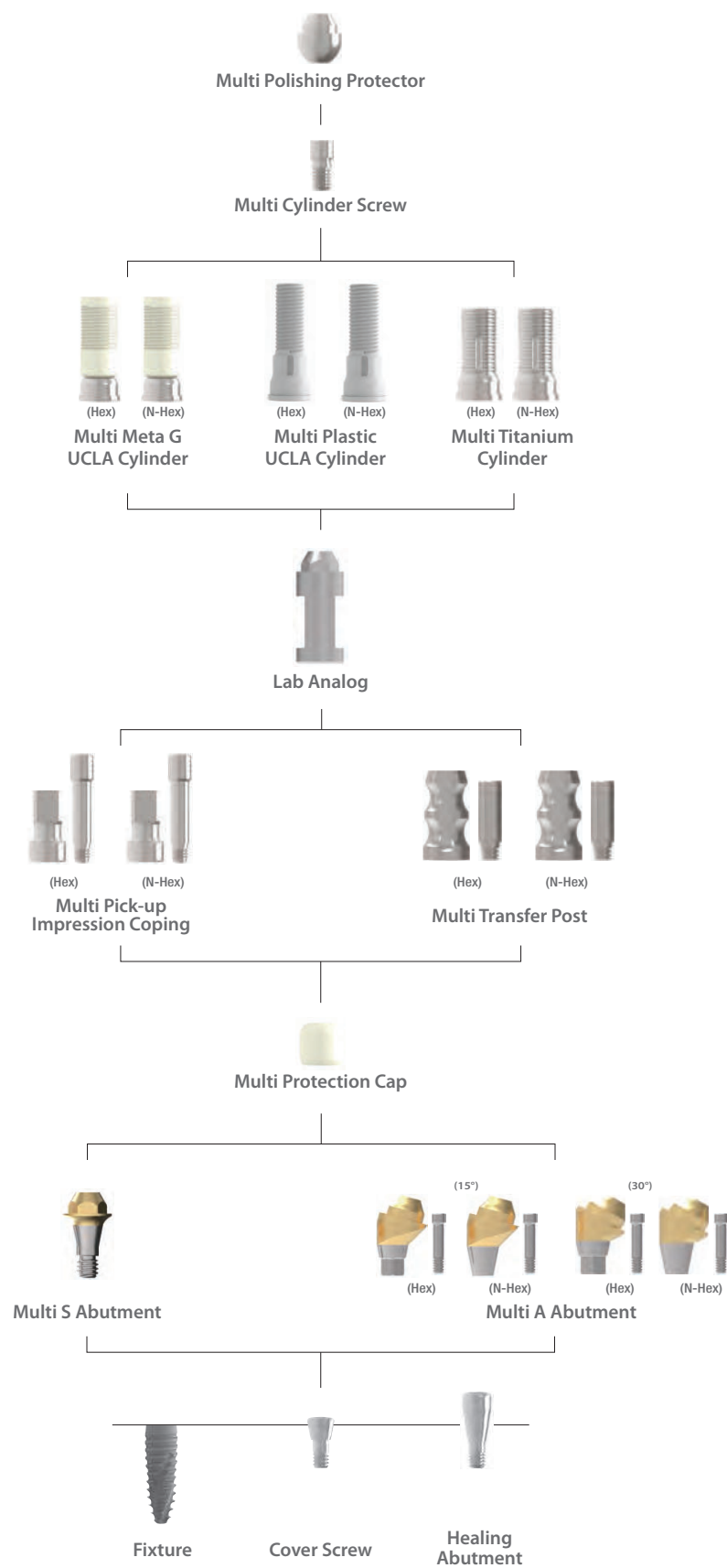


Type	Hex	N-Hex
<i>Diameter</i>	Ø4.5	Ø4.5
<i>Length / Cuff</i>	9 (Short) / 2	STN45SN
	11 (Long) / 4	STN45LN

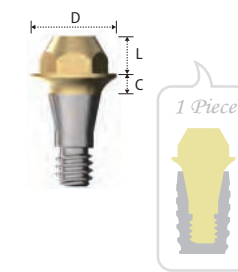
- > Packing unit : 1 Transfer Post + 1 Guide Pin (Hex) / 1 Transfer Post (N-Hex, Solid).
- > For closed tray impression.
- > Connected with the Guide Pin (STS001SN / STS001LN).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Prosthesis Procedure II

Component Selection Guide for Multi S&A Abutment



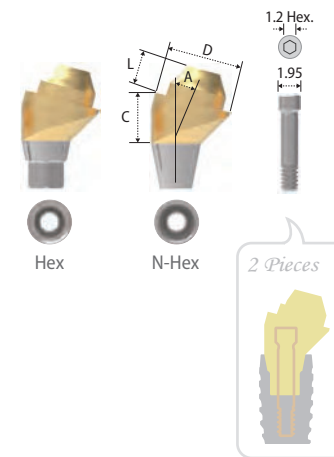
Multi S Abutment



Diameter	Ø4.5
Cuff / Length	2
1	SMS451N
2	SMS452N
3	SMS453N
4	SMS454N

- > Packing unit : 1 Multi S Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Integrated with screw and abutment.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Use the S Holder for more stable position.
- > Tightened with the S Machine & S Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

Multi A Abutment

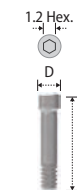


Type	Hex	
Diameter/Angle	Ø4.5(15°)	Ø4.5(30°)
Cuff / Length	2	2
2	★ SMAH45152BN	
3	● SMAH45153BN	★ SMAH45303BN
4	● SMAH45154BN	● SMAH45304BN

Type	N-Hex	
Diameter/Angle	Ø4.5(15°)	Ø4.5(30°)
Cuff / Length	2	2
2	★ SMAN45152NB	
3	● SMAN45153NB	★ SMAN45303NB
4	● SMAN45154NB	● SMAN45304NB

- > Packing unit : 1 Multi A Abutment + 1 Abutment Screw.
- > For Screw-Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Use the A Holder for more stable position.
- > Connected with the Abutment Screw (SSHR200N : ★ / SSHR300N : ●).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

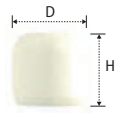
Abutment Screw



Height / Diameter	8.7	9.3
Ø1.95	★ SSHR200N	● SSHR300N

- > Packing unit: 1 Abutment Screw.
- > To connect the Multi A Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

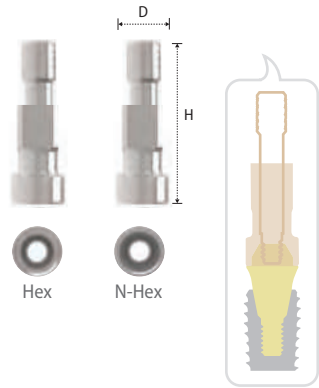
Multi Protection Cap



Multi S & A Abutment Diameter	Ø4.5
Diameter	Ø5.2
Height	5
2SMPC45	

- > Packing unit : 1 Multi Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.
- > Alternative usage for sub-structure of temporary prosthesis.

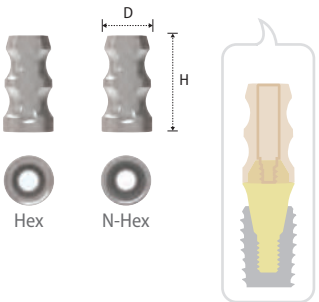
Multi Pick-up Impression Coping



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø4.5
Diameter	Ø4.65	Ø4.65
Height	14.8	14.8
2SMIH45		2SMIN45

- > Packing unit: 1 Multi Pick-up Impression Coping + 1 Guide Pin (2SMGP012).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Multi Transfer Post



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø4.5
Diameter	Ø4.5	Ø4.5
Height	8.5	8.5
2SMTH45		2SMTN45

- > Packing unit: 1 Multi Transfer Post + 1 Guide Pin (2SMTHS100).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

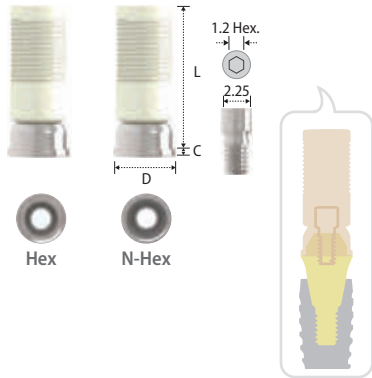
Multi Lab Analog



Multi S & A Abutment Diameter	Ø4.5
Diameter	Ø4.5
Length	2
2SMA45	

- > Packing unit : 1 Multi Lab Analog.
- > Replacement of abutment shape in working cast.

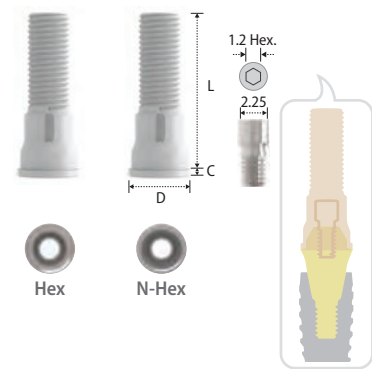
Multi Meta G UCLA Cylinder



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø4.5
Diameter	Ø4.5	Ø4.5
Length	10.9	10.9
Cuff	0.5	0.5
2SCCH45		2SCCN45

- > Packing unit : 1 Multi Meta G UCLA Cylinder + 1 Multi Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Modification to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Multi Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

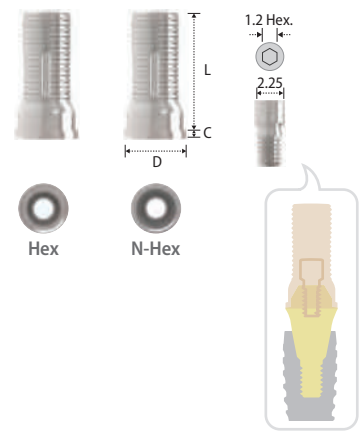
Multi Plastic UCLA Cylinder



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø4.5
Diameter	Ø4.5	Ø4.5
Length	11.5	11.5
Cuff	0.5	0.5
2SMPH45		2SMPN45

- > Packing unit : 1 Multi Plastic UCLA Cylinder + 1 Multi Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Same purpose of use as the Meta G UCLA Cylinder but low accuracy of connection.
- > PMMA material.
- > Connected with the Multi Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

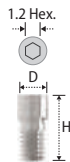
Multi Titanium Cylinder



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø4.5
Diameter	Ø4.5	Ø4.5
Length	8.5	8.5
Cuff	0.5	2STCH45
	2STCN45	

- > Packing unit : 1 Multi Titanium Cylinder + 1 Cylinder Screw.
- > For Screw, Cement or Screw-Cement Retained Prosthesis.
- > Connected with the Cylinder Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

Multi Cylinder Screw



Diameter	Ø2.25
Height	5
	2SMCS100

- > Packing unit : 1 Multi Cylinder Screw.
- > Connected with the Meta G UCLA, Plastic UCLA and Titanium Cylinder.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

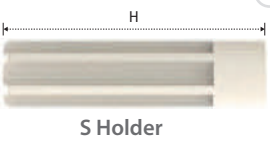
Multi Polishing Protector



Type	Hex
Multi S & A Abutment Diameter	Ø4.5
Diameter	Ø4.5
Length	2
	2SMPP45

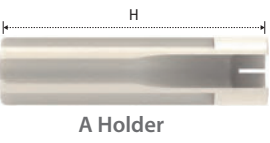
- > Packing unit : 1 Protector.
- > For polishing work during lab procedure.

Multi Holder



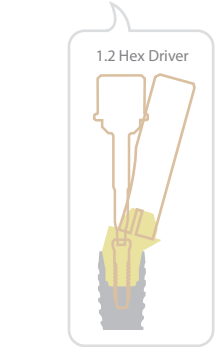
Type	Hand
Height	20
	KMHS01

- > Packing unit : 1 Holder.
- > To position the Multi S Abutment more stably.

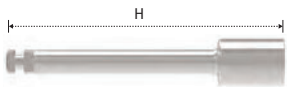


Type	Hand
Height	20
	KMHA01

- > Packing unit : 1 Holder.
- > To position the Multi A Abutment more stably.



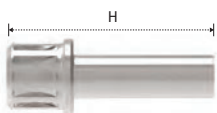
Multi S Machine Driver



Type	Machine
Height	27.5
	KMMSD21L

- > Packing unit: 1 Multi S Machine Driver.
- > To install the Multi S Abutment by machine.

Multi S Ratchet Driver

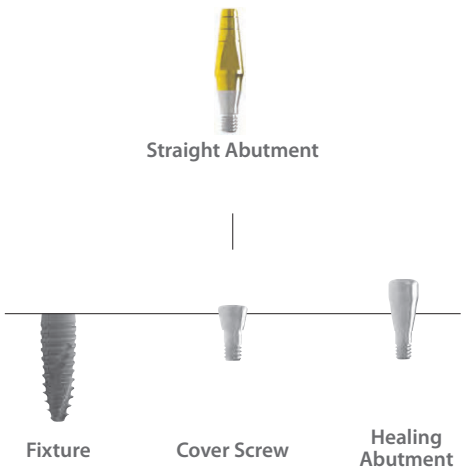


Type	Ratchet
Height	22
	KRMSD15L

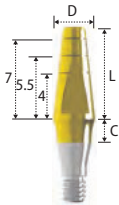
- > Packing unit: 1 Multi S Ratchet Driver.
- > To install the Multi S Abutment by hand.

Prosthesis Procedure III

Component Selection Guide for Straight Abutment



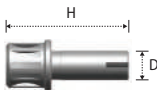
Straight Abutment



Diameter	Ø3.5				
Length [Cuff]	8 [0.5]	8 [1]	8 [2]	8 [3]	8 [4]
	SR308	SR318	SR328	SR338	SR348

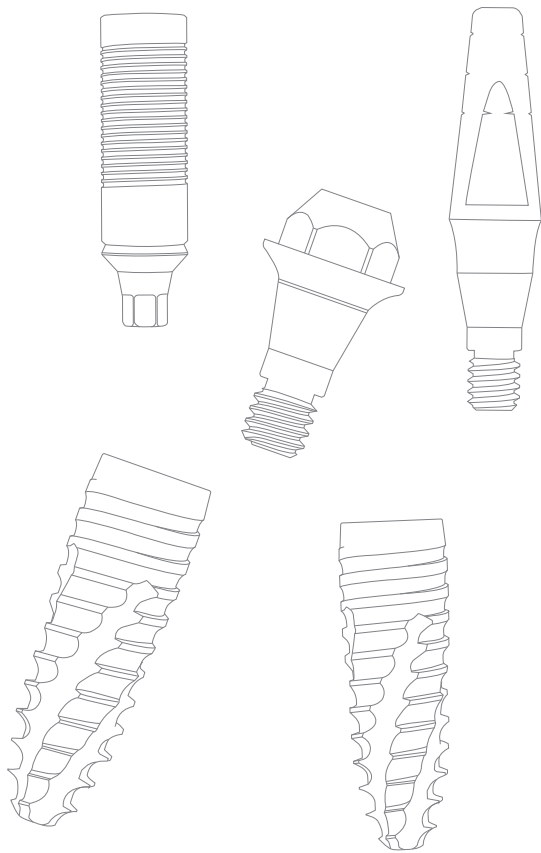
- > Packing unit : 1 Straight Abutment.
- > For Cement Retained Prosthesis.
- > Integrated with screw and abutment.
- > Tightened with the Shoulder Driver.
- > Tightening torque force : 30 N.cm.
- > Direct impression.

Shoulder Driver



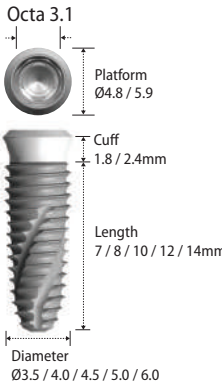
Diameter	Ø4.5
Height	19
	KRR19L

- > Packing unit : 1 Driver.
- > To install the Straight Abutment.



INNO INTERNAL IMPLANT (Int.)

System Flow

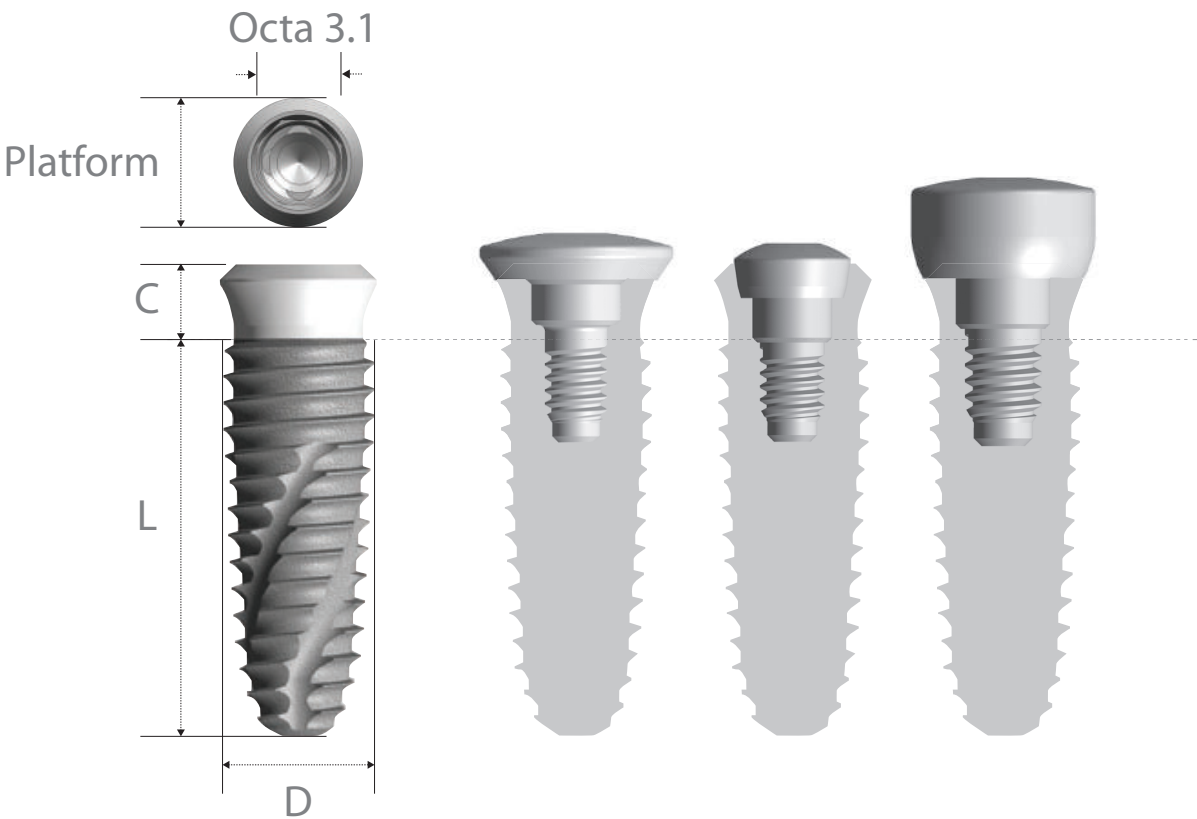
Fixture	Abutment		Impression
	Prosthetic Procedure I	083p  Cemented 083p  Angulated 083p  Meta G UCLA Fixture Level Impression	084p  Replica 084p  Pick-up Impression Coping 084p  Transfer Post
	Prosthetic Procedure II	086p  Solid	086p  Solid Protection Cap 086p  Solid Impression Cap 086p  Solid Positioning Cylinder 087p  Solid Lab Analog 087p  Solid Plastic Coping
	Prosthetic Procedure III	<div>089p</div> <div></div> <div>Shoulder</div> <div data-kind="parent" data-rs="3">Abutment Level Impression</div>	089p  Shoulder Abutment Cap 089p  Shoulder Impression Cap 089p  Shoulder Positioning Cylinder 089p  Shoulder Lab Analog
	Prosthetic Procedure IV	091p  Sonator S Abutment	092p  Impression Coping 092p  Sonator Analog
	Prosthetic Procedure V	095p  Ball	095p  Ball Analog

INNO Internal Impant (Int.)



Internal Fixture
Surface Treatment : **SLA-SH®**

- > Interchangeable with 1 staged internal fixture.
- > Internal Octa Connection (Taper 8°/ Octa 3.1).
- > No-Mount type.



INNO Fixture Code

I	P	T	40	10	S	M	<i>*Ex.)</i>
Type Internal	P=Cuff 1.8	body Taper	Diameter Ø 4.0	Length 10 mm	Surface Treatment SLA	Mount No-Mount	SLA Cuff 1.8 No-Mount
							IPT4010SM
I		T	40	10	S	M	<i>*Ex.)</i>
Type Internal	Cuff 2.4	body Taper	Diameter Ø 4.0	Length 10 mm	Surface Treatment SLA	Mount No-Mount	SLA Cuff 2.4 No-Mount
							IT4010SM

No-Mount Cuff 1.8mm fixture > Packing unit : 1 Fixture + 1 Cover Screw.

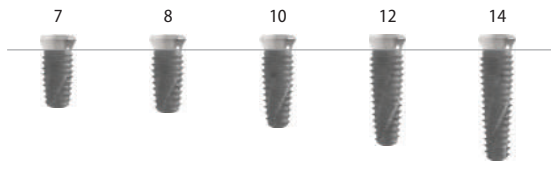
* Diameter	Ø3.5
Length	
7	-
8	IPT3508SM
10	IPT3510SM
12	IPT3512SM
14	IPT3514SM

* Platform : Ø4.8



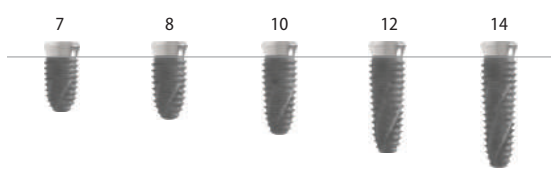
* Diameter	Ø4.0
Length	
7	IPT4007SM
8	IPT4008SM
10	IPT4010SM
12	IPT4012SM
14	IPT4014SM

* Platform : Ø4.8



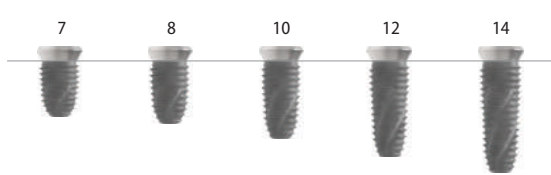
* Diameter	Ø4.5
Length	
7	IPT4507SM
8	IPT4508SM
10	IPT4510SM
12	IPT4512SM
14	IPT4514SM

* Platform : Ø4.8



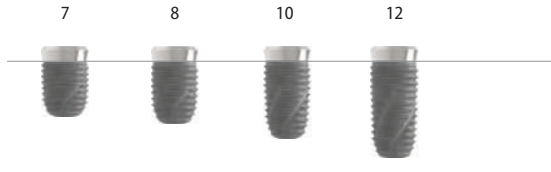
* Diameter	Ø5.0
Length	
7	IPT5007SM
8	IPT5008SM
10	IPT5010SM
12	IPT5012SM
14	IPT5014SM

* Platform : Ø5.9



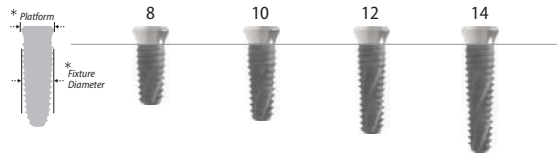
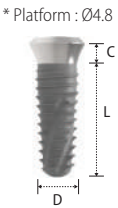
* Diameter	Ø6.0
Length	
7	IPT6007SM
8	IPT6008SM
10	IPT6010SM
12	IPT6012SM
14	-

* Platform : Ø5.9



No-Mount Cuff 2.4mm fixture > Packing unit : 1 Fixture + 1 Cover Screw.

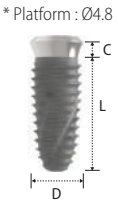
* Diameter	Ø3.5
Length	
7	-
8	IT3508SM
10	IT3510SM
12	IT3512SM
14	IT3514SM



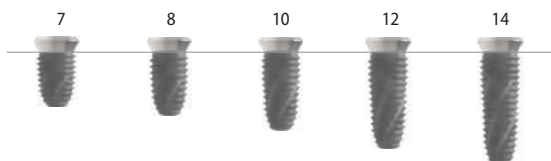
* Diameter	Ø4.0
Length	
7	IT4007SM
8	IT4008SM
10	IT4010SM
12	IT4012SM
14	IT4014SM



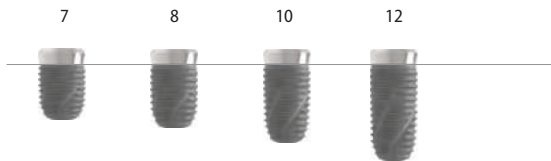
* Diameter	Ø4.5
Length	
7	IT4507SM
8	IT4508SM
10	IT4510SM
12	IT4512SM
14	IT4514SM



* Diameter	Ø5.0
Length	
7	IT5007SM
8	IT5008SM
10	IT5010SM
12	IT5012SM
14	IT5014SM



* Diameter	Ø6.0
Length	
7	IT6007SM
8	IT6008SM
10	IT6010SM
12	IT6012SM
14	-



Cover Screw



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter / Height	Ø5.0	Ø6.0
6.5	ICVR002	ICVW002

- > Packing unit : 1 Cover Screw.
- > To seal the conical interface of fixture.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Headless Screw



Diameter / Height	Ø3.5
6	ICVR001

- > Packing unit : 1 Headless Screw.
- > For narrow mesio-distal distance.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Healing Abutment

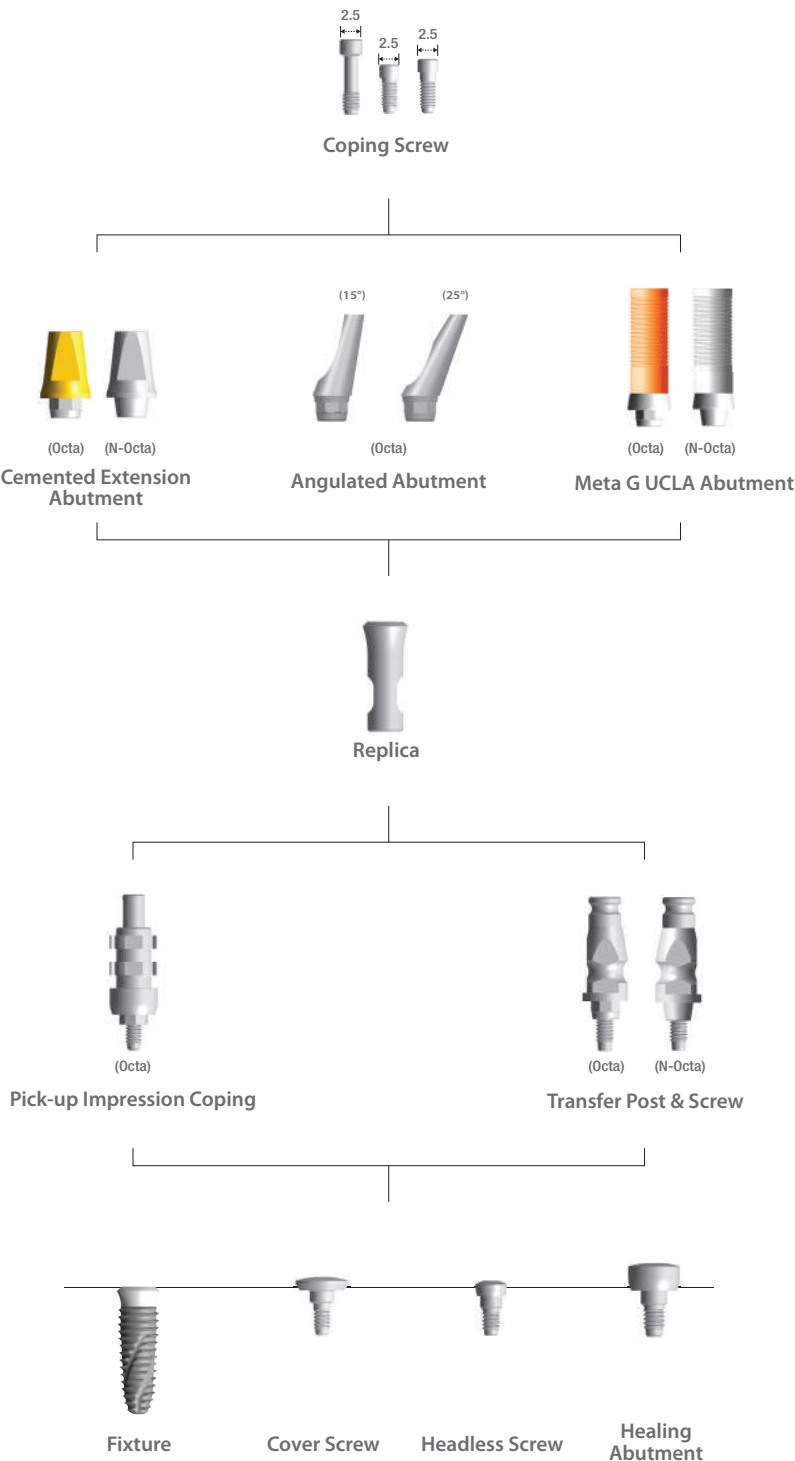


Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter / Length	Ø5.5	Ø6.6
2	IHCR020	IHCW020
3	IHCR030	IHCW030
4.5	IHCR045	IHCW045

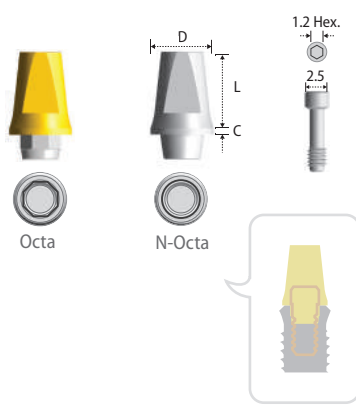
- > Packing unit : 1 Abutment.
- > For remodeling gingival contour during soft tissue healing.
- > Select according to gingival height and abutment type.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Prosthetic Procedure I

Component Selection Guide for Cemented & UCLA Abutment



Cemented Extension Abutment

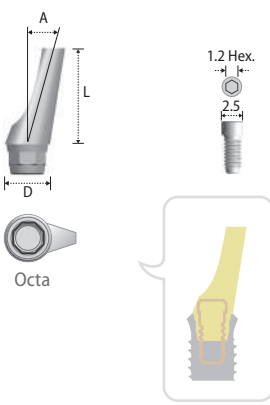


Type	Octa			
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]		Ø5.9 [Ø5.0 / Ø6.0]	
Diameter	Ø4.8	Ø5.8	Ø5.9	Ø6.9
Cuff Length	6	6	6	6
0.5	IECR406		IECW506	
1		IECR416		IECW516
2		IECR426		IECW526
3		IECR436		IECW536

Type	N-Octa			
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]		Ø5.9 [Ø5.0 / Ø6.0]	
Diameter	Ø4.8	Ø5.8	Ø5.9	Ø6.9
Cuff Length	6	6	6	6
0.5	IENR406		IENW506	
1		IENR416		IENW516
2		IENR426		IENW526
3		IENR436		IENW536

- > Packing unit : 1 Cemented Extension Abutment + 1 Abutment Screw.
- > For Cement Retained or Screw-Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of prosthesis.
- > Connected with the Abutment Screw (ISHR110).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 35 N.cm.
- > Fixture level impression.

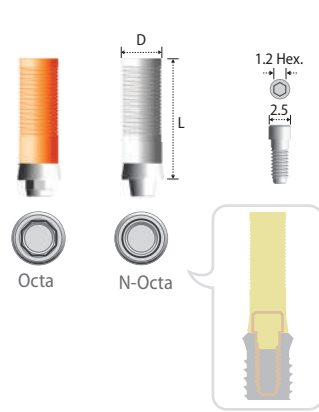
Angulated Abutment



Type	Octa	
Platform [Fixture Dia.]	Ø4.8 & Ø5.9 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø6.0]	
Diameter(Angle)	3.8 (15°)	3.8 (25°)
Length	8	8
	IAAR158A	IAAR258A

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Cement Retained or Screw-Cement Retained Prosthesis.
- > Solution for anterior esthetic zone.
- > Connected with the Abutment Screw (ISHR100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 35 N.cm.
- > Fixture level impression.

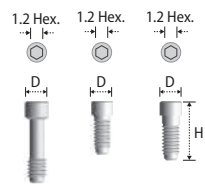
Meta G UCLA Abutment



Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø5	Ø6	Ø5	Ø6
Length	12	12	12	12
	IGOR400N	IGOW500N	IGNR400N	IGNW500N

- > Packing unit : 1 Meta G UCLA Abutment + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Prosthesis.
- > Modification to angulated abutment, customized abutment and telescopic abutment.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Abutment Screw (ISHR120).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 35 N.cm.
- > Fixture level impression.

Abutment Screw



Diameter Height	Ø2.5	Ø2.5	Ø2.5
6.3	ISHR100		
7.8			ISHR120
9.2	ISHR110		

- > Packing unit : 1 Abutment Screw.
- > ISHR110 : Cemented Abutment.
- > ISHR100 : Angulated Abutment.
- > ISHR120 : Meta G Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

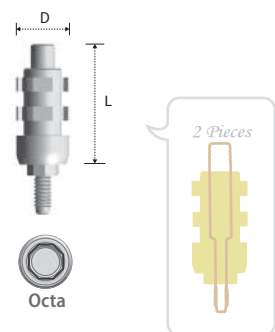
Replica



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter Height	Ø4.8	Ø5.9
12	IROR001	IROW001

- > Packing unit : 1 Replica.
- > Mimicking of conical interface of fixture.
- > Analog of fixture for working cast.

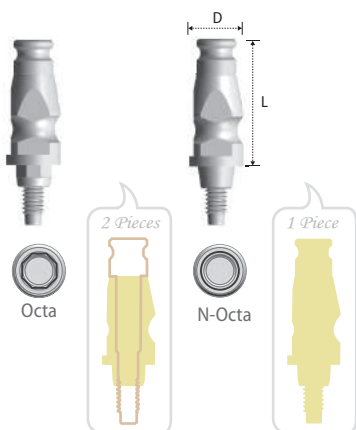
Pick-up Impression Coping



Type	Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter Length	Ø5.5	Ø6.6
13.7	IIOR001	IOW001

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (IIOR001S).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Transfer Post

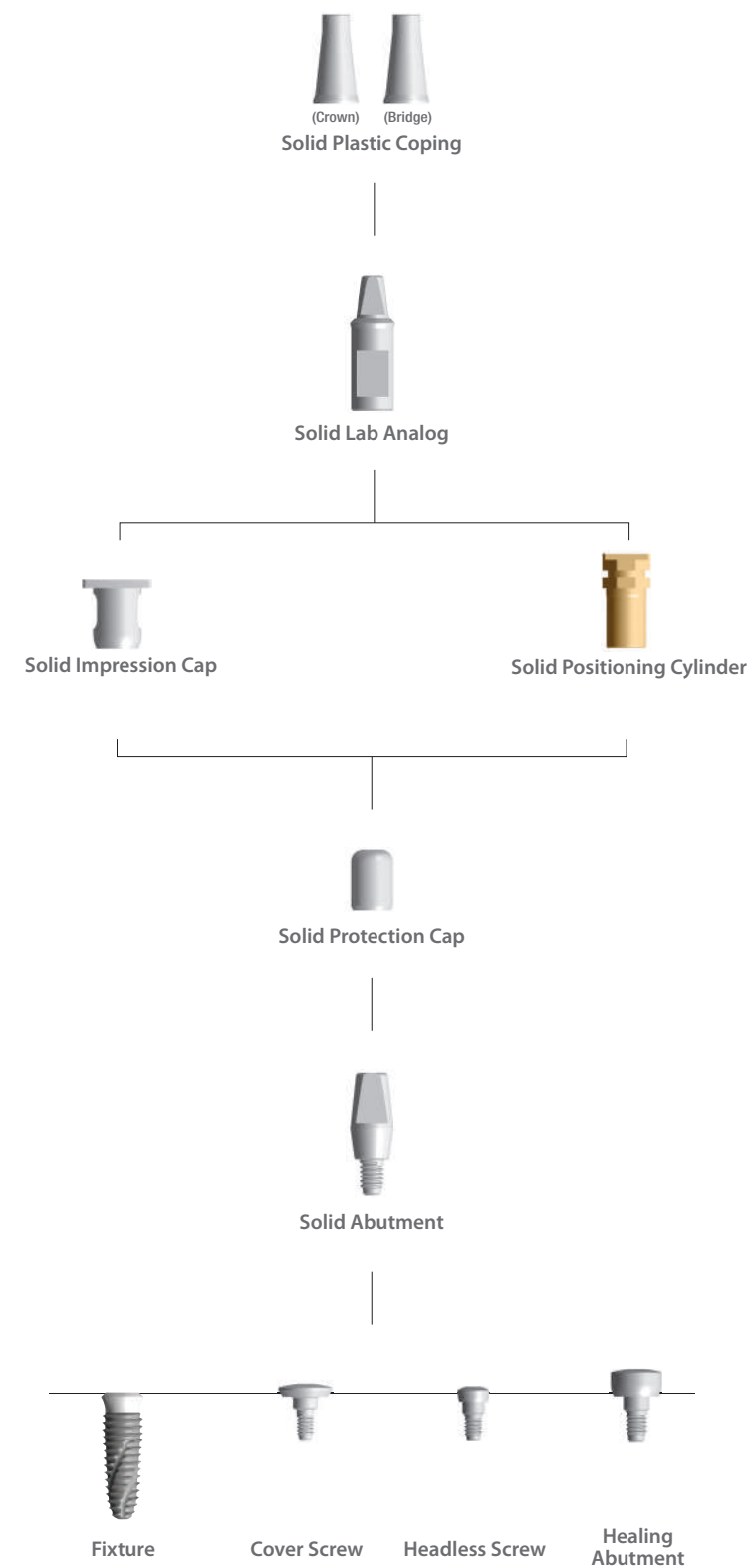


Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter Length	Ø4.85	Ø5.95	Ø4.85	Ø5.95
11.6	ITOR400	ITOW500	ITNR400	ITNW500

- > Packing unit : Octa - 1 Transfer Post + 1 Guide Pin (Regular: ITOR400S / Wide: ITOW500S)
N-Octa - 1 Transfer Post (solid screw).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Prosthetic Procedure II

Component Selection Guide for Solid Abutment



Solid Abutment

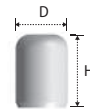


Platform [Fixture Dia.]	Ø4.8 & Ø5.9 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø6.0]			
Diameter	Ø3.5			
Length	3	4	5.5	7
	IASR030	IASR040	IASR055	IASR070

- > Packing unit : 1 Solid Abutment + 1 Abutment Cap.
- > For Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of prosthesis.
- > Integrated with screw and abutment.
- > Tightened with the Shoulder Driver.
- > Tightening torque force : 35 N.cm.
- > Abutment level impression :
Impression cap in platform Ø4.1 fixture and direct impression in platform Ø5.8 fixture.



Solid Protection Cap



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	
Diameter	Ø5.4	
Height	5.2	IASR130
	6.2	IASR140
	7.7	IASR155
	9.2	IASR170

- > Packing unit : 1 Solid Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Alternative usage for sub-structure of temporary prosthesis.

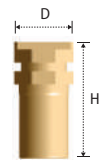
Solid Impression Cap



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	
Diameter	8	
Height	8	IICR001

- > Packing unit : 1 Impression Cap.
- > Connected with the Positioning Cylinder.
- > Confirm locking with abutment by rotation of clockwise and anti-clockwise direction.

Solid Positioning Cylinder



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	
Diameter	Ø5.7	
Height	10.2	IPCR001

- > Packing unit : 1 Positioning Cylinder.
- > Inner cutting surface for anti-rotation on abutment.
- > Insert into the Impression Cap.

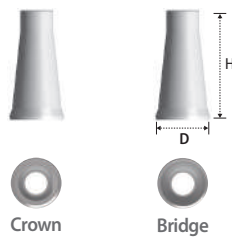
Solid Lab Analog



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]			
Length Diameter	3	4	5.5	7
4.8	ILSR030	ILSR040	ILSR055	ILSR070

- > Packing unit : 1 Lab Analog.
- > Replacement of abutment shape in working cast.
- > Choose by abutment length.

Solid Plastic Coping

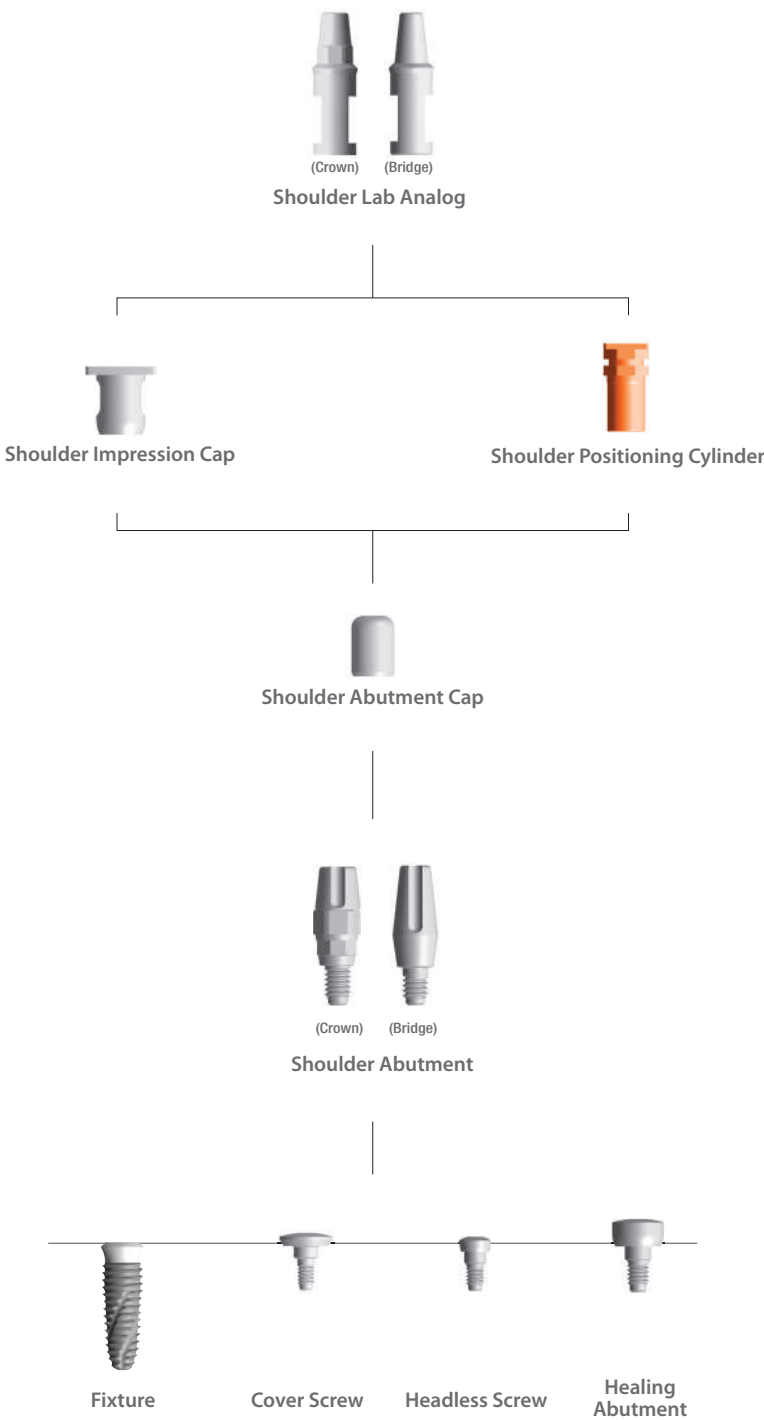


Type	Crown	Bridge
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	
Diameter	Ø5	
Height	10	IPCB001

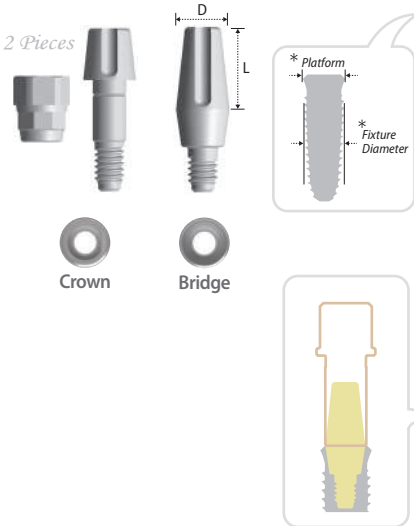
- > Packing unit : 1 Plastic Coping.
- > Connect with the Lab Analog.
- > Burn out and casting for metal framework.

Prosthetic Procedure III

Component Selection Guide for Shoulder Abutment



Shoulder Abutment

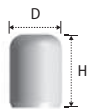


Type	Crown		Bridge	
* Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø3.5	Ø4.5	Ø3.5	Ø4.5
Length	4	ISAC404	ISAC504	ISAB404
	5.5	ISAC405	ISAC505	ISAB405
	7	ISAC407	ISAC507	ISAB407

- > Packing unit : 1 Shoulder Abutment + 1 Abutment Cap.
- > For Cement Retained Prosthesis.
- > Dual anti-rotation grip with single crown for prevention of screw loosening.
- > Integrated with the Screw and Abutment.
- > Tightened with the Shoulder Driver.
- > Tightening torque force : 35 N.cm.
- > Abutment level impression.



Shoulder Abutment Cap



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø5.4	Ø5.4
Height	6.2	IASR140
	7.7	IASR155
	9.2	IASR170

- > Packing unit : 1 Shoulder Abutment Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Alternative usage for sub-structure of temporary prosthesis.

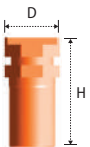
Shoulder Impression Cap



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	8	9
Height	8	IICR001
		IICW001

- > Packing unit : 1 Impression Cap.
- > Connected with the Positioning Cylinder.
- > Confirm locking with abutment by rotation of clockwise and anti-clockwise direction.

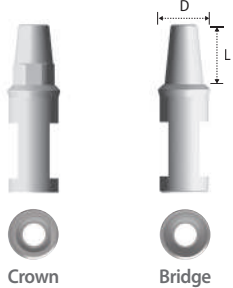
Shoulder Positioning Cylinder



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	5.7	6.8
Height	10.7	SAPR001
		SAPW001

- > Packing unit : 1 Positioning Cylinder.
- > Inner cutting surface for anti-rotation on abutment.
- > Insert into the Impression Cap.

Shoulder Lab Analog

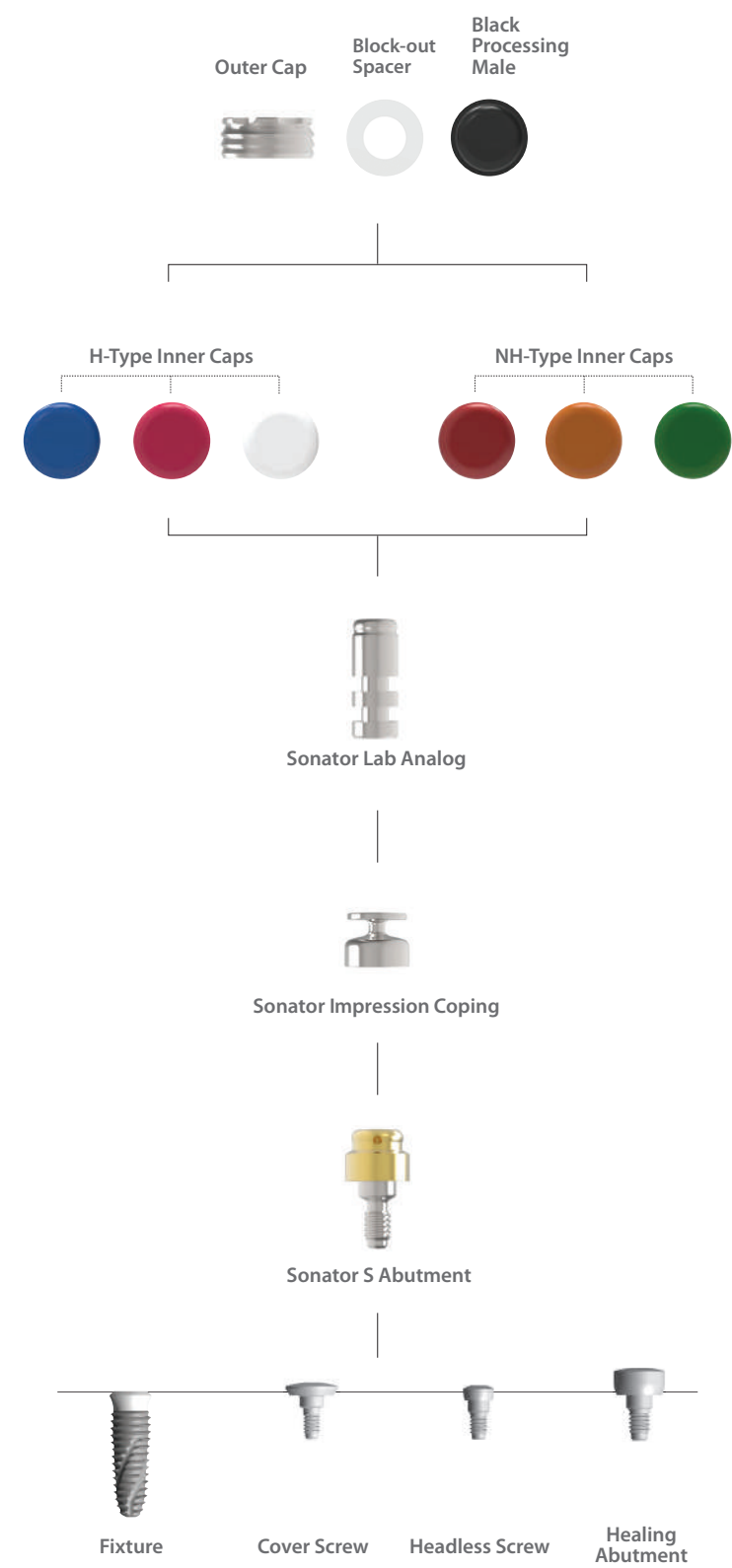


Type	Crown		Bridge	
* Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.9	Ø4.8	Ø5.9
Length	4	SLCR040	SLCW040	SLBR040
	5.5	SLCR055	SLCW055	SLBR055
	7	SLCR070	SLCW070	SLBR070

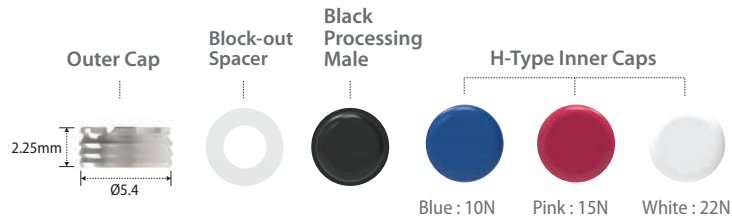
- > Packing unit : 1 Lab Analog.
- > Replacement of abutment shape in working cast.
- > Choose according to width and length of abutment.

Prosthetic Procedure IV

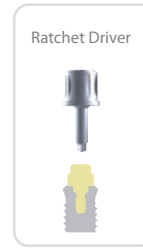
Component Selection Guide for Sonator Abutment



Sonator S Abutment



Carrier



Diameter	Ø4.0			
Cuff Length	0.6	2	3	4
1.5	IONS401	IONS402	IONS403	IONS404

- > Packing unit : 1 Sonator S Abutment + Carrier + 3 H-Type Inner Caps + Outer Cap + Block-out Spacer + Black Processing Male.
- > For Implant Supported Over-denture Prosthesis.
- > Stable with low vertical height.
- > 6 kinds of the Inner Caps give various holding force (Both, H and NH-Type Inner Caps are used for Sonator S Abutment).
- > Path compensation up to 20° based on 2 implants.
- > Carrier : Used for delivery of the abutment.
- > Tightened with the Ratchet Driver and Torque wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

Outer Cap



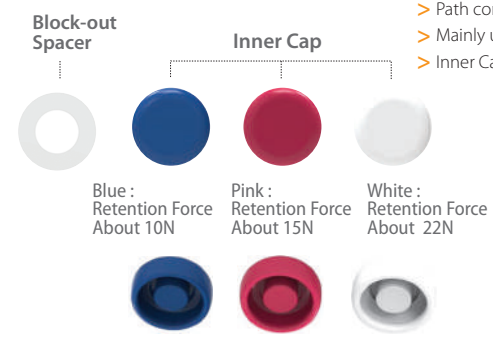
Diameter / Height	Ø5.4
2.25	SONOC01

- > Packing unit : 2 Outer Caps and 2 Black Processing Males.
- > Black Processing Male : Inserted and Removed with the I&R Driver.

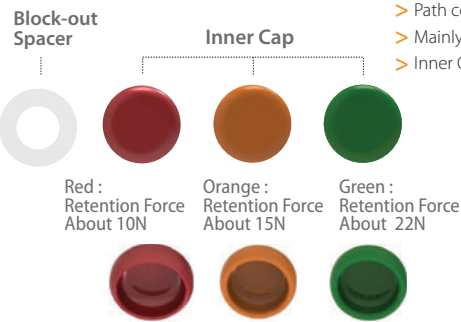
H-Type Inner Cap

Code	SONIC01
------	---------

- > Packing unit : 3 Block-out Spacers + 3 Inner Caps (1 Blue, 1 Pink and 1 White).
- > Path compensation up to 20° based on 2 implants.
- > Mainly used for the Sonator S Abutment.
- > Inner Caps : Inserted and Removed with the I&R Driver.

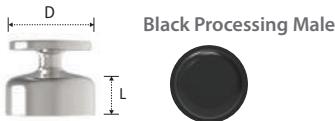


NH-Type Inner Cap



Code	SONIC02
> Packing unit : 3 Block-out Spacers + 3 Inner Caps (1 Red, 1 Orange and 1 Green). > Path compensation up to 40° based on 2 implants. > Mainly used for the Sonator A Abutment. > Inner Caps : Inserted and Removed with the I&R Driver.	

Sonator Impression Coping



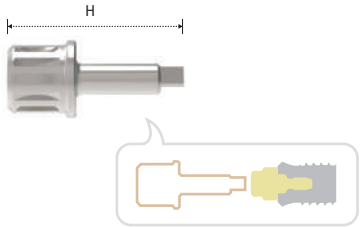
Diameter Length	Ø4.8 3
SONIP04	
> Packing unit : 4 Impression Copings and 4 Black Processing Males. > Abutment level pick-up impression. > Connected over the Sonator Abutment after placing the Block-out Spacer. > For close tray impression.	

Sonator Lab Analog



Diameter Length	Ø4 1.4
SONLA04	
> Packing unit : 4 Lab Analogs. > Replacement of abutment shape in working cast.	

Sonator S Ratchet Driver



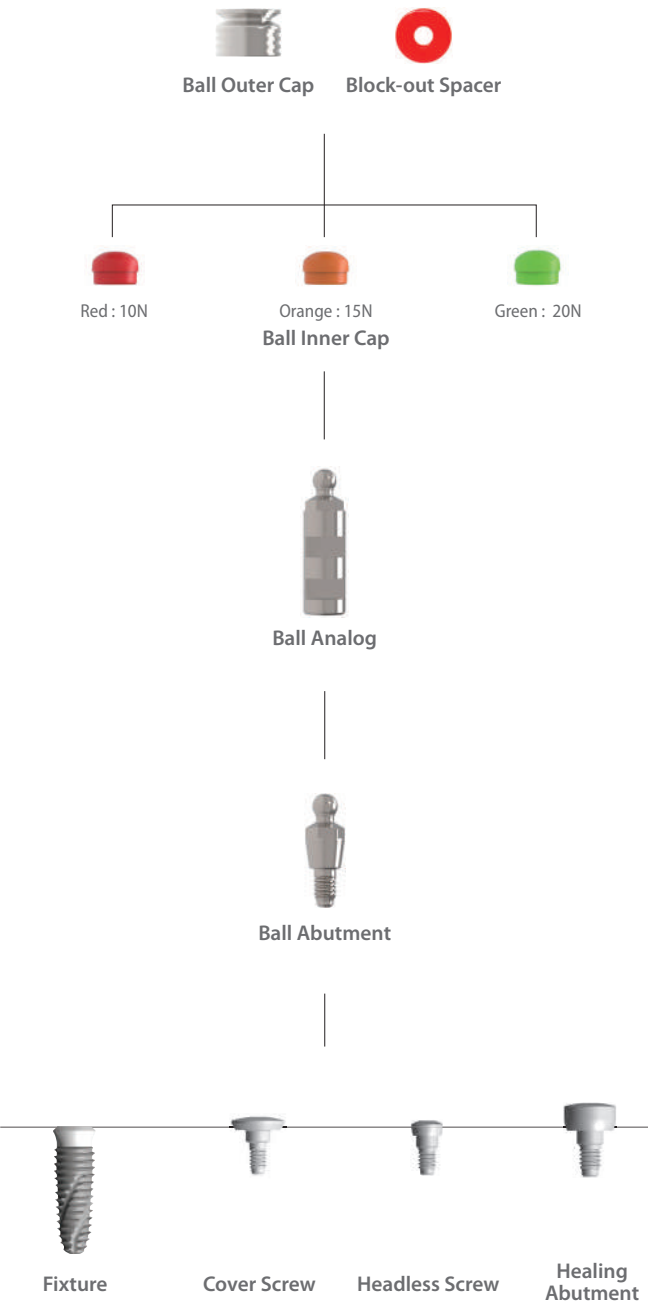
Type Height	Ratchet 18
SONRD19L	
> Used to tighten and untighten the Sonator S Abutment.	

I & R Driver

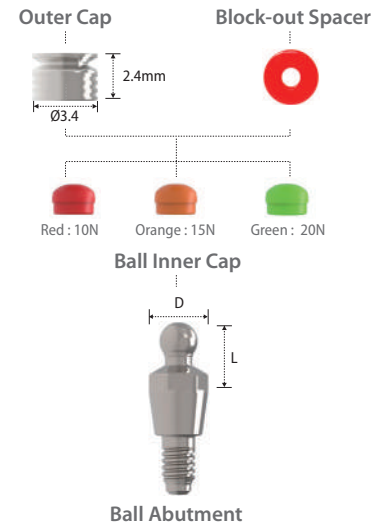
Height	95.4
SONIR002	
For Removal H For Insertion > Used to insert and remove the Inner Caps and Block Processing Male.	

Prosthetic Procedure V

Component Selection Guide for Ball Abutment



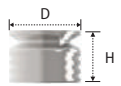
Ball Abutment



Diameter	Ø3.5
Length	4
IBAT404R	

- > Packing unit : 1 Ball Abutment + 3 Inner Caps (1 per each color) + 1 Block-out Spacer + 1 Outer Cap.
- > For Implant Supported Over-denture Prosthesis.
- > Tightened with the Ball Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Direct impression.

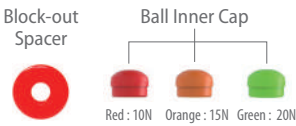
Ball Outer Cap



Diameter	Ø3.4
Height	2.4
BATC003C	

- > Packing unit : 2 Outer Caps.

Ball Inner Cap



BATC003I	
----------	--

- > Packing unit : 2 Block-out Spacers + 6 Inner Caps (2 per each color).
- > Retention force : Red 10N, Orange 15N & Green 20N.

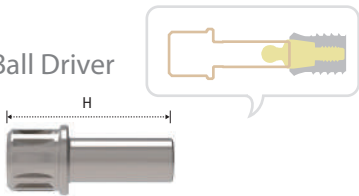
Ball Analog



Diameter	Ø4.0
Length	4
SBAL400	

- > Packing unit : 4 Lab Analogs.
- > Replacement of abutment shape in working cast.

Ball Driver

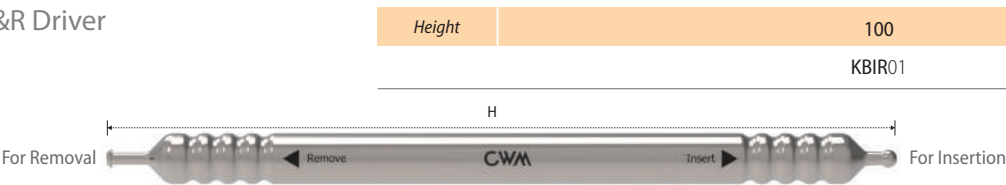


Height	Type	Ratchet
19		KRB19L

- > Packing unit : 1 Ball Driver.
- > Used with the Torque Wrench to tighten and untighten the Ball Abutment.

*Extra Product

I&R Driver

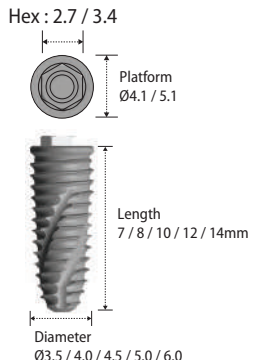


Height	100
KBIR01	

- > Packing unit : 1 I&R Driver.
- > Used to insert and remove the Inner Caps into and out of the Outer Cap.

INNO EXTERNAL IMPLANT (Ext.)

System Flow

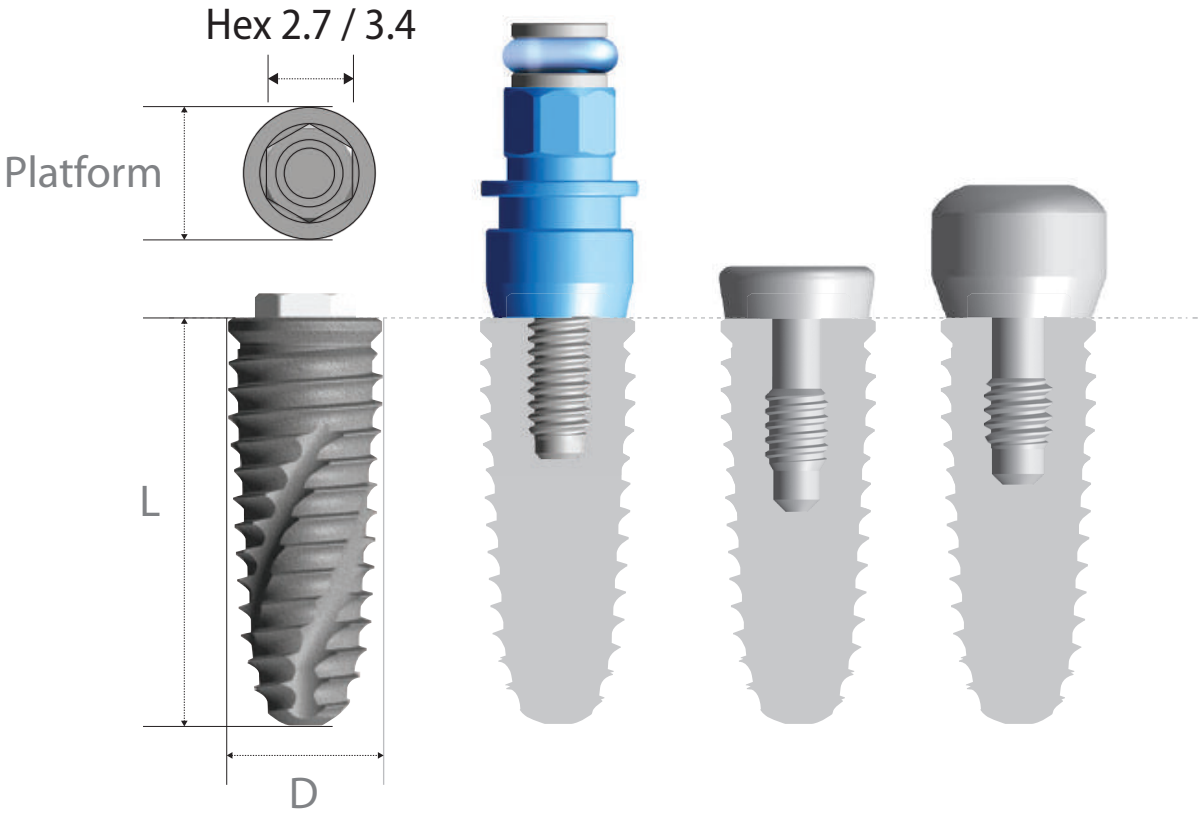
Fixture		Abutment		Impression
	Prosthetic Procedure I	102p Cemented 102p Angulated 102p Temporary 103p Meta G UCLA 103p Plastic Sleeve	Fixture Level Impression	104p Replica 104p Pick-up Squared Impression Coping 104p Transfer Post
	Prosthetic Procedure II	106p Shoulder	Abutment Level Impression	106p Shoulder Abutment Cap 107p Shoulder Impression Cap 107p Shoulder Positioning Cylinder 107p Shoulder Lab Analog
	Prosthetic Procedure III	109p Ball		109p Ball Analog

INNO External Implant (Ext.)



External Fixture
Surface Treatment : **SLA-SH®**

- > Interchangeable with external hexagonal fixture.
- > External hex connection (Hex 2.7 / 3.4).



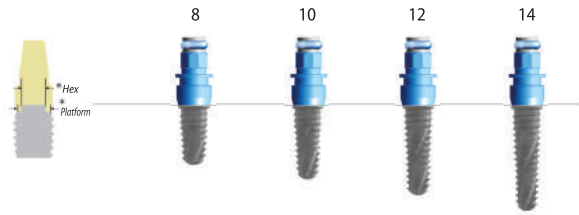
INNO Fixture Code

E	T	40	10	S	
Type	body	Diameter	Length	Surface Treatment	Mount
External	Taper	Ø 4.0	10mm	SLA	Pre-Mount

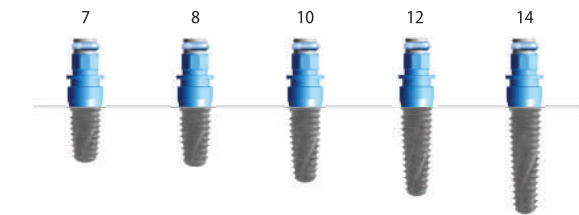
*Ex.)
SLA Pre-Mount **ET4010S**

Pre-Mount > Packing unit : 1 Fixture + 1 Mount + 1 Mount Screw.

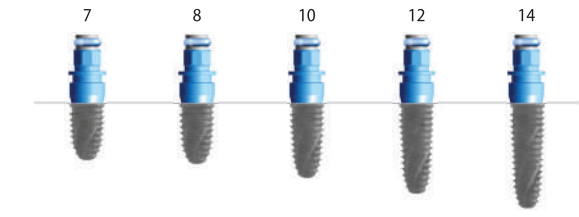
* Diameter	Ø3.5
Length	
7	-
8	ET3508S
10	ET3510S
12	ET3512S
14	ET3514S



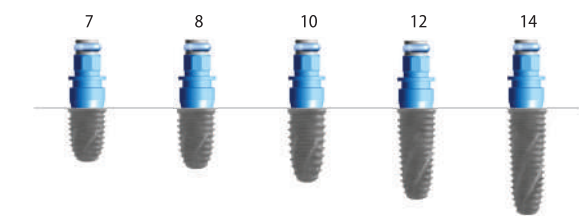
* Diameter	Ø4.0
Length	
7	ET4007S
8	ET4008S
10	ET4010S
12	ET4012S
14	ET4014S



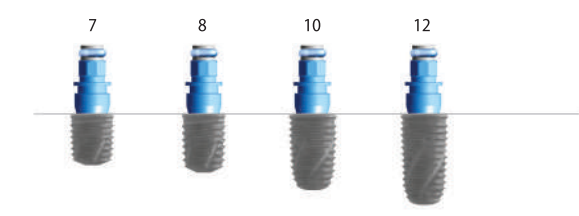
* Diameter	Ø4.5
Length	
7	ET4507S
8	ET4508S
10	ET4510S
12	ET4512S
14	ET4514S



* Diameter	Ø5.0
Length	
7	ET5007S
8	ET5008S
10	ET5010S
12	ET5012S
14	ET5014S



* Diameter	Ø6.0
Length	
7	ET6007S
8	ET6008S
10	ET6010S
12	ET6012S
14	-



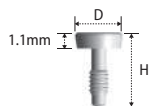
Fixture Mount



Hex	Hex2.7	Hex3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter / Length	Ø4.9	Ø5.5
7.2	MER001	MEW002

- > Packing unit : 1 Mount + 1 Mount Screw.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Cover Screw



Hex	Hex2.7	Hex3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter / Height	Ø4.3	Ø5.4
5.8	VNR001	VNW001

- > Packing unit : 1 Cover Screw.
- > To seal the conical interface of fixture.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Healing Abutment

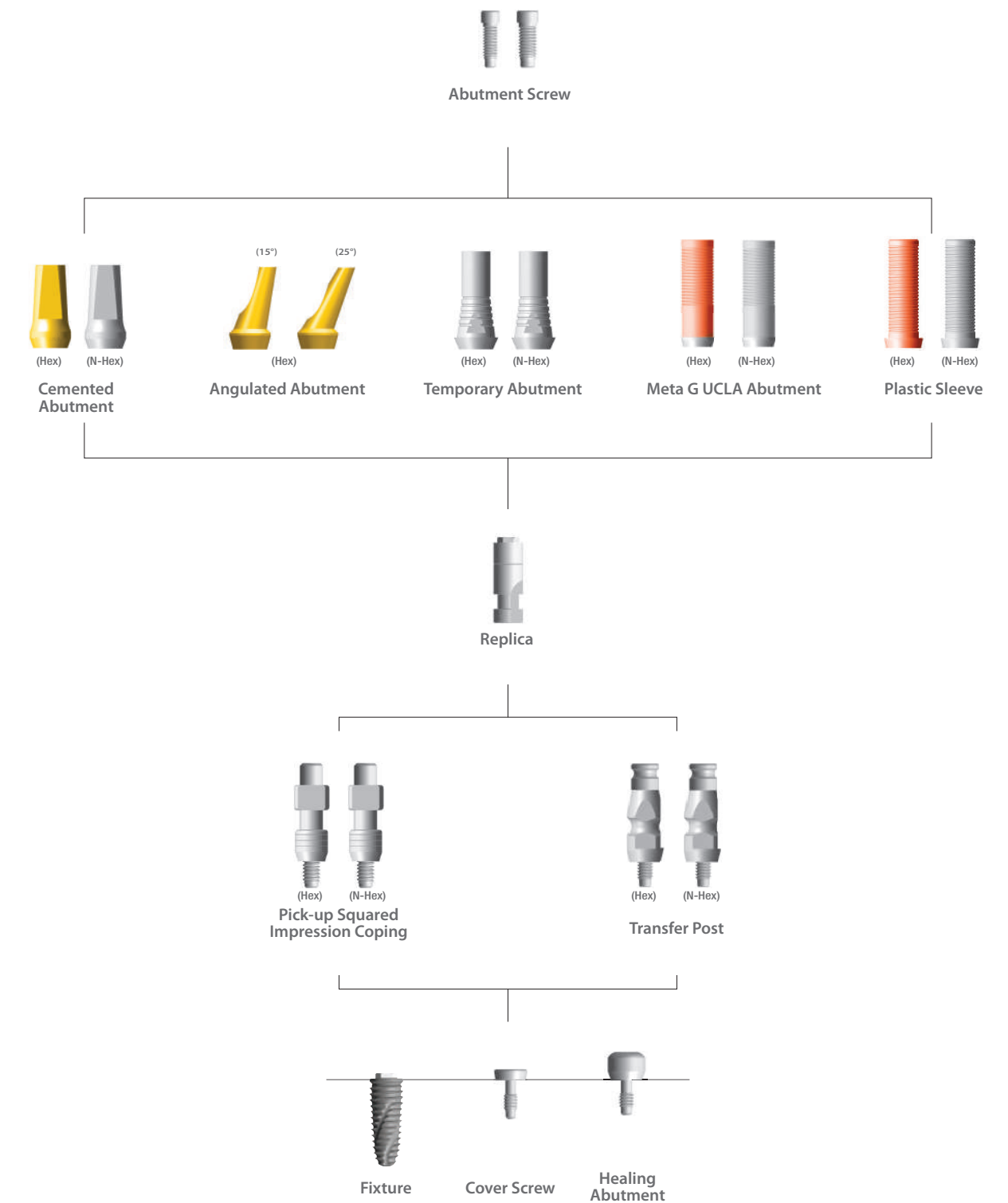


Hex	Hex2.7	Hex3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter / Length	Ø5.0	Ø6.0
2.8	HNR502	HNW602
3.8	HNR503	HNW603
4.8	HNR504	HNW604
5.8	HNR505	HNW605
6.8	HNR506	HNW606
7.8	HNR507	HNW607

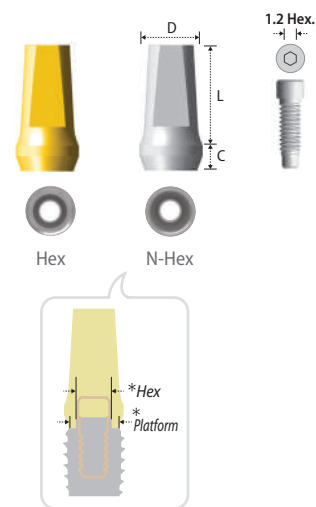
- > Packing unit : 1 Abutment.
- > For remodeling gingival contour during soft tissue healing.
- > Select according to gingival height and abutment type.
- > Tightened with the 1.2 Hex Driver.
- > Tightening torque force : 5~10 N.cm.

Prosthetic Procedure I

Component Selection Guide for Cemented & UCLA Abutment



Cemented Abutment

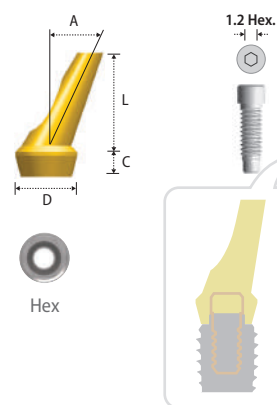


Type	Hex			
*Hex	Hex2.7		Hex3.4	
*Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]		Ø5.1 [Ø5.0 / Ø6.0]	
Diameter	Ø5.0		Ø6.0	
Length Cuff	6	8	6	8
1	CHR516	CHR518	CHW616	CHW618
2	CHR526	CHR528	CHW626	CHW628
3	CHR536	CHR538	CHW636	CHW638
4	CHR546	CHR548	CHW646	CHW648

Type	N-Hex			
*Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]		Ø5.1 [Ø5.0 / Ø6.0]	
Diameter	Ø5.0		Ø6.0	
Length Cuff	6	8	6	8
1	CNR516	CNR518	CNW616	CNW618
2	CNR526	CNR528	CNW626	CNW628
3	CNR536	CNR538	CNW636	CNW638
4	CNR546	CNR548	CNW646	CNW648

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Cement Retained and Screw-Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of prosthesis.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 35 N.cm
- > Fixture level impression.

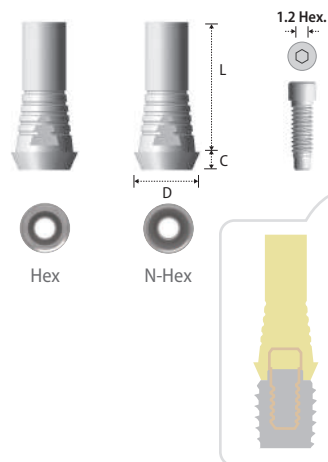
Angulated Abutment



Type[Hex]	Hex2.7	Hex3.4	Hex2.7	Hex3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter (Angle)	Ø5 (15°)	Ø6 (15°)	Ø5 (25°)	Ø6 (25°)
Length Cuff	8	8	8	8
2	AAR152	AAW152	AAR252	AAW252
3	AAR153	AAW153	AAR253	AAW253
4	AAR154	AAW154	AAR254	AAW254

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Prosthesis.
- > Solution for anterior esthetic zone.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 35 N.cm.
- > Fixture level impression.

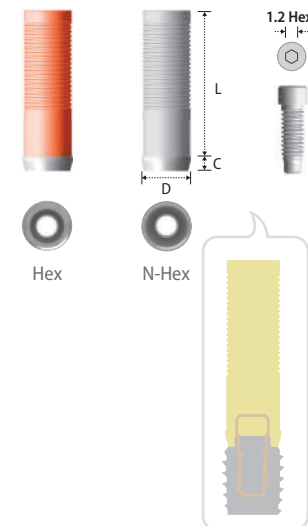
Temporary Abutment



Type[Hex]	Hex[2.7]	Hex[3.4]	N-Hex	N-Hex
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø5.4	Ø5.95	Ø5.4	Ø5.95
Length Cuff	12	12	12	12
1.5	THR001	THW001	TNR001	TNW001

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement Retained Prosthesis.
- > For provisional restoration.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 20 N.cm.

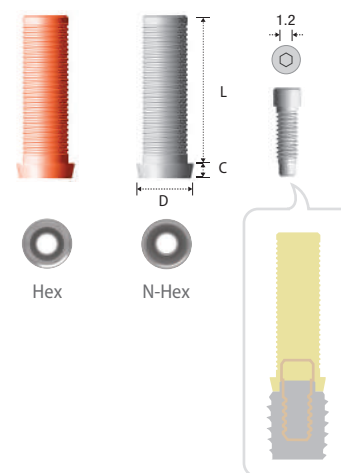
Meta G UCLA Abutment



Type[Hex]	Hex[2.7]	Hex[3.4]	N-Hex	N-Hex
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length Cuff	13	13	13	13
1.2	GHR001N	GHW001N	GNR001N	GNW001N

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > For Screw-Cement or Screw Retained Prosthesis.
- > Modification to angulated abutment, customized abutment and telescopic abutment.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 35 N.cm.
- > Fixture level impression.

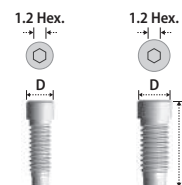
Plastic Sleeve



Type[Hex]	Hex[2.7]	Hex[3.4]	N-Hex	N-Hex
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Length Cuff	11.8	11.8	11.8	11.8
1.2	PHR001	PHW001	PNR001	PNW001

- > Packing unit : 1 Abutment + 1 Abutment Screw.
- > Same purpose of use as Meta G UCLA Abutment but low accuracy of connection.
- > PMMA material.
- > Connected with the Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : Finger light force during wax Pattern fabrication, 35 N.cm after casting.

Abutment Screw



Hex	Hex2.7	Hex3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø2.5	Ø3.0
8	SHR100	SHW100

- > Packing unit : 1 Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

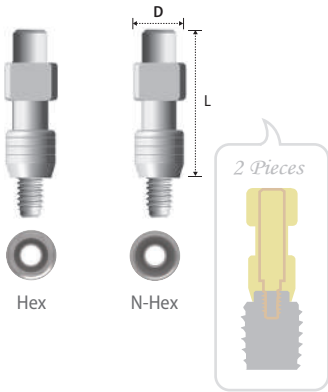
Replica



Type[Hex]	Hex[2.7]	Hex[3.4]
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø4.1	Ø5.1
Height	12	LHR001
		LHW001

- > Packing unit : 1 Replica.
- > Mimicking of conical interface of fixture.
- > Analog of fixture for working cast.

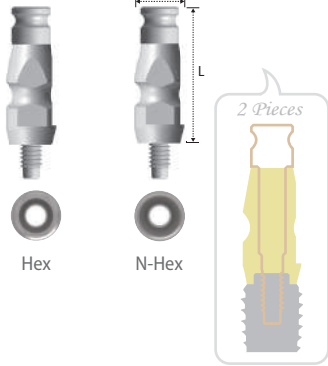
Pick-up Squared Impression Coping



Type[Hex]	Hex[2.7]	Hex[3.4]	N-Hex	N-Hex
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø5	Ø5.8	Ø5	Ø5.8
Length	17	IHR500	IHW600	INR500
				INW600

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (Regular : UHR115 / Wide : UHW115).
- > For Open Tray Impression.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Transfer Post

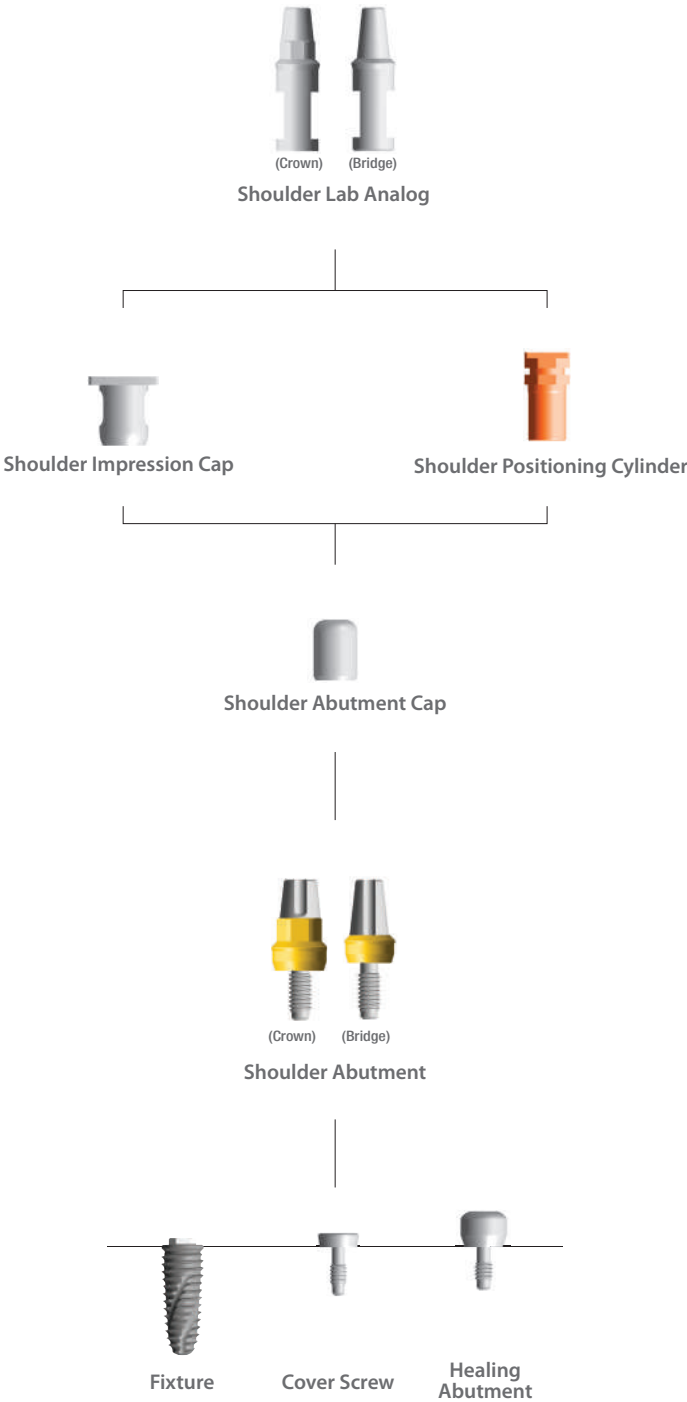


Type[Hex]	Hex[2.7]	Hex[3.4]	N-Hex	N-Hex
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.8	Ø4.8	Ø5.8
Length	13.1	IHR510	IHW610	INR510
				INW610

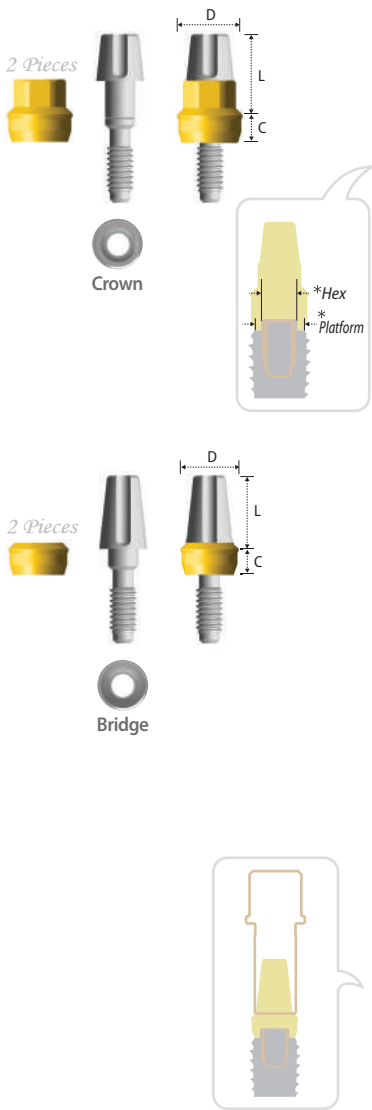
- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (Regular : IHR510S, IHR610S / Wide : IHW610S).
- > For Closed Tray Impression.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Prosthetic Procedure II

Component Selection Guide for Shoulder Abutment



Shoulder Abutment



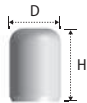
Type	Crown					
*Hex	Hex2.7			Hex3.4		
* Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]			Ø5.1 [Ø5.0 / Ø6.0]		
Diameter	Ø4.8			Ø5.9		
Length Cuff	4	5.5	7	4	5.5	7
1	SAC414	SAC415	SAC417	SAC514	SAC515	SAC517
2	SAC424	SAC425	SAC427	SAC524	SAC525	SAC527
3	SAC434	SAC435	SAC437	SAC534	SAC535	SAC537
4	SAC444	SAC445	SAC447	SAC544	SAC545	SAC547

Type	Bridge					
Hex	Hex2.7			Hex3.4		
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]			Ø5.1 [Ø5.0 / Ø6.0]		
Diameter	Ø4.8			Ø5.9		
Length Cuff	4	5.5	7	4	5.5	7
1	SAB414	SAB415	SAB417	SAB514	SAB515	SAB517
2	SAB424	SAB425	SAB427	SAB524	SAB525	SAB527
3	SAB434	SAB435	SAB437	SAB534	SAB535	SAB537
4	SAB444	SAB445	SAB447	SAB544	SAB545	SAB547

- > Packing unit : 1 Abutment.
- > For Cement Retained Prosthesis.
- > Dual anti-rotation grip for prevention of screw loosening.
- > Integrated with screw and abutment.
- > Tightened with the Shoulder Driver.
- > Tightening torque force : 35 N.cm.
- > Abutment level impression : Impression cap in platform Ø4.1 fixture and direct impression in platform Ø5.8 fixture.



Shoulder Abutment Cap



Hex	Hex2.7	Hex3.4
Diameter Height	Ø5.4	Ø6.5
6.2	IASR140	IASW140
7.7	IASR155	IASW155
9.2	IASR170	IASW170

- > Packing unit : 1 Shoulder Abutment Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Alternative usage for sub-structure of temporary prosthesis.

Shoulder Impression Cap



Hex	Hex2.7	Hex3.4
Diameter Height	8	9
8	IICR001	IICW001

- > Packing unit : 1 Impression Cap.
- > Connected with the Positioning Cylinder.
- > Confirm locking with abutment by rotation of clockwise and anti-clockwise direction.

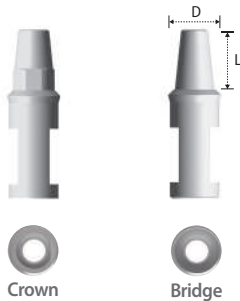
Shoulder Positioning Cylinder



Hex	Hex2.7	Hex3.4
Diameter Height	Ø4.4	Ø5.5
10.7	SAPR001	SAPW001

- > Packing unit : 1 Cylinder.
- > Inner cutting surface for anti-rotation on abutment.
- > Insert into the Impression Cap.

Shoulder Lab Analog

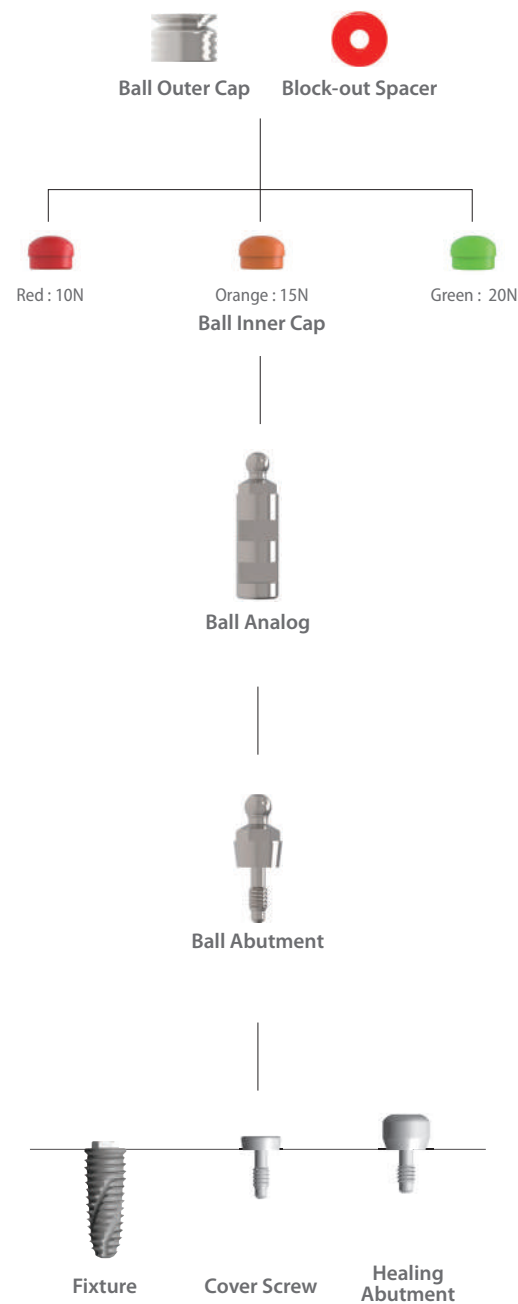


Type	Crown		Bridge	
Diameter Length	Ø4.8	Ø5.9	Ø4.8	Ø5.9
4	SLCR040	SLCW040	SLBR040	SLBW040
5.5	SLCR055	SLCW055	SLBR055	SLBW055
7	SLCR070	SLCW070	SLBR070	SLBW070

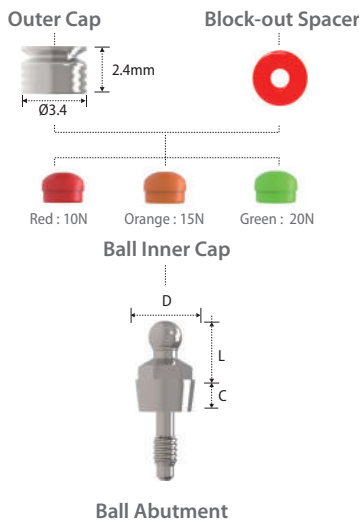
- > Packing unit : 1 Analog.
- > Replacement of abutment shape in working cast.
- > Choose by abutment length.

Prosthetic Procedure III

Component Selection Guide for Ball Abutment



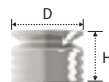
Ball Abutment



Diameter	Ø5.0	Ø6.0
Length Cuff	4	4
1	EBAT411R	EBAT511R
2	EBAT412R	EBAT512R
3	EBAT413R	EBAT513R
4	EBAT414R	EBAT514R

- > Packing unit : 1 Ball Abutment + 3 Inner Caps (1 per each color) + 1 Block-out Spacer + 1 Outer Cap.
- > For Implant Supported Over-denture Prosthesis.
- > Tightened with the Ball Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Direct impression.

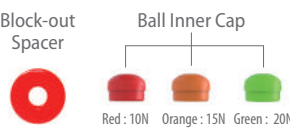
Ball Outer Cap



Diameter Height	Ø3.4 2.4
	BATC003C

- > Packing unit : 2 Outer Caps.

Ball Inner Cap



	BATC003I
--	----------

- > Packing unit : 2 Block-out Spacers + 6 Inner Caps (2 per each color).
- > Retention force : Red 10N, Orange 15N & Green 20N.

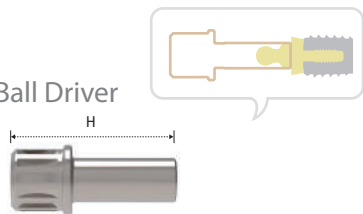
Ball Analog



Diameter Length	Ø4.0 4
	SBAL400

- > Packing unit : 4 Lab Analogs.
- > Replacement of abutment shape in working cast.

Ball Driver



Type Height	Ratchet 19
	KRB19L

- > Packing unit : 1 Ball Driver.
- > Used with the Torque Wrench to tighten and untighten the Ball Abutment.

*Extra Product

I&R Driver

Height	100
	KBIR01



- > Packing unit : 1 I&R Driver.
- > Used to insert and remove the Inner Caps into and out of the Outer Cap.

INNO SUB. FULL SURGICAL KIT [KCA010F]

SUB.
HEXAGON
SYSTEM

- > For INNO Submerged Implant System (Sub.).
- > All components are for Sub. / Int. / Ext. except for the Fixture Drivers and the Depth Gauge used for Sub. exclusively.



 Path Drill 2KTD18	 Point Drill KPD01S	 Ø2.2 X 7 KPSD2207	 Ø3.5 X 7 2KTD3707	 Ø4.0 X 7 2KTD4007	 Ø4.5 X 7 2KTD4507	 Ø5.0 X 7 2KTD5007	 Ø6.0 X 7 2KTD6007
 Parallel Pin KPP002	 Parallel Pin KPP002	 Ø2.2 X 8 KPSD2208	 Ø3.5 X 8 2KTD3708	 Ø4.0 X 8 2KTD4008	 Ø4.5 X 8 2KTD4508	 Ø5.0 X 8 2KTD5008	 Ø6.0 X 8 2KTD6008
 1.2 Hex Driver L KHD1221	 1.2 Hex Driver XL KHD1227	 Ø2.2 X 10 KPSD2210	 Ø3.5 X 10 2KTD3710	 Ø4.0 X 10 2KTD4010	 Ø4.5 X 10 2KTD4510	 Ø5.0 X 10 2KTD5010	 Ø6.0 X 10 2KTD6010
 M. Mount Driver L KMMD06L	 R. Mount Driver L KRMD19L	 Ø2.2 X 12 KPSD2212	 Ø3.5 X 12 2KTD3712	 Ø4.0 X 12 2KTD4012	 Ø4.5 X 12 2KTD4512	 Ø5.0 X 12 2KTD5012	 Ø6.0 X 12 2KTD6012
 Sub. Fixture Driver M. Fixture Driver S 2KMS01S	 Sub. Fixture Driver R. Fixture Driver L 2KHS01L	 Ø2.2 X 14 KPSD2214	 Ø3.5 X 14 2KTD3714	 Ø4.0 X 14 2KTD4014	 Ø4.5 X 14 2KTD4514	 Ø5.0 X 14 2KTD5014	
 M. Fixture Driver L 2KMS01L	 R. Fixture Driver XL 2KHS01X	 Drill Extension KDE002	 Ø3.5 Countersink 4KCS35	 Ø4.0 Countersink 4KCS40	 Ø4.5 Countersink 4KCS45	 Ø5.0 Countersink 4KCS50	 Ø6.0 Countersink 4KCS60



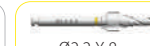
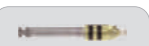
*  A common tool for Sub. / Int. / Ext.  An exclusive tool by type

INNO INT. FULL SURGICAL KIT [KCA010FI]

INT.
OCTAGON
SYSTEM

- > For the selection and use guide of the components for the Sub. Int. & Ext. Full Surgical Kit, refer to pages113 to 119.
- > For the INNO Internal Implant System (Int.).
- > All components are for Sub. / Int. / Ext. except for the Fixture Drivers used for Int. exclusively.



 Path Drill 2KTD18	 Point Drill KPD01S	 Ø2.2 X 7 KPSD2207	 Ø3.5 X 7 2KTD3707	 Ø4.0 X 7 2KTD4007	 Ø4.5 X 7 2KTD4507	 Ø5.0 X 7 2KTD5007	 Ø6.0 X 7 2KTD6007
 Parallel Pin KPP002	 Parallel Pin KPP002	 Ø2.2 X 8 KPSD2208	 Ø3.5 X 8 2KTD3708	 Ø4.0 X 8 2KTD4008	 Ø4.5 X 8 2KTD4508	 Ø5.0 X 8 2KTD5008	 Ø6.0 X 8 2KTD6008
 1.2 Hex Driver L KHD1221	 1.2 Hex Driver XL KHD1227	 Ø2.2 X 10 KPSD2210	 Ø3.5 X 10 2KTD3710	 Ø4.0 X 10 2KTD4010	 Ø4.5 X 10 2KTD4510	 Ø5.0 X 10 2KTD5010	 Ø6.0 X 10 2KTD6010
 M. Mount Driver L KMMD06L	 R. Mount Driver L KRMD19L	 Ø2.2 X 12 KPSD2212	 Ø3.5 X 12 2KTD3712	 Ø4.0 X 12 2KTD4012	 Ø4.5 X 12 2KTD4512	 Ø5.0 X 12 2KTD5012	 Ø6.0 X 12 2KTD6012
 Int. Fixture Driver M. Fixture Driver S KMMI01S	 Int. Fixture Driver R. Fixture Driver S KHI01S	 Ø2.2 X 14 KPSD2214	 Ø3.5 X 14 2KTD3714	 Ø4.0 X 14 2KTD4014	 Ø4.5 X 14 2KTD4514	 Ø5.0 X 14 2KTD5014	
 M. Fixture Driver L KMMI01L	 R. Fixture Driver L KHI01L	 Drill Extension KDE002	 Ø3.5 Countersink 4KCS35	 Ø4.0 Countersink 4KCS40	 Ø4.5 Countersink 4KCS45	 Ø5.0 Countersink 4KCS50	 Ø6.0 Countersink 4KCS60



*  A common tool for Sub. / Int. / Ext.  An exclusive tool by type

INNO EXT. FULL SURGICAL KIT [KCA010FE]

EXT.
HEXAGON
SYSTEM

- > For the selection and use guide of the components for the Sub. Int. & Ext. Full Surgical Kit, refer to pages 113 to 119.
- > For the INNO External Implant System (Ext.).
- > All components are for Sub. / Int. / Ext. except for the Fixture Drivers and the Multi Countersink used for Ext. exclusively.



* A common tool for Sub. / Int. / Ext. An exclusive tool by type

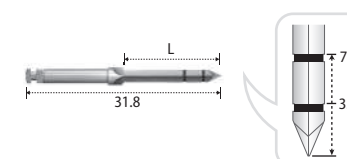
01 Drill / Surgical Tool

SUB.
HEXAGON
SYSTEM

INT.
OCTAGON
SYSTEM

EXT.
HEXAGON
SYSTEM

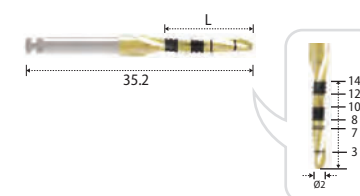
Point Drill



- > Primarily used for marking the implant recipient site and to determine spacing.
- > The point drill has a unique pointed tip, making this an excellent drill for starting the osteotomy through the hard cortical plate.

Length	15
	KPD01S

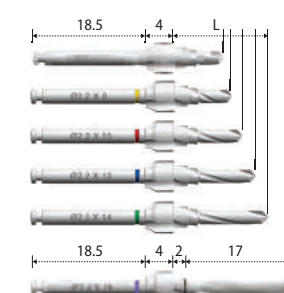
Path Drill



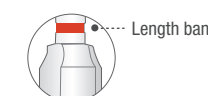
- > Used for the case that path modification is required.
- > Excellent ablation force that does not slip in slanted bone.
- > Easy to drill even in extraction socket without slipping.

Length	15
	2KTD18

Initial Drill

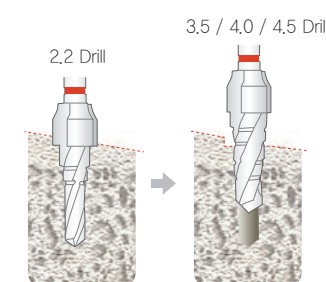


- > Initial stepped Drill - Ø2.2 / Ø2.8 / Ø3.3 mm stepped osteotomy at Ø1.8 Drill site.

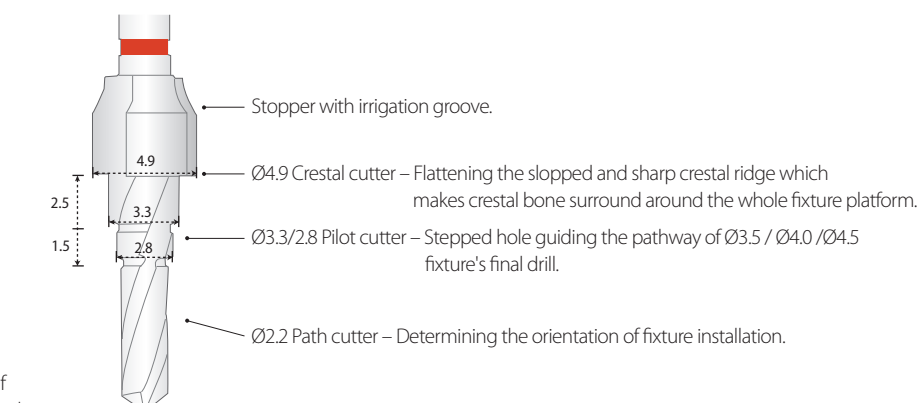


Length	8	9	11	13	15	17&19
	KPSD2207	KPSD2208	KPSD2210	KPSD2212	KPSD2214	*KPSD2218

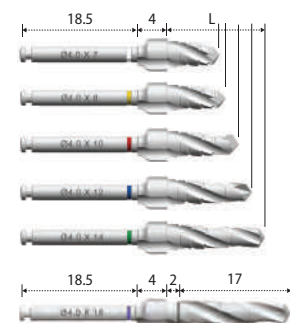
*Extra product



The Initial Drill guides the pathway of the Final Drills. The Final Drill is inserted a half into the Initial Drill's hole without drilling.



Final Drill



- > Ø3.5 / 4.0 / 4.5 / 5.0 / 6.0 fixture's Final Drill.
- > 7 / 8 / 10 / 12 / 14 / 16 / 18mm fixture's Final Drill.

Fixture Dia. Length	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
8	2KTD3707	2KTD4007	2KTD4507	2KTD5007	2KTD6007
9	2KTD3708	2KTD4008	2KTD4508	2KTD5008	2KTD6008
11	2KTD3710	2KTD4010	2KTD4510	2KTD5010	2KTD6010
13	2KTD3712	2KTD4012	2KTD4512	2KTD5012	2KTD6012
15	2KTD3714	2KTD4014	2KTD4514	2KTD5014	
17&19	*2KTD3718	*2KTD4018	*2KTD4518		

*Extra product

Tap Drill



- > Used in preparation of osteotomy in dense bone only.

Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
	*3KMTD35A	*3KMTD40A	*3KMTD45A	*3KMTD50A	*3KMTD60A

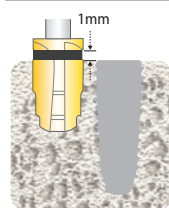
*Extra product

Countersink

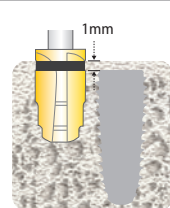


- > Bone quality 1 : high compressive placement of fixtures induces the failure of osseointegration and bone loss.
- > Countersink decreases torque force (Ø4.0 Fixture : 80 N.cm -> 45 N.cm / Ø5.0 Fixture : 150 N.cm -> 45 N.cm).
- > Preventing compressive necrosis of dense cortical bone.

Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
Diameter	Ø3.7	Ø4.2	Ø4.6	Ø5.1	Ø6.0
	4KCS35	4KCS40	4KCS45	4KCS50	4KCS60



Lower margin of depth marking line indicating fixture platform level.



Upper margin of depth marking line indicating 1 mm over fixture platform level.

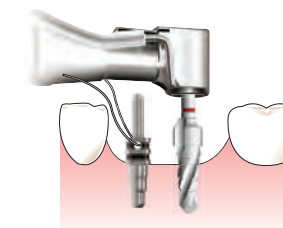
Parallel Pin



- > Insert the Parallel Pin after Ø2.2 or 3.5 Drill to check the osteotomy path.
- > In order to prevent losing Parallel Pin in patient's mouth, be sure to tie floss through the hole in the Parallel Pin.

Height	21
	KPP002

After Ø2.2 initial drilling. After Ø3.5 final drilling.



Drill Extension



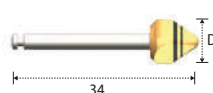
- > Used for lengthening the Drill when using a Hand-piece.
- > Do not go over recommended torque when using the Drill Extension.

Height	27.5
	KDE002



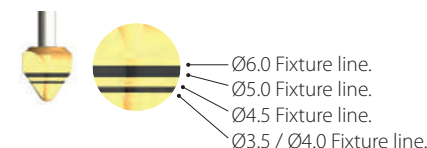
Triangle mark indicating the cutting surface of the drill shaft.

Multi Countersink



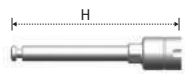
Diameter	Ø6.5
	4KCS01

> Only for Ext.



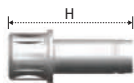
Mount Driver

> Used to install Pre-Mount type fixtures.



Type	Machine
Height	
20.5(Short)	* KMMD06S
26.3(Long)	KMMD06L
32.3(X-Long)	* KMMD12X

*Extra product



Type	Ratchet
Height	
12(Short)	* KRMD12S
19(Long)	KRMD19L

*Extra product

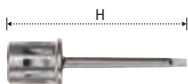
Hex Driver

- > Used to insert or remove the Cover Screw, Healing Abutment and Abutment Screw etc.
> The Machine Drivers are used with contra angle, while the Ratchet Drivers are used with the Torque Wrench.



Type	Machine	
Hex	Hex 0.9	Hex 1.2
Height		
22(Short)	* KMD09S	* KMD12S
28(Long)	* KMD09L	* KMD12L

*Extra product



Type	Ratchet	
Hex	Hex 0.9	Hex 1.2
Height		
12(X-Short)	-	* KHD1212
17(Short)	* KHD0915	* KHD1215
23(Long)	* KHD0921	KHD1221
29(X-Long)	* KHD0927	KHD1227

*Extra product



Fixture Driver

> Used to install No-Mount type fixtures.



Type	Machine			
System	Sub.	Int.	Ext.(Hex 2.7)	Ext.(Hex 3.4)
Length				
28.1 / 26.3 / 26.4 (Short)	2KMMS01S	KMMI01S	KMME01S	KMME02S
33.3 / 30.5 / 31.4 (Long)	2KMMS01L	KMMI01L	*KMME01L	
40.3 / 35.5 / 36.4 (X-Long)	*2KMMS01X	*KMMI01X	*KMME01X	

*Extra product



Type	Ratchet			
System	Sub.	Int.	Ext.(Hex 2.7)	Ext.(Hex 3.4)
Length				
20.7 / 19.5 / 19.9 (Short)	* 2KHDS01S	KHDI01S	*KHDE01S	
25.7 / 24.5 / 24.9 (Long)	2KHDS01L	KHDI01L	KHDE01L	KHDE02L
30.7 / 29.5 / 29.9 (X-Long)	2KHDS01X	*KHDI01X	*KHDE01X	

*Extra product



Torque Wrench

- > Torque control in implant placement and abutment connection.
> Torque force 10, 25, 30 & 35 N.cm are able to be controlled by pulling the elastic bar.
> Maximal torque force 120 N.cm with pulling the rigid main bar.



Code	KTW001
------	--------

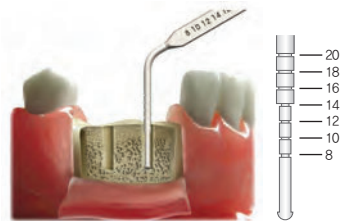


Depth Gauge

- > Measuring the drill depth with scaled rod.
> Measuring the 5mm space between adjacent fixtures with flat end of the other side.



Code	KDG001
------	--------



- > One side of the Depth Gauge measures the drilling depth and the other side measures the gingival height from the top of the implant.

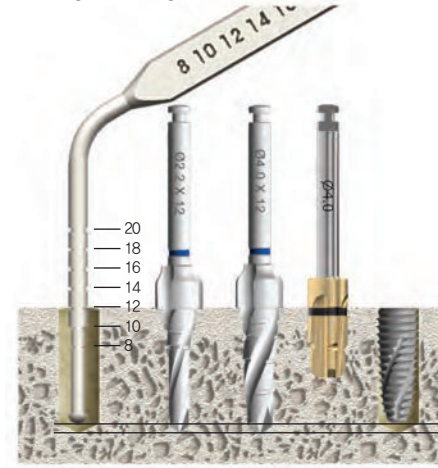
Code	KDG004	※ Exclusive for Sub.
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02 Drilling Sequence E.g. 12mm Fixture

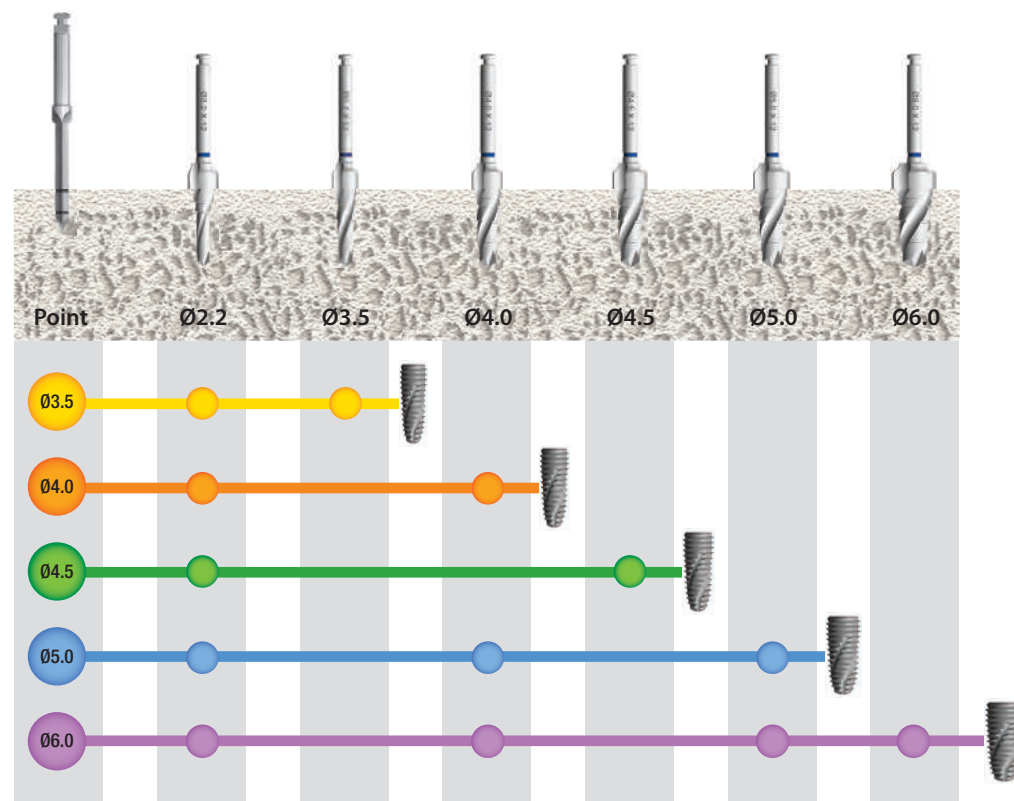
> Minimal drill frequency with the Point Drill, Initial Drill and Final Drills (Ø3.5, Ø4.0 and Ø4.5 Fixtures).



> Length Marking



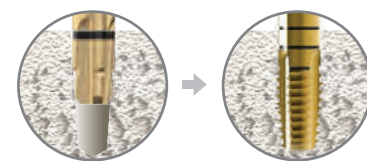
Actual length of Drill : Fixture + 1mm



> Ø5.0 fixture : a series of the Point Drill, Initial Drill, Ø4.0 Final Drill and Ø5.0 Final Drill.

> Ø6.0 fixture : a series of the Point Drill, Initial Drill, Ø4.0 Final Drill, Ø5.0 Final Drill and Ø6.0 Final Drill.

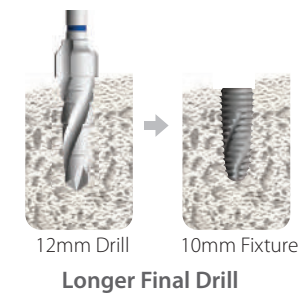
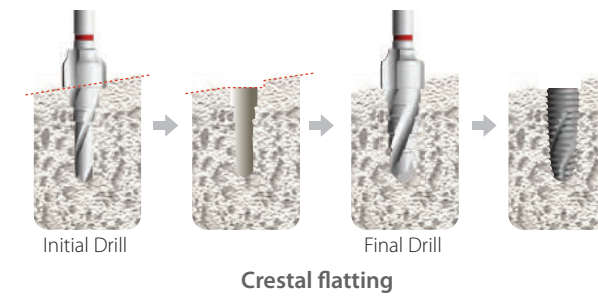
※ The Countersink and Tap Drill are used in hard bone quality.



*Extra product

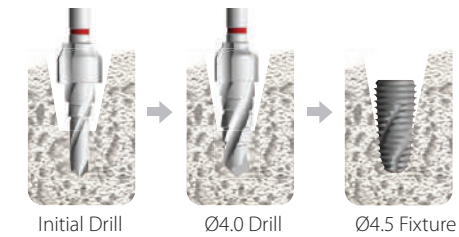
※ Sloped edentulous ridge adjacent of tooth

> Crestal cutter of the Initial Drill and Final Drill.
> Longer drills than fixture's length.



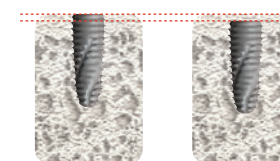
※ Wide extraction socket

> Absence of the cortical bone & spongy bone.
> Narrower diameter than the fixture's diameter.



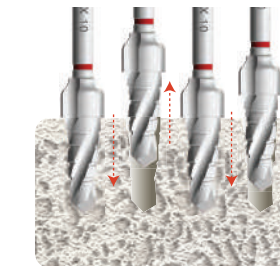
※ Torque force control

> The 0.5mm deeper placement increases the initial torque force of fixture.



Fixture Placement Level						
Level	Crestal Level			0.5mm Deeper Level		
Density	D1	D2	D3	D1	D2	D3
Torque	34.1	29	15.5	44.4	38.4	19.1

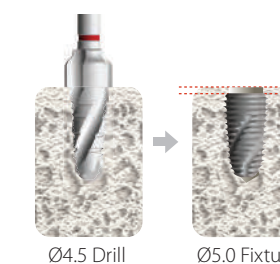
> The pumping action of drill removes the bone chip in the hole.
> In dense bone, the debrimment action decreases the high torque force.



Pumping action of final drill for debrimment			
Density	D1	D2	D3
Non- Debriment	34.1	29	19.6
Debriment	30	25	15.5

※ In weak bone quality 4 of maxillary tuberosity

> No pumping action.
> 0.5mm deeper placement of fixture.
> Wider fixture than Final Drill.

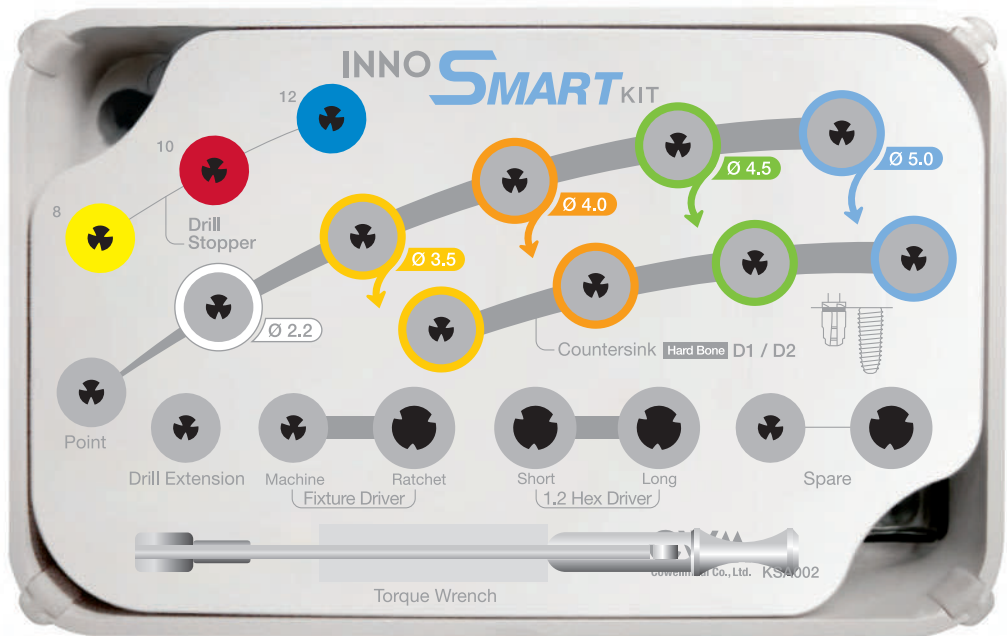


Level	Crestal level		0.5mm Deeper Level	
Debriment	with	without	with	without
Ø4.5 Fixture	4.4	10.2	-	12.9
Ø5.0 Fixture	11.6	19.9	14.1	24.5

INNO SUB. SMART SURGICAL KIT [KSA002]

SUB.
HEXAGON
SYSTEM

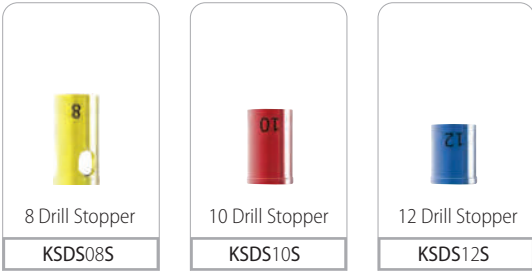
- > For the INNO Submerged Implant System (Sub. Ø3.5, 4.0, 4.5 & 5.0).
- > A simpler kit for implant surgery, applied to fixtures with 8~14mm in length using the Drills and Stoppers.



Drill



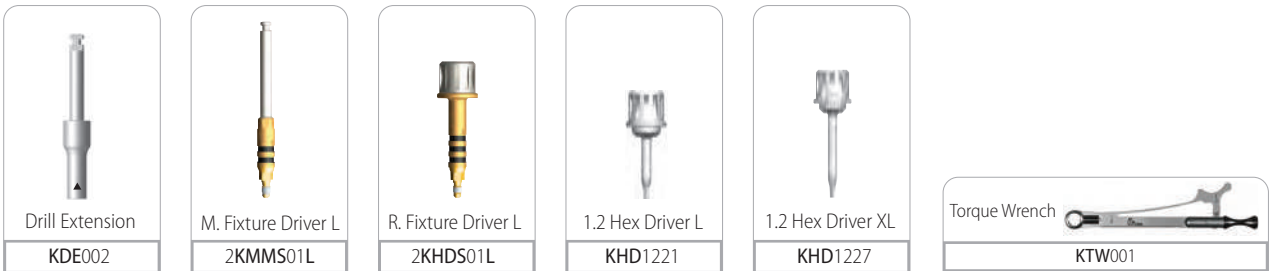
Stopper



Countersink

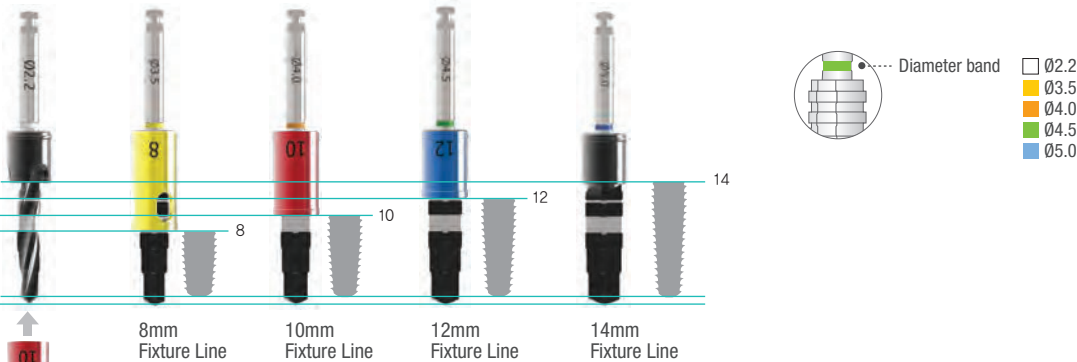


Extension & Driver



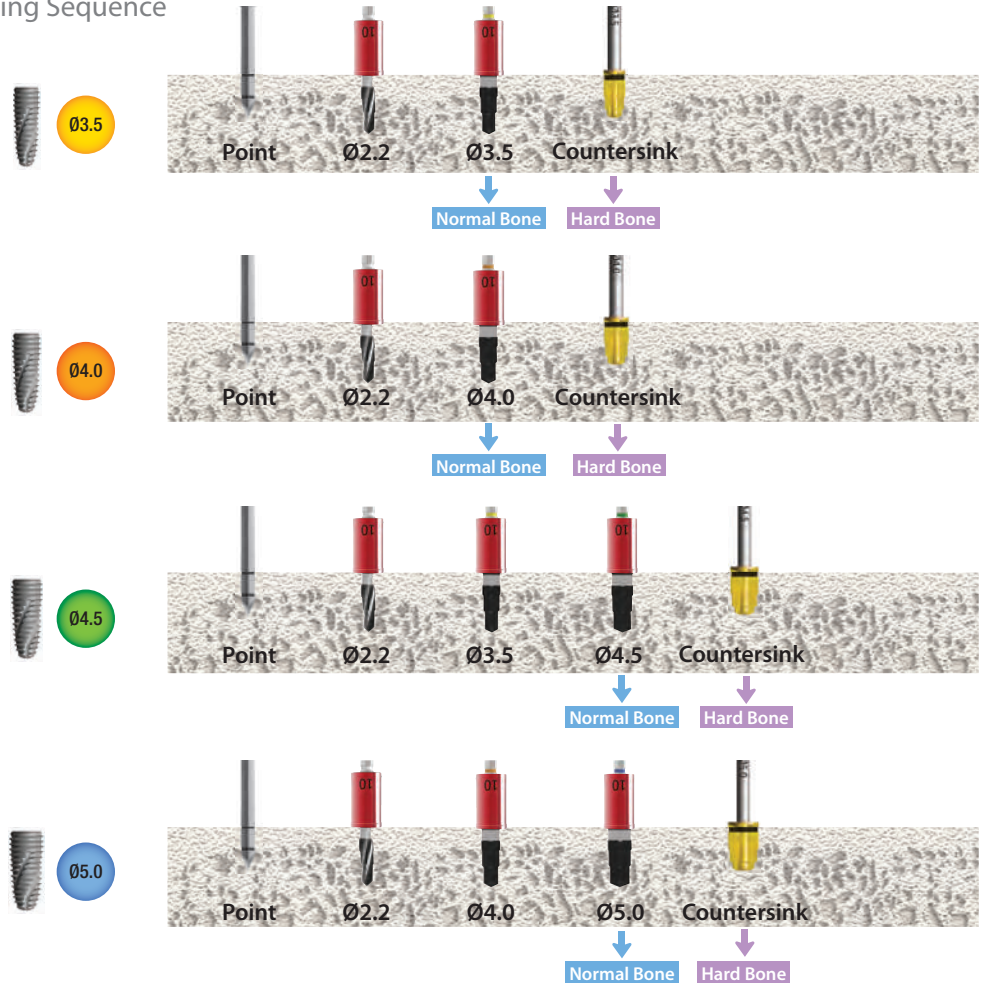
Length Marking & Stopper

Actual Length of Drill : Fixture length + 1mm



* While the 2.2 Initial Drill is used at 1,000 rpm with irrigation, the Final Drills from the 3.5 to 5.0 should be used at 50 rpm without irrigation.

Drilling Sequence



INNO SUB-SHORT SURGICAL KIT [KSI001]

SUB.
HEXAGON
SYSTEM

> For the INNO Submerged Short Implant System (Sub).



Drill

Point Drill KPD01S	Ø2.0 Step Drill KSSD2004	Ø4.0 Step Drill KSSD4004	Ø4.5 Step Drill KSSD4504	Ø5.0 Step Drill KSSD5004	Ø5.5 Step Drill KSSD5504	Ø6.0 Step Drill KSSD6004

Stopper

4mm Drill Stopper SIDS04	5.5mm Drill Stopper SIDS05	7mm Drill Stopper SIDS07

Countersink

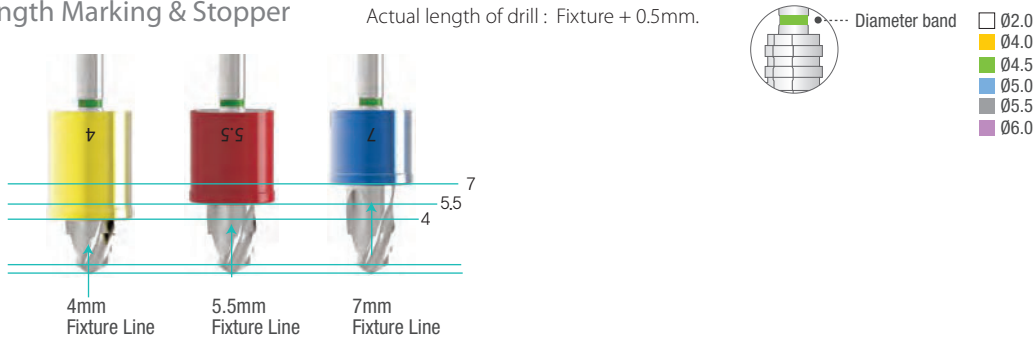
Ø4.0 Countersink 4KCS40S	Ø4.5 Countersink 4KCS45S	Ø5.0 Countersink 4KCS50S	Ø5.5 Countersink 4KCS55S	Ø6.0 Countersink 4KCS60S

Extension & Driver

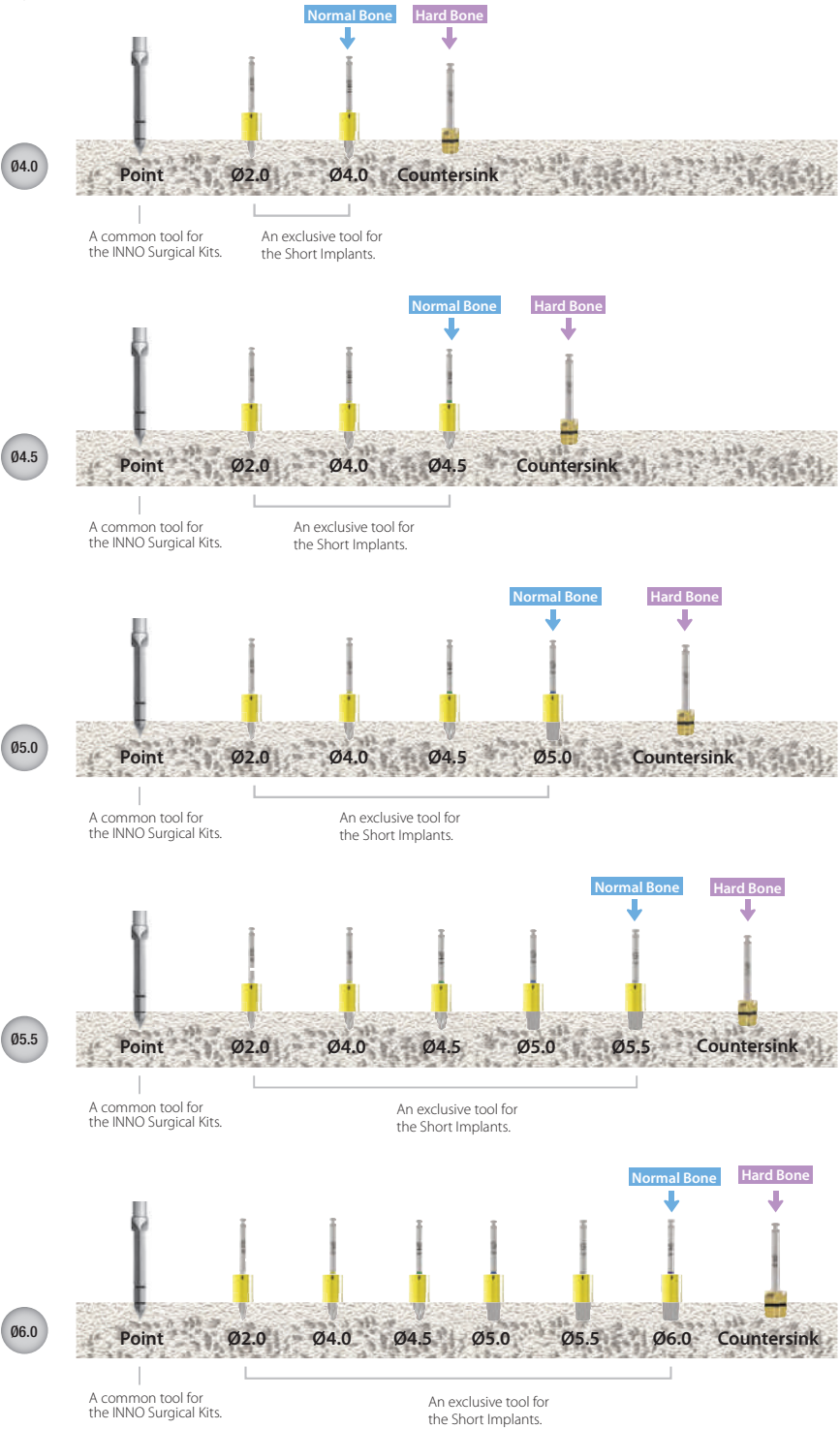
M. Mount Driver. L KMMD06L	R. Mount Driver. L KRMD19L	1.2 Hex Driver L KHD1221	Torque Wrench KTW001

Length Marking & Stopper

Actual length of drill : Fixture + 0.5mm.



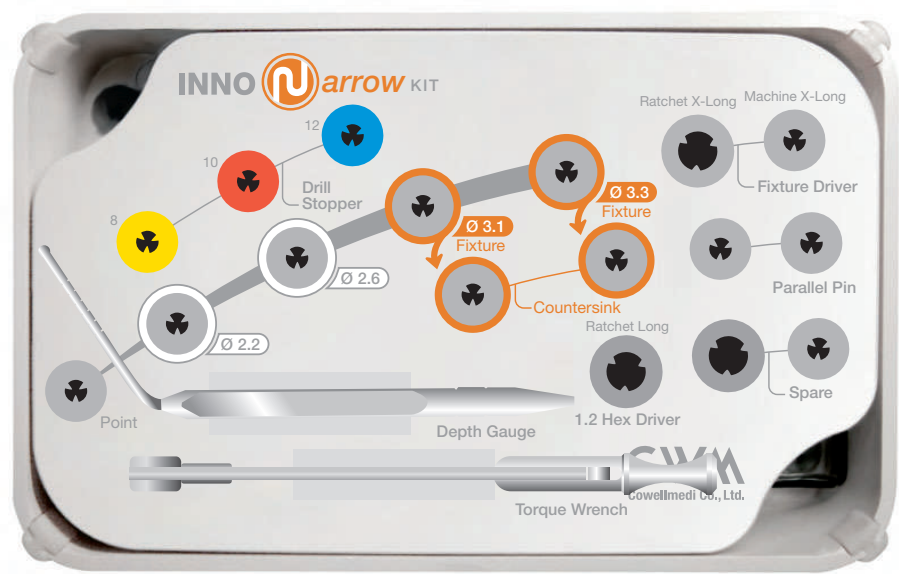
Drilling Sequence



INNO SUB-NARROW SURGICAL KIT [KNA001]



> For the INNO Submerged Narrow Implant System (Sub-N).



Drill

Point Drill
KNPD20

Ø2.2 Twist Drill
KNSD22L

Ø2.6 Twist Drill
KNSD26L

Ø3.1 Twist Drill
KNSD31L

Ø3.3 Twist Drill
KNSD33L

Stopper

8 Drill Stopper
KNDS08

10 Drill Stopper
KNDS10

12 Drill Stopper
KNDS12

Countersink

Ø3.1 Countersink
4KCS31N

Ø3.3 Countersink
4KCS33N

Extension & Driver

Fixture Driver (Ratchet)
KHDS01XN

Fixture Driver (Machine)
KMMS01XN

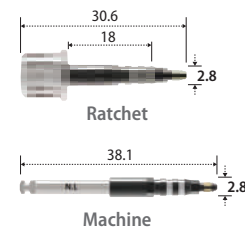
Parallel Pin
KPP003

1.2 Hex Driver L
KHD1221

Depth Gauge
KDG001

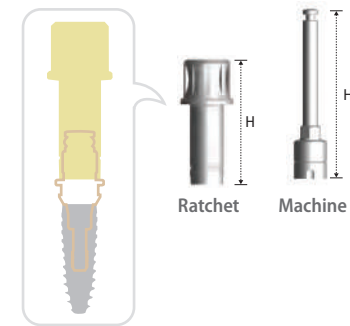
Torque Wrench
KTW001

Fixture Driver



Type	Ratchet	Machine
	KHDS01XN	KMMS01XN

Mount Driver

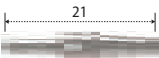


Type	Ratchet	Machine
	KRMD19L	*KMMD12X

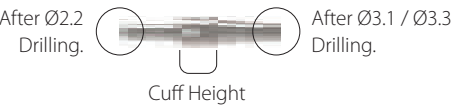
> Used to install fixture.

*Extra product

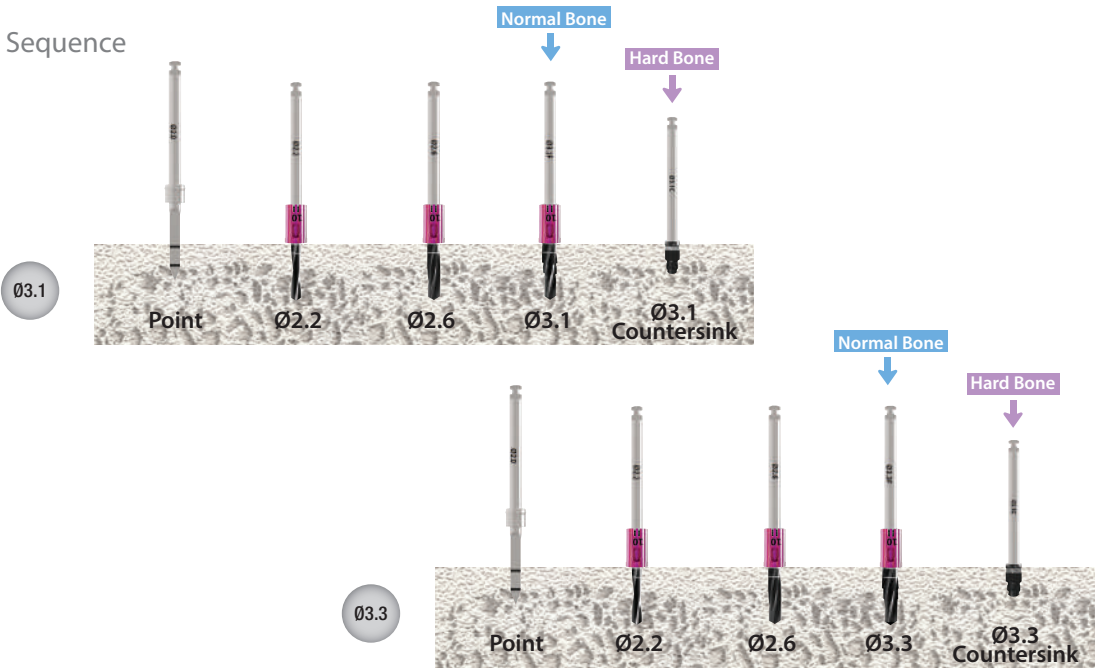
Parallel Pin



Code	KPP003
------	--------



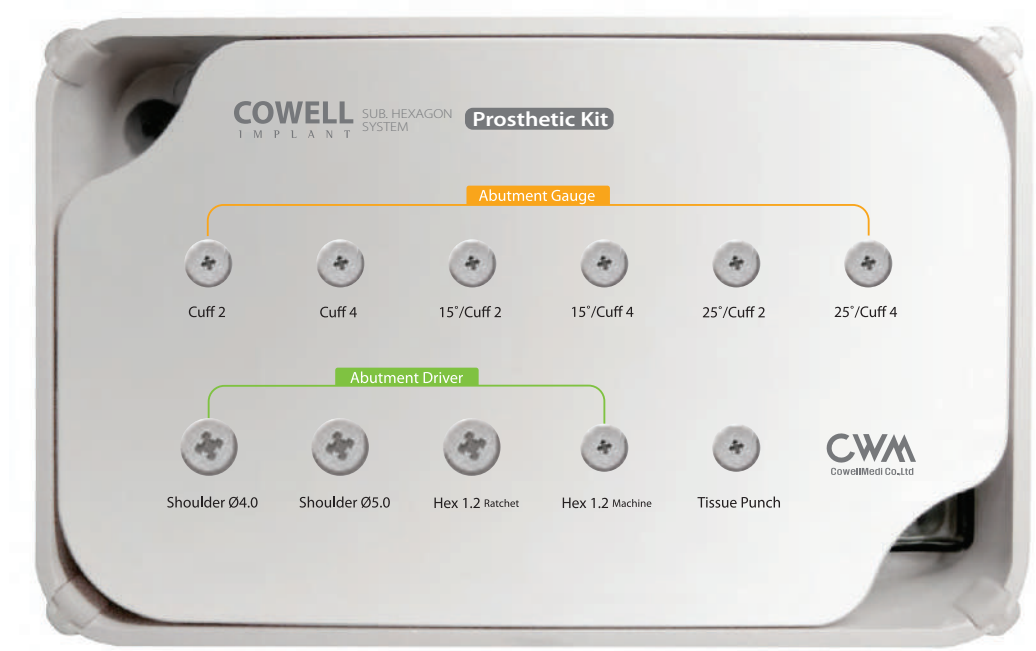
Drilling Sequence



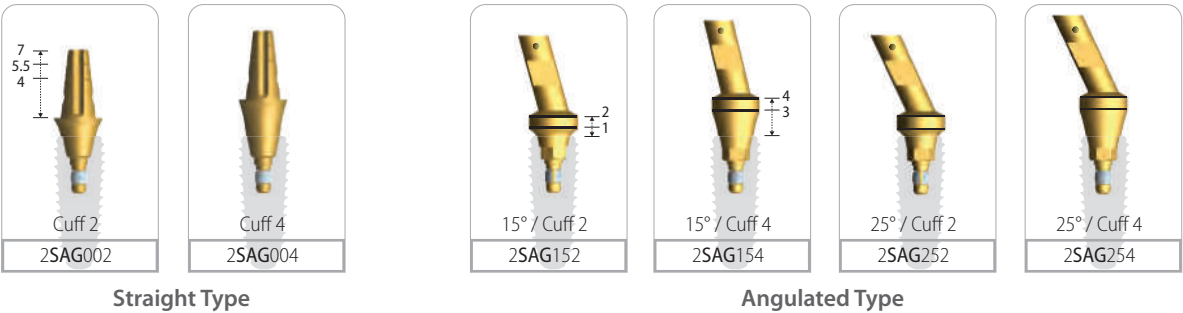
COWELL® PROSTHETIC KIT [KPA003]



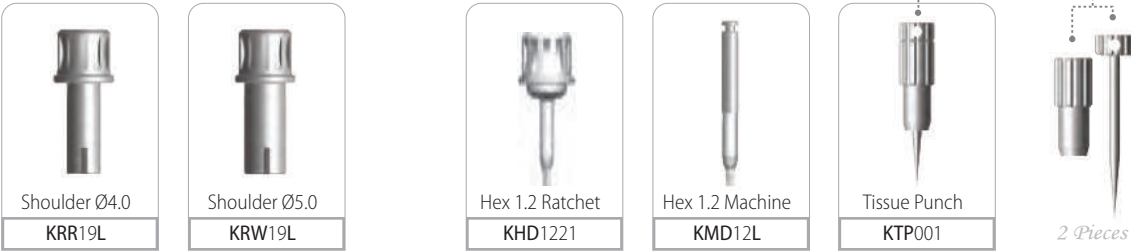
- > For the INNO Submerged Implant System.
- > Try-in Kit for determining abutment specifications.



Abutment Gauge > Measuring of the diameter, cuff length and angulation of abutment.



Abutment Driver > Used in the Shoulder, Solid, Absolute, and Straight Abutment placement.



Trephine soft tissue over the Cover Screw of fixture.

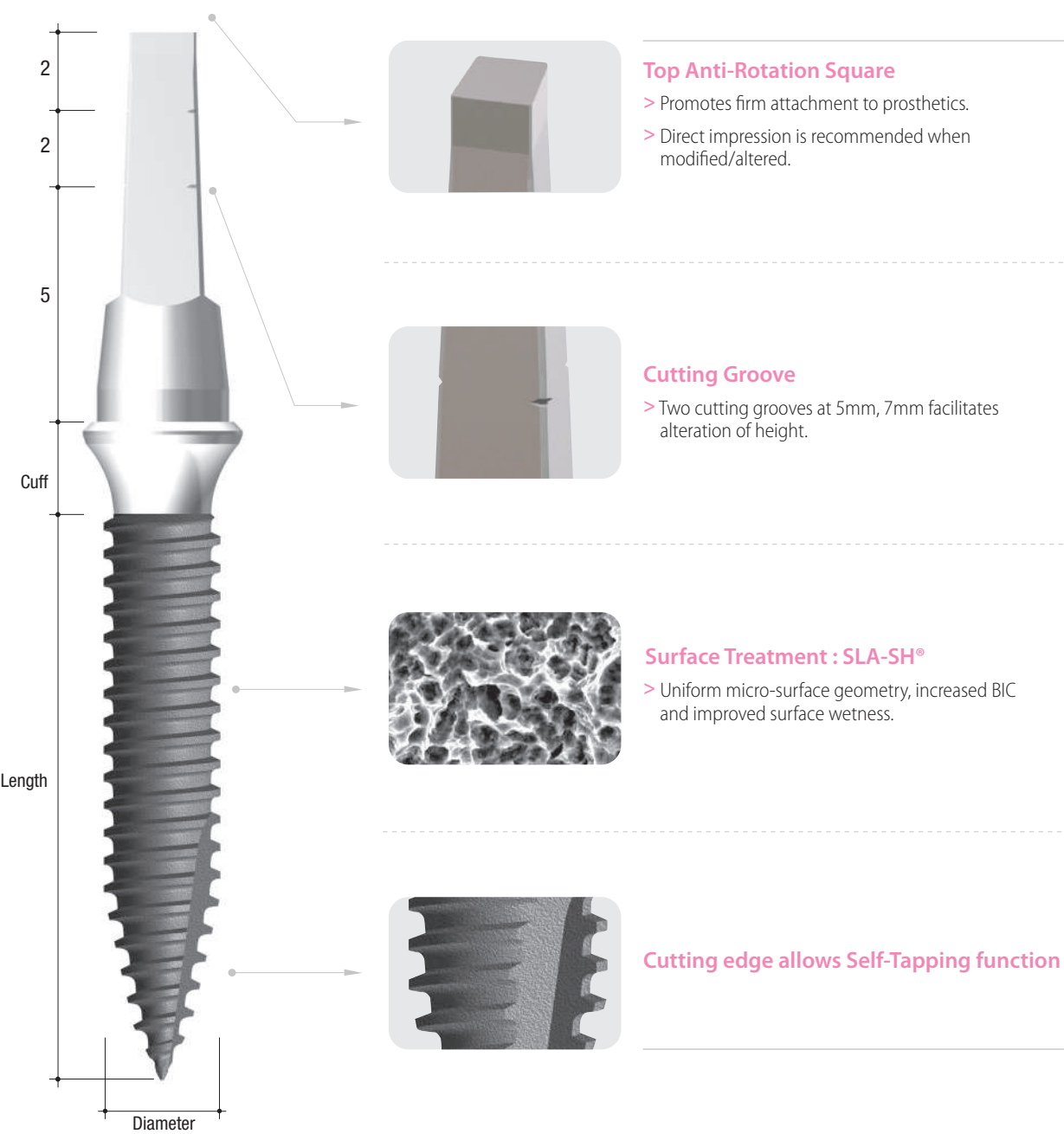
Mini Plus® Implant system

Mini Plus® Implant
Cement Type
Ball Type
Surgical kit

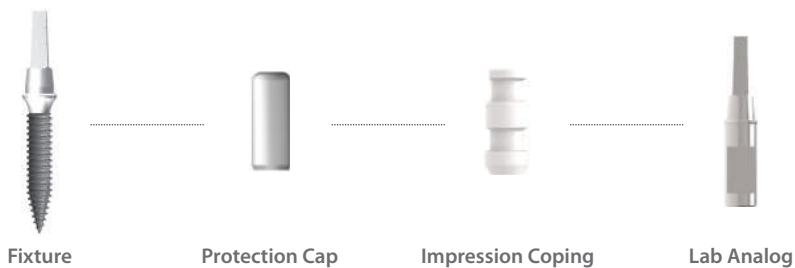
DESIGN OF MINI PLUS® FIXTURE (1P-C.)

Cement Type

- > For mandible anterior spaces and edentulous arch.
- > For semi-permanent or temporary solution.



System Flow



Implant



Diameter Cuff Length	Ø2.5	
	2.0mm	4.0mm
10mm	AMC2210S	AMC2410S
12mm	AMC2212S	AMC2412S
14mm	AMC2214S	AMC2414S

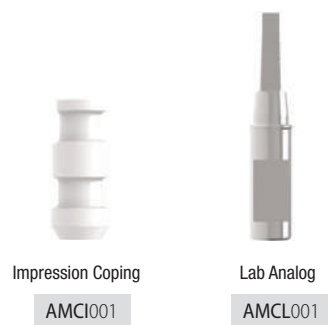
- > Packing unit : 1 Fixture.
- > Abutment level impression.



Diameter Cuff Length	Ø3.0	
	2.0mm	4.0mm
10mm	AMC3210S	AMC3410S
12mm	AMC3212S	AMC3412S
14mm	AMC3214S	AMC3414S

- > Packing unit : 1 Fixture.
- > Abutment level impression.

Impression Coping / Lab Analog



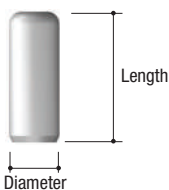
Impression Coping

- > Packing unit : 1 Impression Coping.
- > Fastened on the shoulder of the cement post and connected with the Lab Analog for working cast.
- > Direct impression is recommended when modified/alterd.

Lab Analog

- > Packing unit : 1 Lab Analog.
- > The same adjustment must be made for the Lab Analog when the abutment portion of the fixture is modified/alterd.
- > Replacement of the cement post shape in working mode.

Protection Cap



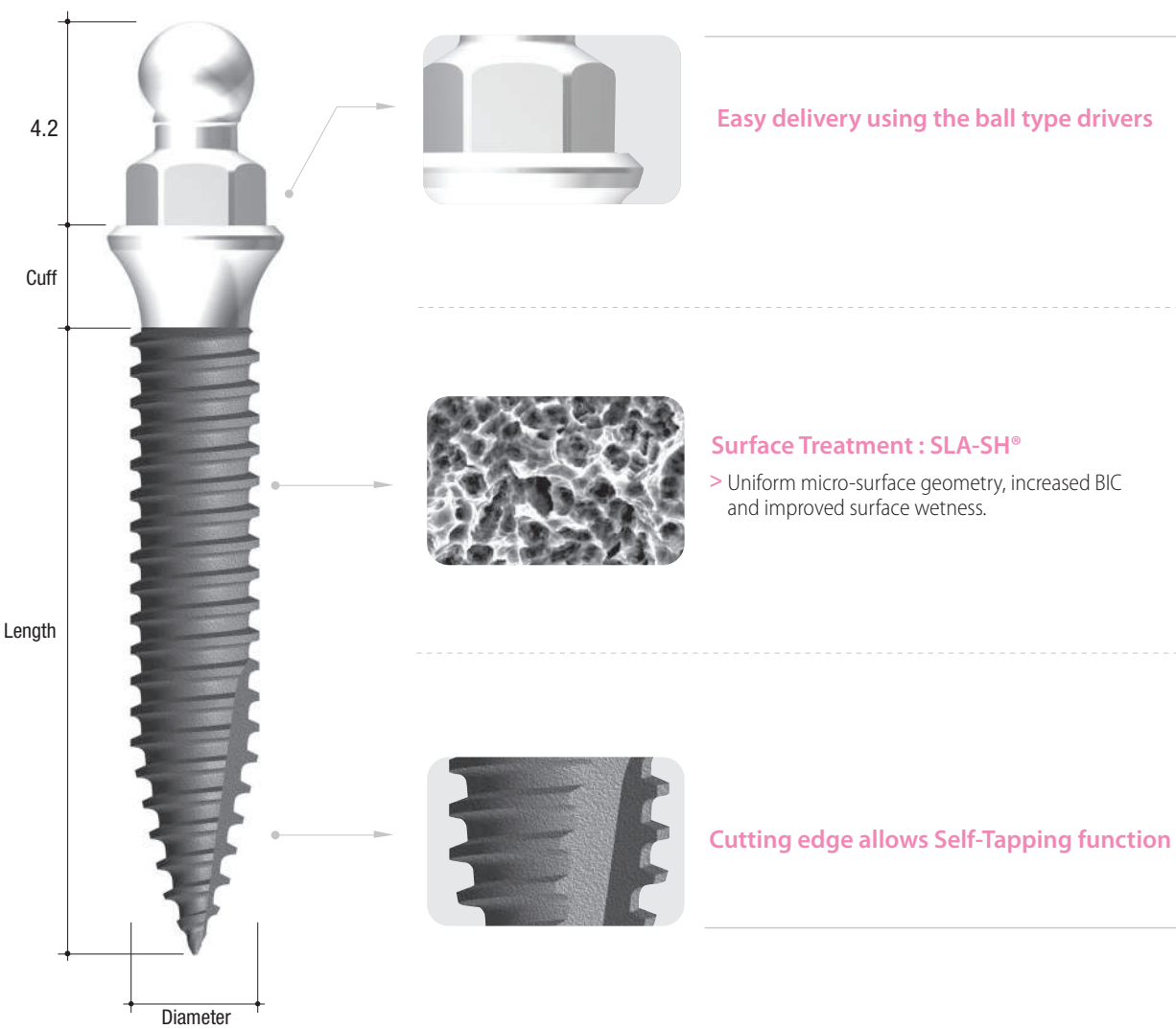
Diameter Length	Ø4.0
7mm	AMCC001
9mm	AMCC002
11mm	AMCC003

- > Packing unit : 1 Protection Cap.

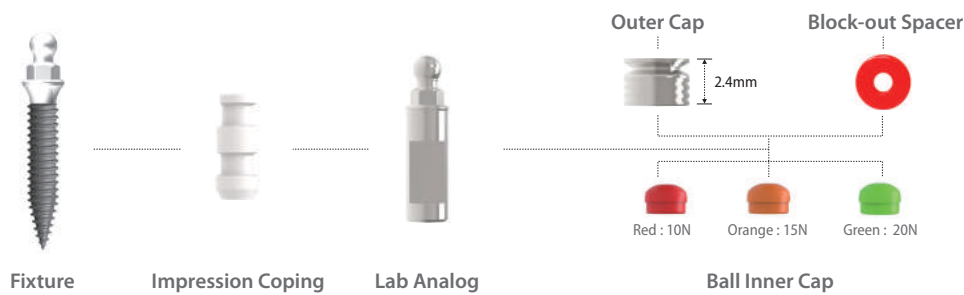
DESIGN OF MINI PLUS® FIXTURE (1P-B.)

Ball Type

> For semi-permanent or temporary solution for overdenture prosthesis.



System Flow



Implant

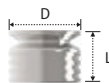
	Diameter	Ø2.5	
		Cuff	Length
		2.0mm	4.0mm
10mm	AMB2210S	AMB2410S	
12mm	AMB2212S	AMB2412S	
14mm	AMB2214S	AMB2414S	

> Packing unit : 1 Fixture.

	Diameter	Ø3.0	
		Cuff	Length
		2.0mm	4.0mm
10mm	AMB3210S	AMB3410S	
12mm	AMB3212S	AMB3412S	
14mm	AMB3214S	AMB3414S	

> Packing unit : 1 Fixture.

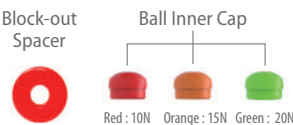
Ball Outer Cap



Diameter	Length	Ø3.4
2.4		BATC003C

> Packing unit : 2 Outer Caps.

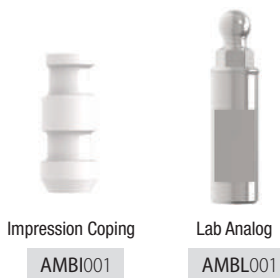
Ball Inner Cap



BATC003I

> Packing unit : 2 Block-out Spacers + 6 Inner Caps (2 per each color).
> Retention force : Red 10N, Orange 15N & Green 20N.

Impression Coping / Lab Analog



Impression Coping

> Packing unit : 1 Impression Coping.
> Used for impression taking of the ball post.

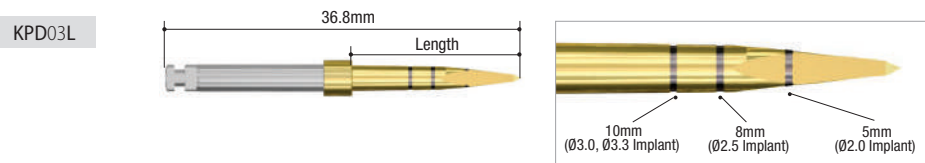
Lab Analog

> Packing unit : 1 Lab Analog.
> Replacement of the ball post shape in working model.

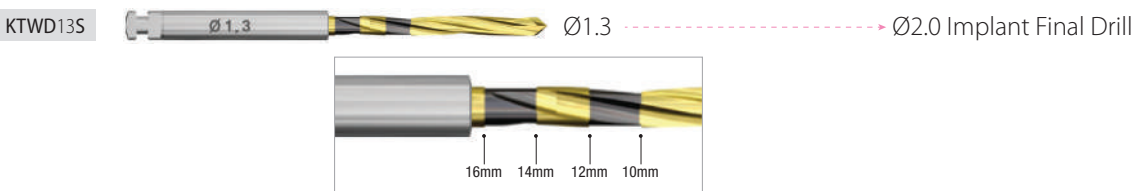
SURGICAL KIT [KMA003]



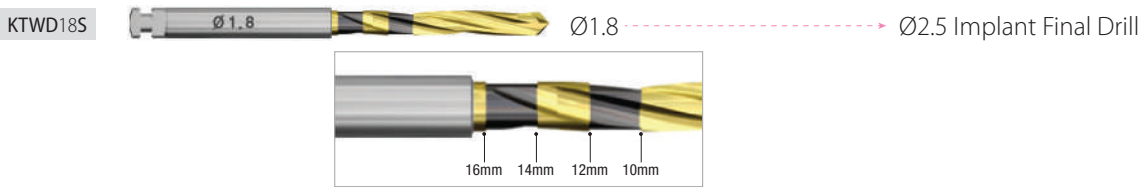
Point Drill



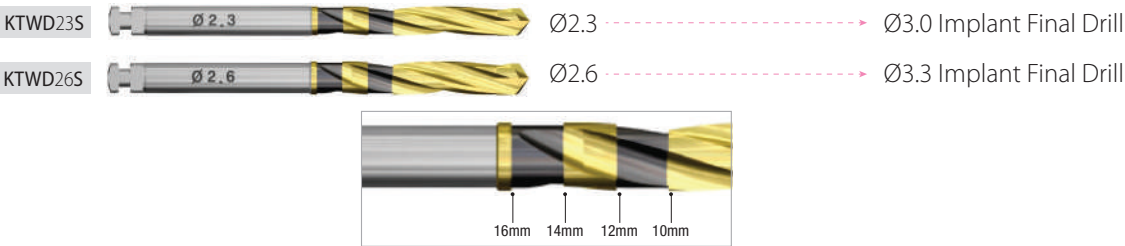
Ø1.3 Twist Drill



Ø1.8 Twist Drill



Ø2.3 / Ø2.6 Twist Drill



Driver

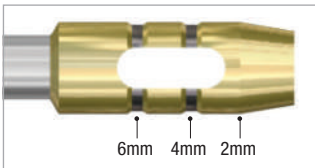
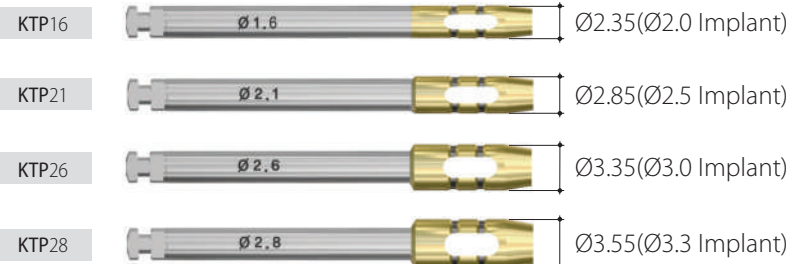
Cement Type



Ball Type



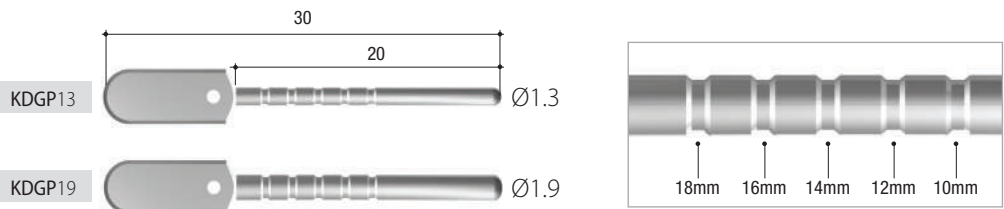
Tissue Punch *Extra product



- > Easy removal of soft tissue for flapless surgery.
- > 0.3mm wider than implant diameter allows more predictable results.

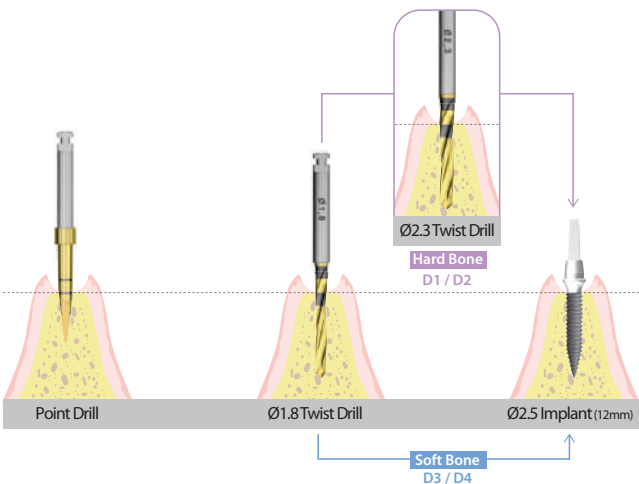
Multi Gauge *Extra product

- > Allows precise measurement of drilling depth and path.

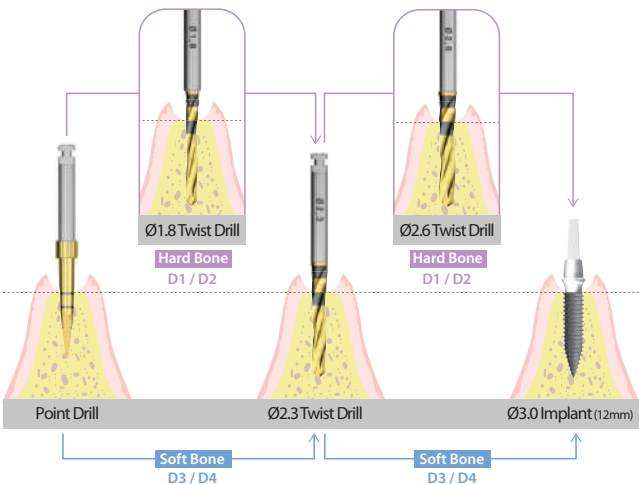


Drilling Sequence

Ø2.5



Ø3.0



※ In case of D4 bone quality, make proper adjustment in drilling. Due to narrow diameter, the Mini Plus® Implants have self-tapping characteristic.

COWELL® DIGITAL PRODUCTS

Drive yourself to COWELLMEDI's Digital Transformation

Digital Guided Surgery Kit

InnoFit® Lodestar Plus Kit
InnoFit® Lodestar Kit

Digital Prosthesis

SFIT Ti-Base System
· Sub. SFIT Ti-Base System
· Sub. SFIT Absolute Ti-Base System
· Sub. & Sub-N. Multi SFIT Ti-Base System
· Int. SFIT Ti-Base System

InnoFit® Hybrid Ti-Base System
· Sub. Hybrid Ti-Base System
· Sub. & Sub-N. Multi Hybrid Ti-Base System
· Sub. Lock Hybrid Ti-Base System
· Sub-N. Hybrid Ti-Base System
· Int. Hybrid Ti-Base System



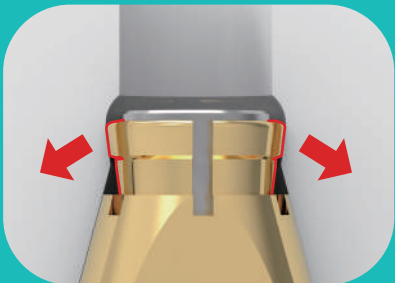
Exclusive for the INNO Submerged and Submerged Narrow Implant System.



Universal to any implant system.



SFIT Ti-Base System



Cementless
(Spread Fit™)



Angulated screw channels
in both anterior and posterior teeth

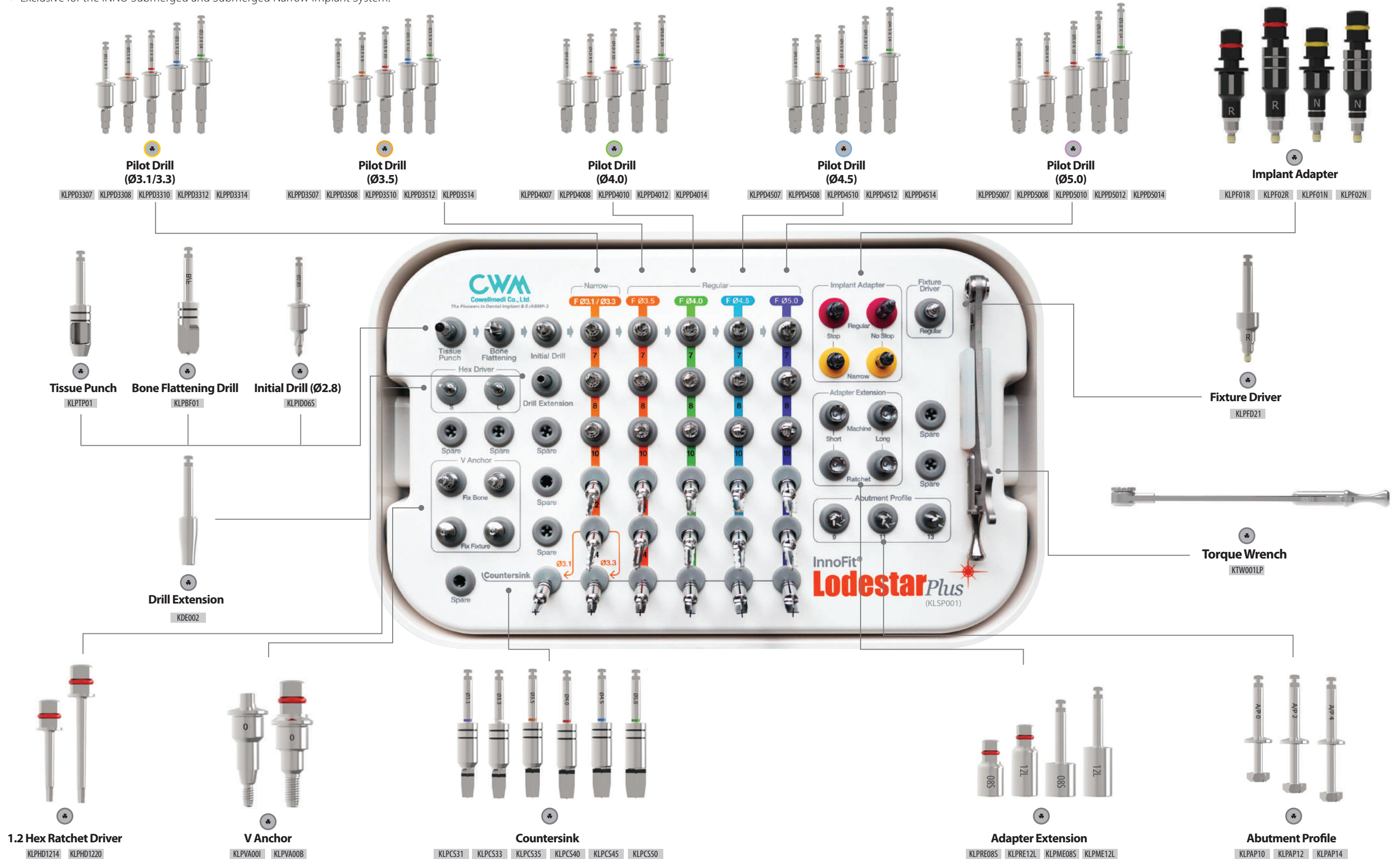


Low prosthetic height

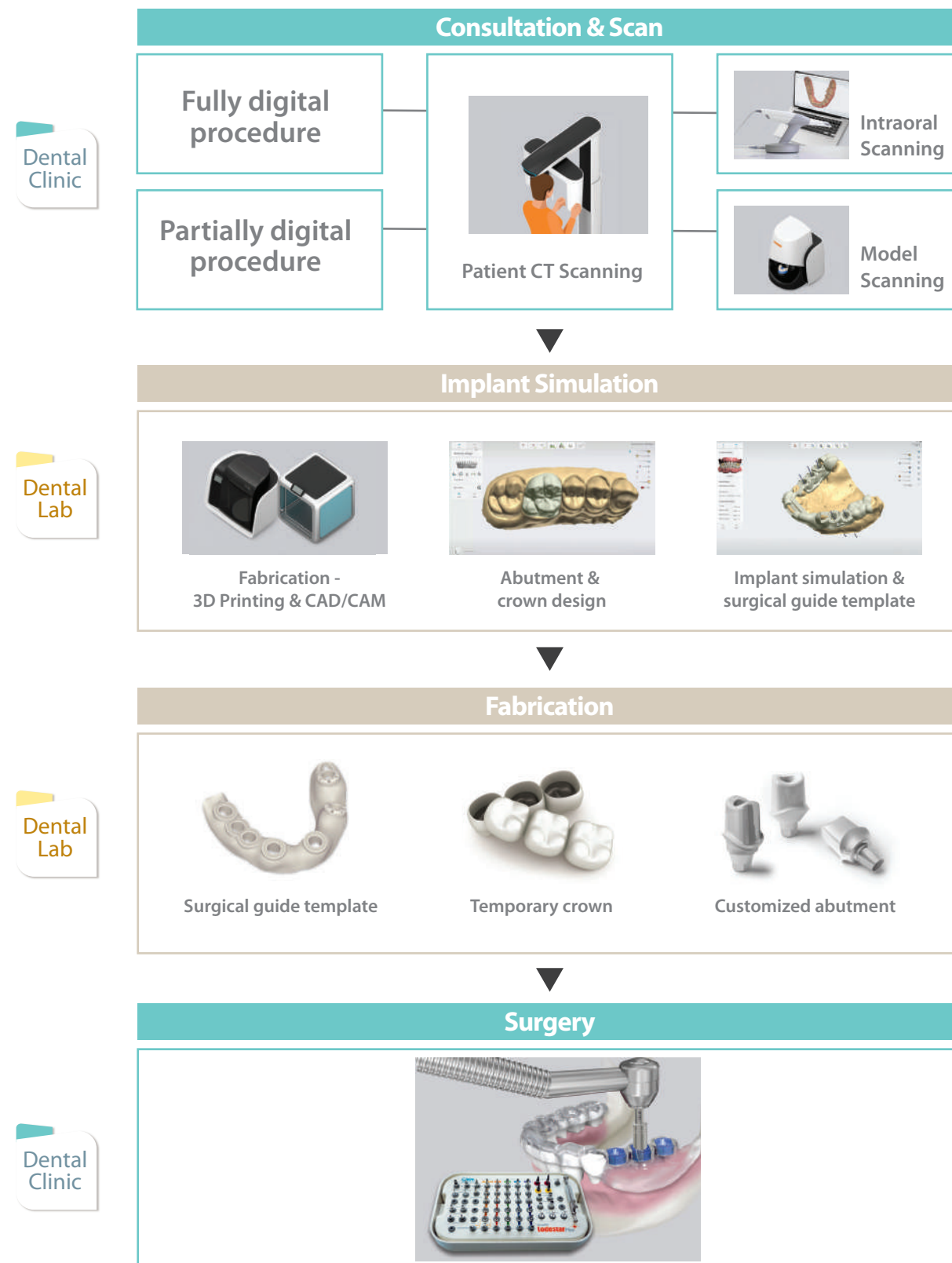


InnoFit® Lodestar Plus Kit [KLSP001]

- > 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.

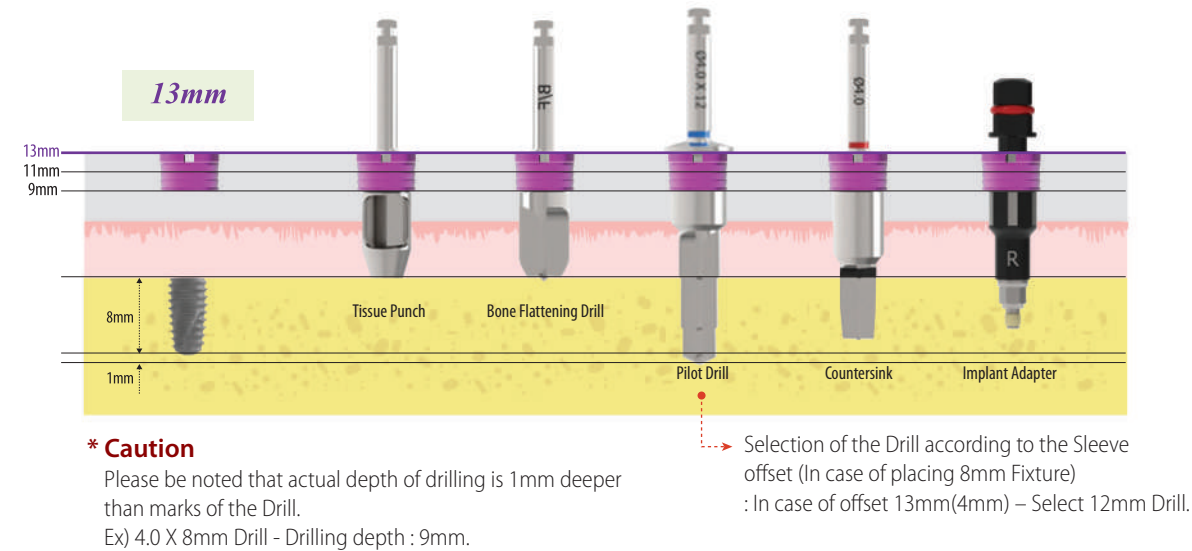
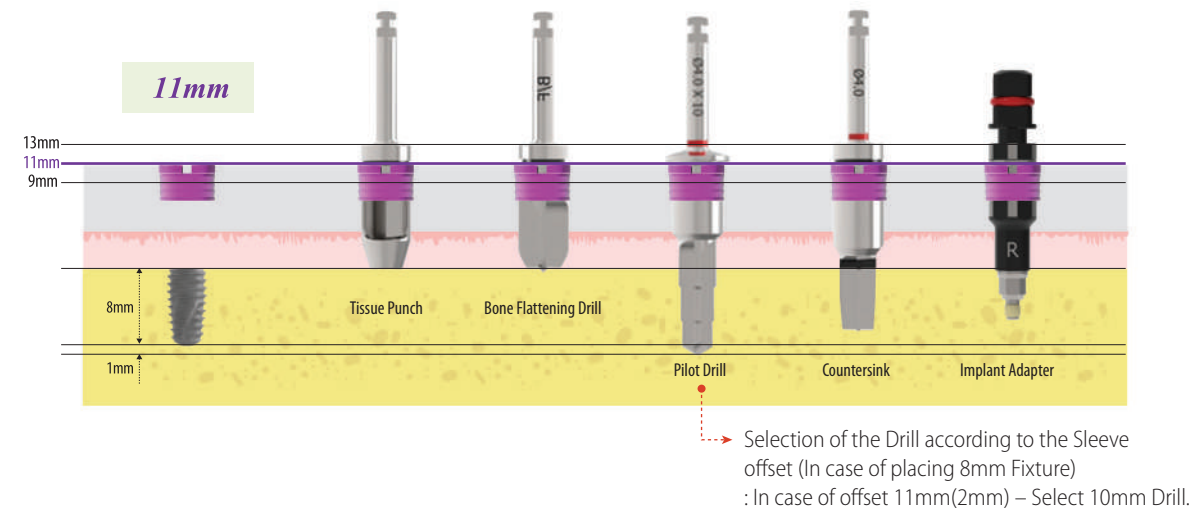
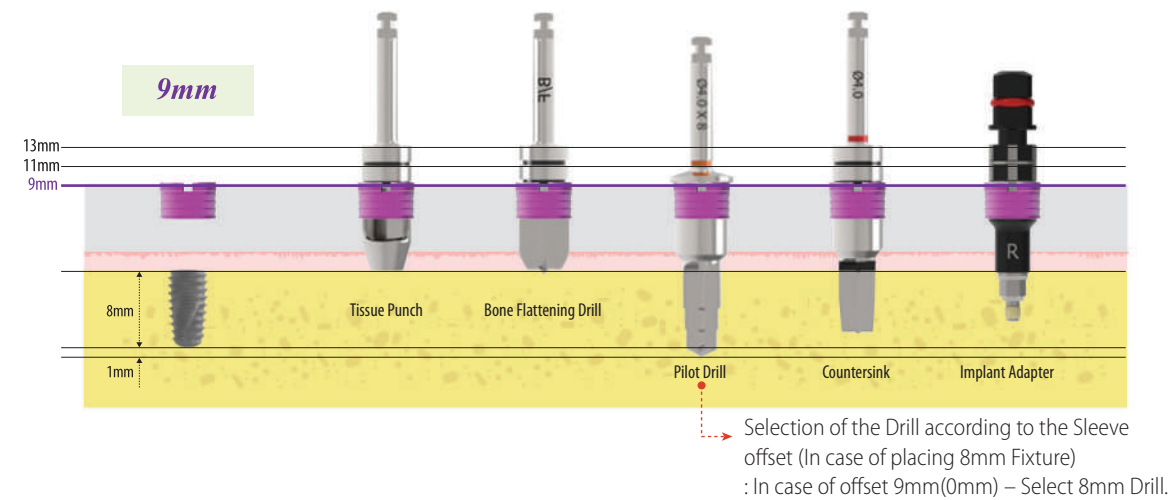


Confirmation of protocol

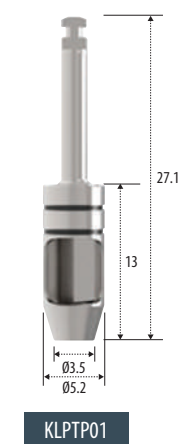
Confirm the surgical report and surgical protocol for the last time.

Comprehension and Usage of Offset

- > The basic length from the fixture platform to the top of the Sleeve is 9mm.
- > In case that gingiva 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 9mm if possible.



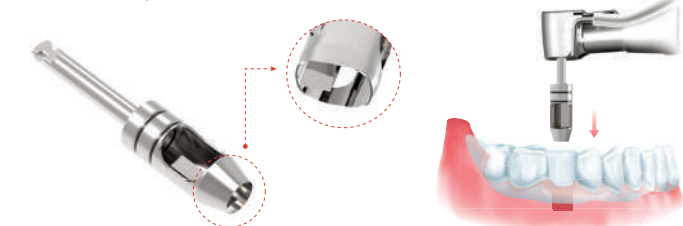
Tissue Punch



- > 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).
- > 50 rpm without irrigation.

Double blade

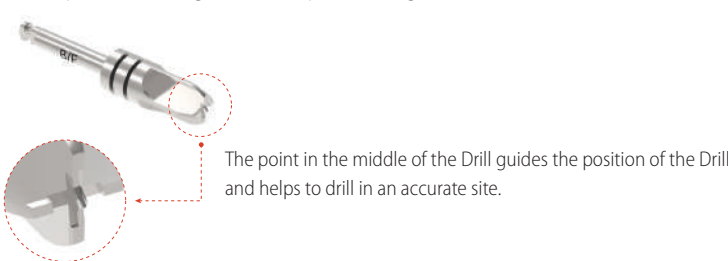
The internal cutting edge of the Tissue Punch cuts the gingiva into small pieces so that those can be removed by suction without extra work.



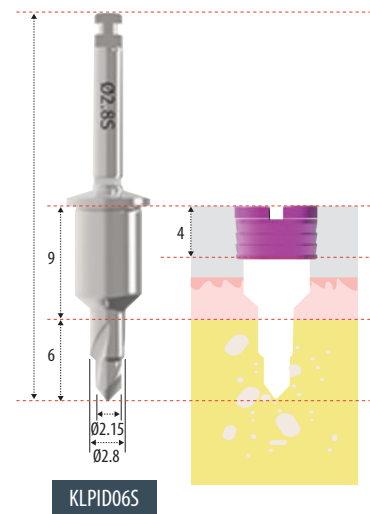
Bone Flattening Drill



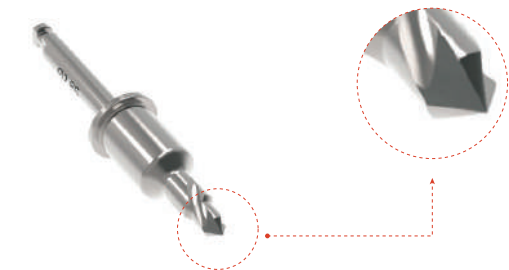
- > Flattens the bone level of operation site.
- > Inclined bone level may glide the Drill and can not drill as planned.
- > Eliminate the soft tissue after using the Tissue Punch.
- > The point in the middle of the Drill guides the position of the Drill and helps to drill in an accurate site.
- > Able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



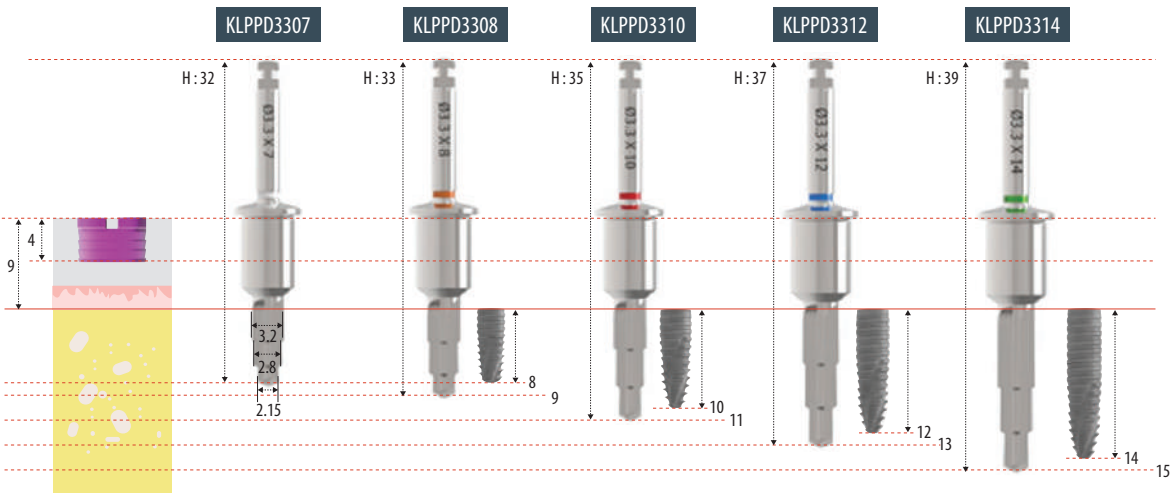
Initial Drill



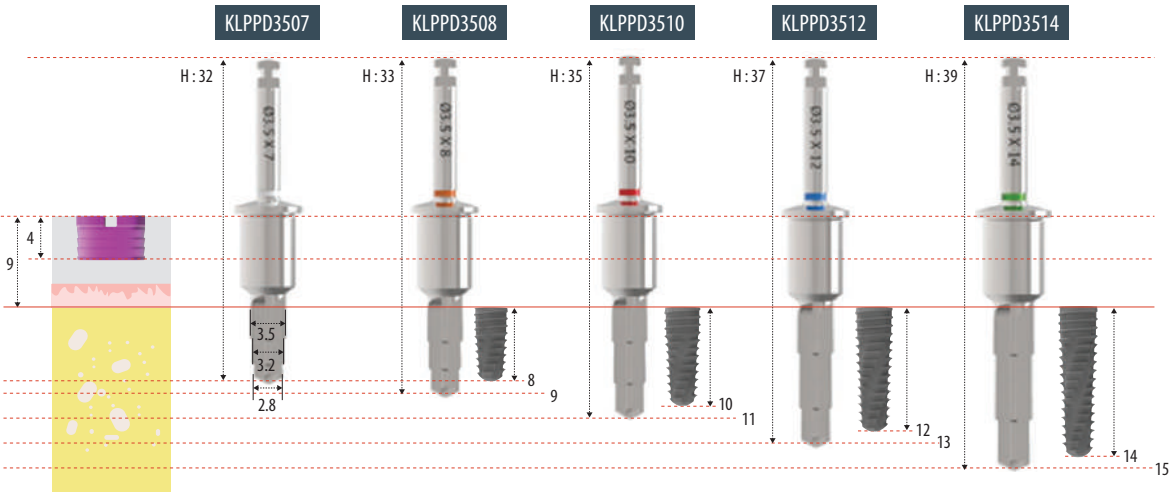
- > High speed, 1,000 rpm with irrigation.



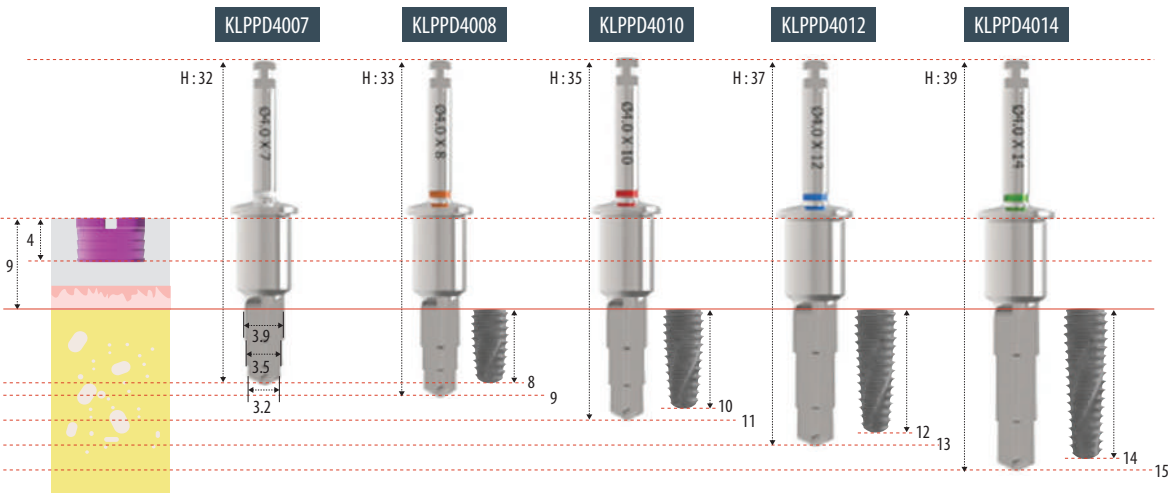
Ø3.1/Ø3.3 Fixture



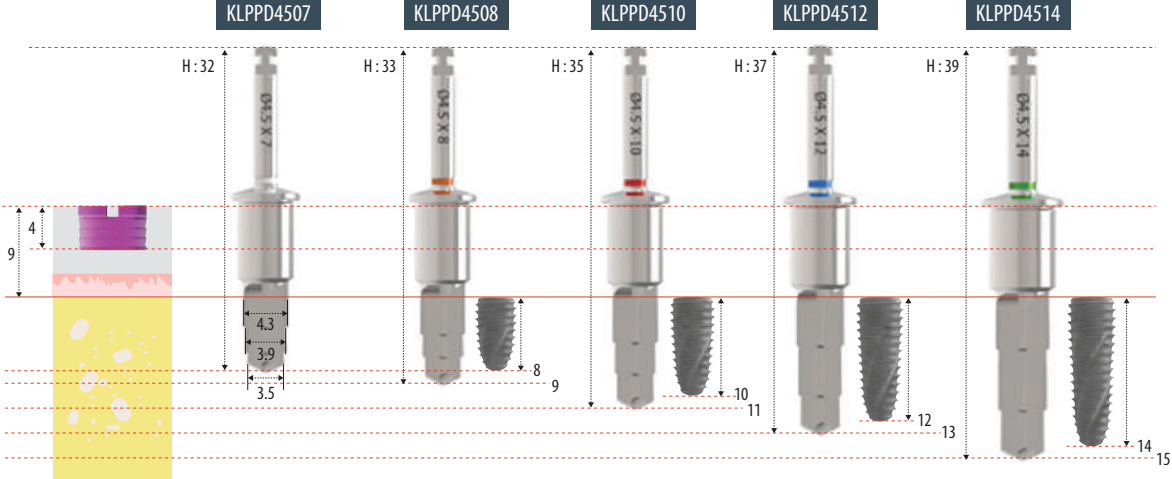
Ø3.5 Fixture



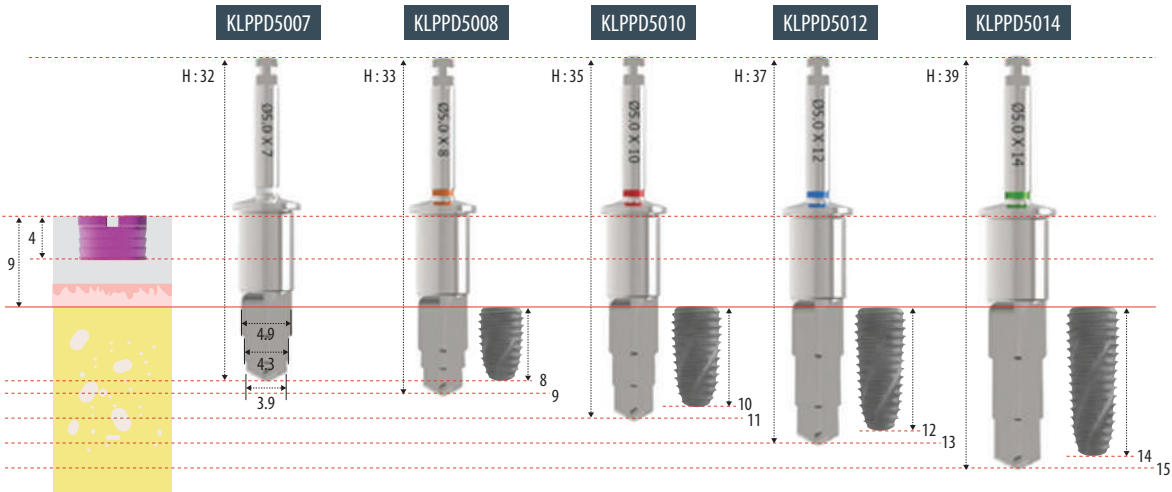
Ø4.0 Fixture



Ø4.5 Fixture

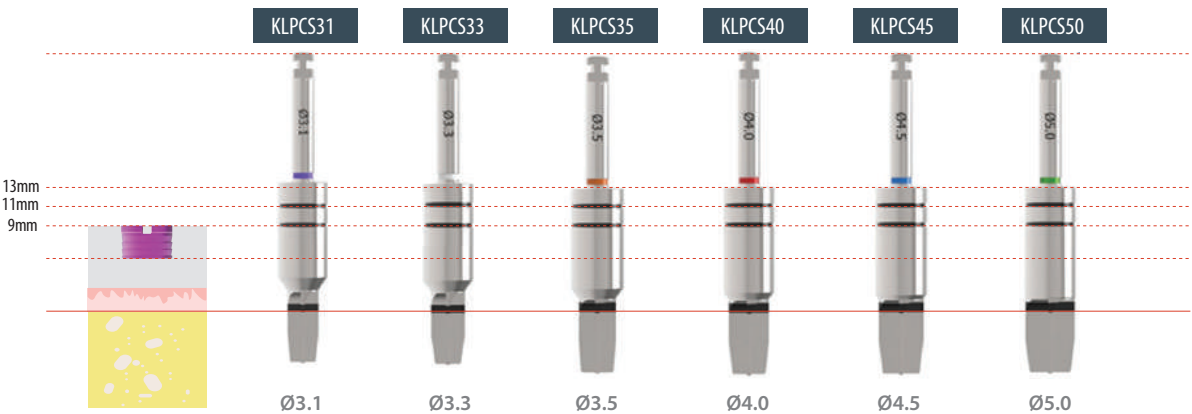


Ø5.0 Fixture



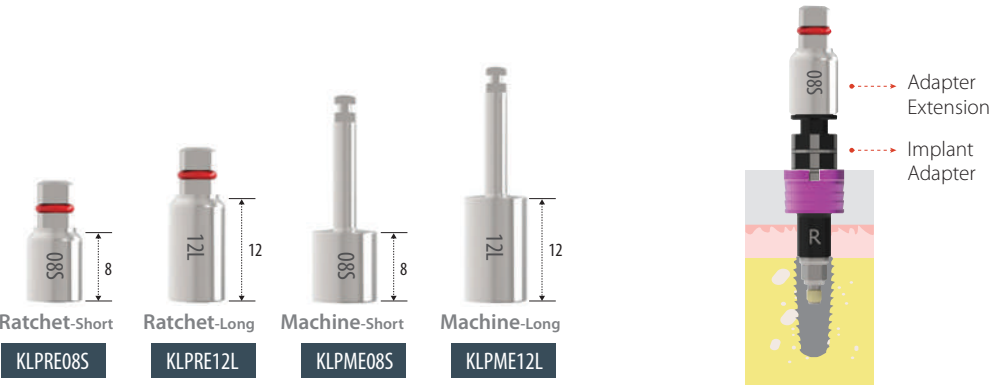
Countersink

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



Adapter Extension

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



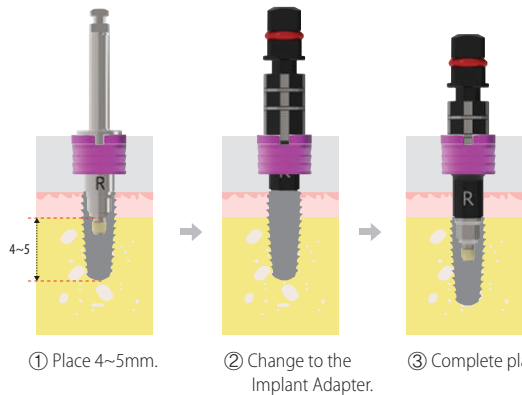
Implant Adapter

- > 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 can not be removed by cold welding after placing the fixture, hang the crown remover on the groove to remove.



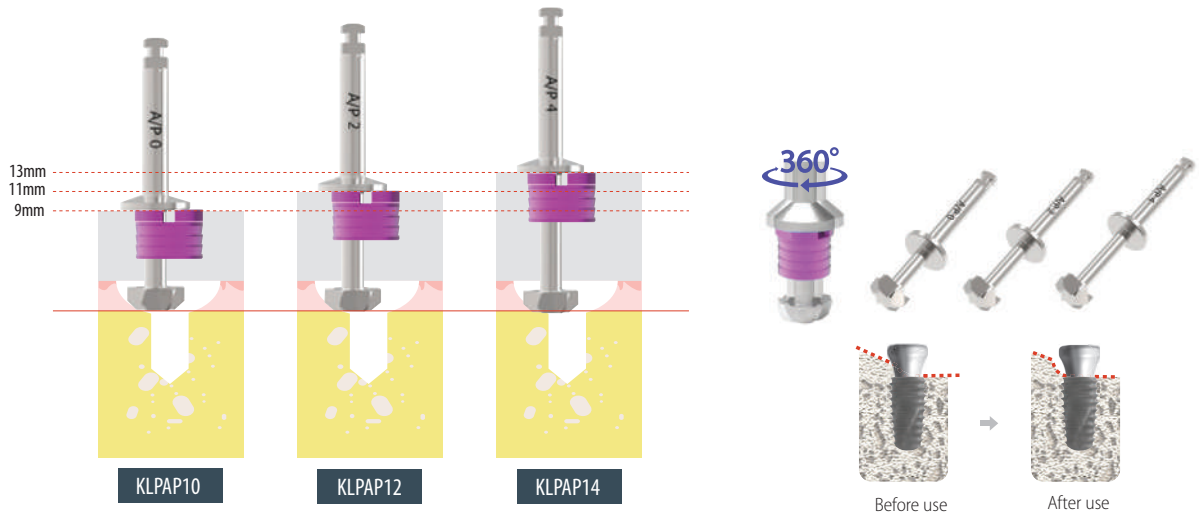
Fixture Driver - Molar

- > 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.



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°.
- > In case of thick cortical bone, higher the drilling rpm and use with irrigation (within 100 rpm).



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).

1.2 Hex Ratchet Driver

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

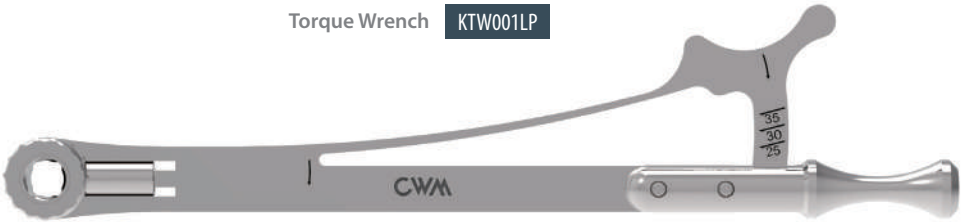


Torque Wrench(Square)

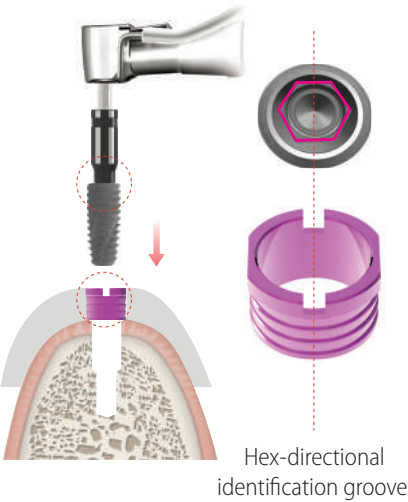
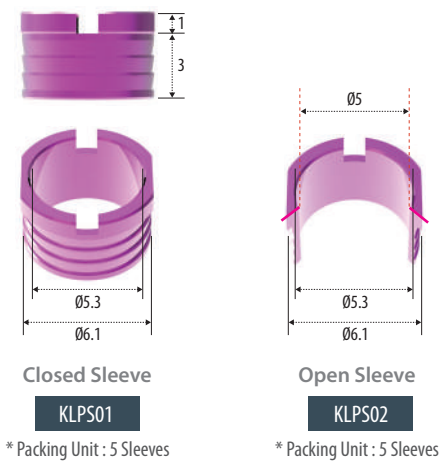
> Use to implant the fixture (Connect to the Implant Adapter).

> Use after connecting to the 1.2 Hex Driver.

> Use after connecting to the V Anchor (Fix Bone).

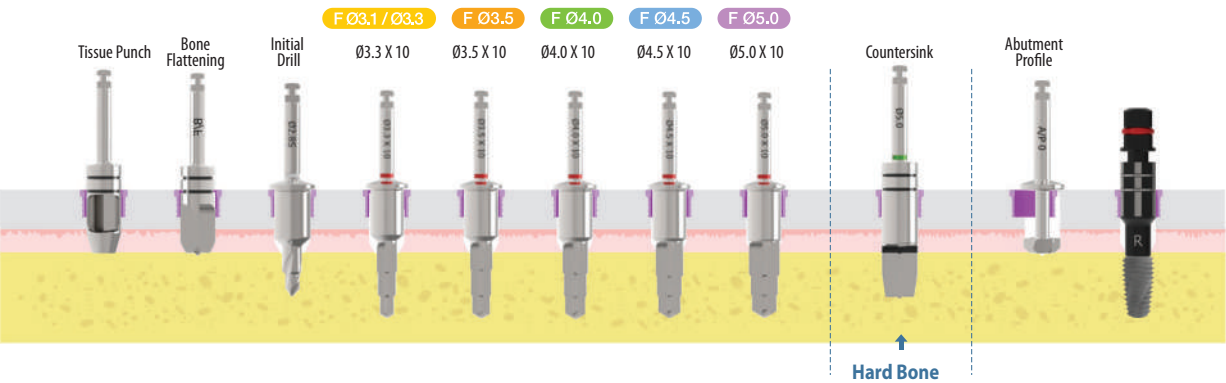


Sleeve Extra

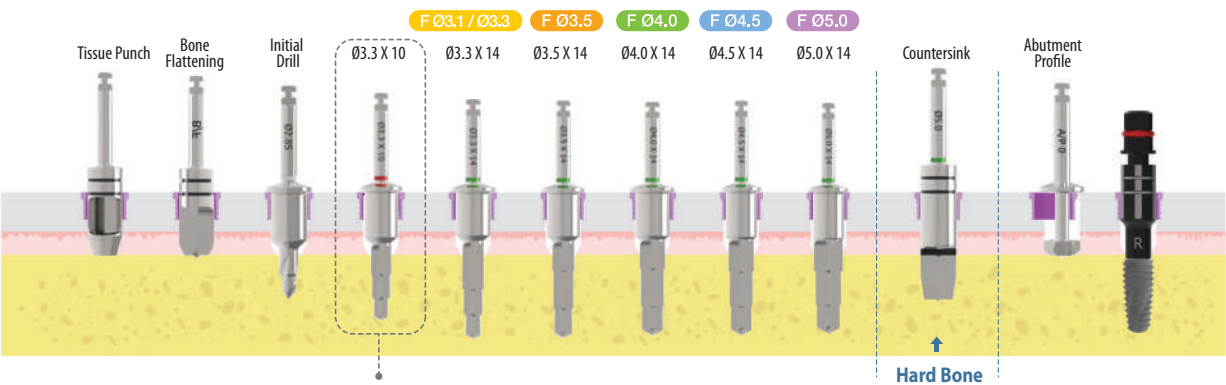


Drill Protocol

Drill Protocol (7~10mm)
INNO Sub Fixture Ø5 x 10mm

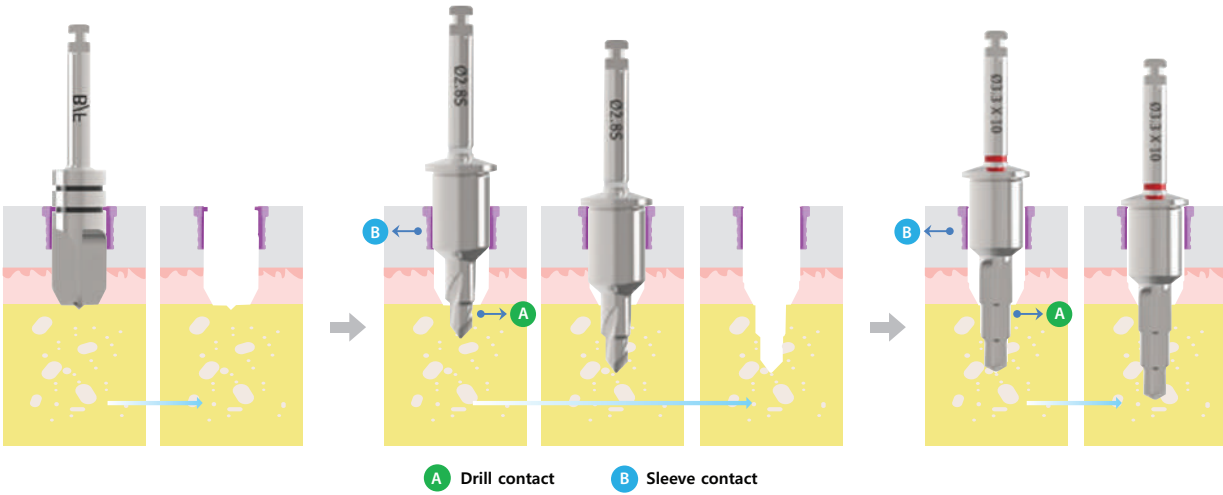


Drill Protocol(12~14mm)
INNO Sub Fixture Ø5 x 14mm



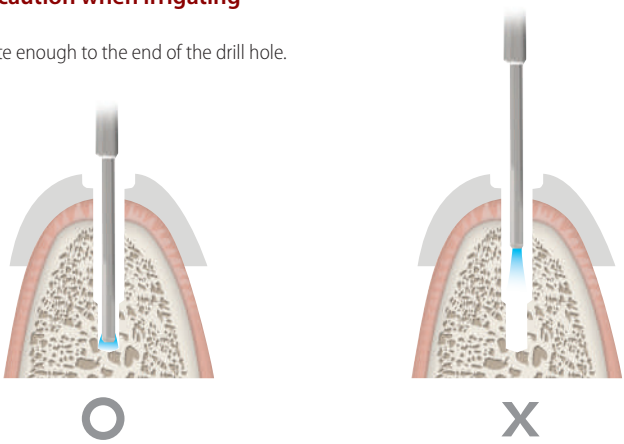
8~10mm drilling should be done in advance for the sleeve contact.

- * 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.



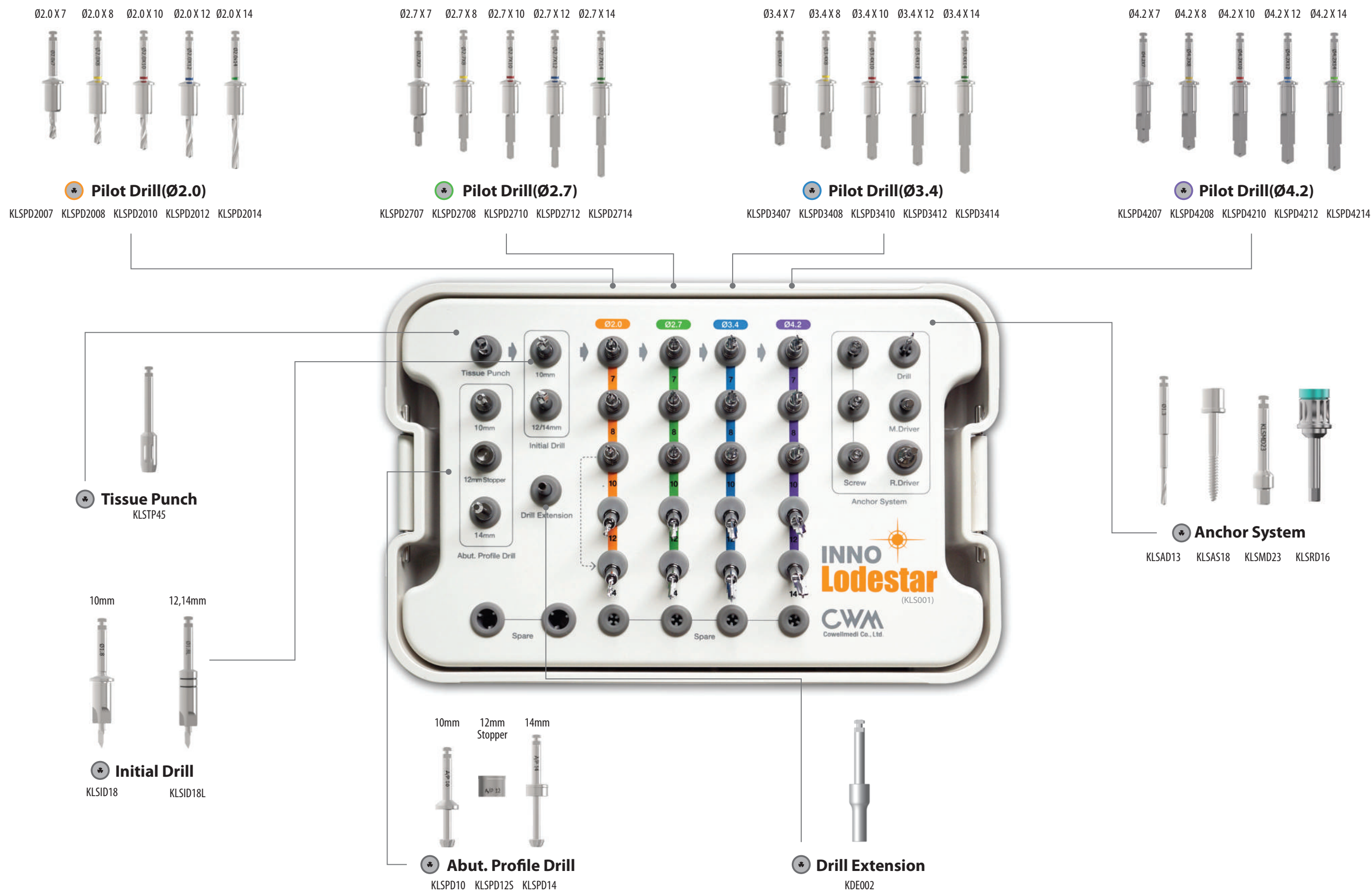
*** Precaution when irrigating**

- Irrigate enough to the end of the drill hole.

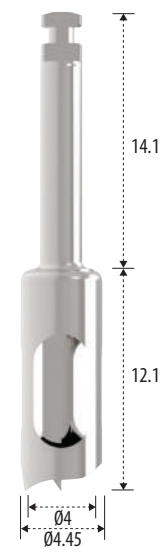


InnoFit® Lodestar Kit [KLS001]

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

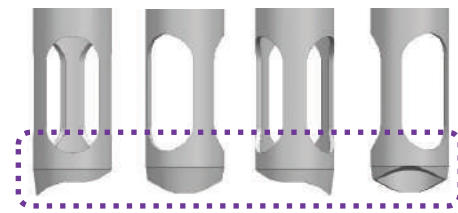


Tissue Punch

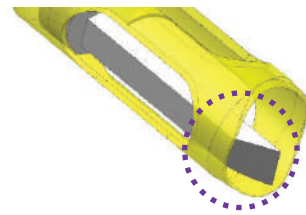


KLSTP45

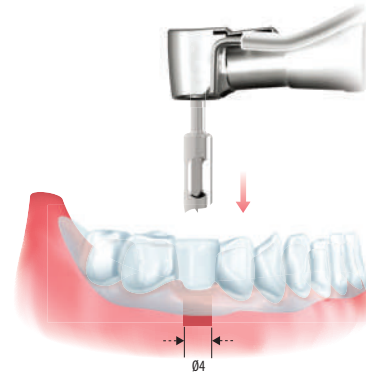
> The gingiva in the position where the implant is to be placed can be incised in a circular shape, and it can also be used in inclined bones (50 rpm without irrigation).



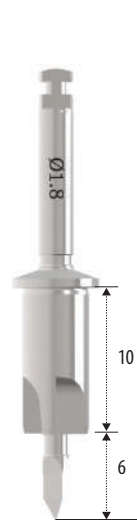
The gingiva can be incised in a circular shape although bone level is inclined or not parallel.



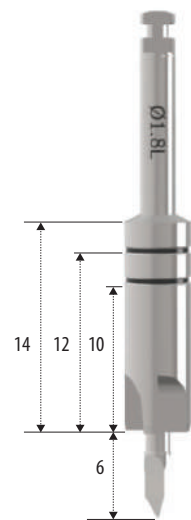
The internal cutting edge of the Tissue Punch cuts the gingiva into small pieces so that those can be removed by suction without extra work.



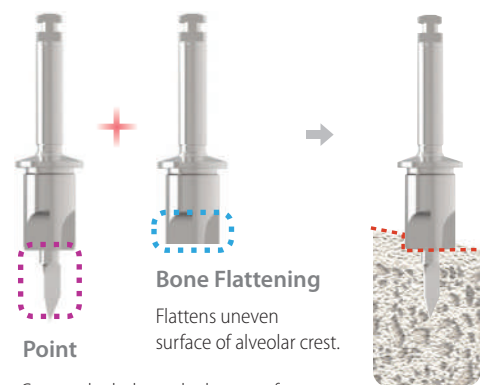
Initial Drill



KLSID18



KLSID18L



Point

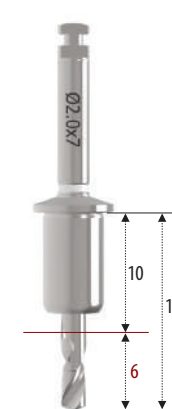
Creates the hole on the bone surface so that the axis of the next step Drill is not moved and it guides the Drill position by preventing slip even at the inclined bone level.

Bone Flattening
Flattens uneven surface of alveolar crest.

Pilot Drill

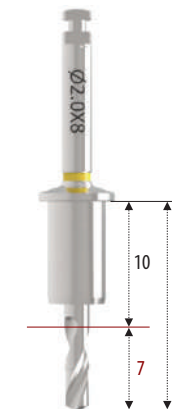
> Ø2.0 / Ø2.7 / Ø3.4 / Ø4.2.

Ø2.0 : High Speed - 600 rpm



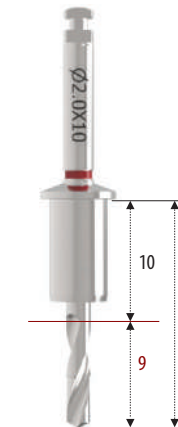
Pilot Drill 16mm(6mm)

KLSPD2007



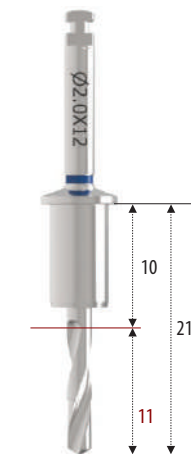
Pilot Drill 17mm(7mm)

KLSPD2008



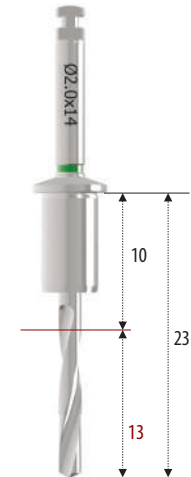
Pilot Drill 19mm(9mm)

KLSPD2010



Pilot Drill 21mm(11mm)

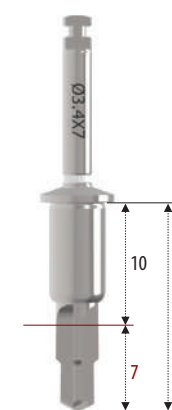
KLSPD2012



Pilot Drill 23mm(13mm)

KLSPD2014

Ø2.7 / Ø3.4 / Ø4.2 : Low Speed - 50~200 rpm / 50 N.cm

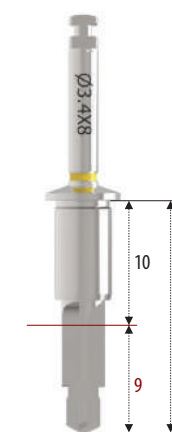


Pilot Drill 17mm(7mm)

KLSPD2707

KLSPD3407

KLSPD4207

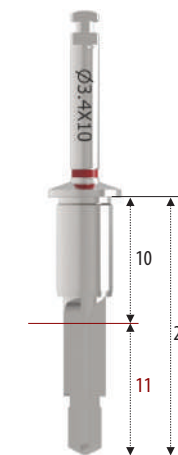


Pilot Drill 19mm(9mm)

KLSPD2708

KLSPD3408

KLSPD4208

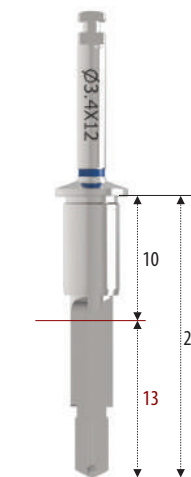


Pilot Drill 21mm(11mm)

KLSPD2710

KLSPD3410

KLSPD4210

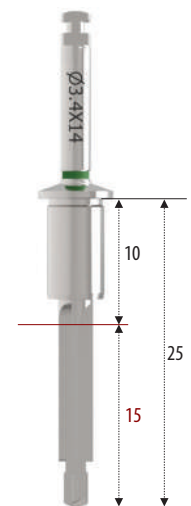


Pilot Drill 23mm(13mm)

KLSPD2712

KLSPD3412

KLSPD4212



Pilot Drill 25mm(15mm)

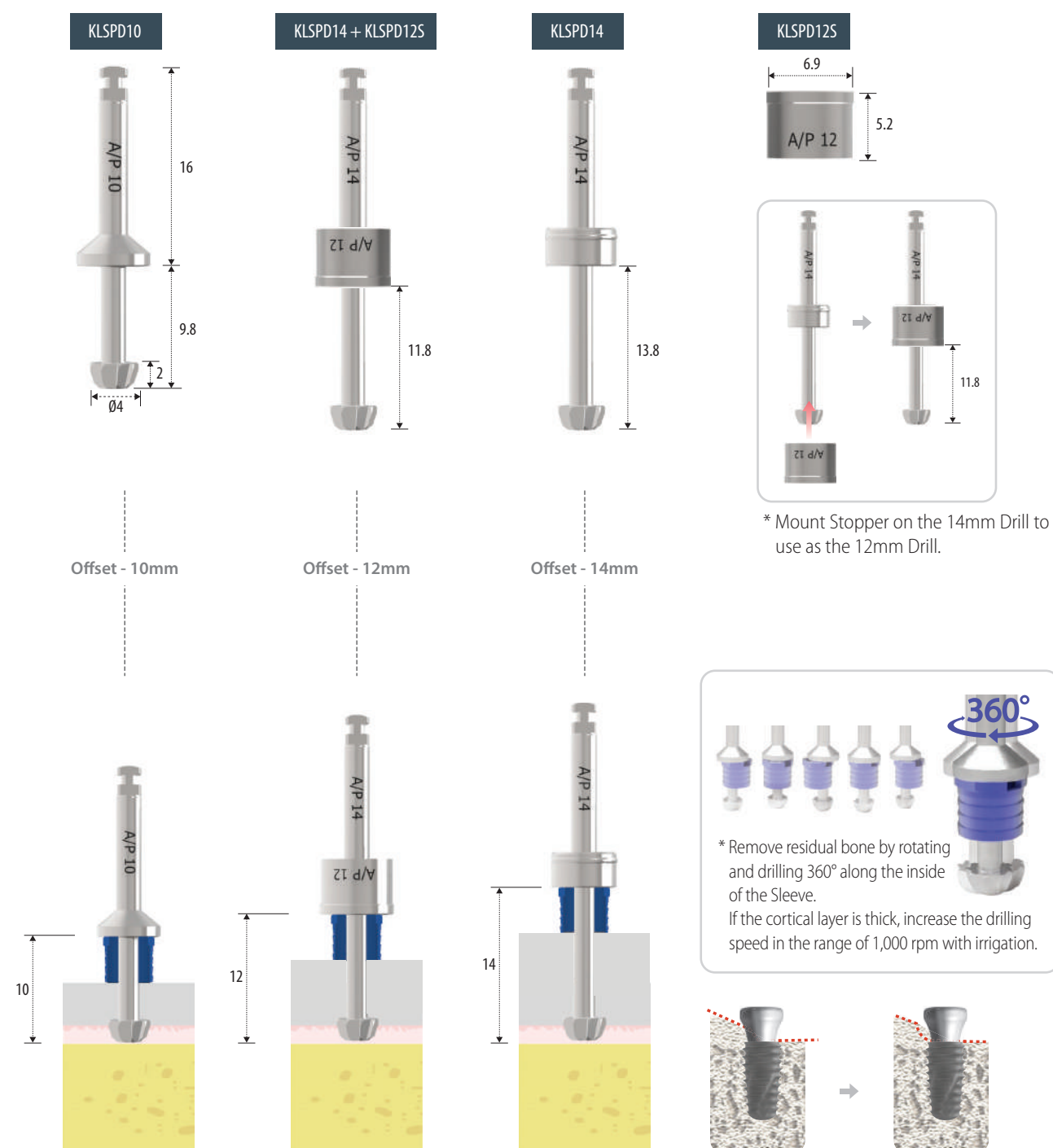
KLSPD2714

KLSPD3414

KLSPD4214

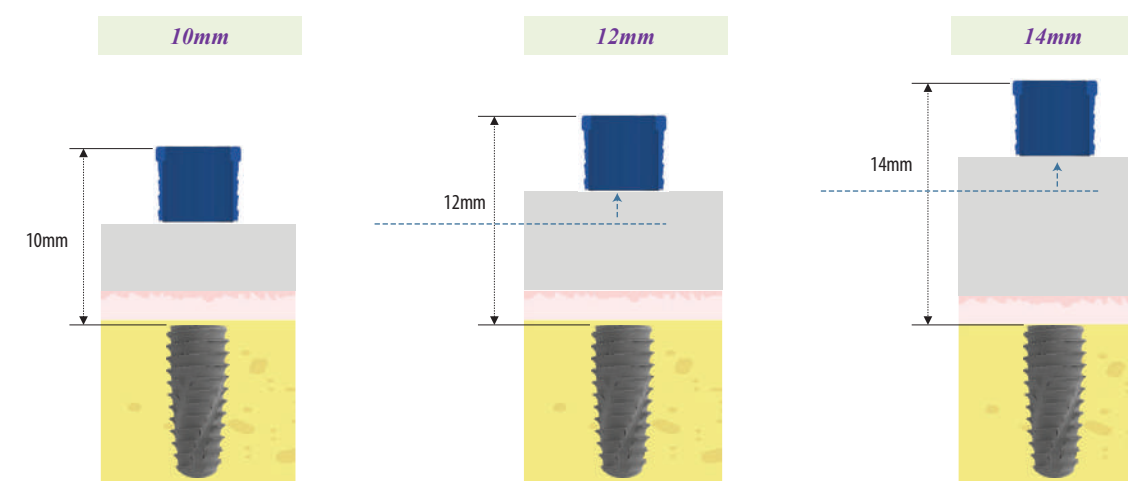
Abutment Profile

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

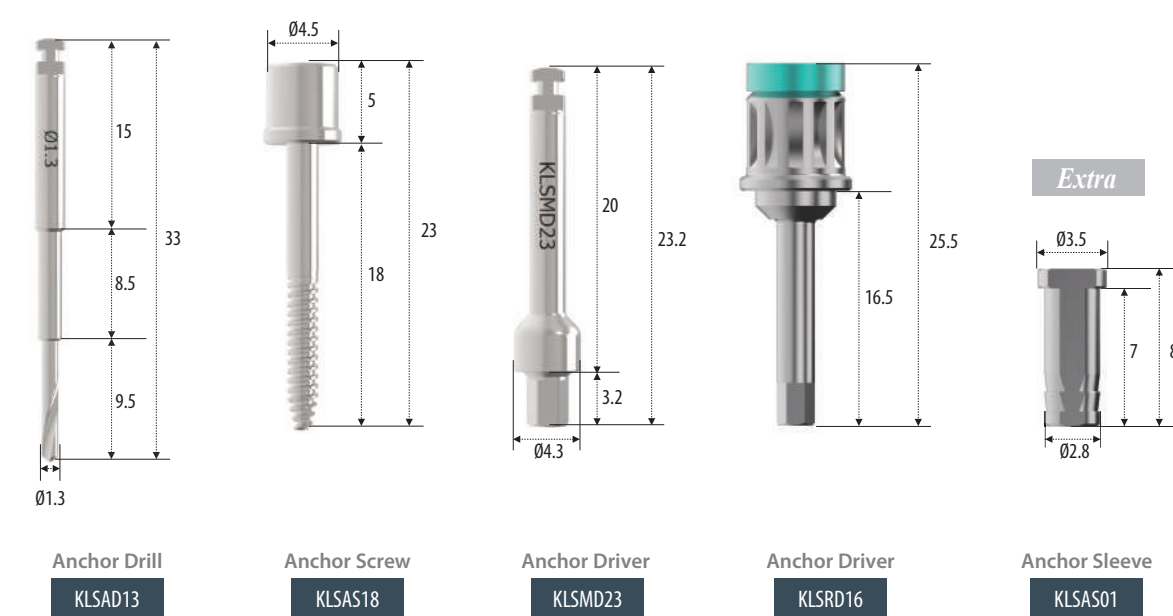


* Offset length setting

- 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 10mm if possible.



Anchor System



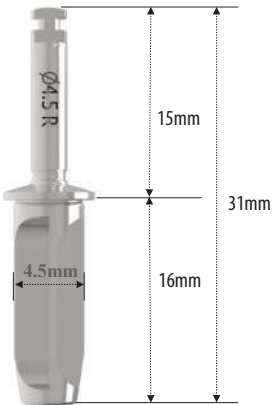
* Packing Unit : 5 Sleeves

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

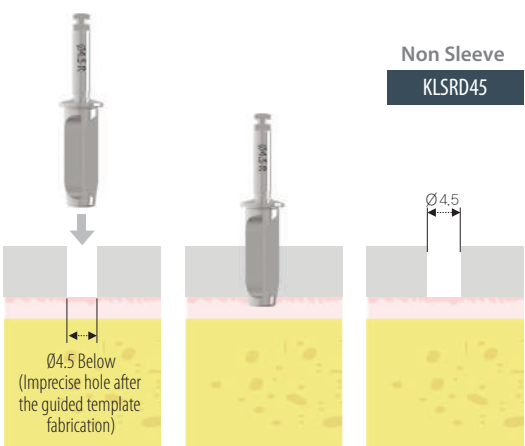
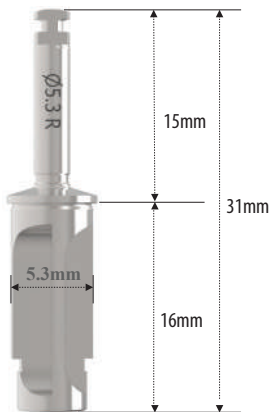
Guide Reamer Extra

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).

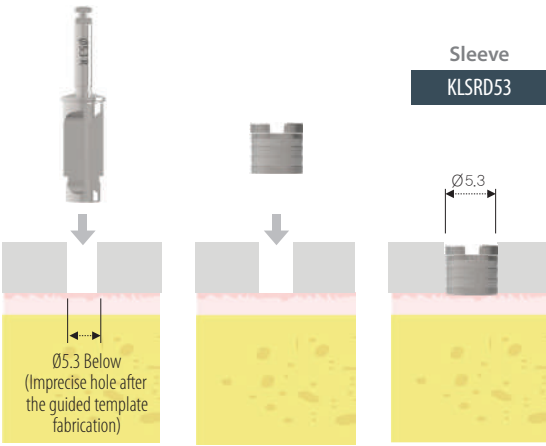
Guide Reamer
(Non Sleeve)
KLSRD45



Guide Reamer
(Sleeve)
KLSRD53

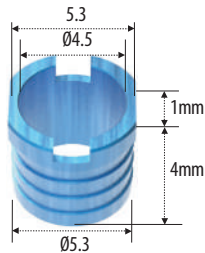


Revises imprecisely formed hole after the guided template fabrication using the 4.5 Guide Reamer to create the hole to be in exact contact with the Drill.



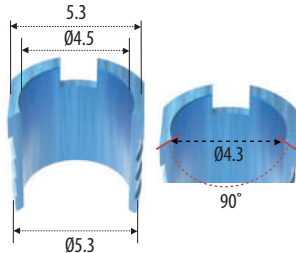
Revises imprecisely formed hole after the guided template fabrication using the 5.3mm Guide Reamer to precisely insert the Sleeve.

Sleeve Extra



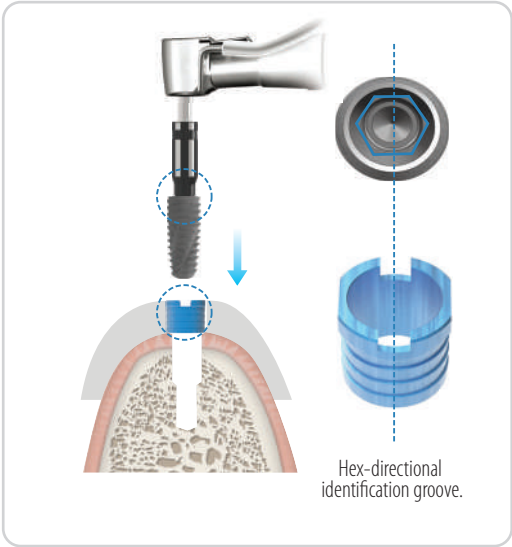
Closed Sleeve
KLSS01

* Packing Unit : 5 Sleeves

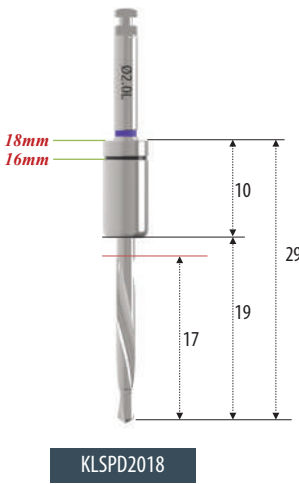


Open Sleeve
KLSS02

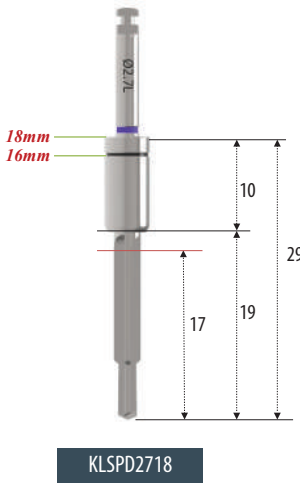
* Packing Unit : 5 Sleeves



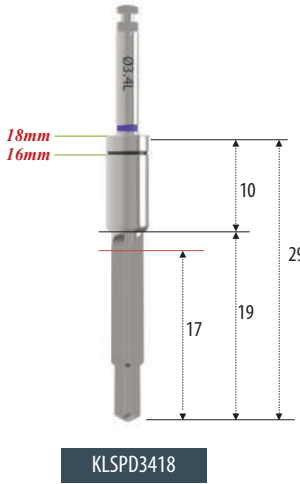
Pilot Drill – 16/18mm Extra



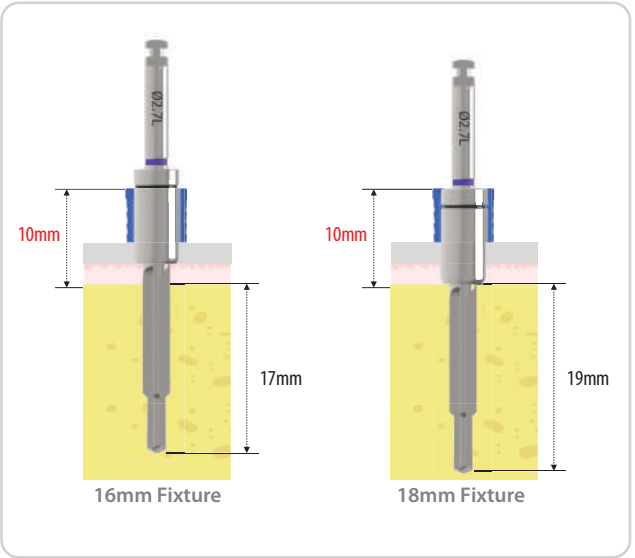
KLSPD2018



KLSPD2718

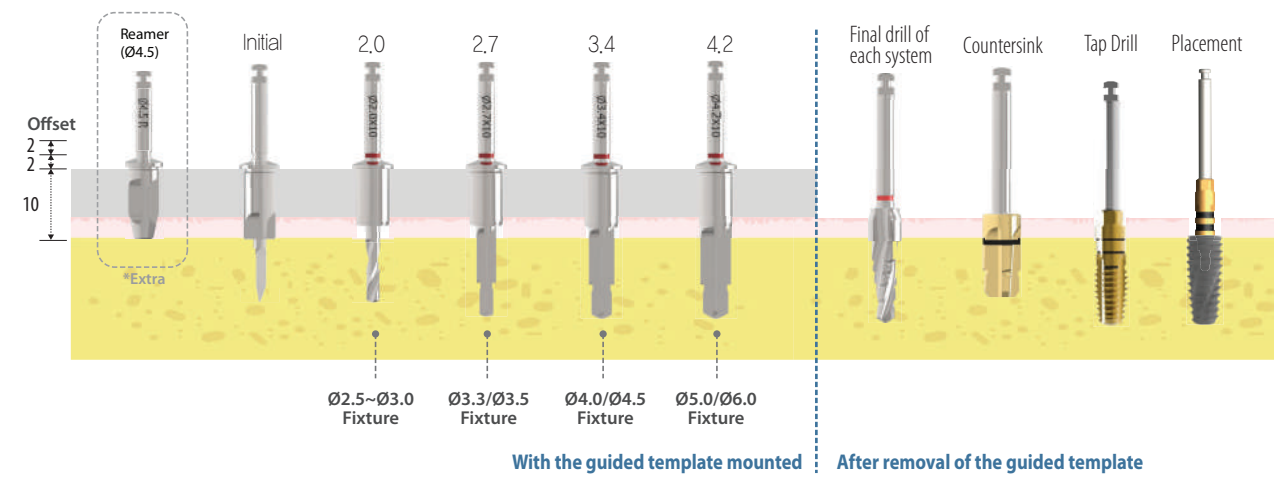


KLSPD3418

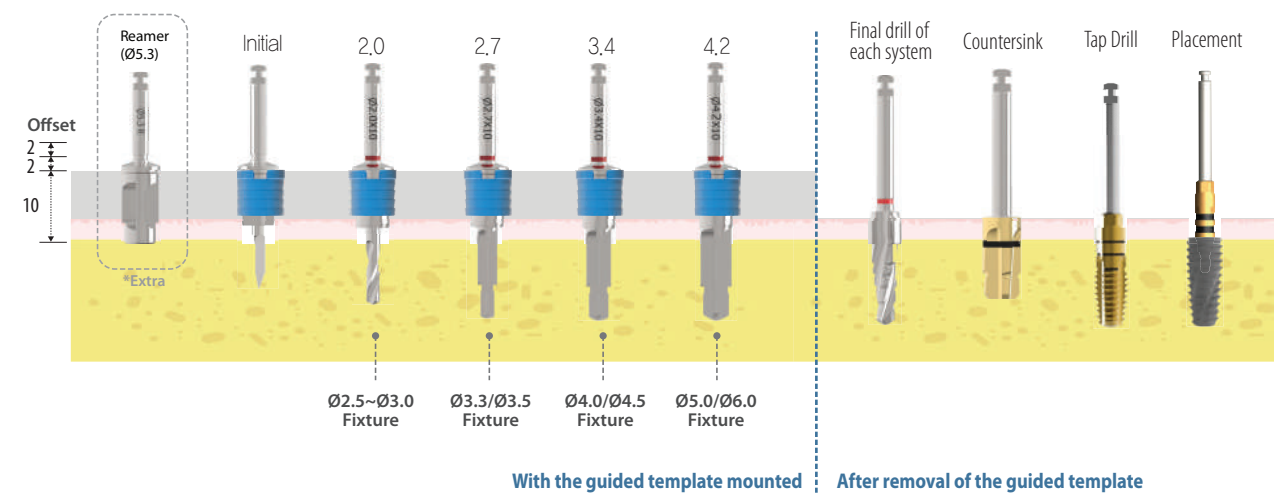


Drilling Sequence

Drill Protocol (Non Sleeve)



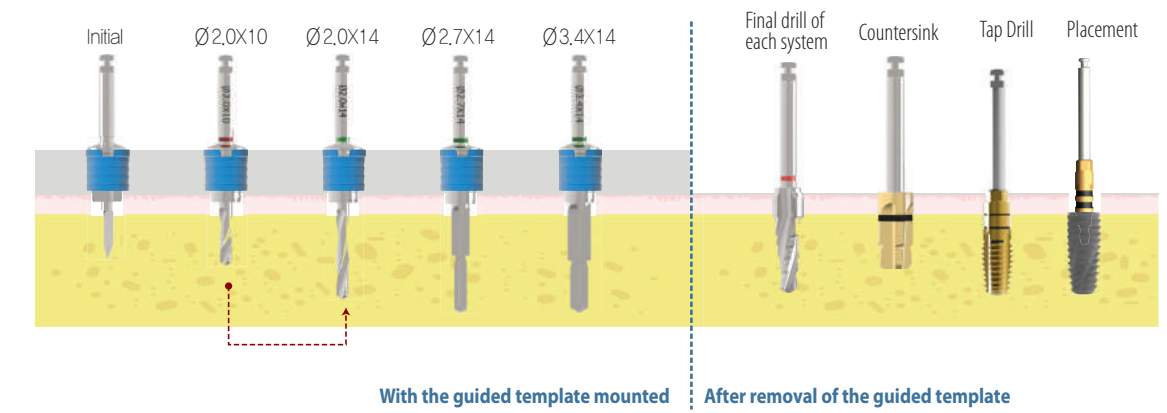
Drill Protocol (Sleeve)



* The 14mm Drill must be used after using the 10mm Drill to enable Sleeve contact

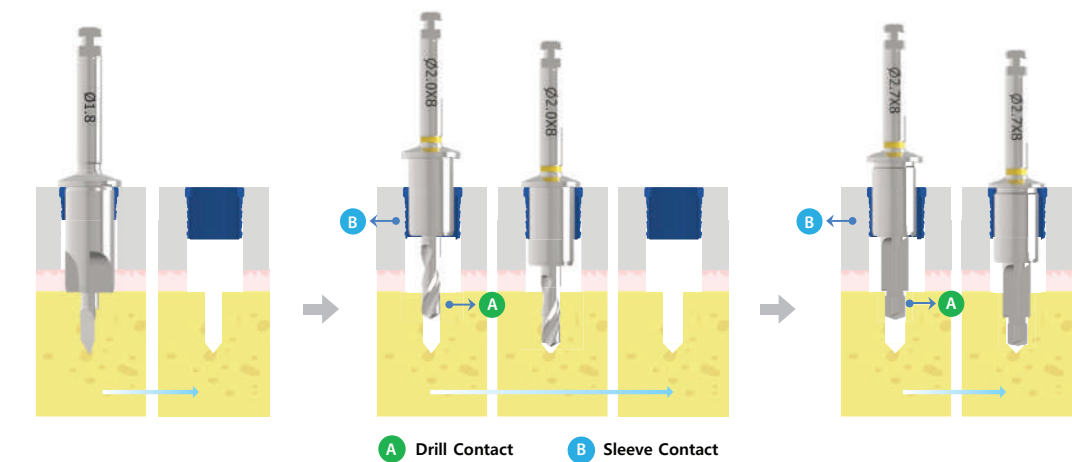
For the use of the 14mm Drill with exact contact to the Sleeve, use the Ø2.0x10mm Drill first before using the 14mm Drill.

e.g.) 3.4 X 14mm Drilling Sequence



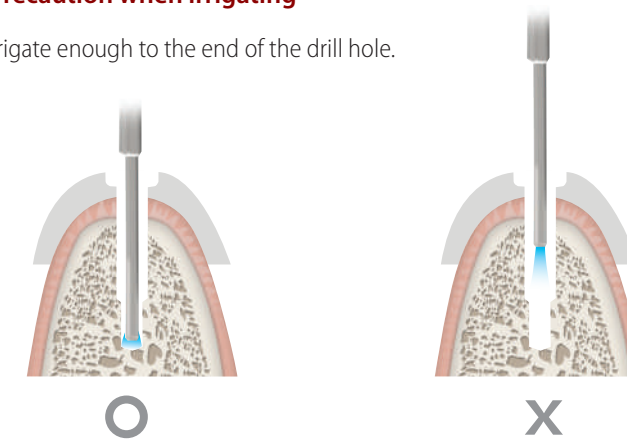
* Drilling method

- 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.

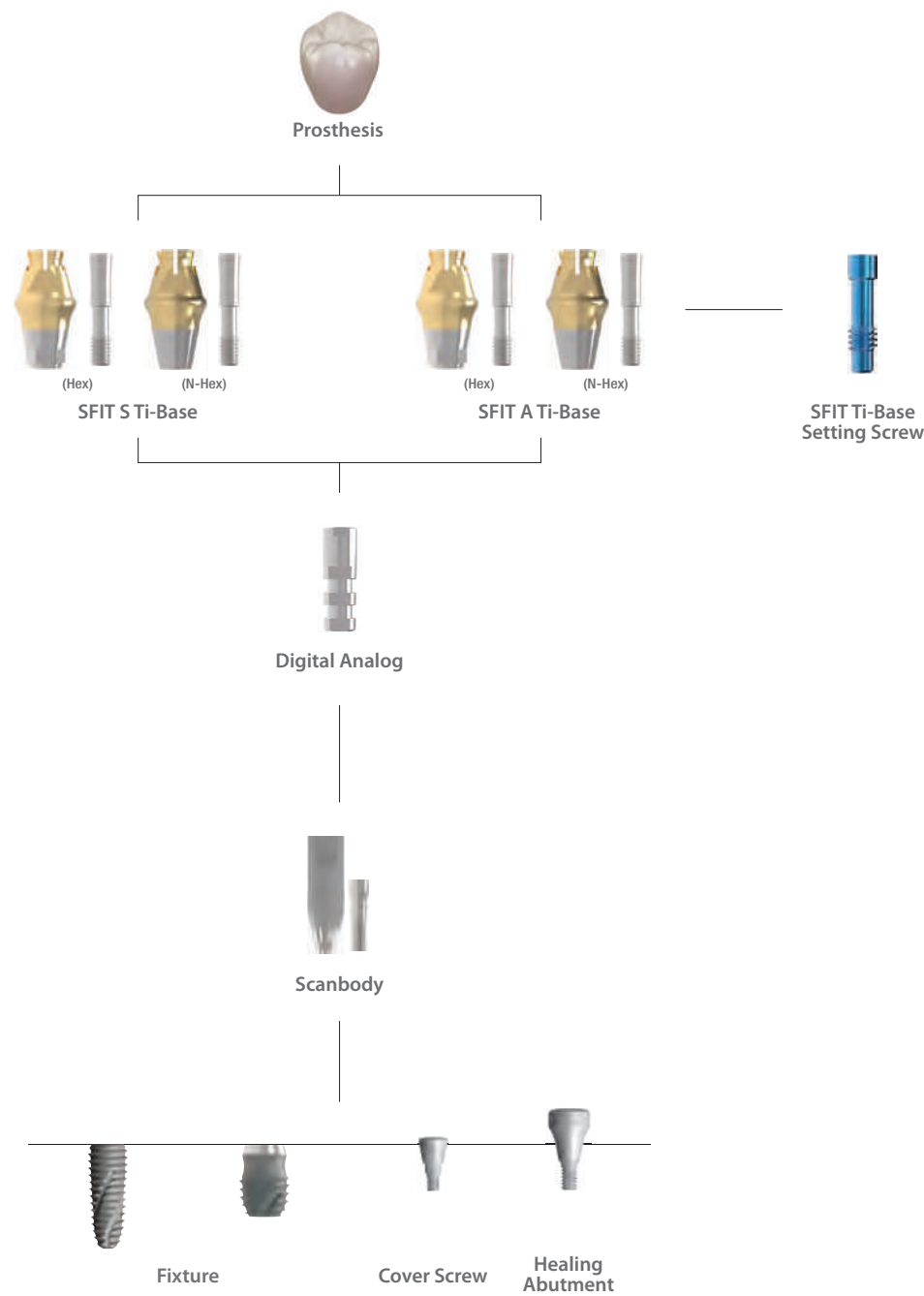


* Precaution when irrigating

- Irrigate enough to the end of the drill hole.

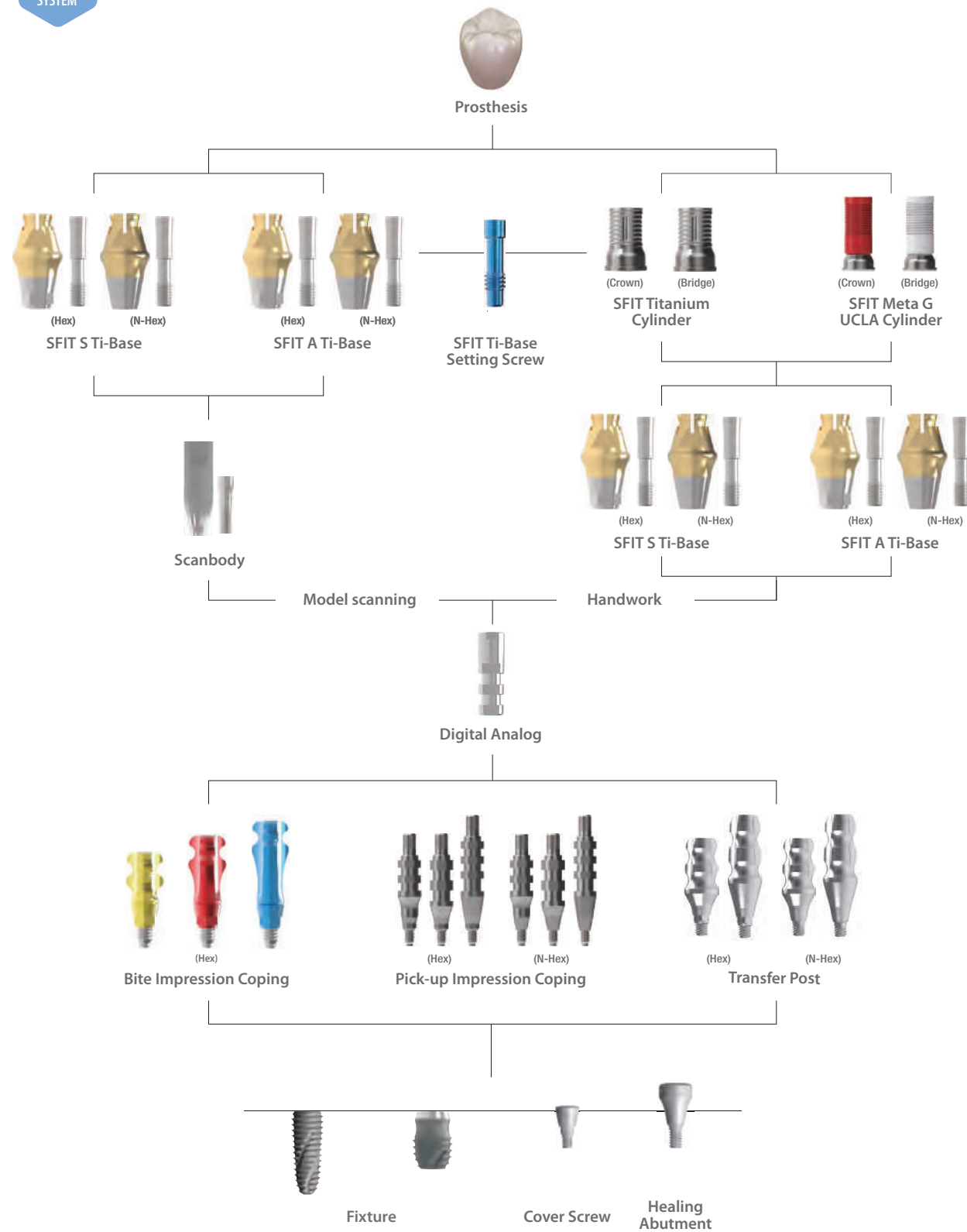


Component selection guide for the Sub. SFIT Ti-Base System



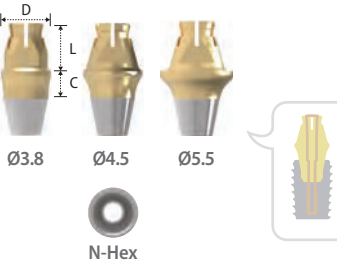
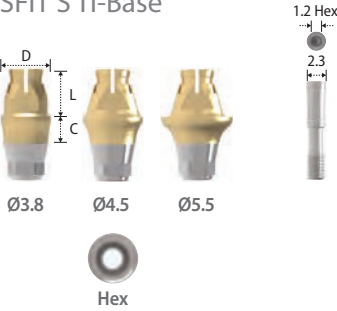
Intra-oral scanning procedure

Component selection guide for the Sub. SFIT Ti-Base System



- Model-scanning
- Handwork procedure

SFIT S Ti-Base



Type	Hex			N-Hex		
Diameter	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
Length Cuff	3.6	3.6	3.6	3.6	3.6	3.6
1	2SSFH38135	2SSFH45135	2SSFH55135	2SSFN38135	2SSFN45135	2SSFN55135
2	2SSFH38235	2SSFH45235	2SSFH55235	2SSFN38235	2SSFN45235	2SSFN55235
3	2SSFH38335	2SSFH45335	2SSFH55335	2SSFN38335	2SSFN45335	2SSFN55335
4	2SSFH38435	2SSFH45435	2SSFH55435	2SSFN38435	2SSFN45435	2SSFN55435

- > Packing unit: 1 SFIT S Ti-Base + 1 SFIT S Ti-Base Screw.
- > For Screw Retained Prosthesis with straight screw channel.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the SFIT S Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the SFIT Scanbody for digital workflow.
- > Fixture level impression.

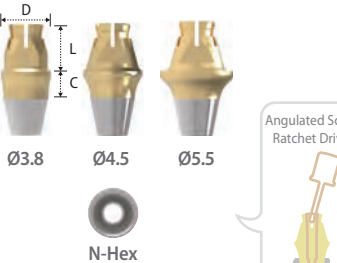
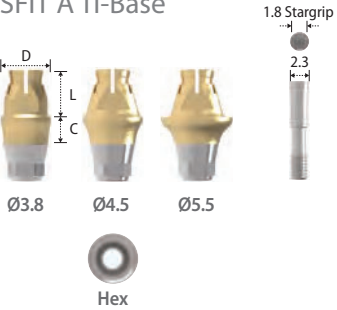
SFIT S Ti-Base Screw



SFIT A Ti-Base Screw



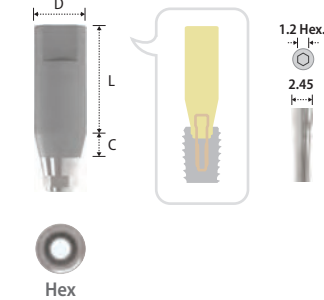
SFIT A Ti-Base



Type	Hex			N-Hex		
Diameter	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
Length Cuff	3.6	3.6	3.6	3.6	3.6	3.6
1	2SSFH38135A	2SSFH45135A	2SSFH55135A	2SSFN38135A	2SSFN45135A	2SSFN55135A
2	2SSFH38235A	2SSFH45235A	2SSFH55235A	2SSFN38235A	2SSFN45235A	2SSFN55235A
3	2SSFH38335A	2SSFH45335A	2SSFH55335A	2SSFN38335A	2SSFN45335A	2SSFN55335A
4	2SSFH38435A	2SSFH45435A	2SSFH55435A	2SSFN38435A	2SSFN45435A	2SSFN55435A

- > Packing unit: 1 SFIT A Ti-Base + 1 SFIT A Ti-Base Screw.
- > For Screw Retained Prosthesis with angulated screw channel.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the SFIT A Ti-Base Screw.
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the SFIT Scanbody for digital workflow.
- > Fixture level impression.

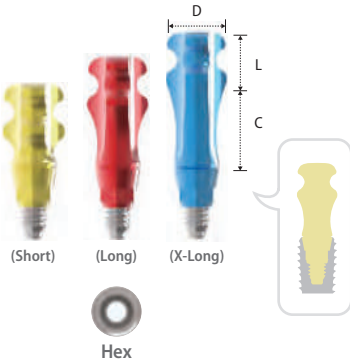
Scanbody



Type	Hex		
Diameter	Ø4.3		
Length Cuff	8		
2	2SSB4329		

- > Packing unit: 1 Scanbody + 1 Abutment Screw (2SSHR100).
- > For both intra-oral scanning and model-scanning.
- > 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: 12~15 N.cm.

Bite Impression Coping



Type	Hex(Short)	Hex(Long)	Hex(X-Long)
Diameter	Ø4.5	Ø4.5	Ø4.5
Length Cuff	2	4	6
4.0	2SBIC45S	2SBIC45L	2SBIC45X

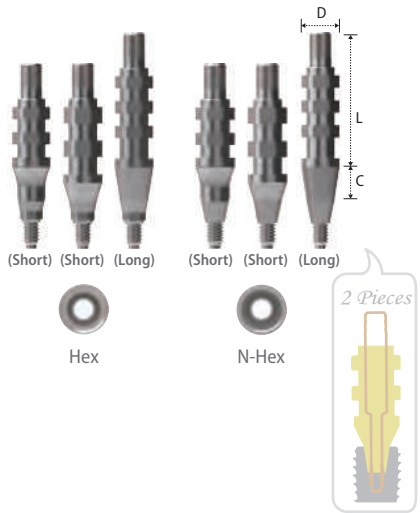
- > Packing unit: 1 Bite Impression Coping + 1 Guide Guide Pin (inbuilt).
- > Designed to simultaneously take bite and impression.
- > For closed tray impression (bite impression).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

* Angulated Screw Ratchet Driver

Height	Type	Ratchet
24(Short)		KRBUD15
29(Long)		KRBUD20

- > Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.
- > Tightening torque force : 30 N.cm (50 N.cm Max.).

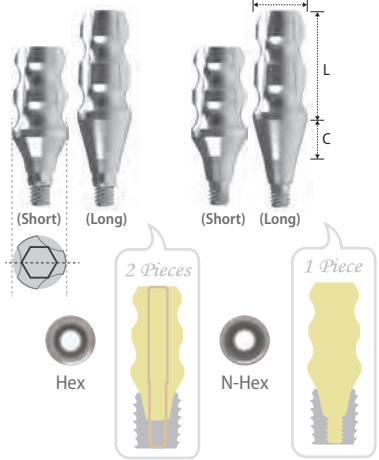
Pick-up Impression Coping



Type	Hex			N-Hex		
<i>Diameter</i> <i>Length / Cuff</i>	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
14 (Short) / 4	2SIH454S	2SIH554S	2SIH654S	2SIN454S	2SIN554S	2SIN654S
14 (Short) / 2	2SIH45S	2SIH55S	2SIH65S	2SIN45S	2SIN55S	2SIN65S
16 (Long) / 4	2SIH45L	2SIH55L	2SIH65L	2SIN45L	2SIN55L	2SIN65L

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (2SISR001SS / 2SISR001SL).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Transfer Post



Type	Hex			N-Hex		
<i>Diameter</i> <i>Length / Cuff</i>	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
9 (Short) / 2	2STH45S	2STH55S	2STH65S	2STN45S	2STN55S	2STN65S
11 (Long) / 4	2STH45L	2STH55L	2STH65L	2STN45L	2STN55L	2STN65L

- > Packing unit: Hex - 1 Transfer Post + 1 Guide Pin (Short: 2STH001SS / Long: 2STH001SL), N-HeX – 1 Transfer Post (solid screw).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Digital Analog



<i>Diameter</i> <i>Height</i>	Ø3.9	
12	2SDR001	

- > Packing unit: 1 Digital Analog.
- > Analog of fixture for working cast.
- > Used for both 3D printed model (RP) and stone model.

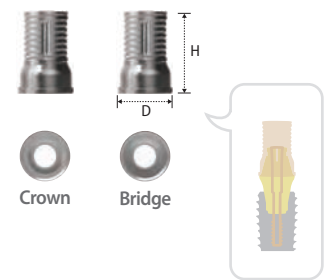
SFIT Ti-Base Setting Screw



<i>Diameter</i> <i>Height</i>	Ø1.95	
8.2	2SSFSS100	

- > Packing unit: 5 SFIT Ti-Base Setting Screws.
- > Used to screw the SFIT S or A Ti-Base into the Digital Analog or the Fixture when revising such prosthetic adaptions as shape, contact surface, occlusion and margin without giving a force to the head of the SFIT Ti-Base S or A Ti-Base to spread and fit in the inner space of the prosthesis.
- > Tightened with the 1.2 Hex Ratchet Driver.

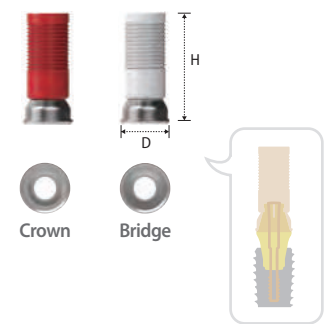
SFIT Titanium Cylinder



Type	Crown			Bridge		
<i>SFIT Ti-Base Diameter</i>	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
<i>Diameter</i> <i>Height</i>	Ø4.1	Ø4.8	Ø5.8	Ø4.1	Ø4.8	Ø5.8
7	2SFTC3835H	2SFTC4535H	2SFTC5535H	2SFTC3835N	2SFTC4535N	2SFTC5535N

- > Packing unit: 1 SFIT Titanium Cylinder.
- > Used over both SFIT S or A Ti-Base and SFIT Absolute S or A Ti-Base.
- > For provisional and permanent restorations.
- > Connected with the SFIT S or A Ti-Base Screw and SFIT Absolute S or A Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.

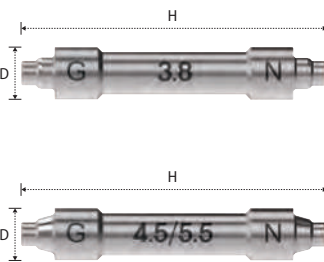
SFIT Meta G UCLA Cylinder



Type	Crown			Bridge		
<i>SFIT Ti-Base Diameter</i>	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
<i>Diameter</i> <i>Height</i>	Ø4.3	Ø5.0	Ø5.7	Ø4.3	Ø5.0	Ø5.7
11.4	2SSFC3835C	2SSFC4535C	2SSFC5535C	2SSFC3835B	2SSFC4535B	2SSFC5535B

- > Packing unit: 1 SFIT Meta G UCLA Cylinder.
- > Used over both SFIT S or A Ti-Base and SFIT Absolute S or A Ti-Base.
- > Modifiable to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the SFIT S or A Ti-Base Screw and SFIT Absolute S or A Ti-Base Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.

SFIT Gono Gauge



<i>SFIT Ti-Base Diameter</i>	Ø3.8	Ø4.5 & Ø5.5
<i>Diameter</i> <i>Height</i>	Ø5.5	Ø5.5
32	2SSFGNG	

- > Packing unit: 2 SFIT Gono Gauge (1 3.8 SFIT Gono Gauge, 1 4.5 & 5.5 SFIT Gono Gauge).
- > Used to check whether the inner milling is done correctly when fabricating the crown.

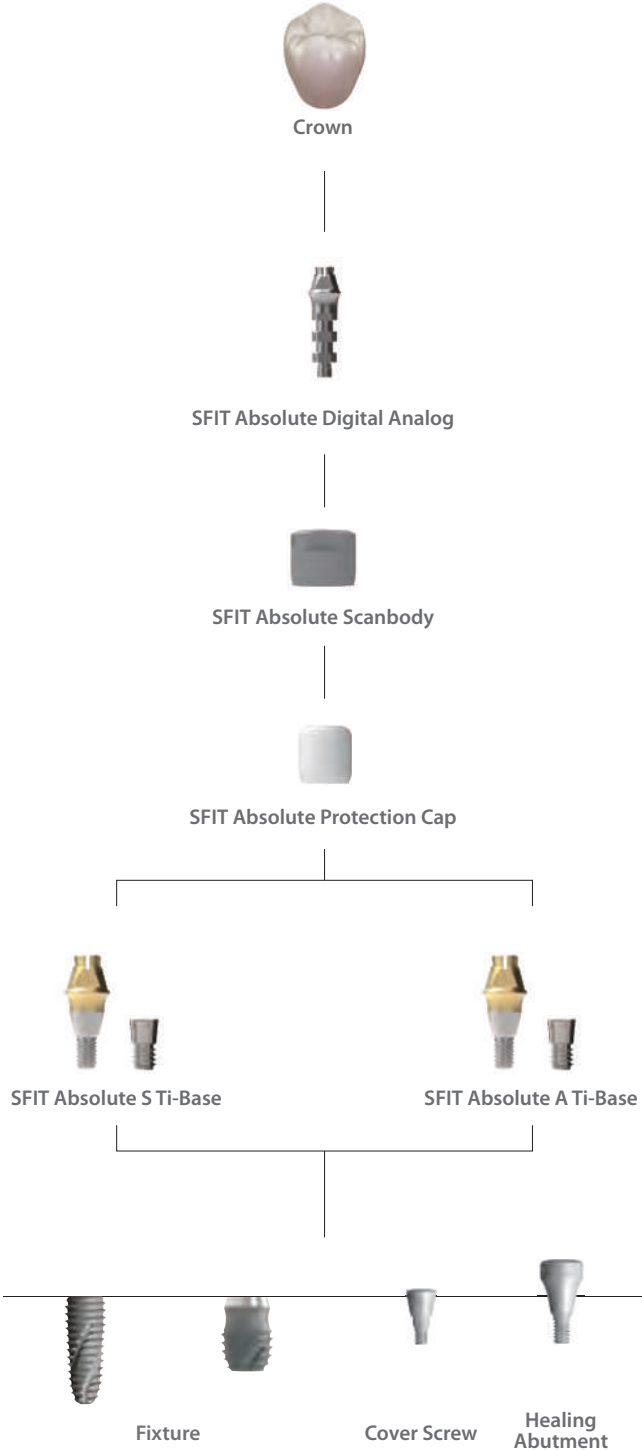
When fastening in the G(Go) direction, the contact point with the crown must fit.



When tightening in the N(No) direction, the contact point with the crown must misfit.

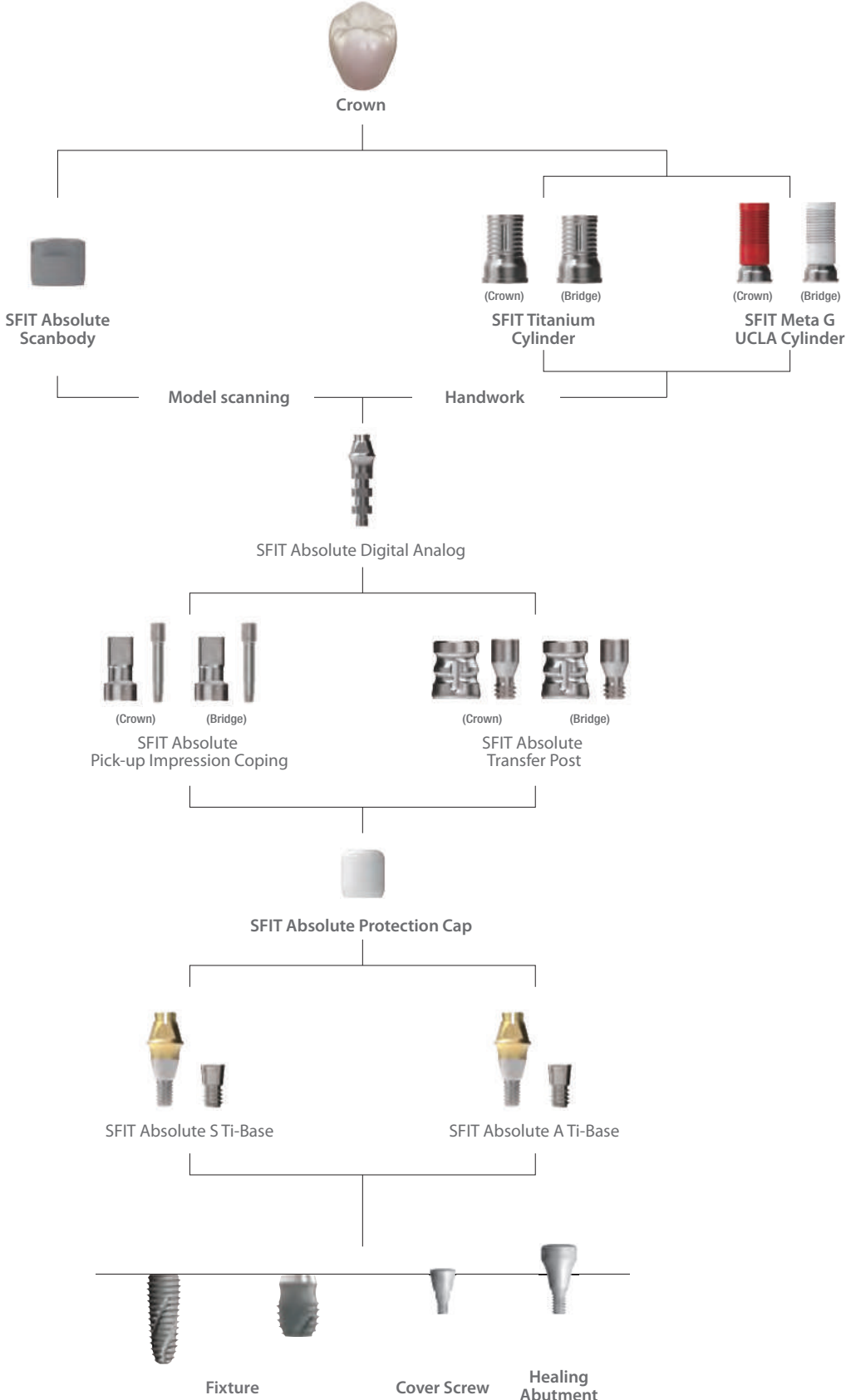
* Refer to the SFIT Ti-Base System Catalog for details.

Component selection guide for the Sub. SFIT Absolute Ti-Base System



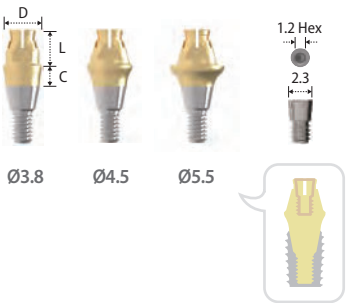
Intra-oral scanning procedure

Component selection guide for the Sub. SFIT Absolute Ti-Base System



• Model-scanning
• Handwork procedure

SFIT Absolute S Ti-Base



<i>Diameter</i>	Ø3.8	Ø4.5	Ø5.5
<i>Length</i> <i>Cuff</i>	3.6	3.6	3.6
1	2SSF38135	2SSF45135	2SSF55135
2	2SSF38235	2SSF45235	2SSF55235
3	2SSF38335	2SSF45335	2SSF55335
4	2SSF38435	2SSF45435	2SSF55435

- > Packing unit: 1 SFIT Absolute S Ti-Base + 1 SFIT Absolute S Ti-Base Screw.
- > For Screw Retained Prosthesis with straight screw channel.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Integrated with the Screw and Ti-Base (solid screw).
- > Tightened with the 1.2 Hex Ratchet Driver or Absolute Ratchet Driver and Torque Wrench.
- > Prosthesis is connected to the SFIT Absolute S Ti-Base by the SFIT Absolute S Ti-Base Screw using the 1.2 Hex Ratchet Driver.
- > Tightening torque force: 30 N.cm.
- > Use the SFIT Absolute Scanbody for digital flow.
- > Abutment level impression.

SFIT Absolute S Ti-Base Screw



<i>Diameter</i> <i>Height</i>	Ø2.3
4.1	2SSFS100S

- > Packing unit: 1 SFIT Absolute S Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.

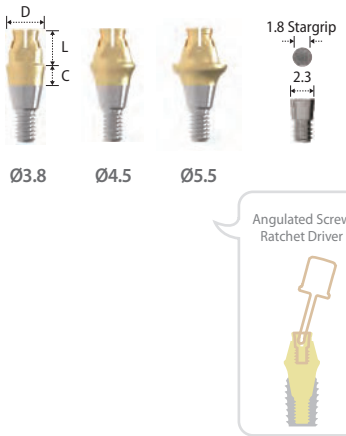
SFIT Absolute A Ti-Base Screw



<i>Diameter</i> <i>Height</i>	Ø2.3
4.1	2SSFS100A

- > Packing unit: 1 SFIT Absolute A Ti-Base Screw.
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.

SFIT Absolute A Ti-Base



<i>Diameter</i>	Ø3.8	Ø4.5	Ø5.5
<i>Length</i> <i>Cuff</i>	3.6	3.6	3.6
1	2SSF38135A	2SSF45135A	2SSF55135A
2	2SSF38235A	2SSF45235A	2SSF55235A
3	2SSF38335A	2SSF45335A	2SSF55335A
4	2SSF38435A	2SSF45435A	2SSF55435A

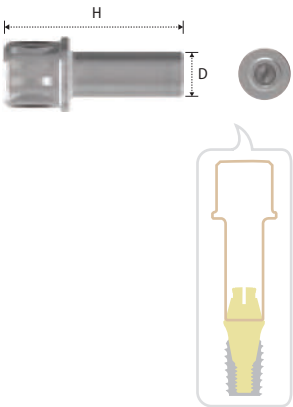
- > Packing unit: 1 SFIT Absolute A Ti-Base + 1 SFIT Absolute A Ti-Base Screw.
- > For Screw Retained Prosthesis with angulated screw channel.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Integrated with the Screw and Ti-Base (solid screw).
- > Tightened with the 1.2 Hex Ratchet Driver or Absolute Ratchet Driver and Torque Wrench.
- > Prosthesis is connected to the SFIT Absolute A Ti-Base by the SFIT Absolute A Ti-Base Screw using the Angulated Screw Ratchet Driver.
- > Tightening torque force: 30 N.cm.
- > Use the SFIT Absolute Scanbody for digital flow.
- > Abutment level impression.

* Angulated Screw Ratchet Driver

<i>Height</i> <i>Type</i>	Ratchet
24(Short)	KRBUD15
29(Long)	KRBUD20

- > Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.
- > Tightening torque force : 30 N.cm (50 N.cm Max.).

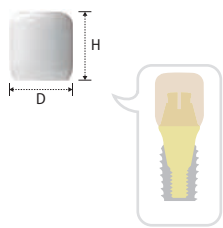
SFIT Absolute Ratchet Driver



Type	Crown	
<i>SFIT Absolute Ti-Base Diameter</i>	Ø3.8	Ø4.5 & Ø5.5
<i>Diameter</i> <i>Height</i>	Ø4.2	Ø4.8
19	KSFR3812S	KSFR4512S
26	KSFR3819L	KSFR4519L

- > Packing unit: 1 SFIT Absolute Ratchet Driver.
- > Used to install and uninstall the SFIT Absolute S & A Ti-Base in case of internal slip.
- > KSFR3812S & KSFR3819L for the SFIT Absolute S & A Ti-Base with Ø3.8 and KSFR4512S & KSFR4519L for the SFIT Absolute S & A Ti-Base with Ø4.5 and Ø5.5.

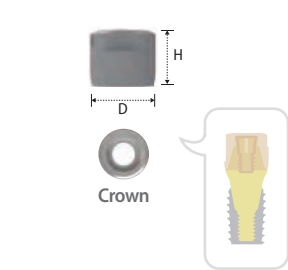
SFIT Absolute Protection Cap



<i>SFIT Absolute Ti-Base Diameter</i>	Ø3.8	Ø4.5	Ø5.5
<i>Diameter</i> <i>Height</i>	Ø4.6	Ø5.5	Ø6.5
5	2SSFPC38	2SSFPC45	2SSFPC55

- > Packing unit: 1 SFIT Absolute Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.
- > Alternative usage for sub-structure of temporary prosthesis.

SFIT Absolute Scanbody



Type	Crown		
SFIT Absolute Ti-Base Diameter	Ø3.8	Ø4.5	Ø5.5
Diameter Height	Ø4.25	Ø4.95	Ø5.85
4.1	2SSFSB3835H	2SSFSB4535H	2SSFSB5535H

- > Packing unit: 1 SFIT Absolute Scanbody.
- > For both intra-oral scanning and model-scanning.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > For the connection to the SFIT Absolute S Ti-Base, use the SFIT Absolute S Ti-Base Screw with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > For the connection to the SFIT Absolute A Ti-Base, use the SFIT Absolute A Ti-Base Screw with the Angulated Screw Ratchet Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

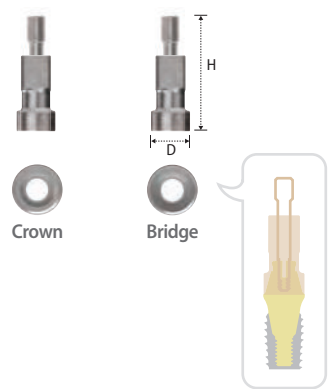
SFIT Absolute Digital Analog



SFIT Absolute Ti-Base Diameter	Ø3.8	Ø4.5	Ø5.5
Diameter Length	Ø3.8	Ø4.5	Ø5.5
3.6	2SSFLA3835	2SSFLA4535	2SSFLA5535

- > Packing unit: 1 SFIT Absolute Digital Analog.
- > Replacement of the SFIT Absolute S or A Ti-Base shape in working cast.
- > Used for both 3D printed model (RP) and stone model.
- > Select according to dimension of the SFIT Absolute S or A Ti-Base.

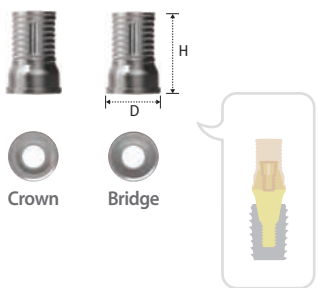
SFIT Absolute Pick-up Impression Coping



Type	Crown			Bridge		
SFIT Absolute Ti-Base Diameter	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
Diameter Height	Ø3.95	Ø4.65	Ø5.65	Ø3.95	Ø4.65	Ø5.65
14.6	2SSFI3835C	2SSFI4535C	2SSFI5535C	2SSFI3835B	2SSFI4535B	2SSFI5535B

- > Packing unit: 1 SFIT Absolute Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with the Guide Pin (2SSFIGP14).
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

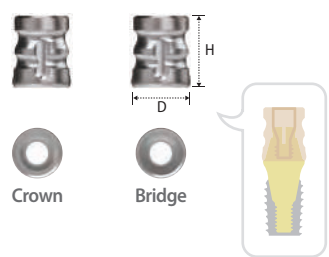
SFIT Titanium Cylinder



Type	Crown			Bridge		
SFIT Ti-Base Diameter	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
Diameter Height	Ø4.1	Ø4.8	Ø5.8	Ø4.1	Ø4.8	Ø5.8
7	2SSFTC3835H	2SSFTC4535H	2SSFTC5535H	2SSFTC3835N	2SSFTC4535N	2SSFTC5535N

- > Packing unit: 1 SFIT Titanium Cylinder.
- > Used over both SFIT S or A Ti-Base and SFIT Absolute S or A Ti-Base.
- > For provisional and permanent restorations.
- > Connected with the SFIT S or A Ti-Base Screw and SFIT Absolute S or A Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.

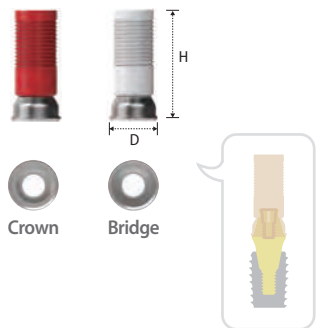
SFIT Absolute Transfer Post



Type	Crown			Bridge		
SFIT Absolute Ti-Base Diameter	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
Diameter Height	Ø4.3	Ø4.95	Ø5.9	Ø4.3	Ø4.95	Ø5.9
6	2SSFT3835LH	2SSFT4535LH	2SSFT5535LH	2SSFT3835LN	2SSFT4535LN	2SSFT5535LN

- > Packing unit: 1 SFIT Absolute Transfer Post + 1 Guide Pin.
- > For closed tray impression.
- > Also used as a scanbody for intra-oral scanning and model-scanning.
- > Connected with the Guide Pin (2SSFT01SL).
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

SFIT Meta G UCLA Cylinder

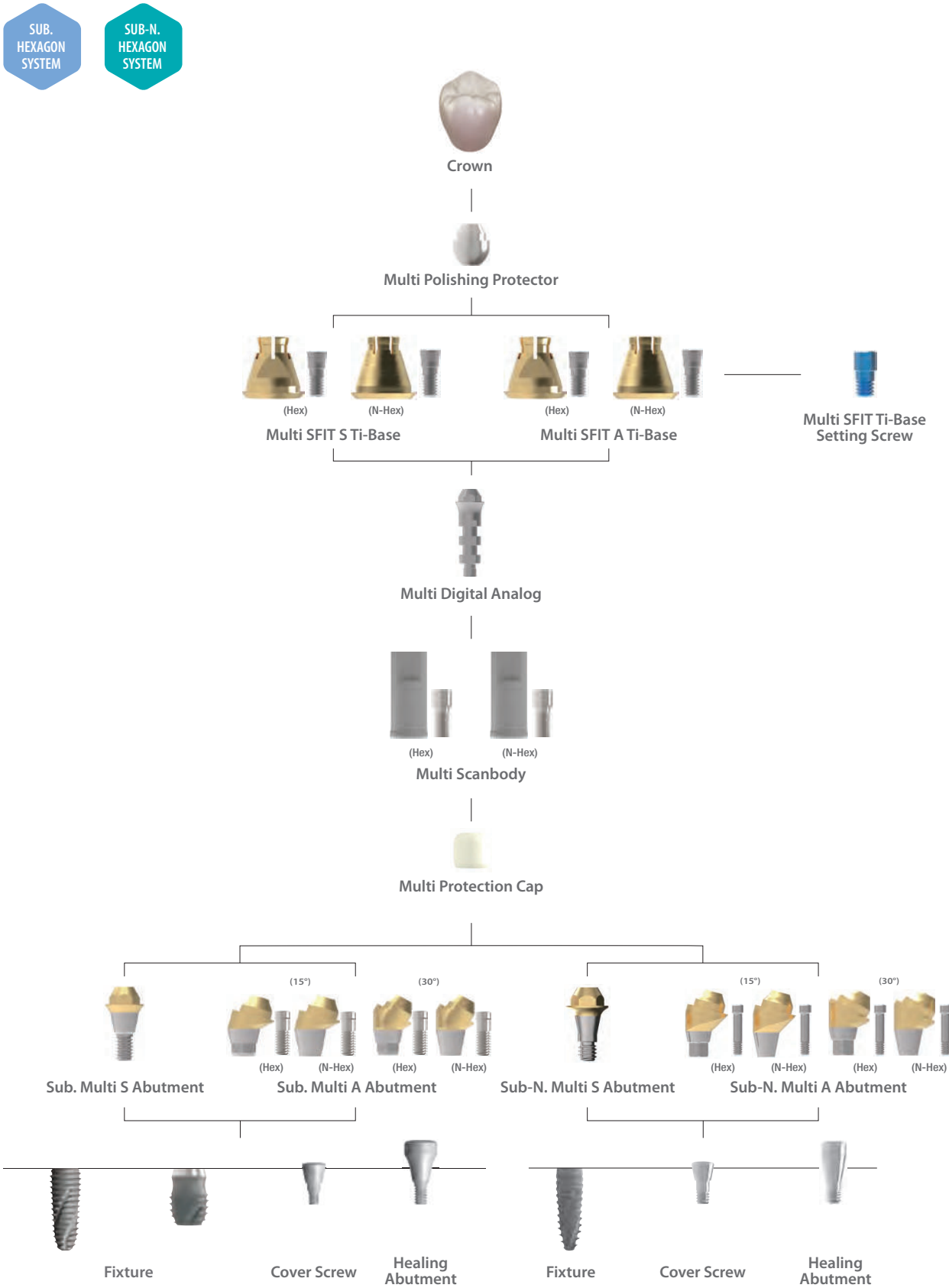


Type	Crown			Bridge		
SFIT Ti-Base Diameter	Ø3.8	Ø4.5	Ø5.5	Ø3.8	Ø4.5	Ø5.5
Diameter Height	Ø4.3	Ø5.0	Ø5.7	Ø4.3	Ø5.0	Ø5.7
11.4	2SSFC3835C	2SSFC4535C	2SSFC5535C	2SSFC3835B	2SSFC4535B	2SSFC5535B

- > Packing unit: 1 1 SFIT Meta G UCLA Cylinder.
- > Used over both SFIT S or A Ti-Base and SFIT Absolute S or A Ti-Base.
- > Modifiable to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with the SFIT S or A Ti-Base Screw and SFIT Absolute S or A Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.

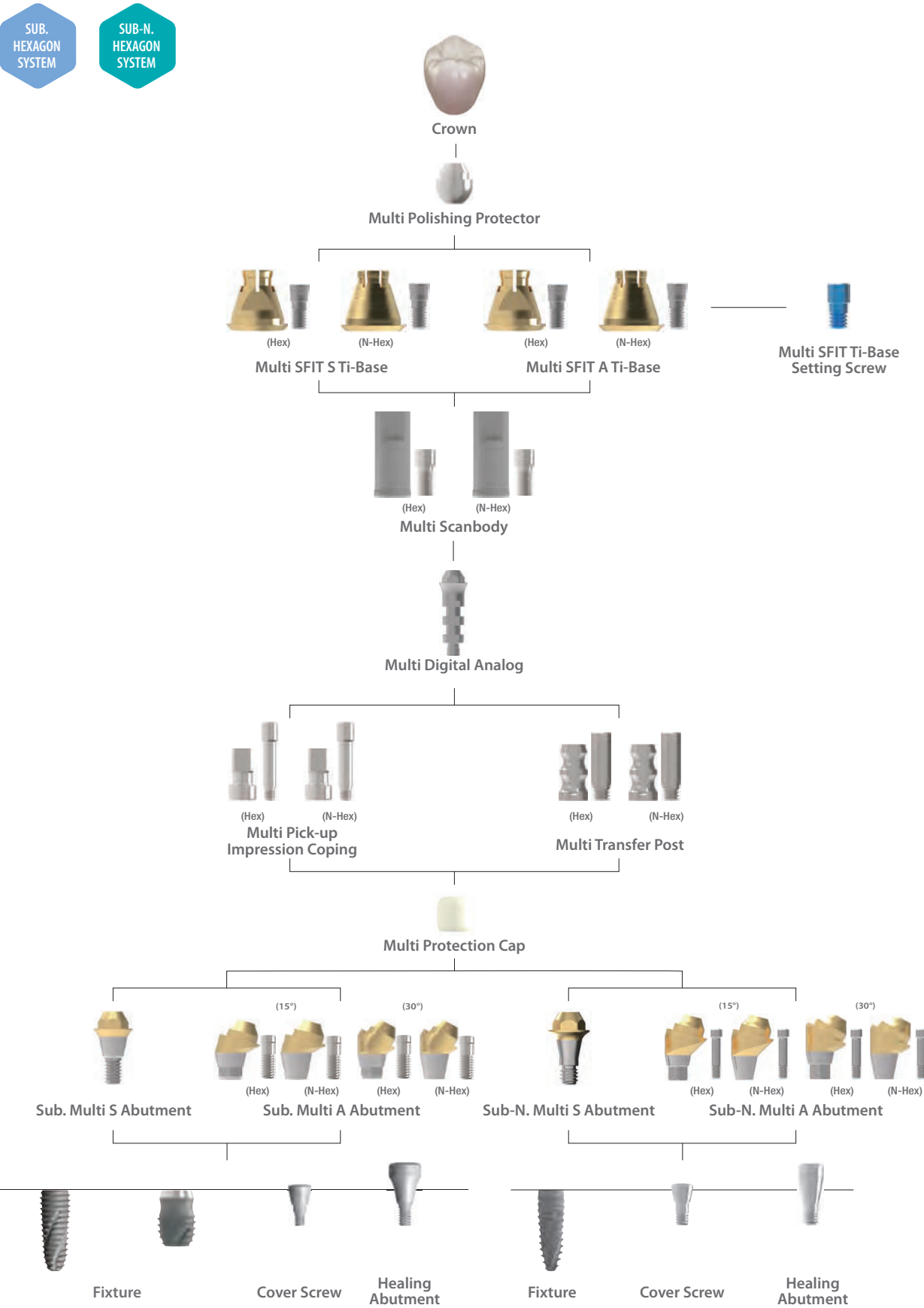
Component selection guide for
the Sub. & Sub-N. Multi SFIT Ti-Base System

Intra-oral scanning
procedure

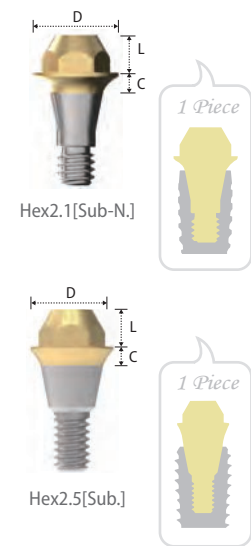


Component selection guide for
the Sub. & Sub-N. Multi SFIT Ti-Base System

Model-scanning
procedure



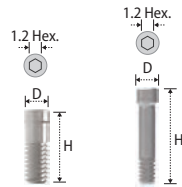
Multi S Abutment



Fixture Connection	Hex2.1[Sub-N.]	Hex2.5[Sub.]	
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]	Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0]	
Diameter	Ø4.5	Ø4.5	Ø5.5
Cuff Length	2	2	2
1	SMS451N	2SMS451	2SMS551
2	SMS452N	2SMS452	2SMS552
3	SMS453N	2SMS453	2SMS553
4	SMS454N	2SMS454	2SMS554
5		2SMS455	2SMS555

- > Packing unit: 1 Multi S Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for the Multi SFIT S or A Ti-Base.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Integrated with the screw and abutment (solid screw).
- > Use the S Holder for more stable position.
- > Tightened with the S Machine or S Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Multi Scanbody for digital flow.
- > Abutment level impression.

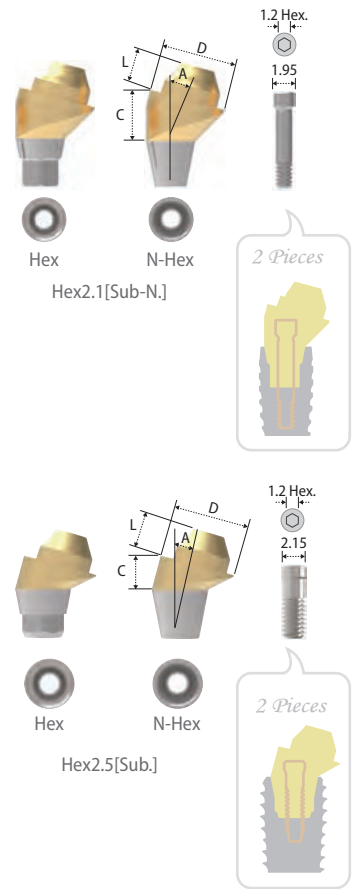
Abutment Screw



Height	8.7	9.3	7.5	6.5
Diameter	1.95	SSHR200N	SSHR300N	
	2.15		2SSHR300	2SSHR400

- > Packing unit: 1 Abutment Screw.
- > To connect the Multi A Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Multi A Abutment

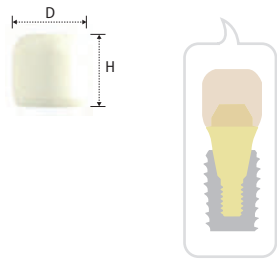


Type	Hex					
Fixture Connection	Hex2.1[Sub-N.]	Hex2.5[Sub.]				
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]	Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0] Ø5.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0]				
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2	2	2
2	★ SMAH45152BN			● 2SMAH45152		
3	● SMAH45153BN	★ SMAH45303BN	★ 2SMAH45153	● 2SMAH45303	★ 2SMAH55153	★ 2SMAH55303
4	● SMAH45154BN	● SMAH45304BN	★ 2SMAH45154	★ 2SMAH45304	★ 2SMAH55154	★ 2SMAH55304
5					★ 2SMAH55155	★ 2SMAH55305

Type	N-Hex					
Fixture Connection	Hex2.1[Sub-N.]	Hex2.5[Sub.]				
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]	Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0] Ø5.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0]				
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2	2	2
2	★ SMAN45152NB			● 2SMAN45152		
3	● SMAN45153NB	★ SMAN45303NB	★ 2SMAN45153	● 2SMAN45303	★ 2SMAN55153	★ 2SMAN55303
4	● SMAN45154NB	● SMAN45304NB	★ 2SMAN45154	★ 2SMAN45304	★ 2SMAN55154	★ 2SMAN55304
5					★ 2SMAN55155	★ 2SMAN55305

- > Packing unit: 1 Multi A Abutment + 1 Abutment Screw.
- > For Screw-Retained Prosthesis.
- > Titanium base for the Multi SFIT S or A Ti-Base.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Use the A Holder for more stable position.
- > Connected with the Abutment Screw (SSHR200N: ★ SSHR300N: ● / 2SSHR300 : ★ 2SSHR400: ●).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Multi Scanbody for digital flow.
- > Abutment level impression.

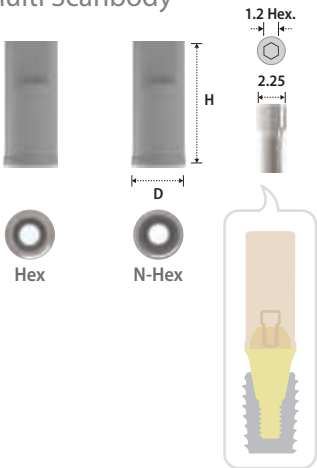
Multi Protection Cap



Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter Height	Ø5.2	Ø6.2
5	2SMP45	2SMP55

- > Packing unit : 1 Multi Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.
- > Alternative usage for sub-structure of temporary prosthesis.

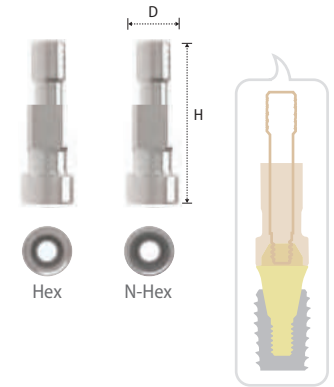
Multi Scanbody



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5 & Ø5.5	Ø4.5 & Ø5.5
Diameter Height	Ø4.5	Ø4.5
9	2SMB001H	2SMB001N

- > Packing unit: 1 Multi Scanbody + 1 Cylinder Screw.
- > For both intra-oral scanning and model-scanning.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Cylinder Screw (2SMC100).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Multi Pick-up Impression Coping



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter	Ø4.65	Ø5.65	Ø4.65	Ø5.65
Height	9	2SMIH45	2SMIH55	2SMIN45
			2SMIN55	

- > Packing unit: 1 Multi Pick-up Impression Coping + 1 Guide Pin (2SMGP012).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

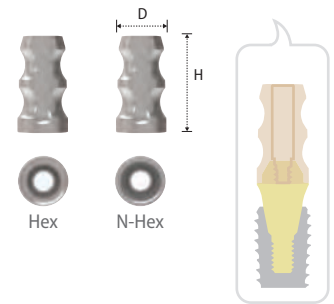
Multi SFIT S Ti-Base



Type	Hex			N-Hex		
Multi S & A Abutment Diameter	Ø4.5	Ø4.5	Ø5.5	Ø4.5	Ø4.5	Ø5.5
Diameter	Ø5.0	Ø5.3	Ø5.7	Ø5.0	Ø5.3	Ø5.7
Length	3.5	3.5	3.5	3.5	3.5	3.5
Cuff	0.5	2SMSFT45H	2SMSFT55H	2SMSFT45N	2SMSFT55N	
	1.5	2SMSFT40H		2SMSFT40N		

- > Packing unit: 1 Multi SFIT S Ti-Base + 1 Multi SFIT S Ti-Base Screw.
- > Used over both Multi S or A Abutment.
- > For Screw Retained prosthesis.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the Multi SFIT S Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Abutment level impression.

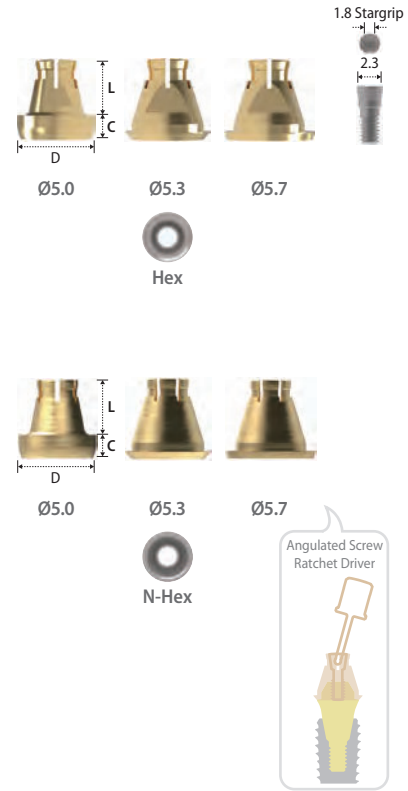
Multi Transfer Post



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Height	7.5	2SMTH45	2SMTH55	2SMTN45
			2SMTN55	

- > Packing unit: 1 Multi Transfer Post + 1 Guide Pin (2SMTHS100).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Multi SFIT A Ti-Base



Type	Hex			N-Hex		
Multi S & A Abutment Diameter	Ø4.5	Ø4.5	Ø5.5	Ø4.5	Ø4.5	Ø5.5
Diameter	Ø5.0	Ø5.3	Ø5.7	Ø5.0	Ø5.3	Ø5.7
Length	3.5	3.5	3.5	3.5	3.5	3.5
Cuff	0.5	2SMSFT45HA	2SMSFT55HA	2SMSFT45NA	2SMSFT55NA	
	1.5	2SMSFT40HA		2SMSFT40NA		

- > Packing unit: 1 Multi SFIT A Ti-Base + 1 Multi SFIT A Ti-Base Screw.
- > Used over both Multi S or A Abutment.
- > For Screw Retained prosthesis.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the Multi SFIT A Ti-Base Screw.
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Abutment level impression.

* Angulated Screw Ratchet Driver

Height	Type	Ratchet
24(Short)		KRBUD15
29(Long)		KRBUD20

- > Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.
- > Tightening torque force : 30 N.cm (50 N.cm Max).

Multi Digital Analog



Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5
Length	2	2SMLA45
		2SMLA55

- > Packing unit: 1 Multi Digital Analog.
- > Replacement of the Multi S or A Abutment shape in working cast.
- > Used for both 3D printed model (RP) and stone model.
- > Select according to dimension of the Multi S or A Abutment.

Multi SFIT S Ti-Base Screw



Diameter Height	Ø2.3
5.5	2SMCS100SF

- > Packing unit: 1 Multi SFIT S Ti-Base Screw.
- > To connect the Multi SFIT S Ti-Base.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.

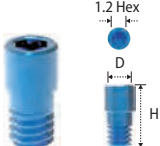
Multi SFIT A Ti-Base Screw



Diameter Height	Ø2.3
5.5	2SMCS100AF

- > Packing unit: 1 Multi SFIT A Ti-Base Screw.
- > To connect the Multi SFIT A Ti-Base.
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.

Multi SFIT Ti-Base Setting Screw



Diameter Height	Ø2.0
4.3	2SMCSS100

- > Packing unit: 5 Multi SFIT Ti-Base Setting Screws.
- > Used to screw the Multi SFIT S or A Ti-Base into the Multi Digital Analog or the Multi S & A Abutment when revising such prosthetic adaption as shape, contact surface, occlusion and margin without giving a force to the head of the Multi SFIT S or A Ti-Base to spread and fit in the inner space of prosthesis.
- > Tightened with the 1.2 Hex Ratchet Driver.

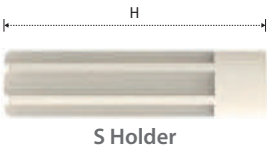
Multi Polishing Protector



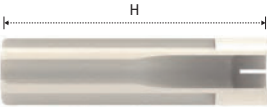
Type	Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter Length	Ø4.5	Ø5.5
2	2SMPP45	2SMPP55

- > Packing unit: 1 Multi Polishing Protector.
- > To polish work during lab procedure.

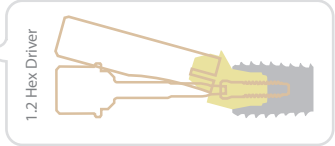
Multi Holder



S Holder



A Holder



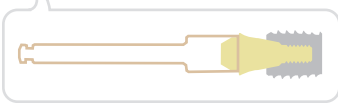
Type Height	Hand
20	KMHS01

- > Packing unit: 1 Multi S Holder.
- > To position the Multi S Abutment more stably.

Type Height	Hand
20	KMHA01

- > Packing unit: 1 Multi A Holder.
- > To position the Multi A Abutment more stably.

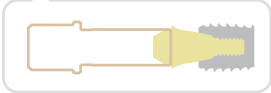
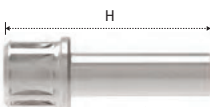
Multi S Machine Driver



Type Height	Machine
27.5	KMMSD21L

- > Packing unit: 1 Multi S Machine Driver.
- > To install the Multi S Abutment by machine.

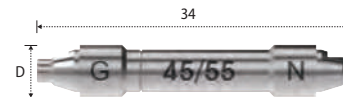
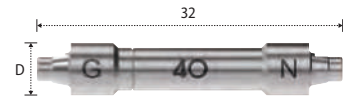
Multi S Ratchet Driver



Type Height	Ratchet
22	KRMSD15L

- > Packing unit: 1 Multi S Ratchet Driver.
- > To install the Multi S Abutment by hand.

Multi SFIT Gono Gauge



Height Diameter	32	34
Ø5.5	2SSFMGNG	

- > Packing unit: 2 Multi SFIT Gono Gauge (1 40 Multi SFIT Gono Gauge, 1 45 & 55 Multi SFIT Gono Gauge).
- > Used to check whether the inner milling is done correctly when fabricating the crown.
- > 40 Multi SFIT Gono Gauge : Multi SFIT S Ti-Base with Cuff 1.5 (2SMSFT40H, 2SMSFT40N).
- > 45 & 55 Multi SFIT Gono Gauge : Multi SFIT S Ti-Base with Cuff 0.5 (2SMSFT45H, 2SMSFT55H, 2SMSFT45N, 2SMSFT55N).

When fastening in the G(Go) direction, the contact point with the crown must fit.

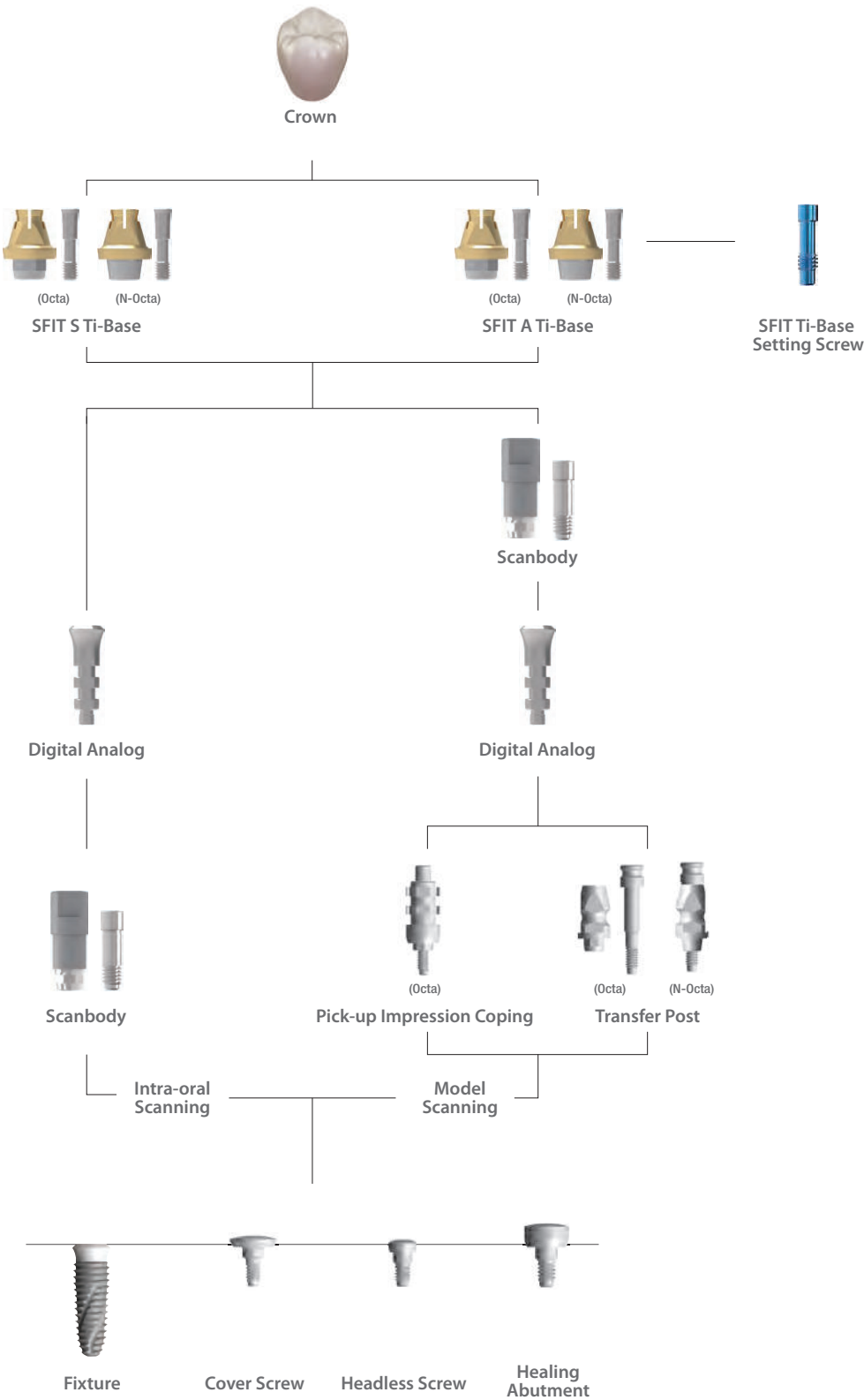


When tightening in the N(No) direction, the contact point with the crown must misfit.

* Refer to the SFIT Ti-Base System Catalog for details.

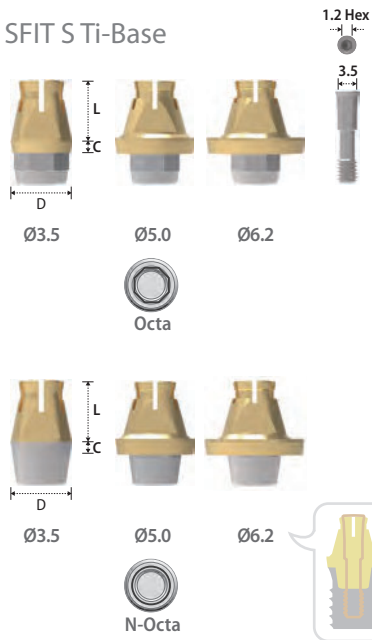
Component selection guide for the Int. SFIT Ti-Base System

INT. OCTAGON SYSTEM



- Intra-oral scanning
- Model-scanning

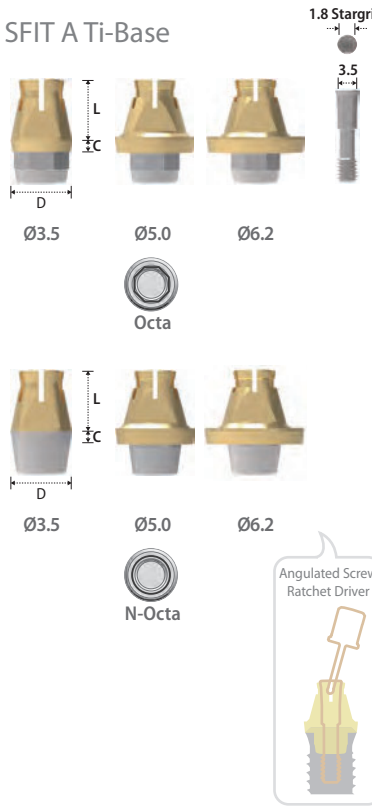
SFIT S Ti-Base



Type	Octa			N-Octa		
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø3.5	Ø5.0	Ø6.2	Ø3.5	Ø5.0	Ø6.2
Length Cuff	3.6	3.6	3.6	3.6	3.6	3.6
0	ISFO35035			ISFN35035		
1		ISFO50135	ISFO60135		ISFN50135	ISFN60135
2		ISFO50235	ISFO60235		ISFN50235	ISFN60235
3		ISFO50335	ISFO60335		ISFN50335	ISFN60335

- > Packing unit: 1 SFIT S Ti-Base + 1 SFIT S Ti-Base Screw.
- > For Screw Retained Prosthesis with straight screw channel.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the SFIT S Ti-Base Screw.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the SFIT Scanbody for digital workflow.
- > Fixture level impression.

SFIT A Ti-Base



Type	Octa			N-Octa		
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø3.5	Ø5.0	Ø6.2	Ø3.5	Ø5.0	Ø6.2
Length Cuff	3.6	3.6	3.6	3.6	3.6	3.6
0	ISFO35035A			ISFN35035A		
1		ISFO50135A	ISFO60135A		ISFN50135A	ISFN60135A
2		ISFO50235A	ISFO60235A		ISFN50235A	ISFN60235A
3		ISFO50335A	ISFO60335A		ISFN50335A	ISFN60335A

- > Packing unit: 1 SFIT A Ti-Base + 1 SFIT A Ti-Base Screw.
- > For Screw Retained Prosthesis with angulated screw channel.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the SFIT A Ti-Base Screw.
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the SFIT Scanbody for digital workflow.
- > Fixture level impression.

* Angulated Screw Ratchet Driver

Height	Type	Ratchet
24(Short)		KRBUD15
29(Long)		KRBUD20

- > Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.
- > Tightening torque force : 30 N.cm (50 N.cm Max.).

SFIT S Ti-Base Screw



SFIT S Ti-Base Cuff	0	1	2	3
Height	9	10.6	11.6	12.6
Diameter	Ø2.3	ISFS00S	ISFS10S	ISFS20S
			ISFS20S	ISFS30S

- > Packing unit: 1 SFIT S Ti-Base Screw.
- > Used to connect the SFIT S Ti-Base.
 - ISFS00S: SFIT S Ti-Base with Cuff 0, ISFS10S: SFIT S Ti-Base with Cuff 1,
 - ISFS20S: SFIT S Ti-Base with Cuff 2, ISFS30S: SFIT S Ti-Base with Cuff 3.
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.

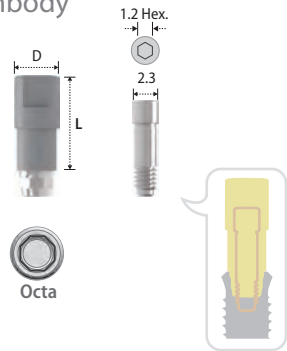
SFIT A Ti-Base Screw



SFIT S Ti-Base Cuff	0	1	2	3
Height	9	10.6	11.6	12.6
Diameter	Ø2.3	ISFS00A	ISFS10A	ISFS20A
			ISFS20A	ISFS30A

- > Packing unit: 1 SFIT A Ti-Base Screw.
- > Used to connect the SFIT A Ti-Base.
 - ISFS00A: SFIT A Ti-Base with Cuff 0, ISFS10A: SFIT A Ti-Base with Cuff 1,
 - ISFS20A: SFIT A Ti-Base with Cuff 2, ISFS30A: SFIT A Ti-Base with Cuff 3.
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.

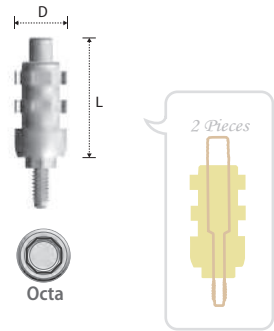
Scanbody



Type	Octa
Platform [Fixture Dia.]	Ø4.8 & Ø5.9 [Ø3.5 / Ø4.0 / Ø4.5, Ø5.0 / Ø6.0]
Diameter	Ø4.5
Length	
6	ISB406
10	ISB410

- > Packing unit: 1 Scanbody + 1 Abutment Screw (ISHR110).
- > For both intra-oral scanning and model-scanning.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Abutment Screw (ISHR110).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

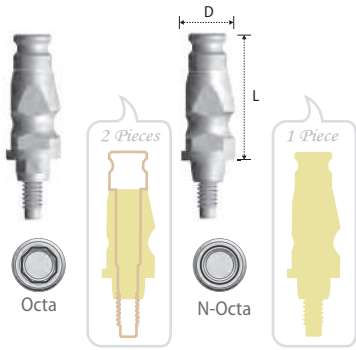
Pick-up Impression Coping



Type	Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø5.5	Ø6.6
Length		
13.7	IIOR001	ILOW001

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (IIOR001S).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Transfer Post



Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.9	Ø4.8	Ø5.9
Length				
11.6	ITOR400	ITOW500	ITNR400	ITNW500

- > Packing unit: Octa - 1 Transfer Post + 1 Guide Pin (Regular: ITOR400S / Wide: ITOW500S)
N-Octa - 1 Transfer Post (solid screw).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Digital Analog



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.9
Height		
13.5	IDR001R	IDR001W

- > Packing unit: 1 Digital Analog.
- > Analog of fixture for working cast.
- > Used for both 3D printed model (RP) and stone model.
- > Select according to fixture platform.

SFIT Ti-Base Setting Screw



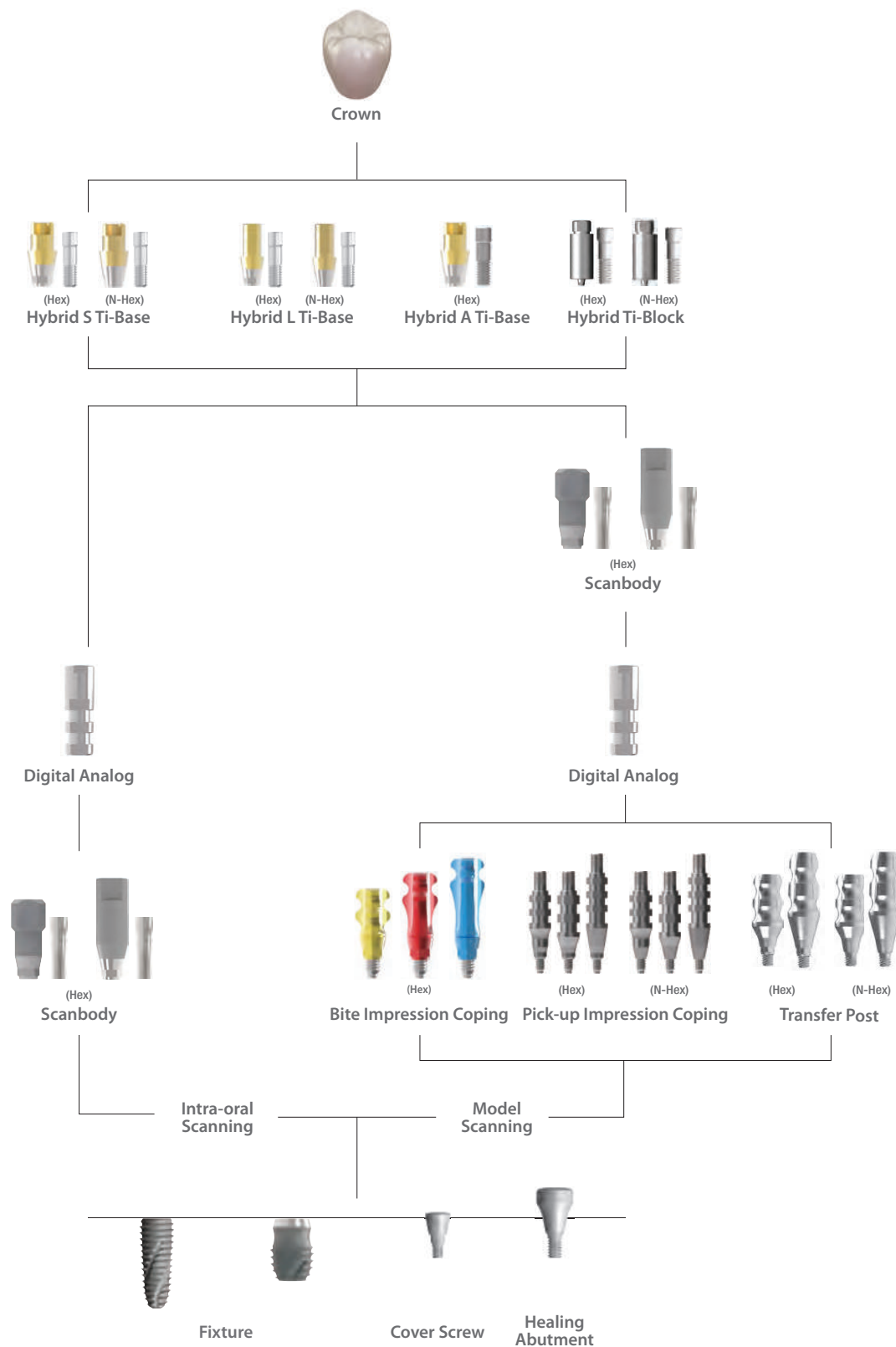
Diameter	Ø1.95
Height	
7.5	ISFSS100

- > Packing unit: 5 SFIT Ti-Base Setting Screws.
- > Used to screw the SFIT S or A Ti-Base into the Digital Analog or the Fixture when revising such prosthetic adaptations as shape, contact surface, occlusion and margin without giving a force to the head of the SFIT Ti-Base S or A Ti-Base to spread and fit in the inner space of the prosthesis.
- > Tightened with the 1.2 Hex Ratchet Driver.

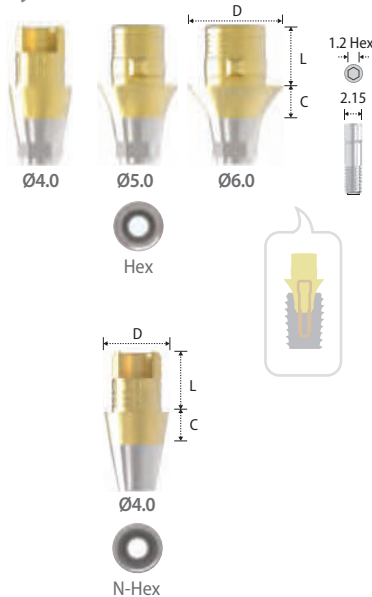
Component selection guide for the Sub. Hybrid Ti-Base System

- Intra-oral scanning
- Model-scanning

SUB.
HEXAGON
SYSTEM



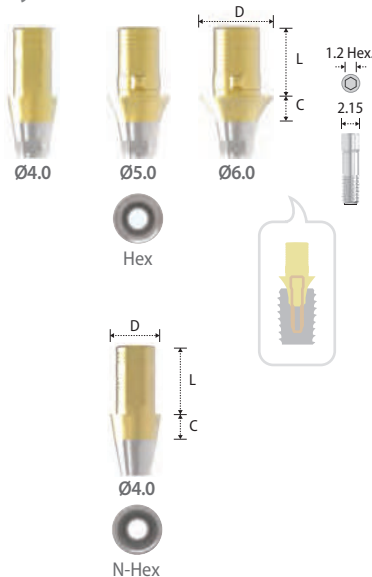
Hybrid S Ti-Base



Type	Hex			N-Hex
Diameter	Ø4.0	Ø5.0	Ø6.0	Ø4.0
Length Cuff	3.75	3.75	3.75	3.75
0.8	2SLH404	2SLH504	2SLH604	2SLN404
2	2SLH424	2SLH524	2SLH624	2SLN424
3	2SLH434	2SLH534	2SLH634	2SLN434

- > Packing unit : 1 Hybrid S Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement 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® & 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.

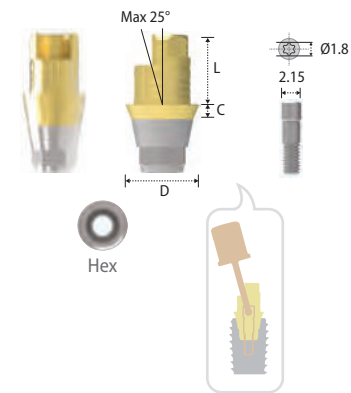
Hybrid L Ti-Base



Type	Hex			N-Hex
Diameter	Ø4.0	Ø5.0	Ø6.0	Ø4.0
Length Cuff	5.5	5.5	5.5	5.5
1	2SLH415	2SLH515	2SLH615	2SLN415
2	2SLH425	2SLH525	2SLH625	2SLN425
3	2SLH435	2SLH535	2SLH635	2SLN435

- > Packing unit : 1 Hybrid L Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement 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® & 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 A Ti-Base



Type	Hex
Diameter	Ø4.0
Length / Cuff	3.75
0.8	2SLH404A
2	2SLH424A
3	2SLH434A

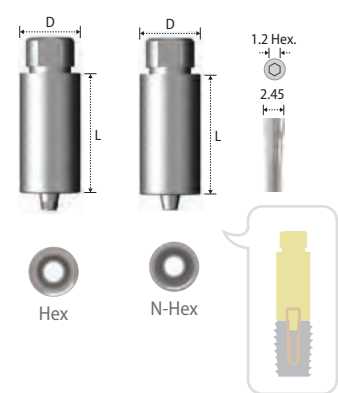
- > Packing unit : 1 Hybrid A Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > For Fabrication of Angulated Screw Channel up to 25°.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with the Stargrip Abutment Screw (2SLAH100, 2SLAH200 & 2SLAH300).
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

* Angulated Screw Ratchet Driver

Type	Ratchet
Height	
24(Short)	KRBUD15
29(Long)	KRBUD20

> Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.
> Tightening torque force : 30 N.cm (50 N.cm Max.).

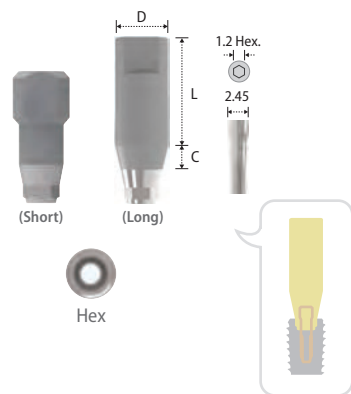
Hybrid Ti-Block



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

- > Packing unit : 1 Hybrid Ti-Block + 2 Abutment Screws.
- > For Screw-Cement or Cement Retained Abutment.
- > Block abutment for CAD/CAM customized abutment.
- > Library available for EXOCAD®, 3Shape® & 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



Type	Hex(Short)	Hex(Long)
Diameter	Ø4.3	Ø4.3
Length / Cuff	4	8
2		2SSB4329
3	2SSB4325	

- > 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.

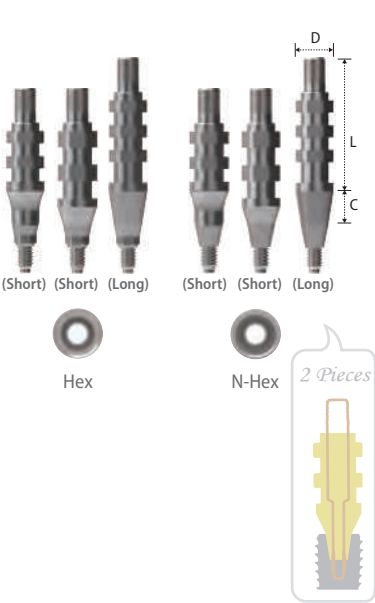
Bite Impression Coping



Type	Hex(Short)	Hex(Long)	Hex(X-Long)
Diameter	Ø4.5	Ø4.5	Ø4.5
Length / Cuff	2	4	6
4.0	2SBIC45S	2SBIC45L	2SBIC45X

- > Packing unit : 1 Bite Impression Coping (Inbuilt Guide Pin).
- > Designed to simultaneously take bite and impression.
- > For Closed Tray Impression (Bite Impression).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

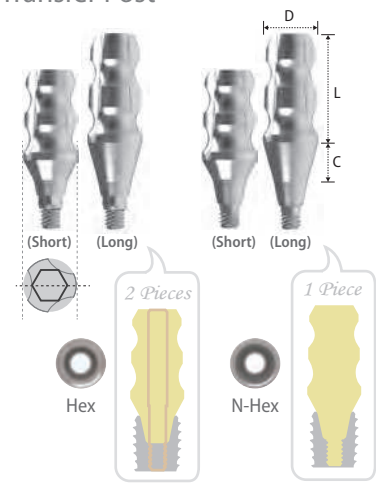
Pick-up Impression Coping



Type	Hex			N-Hex		
Diameter / Length / Cuff	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
14 (Short) / 4	2SIH454S	2SIH554S	2SIH654S	2SIN454S	2SIN554S	2SIN654S
14 (Short) / 2	2SIH45S	2SIH55S	2SIH65S	2SIN45S	2SIN55S	2SIN65S
16 (Long) / 4	2SIH45L	2SIH55L	2SIH65L	2SIN45L	2SIN55L	2SIN65L

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (2SISR001SS / 2SISR001SL).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

Transfer Post



Type <i>Diameter</i> <i>Length / Cuff</i>	Hex			N-Hex		
	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
9 (Short) / 2	2STH45S	2STH55S	2STH65S	2STN45S	2STN55S	2STN65S
11 (Long) / 4	2STH45L	2STH55L	2STH65L	2STN45L	2STN55L	2STN65L

- > Packing unit : 1 Transfer Post + 1 Guide Pin (Hex) / 1 Transfer Post (N-Hex, Solid Type).
- > For closed tray impression.
- > Connected with the Guide Pin (2STH001SS / 2STH001SL).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

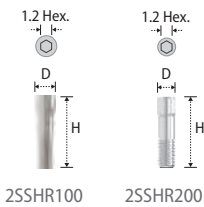
Digital Analog



<i>Diameter</i> <i>Height</i>	Ø3.9
12	2SDR001

- > Packing unit: 1 Digital Analog.
- > Analog of fixture for working cast.
- > Used for both 3D printed model (RP) and stone model.

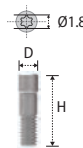
Abutment Screw



<i>Diameter</i> <i>Height</i>	Ø2.45	Ø2.15
8.5	2SSHR100	2SSHR200

- > Packing unit : 1 Abutment Screw.
- > 2SSHR100 : Hybrid Block / Scanbody.
- > 2SSHR200 : Hybrid S & L Ti-Base.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

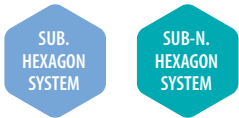
A Abutment Screw



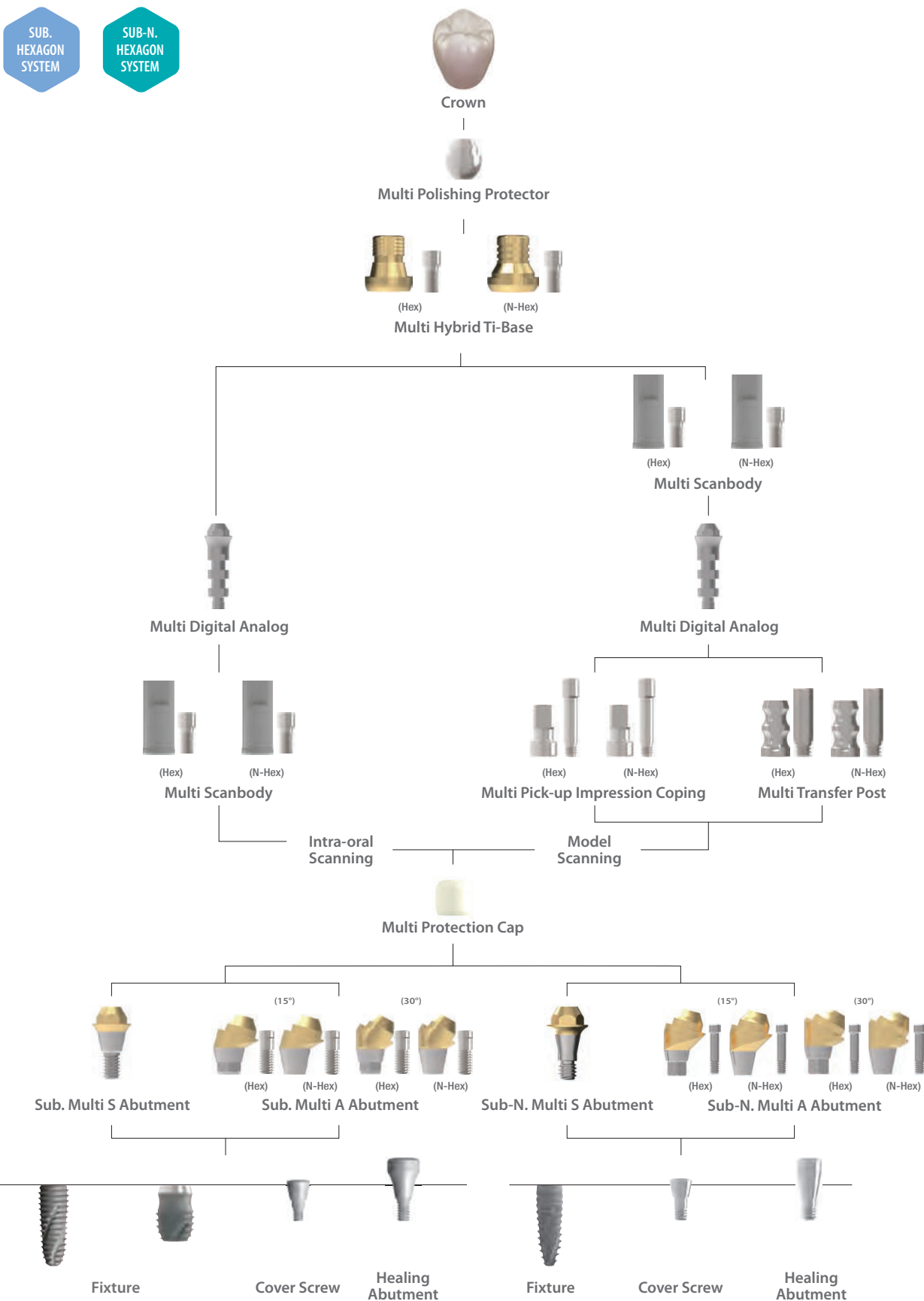
<i>Diameter</i> <i>Height</i>	2	3.2	4.2
Ø2.15	2SLAH100	2SLAH200	2SLAH300

- > Packing unit : 1 A Abutment Screw.
- > Exclusive for Hybrid A Ti-Base (2SLAH100 for 2SLH404A, 2SLAH200 for 2SLH424A & 2SLAH300 for 2SLH434A).
- > Tightened with the Angulated Driver and Torque Wrench.

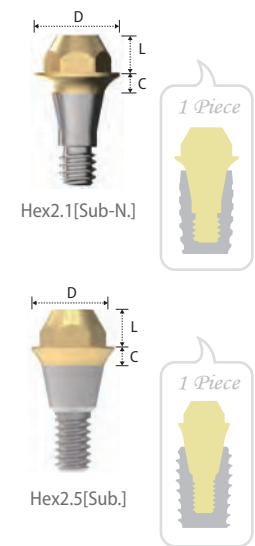
Component selection guide for the Sub. & Sub-N. Multi Hybrid Ti-Base System



- Intra-oral scanning
- Model-scanning



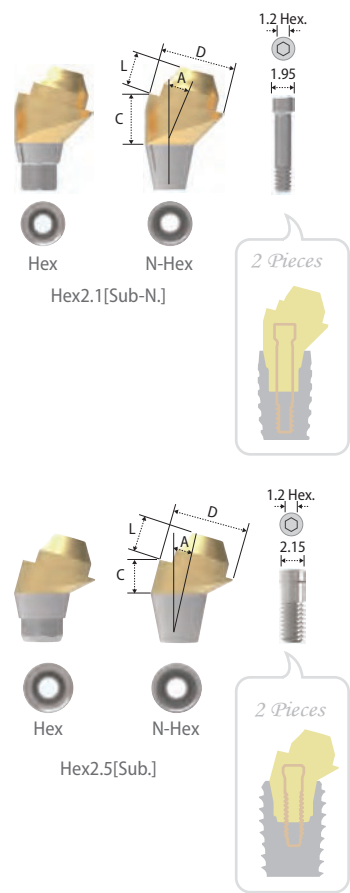
Multi S Abutment



Fixture Connection	Hex2.1[Sub-N.]	Hex2.5[Sub.]	
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]	Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0]	
Diameter	Ø4.5	Ø4.5	Ø5.5
Cuff Length	2	2	2
1	SMS451N	2SMS451	2SMS551
2	SMS452N	2SMS452	2SMS552
3	SMS453N	2SMS453	2SMS553
4	SMS454N	2SMS454	2SMS554
5		2SMS455	2SMS555

- > Packing unit: 1 Multi S Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for the Multi Hybrid Ti-Base.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Integrated with the screw and abutment (solid screw).
- > Use the S Holder for more stable position.
- > Tightened with the S Machine or S Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Multi Scanbody for digital flow.
- > Abutment level impression.

Multi A Abutment

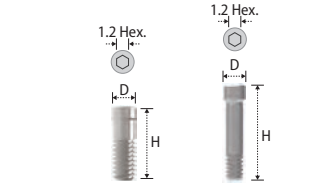


Type	Hex					
Fixture Connection	Hex2.1[Sub-N.]		Hex2.5[Sub.]			
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]		Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0]			
Diameter[Angle]	Ø4.5(15°)	Ø4.5(30°)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2	2	2
2	★ SMAH45152BN		● 2SMAH45152			
3	● SMAH45153BN	★ SMAH45303BN	★ 2SMAH45153	● 2SMAH45303	★ 2SMAH55153	● 2SMAH55303
4	● SMAH45154BN	● SMAH45304BN	★ 2SMAH45154	★ 2SMAH45304	★ 2SMAH55154	★ 2SMAH55304
5					★ 2SMAH55155	★ 2SMAH55305

Type	N-Hex					
Fixture Connection	Hex2.1[Sub-N.]		Hex2.5[Sub.]			
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]		Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø5.5 / Ø6.0]			
Diameter[Angle]	Ø4.5(15°)	Ø4.5(30°)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2	2	2
2	★ SMAN45152NB		● 2SMAN45152			
3	● SMAN45153NB	★ SMAN45303NB	★ 2SMAN45153	● 2SMAN45303	★ 2SMAN55153	● 2SMAN55303
4	● SMAN45154NB	● SMAN45304NB	★ 2SMAN45154	★ 2SMAN45304	★ 2SMAN55154	★ 2SMAN55304
5					★ 2SMAN55155	★ 2SMAN55305

- > Packing unit: 1 Multi A Abutment + 1 Abutment Screw.
- > For Screw-Retained Prosthesis.
- > Titanium base for the Multi Hybrid Ti-Base.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Use the A Holder for more stable position.
- > Connected with the Abutment Screw (SSHR200N: ★ SSHR300N: ● / 2SSHR300: ★ 2SSHR400: ●).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Multi Scanbody for digital flow.
- > Abutment level impression.

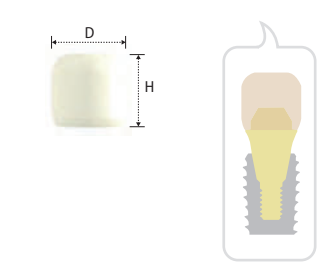
Abutment Screw



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5
Height	7.5	6.5
9	2SMTH45	2SMTN45

- > Packing unit: 1 Abutment Screw.
- > To connect the Multi A Abutment.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

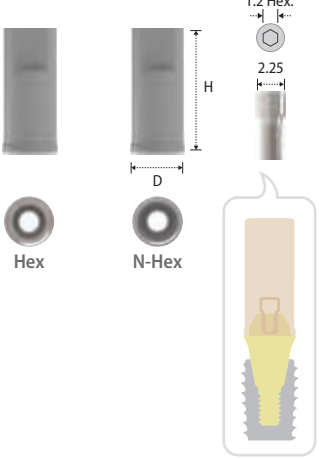
Multi Protection Cap



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø5.2	Ø6.2
Height	5	5
2SMPC45		2SMPC55

- > Packing unit : 1 Multi Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.
- > Alternative usage for sub-structure of temporary prosthesis.

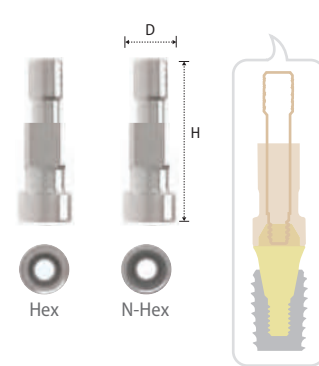
Multi Scanbody



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5 & Ø5.5	Ø4.5 & Ø5.5
Diameter	Ø4.5	Ø4.5
Height	9	9
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.

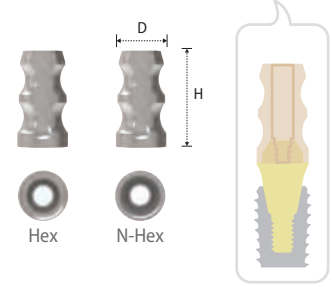
Multi Pick-up Impression Coping



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.65	Ø5.65
Height	9	9
2SMIH45	2SMIH55	2SMIN45

- > Packing unit: 1 Multi Pick-up Impression Coping + 1 Guide Pin (2SMGP012).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

Multi Transfer Post



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5
Height	7.5	6.5
2SMTH45	2SMTH55	2SMTN45

- > Packing unit: 1 Multi Transfer Post + 1 Guide Pin (2SMTHS100).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

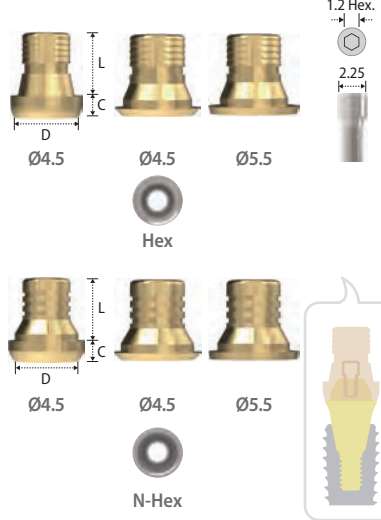
Multi Digital Analog



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5
Length	2	2
2SMLA45		2SMLA55

- > Packing unit: 1 Multi Digital Analog.
- > Replacement of the Multi S or A Abutment shape in working cast.
- > Used for both 3D printed model (RP) and stone model.
- > Select according to dimension of the Multi S or A Abutment.

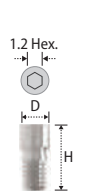
Multi Hybrid Ti-Base



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø5.5
Length	4.5	4.5
Cuff	0.5	0.5
2SMHT45H	2SMHT55H	2SMHT45N

- > Packing unit : 1 Multi Hybrid Ti-Base + 1 Cylinder Screw.
- > For Screw-Cement or Cement 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® & 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.

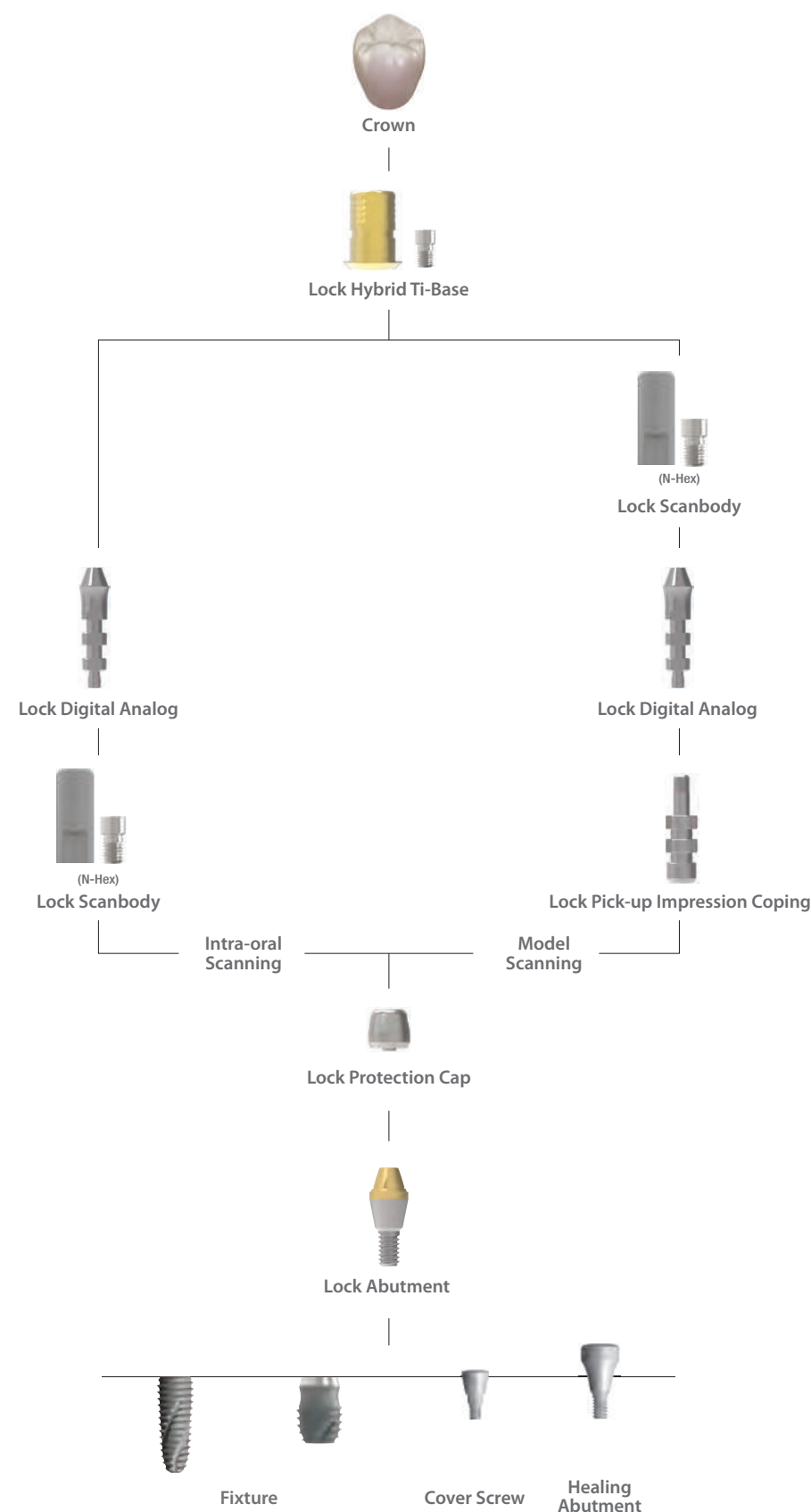
Multi Cylinder Screw



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter	Ø4.65	Ø5.65
Height	5	5
2SMCS100		

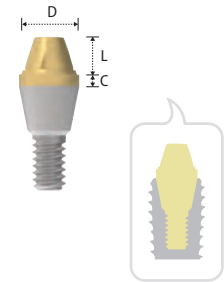
- > Packing unit : 1 Multi Cylinder Screw.
- > Connected with the Multi Scanbody, Multi Hybrid Ti-Base.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

Component selection guide for the Sub. Lock Hybrid Ti-Base System



- Intra-oral scanning
- Model-scanning

Lock Abutment



Diameter	Ø4.5
Cuff Length	2.15
0.5	2SLA400
1	2SLA410
2	2SLA420
3	2SLA430
4	2SLA440

- > Packing unit : 1 Lock Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for Lock Hybrid Ti-Base.
- > Gold color for more translucent restoration.
- > Integrated with screw and abutment.
- > Tightened with the Lock Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Abutment level impression.

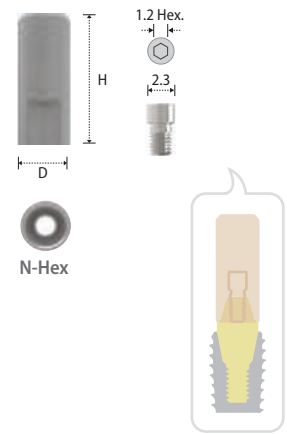
Lock Protection Cap



Diameter	Ø4.5
Height	4.3
	2SLP45

- > Packing unit : 1 Lock Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Gingival retraction for prosthodontic margin of abutment.

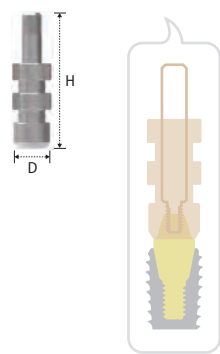
Lock Scanbody



Diameter	Ø4.5
Height	9
	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 (2SLCS200).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 15~20 N.cm.

Lock Pick-up Impression Coping



Diameter Height	Ø4.5
16	2SLIH45

- > Packing unit : 1 Lock Pick-up Impression Coping + 1 Guide Pin (2SLIH45S).
- > For open tray impression.

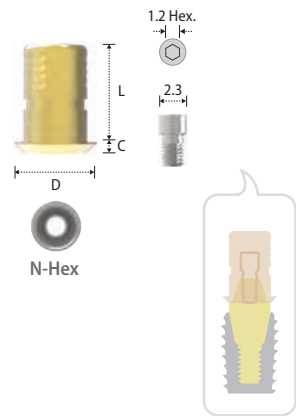
Lock Digital Analog



Diameter Length	Ø3.5
2.2	2SLLA35

- > Packing unit: 1 Lock Digital Analog.
- > Used for both 3D printed model (RP) and stone model.

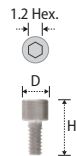
Lock Hybrid Ti-Base



Diameter Length	Ø4.5
Cuff	4.5
0.5	2SLHT40N

- > Packing unit : 1 Lock Hybrid Ti-Base + 1 Cylinder Screw.
- > For Screw-Cement or Cement 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® & Others.
- > Connected with the Cylinder Screw (2SLCS200).
- > 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.

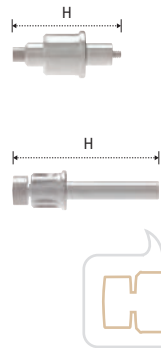
Lock Cylinder Screw



Diameter Height	Ø2.3
4.8	2SLCS200

- > Packing unit : 1 Cylinder Screw.
- > Connected with the Lock Scanbody, Lock Hybrid Ti-Base.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

Lock Ratchet Driver



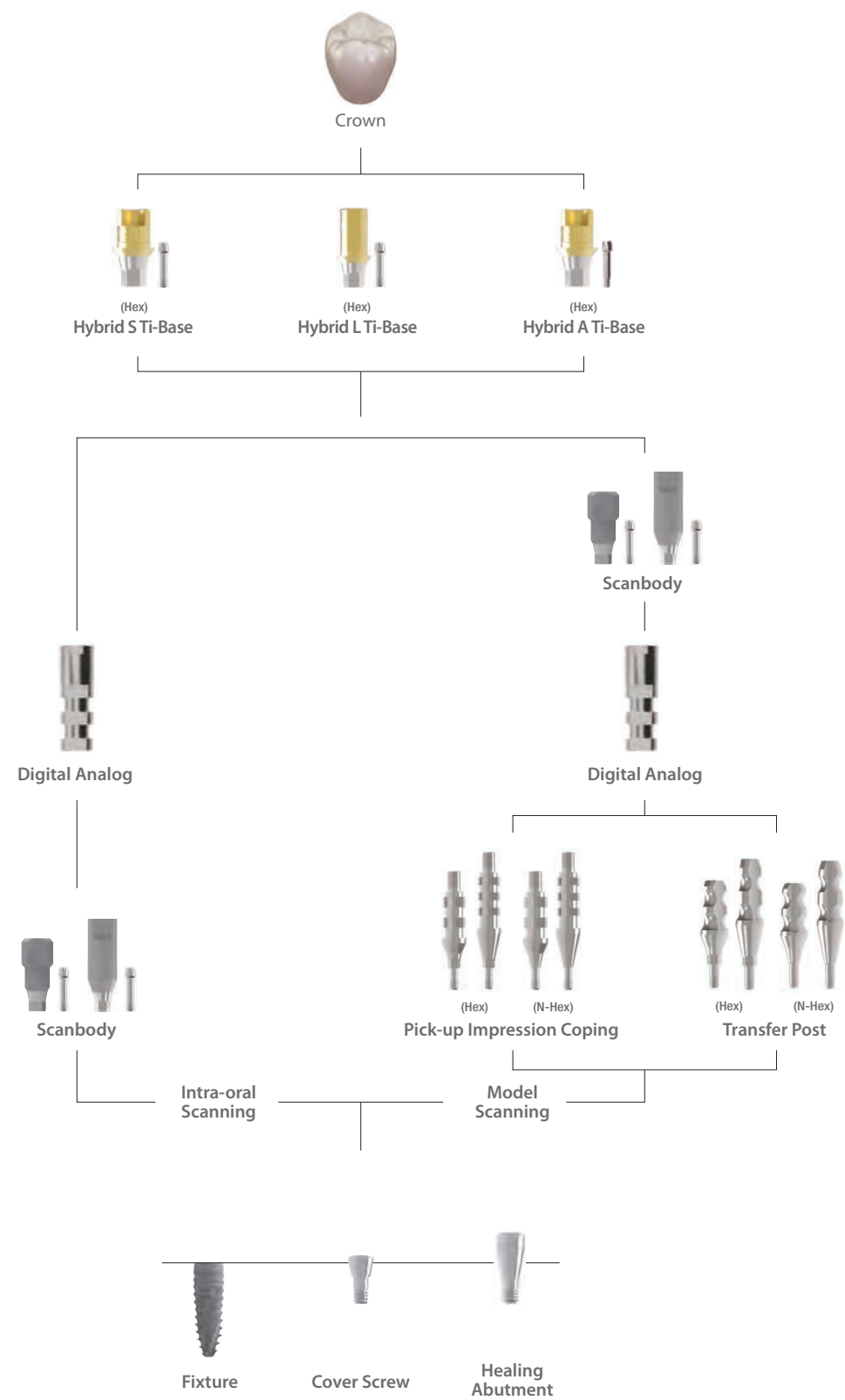
Type Height	Ratchet
14.2	KRLRD18
28.5	KRLRD28

- > Packing unit : 1 Lock Ratchet Driver.
- > To install the Lock Abutment by hand.

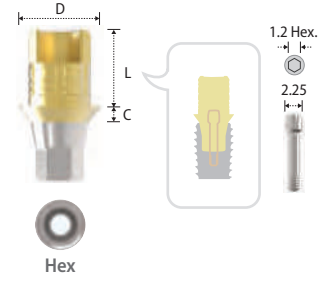
Component selection guide for the Sub-N. Hybrid Ti-Base System



- Intra-oral scanning
- Model-scanning



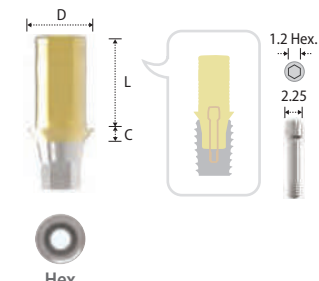
Hybrid S Ti-Base



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

- > Packing unit : 1 Hybrid S Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement 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® & 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.

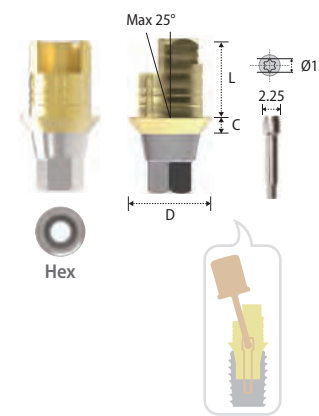
Hybrid L Ti-Base



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

- > Packing unit : 1 Hybrid L Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement 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® & 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 A Ti-Base



Type	Hex
Diameter	Ø4.0
Length Cuff	3.75
0.8	SLH404AN
2	SLH424AN
3	SLH434AN

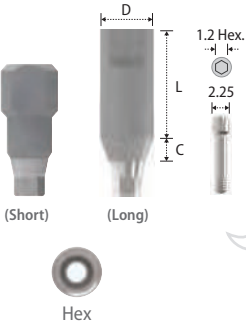
- > Packing unit : 1 Hybrid A Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > For Fabrication of Angulated Screw Channel up to 25°.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with the Stargrip Abutment Screw (SLAH100N, SLAH200N & SLAH300N).
- > Tightened with the Angulated Screw Ratchet Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.
- > Use the Scanbody for 3D Work.
- > Fixture level impression.

* Angulated Screw Ratchet Driver

Height	Type	Ratchet
24(Short)		KRBUD15
29(Long)		KRBUD20

- > Stable to internal slip or fracture due to wide contact area of the Angulated Driver and the dedicated Stargrip Abutment Screw.
- > Tightening torque force : 30 N.cm (50 N.cm Max.).

Scanbody



Type	Hex(Short)	Hex(Long)
Diameter	Ø4.3	Ø4.3
Length / Cuff	4	8
2	SSB4329N	
3	SSB4325N	

- > 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.

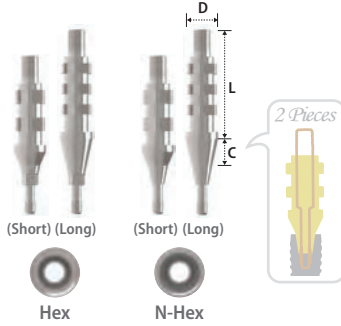
Digital Analog



Diameter / Height	Ø3.9
12	SDR001N

- > Packing unit: 1 Digital Analog.
- > Analog of fixture for working cast.
- > Used for both 3D printed model (RP) and stone model.

Pick-up Impression Coping



Type	Hex	N-Hex
Diameter / Length / Cuff	Ø4.5	Ø4.5
14 (Short) / 2	SIH45SN	SIN45SN
16 (Long) / 4	SIH45LN	SIN45LN

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with the Guide Pin (SIS001SN / SIS001LN).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

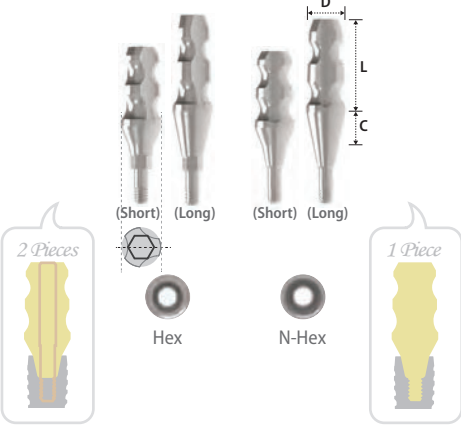
Abutment Screw



Diameter / Height	Ø2.25
10.2	SSHR100N

- > Packing unit : 1 Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

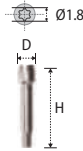
Transfer Post



Type	Hex	N-Hex
Diameter / Length / Cuff	Ø4.5	Ø4.5
9 (Short) / 2	STH45SN	STN45SN
11 (Long) / 4	STH45LN	STN45LN

- > Packing unit : 1 Transfer Post + 1 Guide Pin (Hex) / 1 Transfer Post (N-Hex, Solid).
- > For closed tray impression.
- > Connected with the Guide Pin (STS001SN / STS001LN).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.

A Abutment Screw



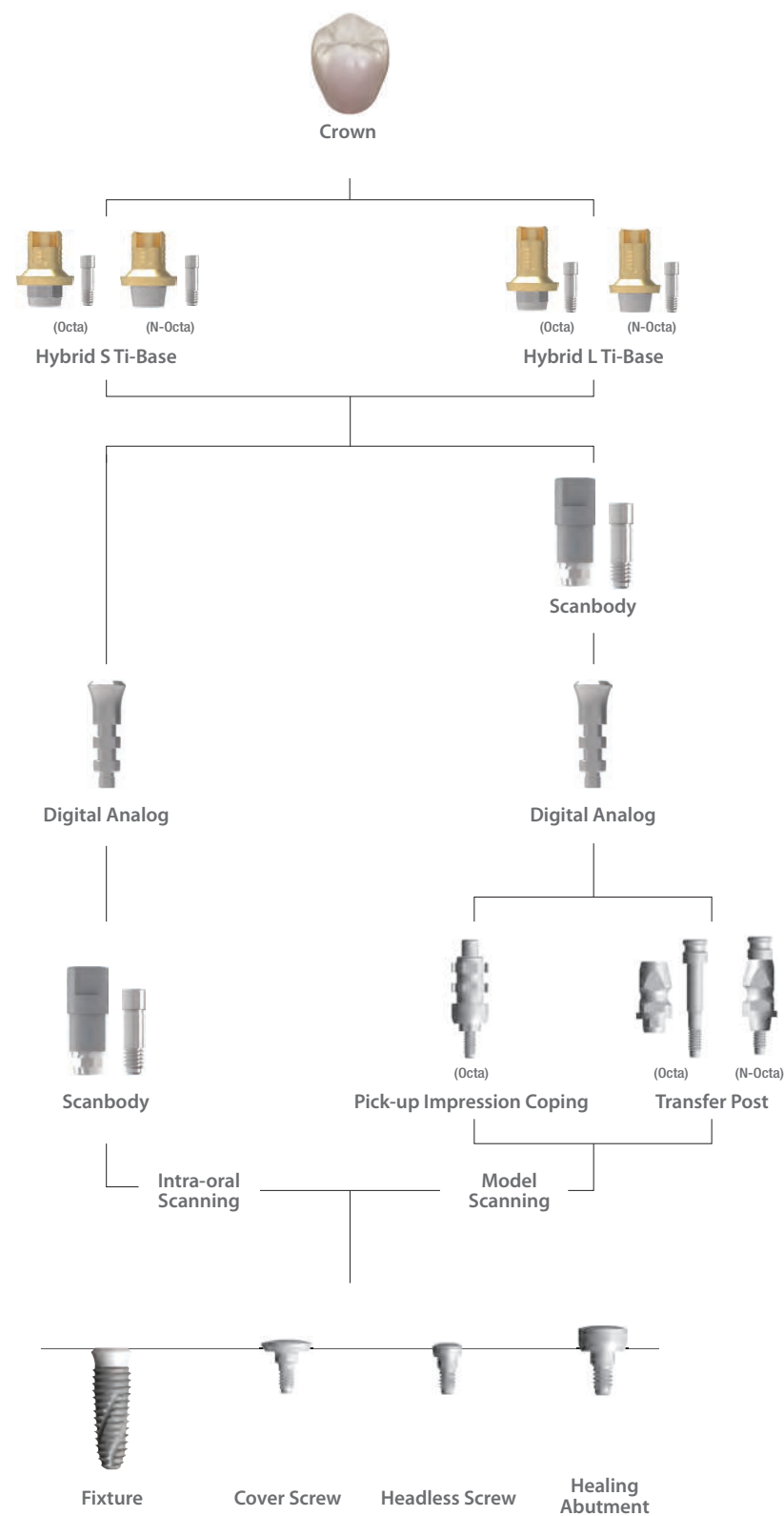
Diameter / Height	10.2	11.4	12.4
Ø2.25	SLAH100N	SLAH200N	SLAH300N

- > Packing unit : 1 A Abutment Screw.
- > Exclusive for Hybrid A Ti-Base (SLAH100N for SLH404AN, SLAH200N for SLH424AN & SLAH300N for SLH434AN).
- > Tightened with the Angulated Driver and Torque Wrench.

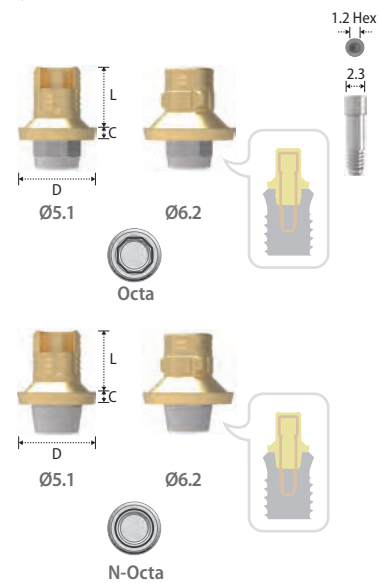
Component selection guide for the Int. Hybrid Ti-Base System

INT. OCTAGON SYSTEM

- Intra-oral scanning
- Model-scanning



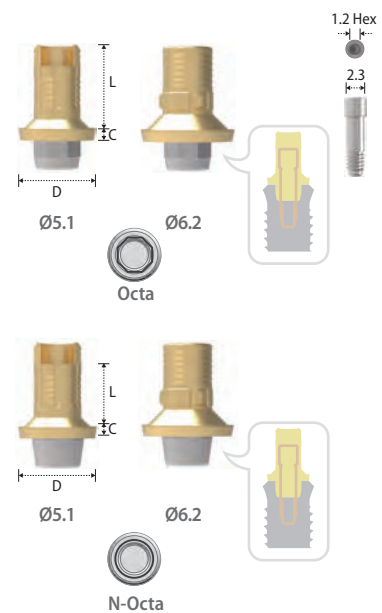
Hybrid S Ti-Base



Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø5.1	Ø6.2	Ø5.1	Ø6.2
Length Cuff	4	4	4	4
0.8	ILO4814	ILO5914	ILN4814	ILN5914
2	ILO4824	ILO5924	ILN4824	ILN5924
3	ILO4834	ILO5934	ILN4834	ILN5934

- > Packing unit: 1 Hybrid S Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the Abutment Screw (ILHS100).
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Scanbody for digital workflow.
- > Fixture level impression.

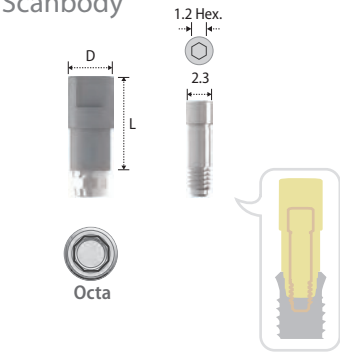
Hybrid L Ti-Base



Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø5.1	Ø6.2	Ø5.1	Ø6.2
Length Cuff	5.5	5.5	5.5	5.5
0.8	ILO4815	ILO5915	ILN4815	ILN5915
2	ILO4825	ILO5925	ILN4825	ILN5925
3	ILO4835	ILO5935	ILN4835	ILN5935

- > Packing unit: 1 Hybrid L Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Connected with the Abutment Screw (ILHS100).
- > Tightened with the 1.2 Hex Ratchet Driver and Torque Wrench.
- > Tightening torque force: 30 N.cm.
- > Use the Scanbody for digital workflow.
- > Fixture level impression.

Scanbody



Type	Octa
Platform [Fixture Dia.]	Ø4.8 & Ø5.9 [Ø3.5 / Ø4.0 / Ø4.5, Ø5.0 / Ø6.0]
Diameter	Ø4.5
Length	
6	ISB406
10	ISB410

- > Packing unit: 1 Scanbody + 1 Abutment Screw (ISHR110).
- > For both intra-oral scanning and model-scanning.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with the Abutment Screw (ISHR110).
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

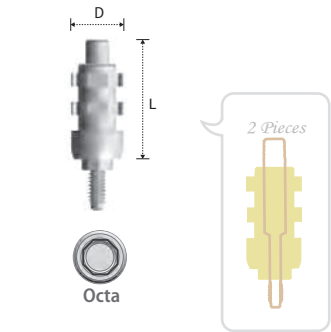
Digital Analog



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.9
Height	13.5	13.5
	IDR001R	IDR001W

- > Packing unit: 1 Digital Analog.
- > Analog of fixture for working cast.
- > Used for both 3D printed model (RP) and stone model.
- > Select according to fixture platform.

Pick-up Impression Coping



Type	Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø5.5	Ø6.6
Length	13.7	13.7
	IIR001	IOW001

- > Packing unit : 1 Pick-up Impression Coping + 1 Guide Pin (IIR001S).
- > For open tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

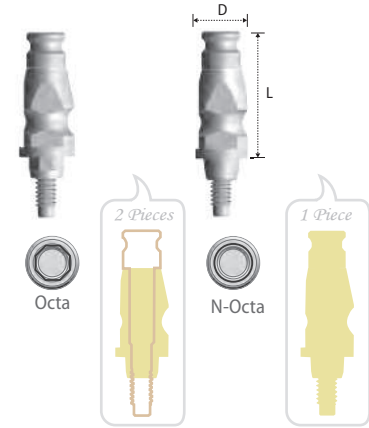
Abutment Screw



Diameter	Ø2.3
Height	8.6
	ILHS100

- > Packing unit : 1 Abutment Screw.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force : 30 N.cm.

Transfer Post



Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.9	Ø4.8	Ø5.9
Length	11.6	11.6	11.6	11.6
	ITOR400	ITOW500	ITNR400	ITNW500

- > Packing unit: Octa - 1 Transfer Post + 1 Guide Pin (Regular: ITOR400S / Wide: ITOW500S)
N-Octa - 1 Transfer Post (solid screw).
- > For closed tray impression.
- > Connected with the Guide Pin.
- > Tightened with the 1.2 Hex Driver and Torque Wrench.
- > Tightening torque force: 12~15 N.cm.

COWELL® EXPERT INSTRUMENTS

An Expert knows what makes the results

COWELL®
EXPERT
INSTRUMENTS

MFS Kit (Multi-Functional Sinus™ Kit)

Designed to perform maxillary sinus lifting. Aqua Membrane Lifter, Drill designs and Stopper System prevent perforation of sinus membrane. The kit includes all the instruments required for both crestal and lateral approach.

Sinus Lift Kit

This revolutionary kit contains US Patented Modified Tap Drills and Spreaders in order to allow any dentists to easily lift, split or condense surrounding bone with simple drilling. Dentists can expect more predictable results, and patients can enjoy less traumatic surgeries with shorter chair time.

MFR Kit (Multi-Functional Removal™ Kit)

An ideal solution for fixture, abutment and screw removal without trauma and bone loss.

InnoGenic™ GBR Kit

An all-in-one solution for various types of GBR procedures.

InnoGenic™ Autobone Harvester

Devised to harvest autogenous bone not only from the general site but also from the site where the implant will be placed. More than 1cc of bone chips can be harvested within 10 seconds.

COWELL® BMP Trephine Kit

An easy-to-use kit with drills and instruments for block-type bone collection, failed fixture removal, crestal & window approach for sinus lift and bone chip extraction.

Atraumatic Extraction Kit

Used for the immediate and effortless extraction of the root of the tooth with simple procedures.

Direct Surgical Guide Kit

Used for a flapless surgery. It can also serve as a guide for positioning the drill while measuring the thickness of the buccal bone, thereby preventing bone resorption and reducing the burden on the patient.

AO4 Surgical Stent

An excellent guide template to place implant precisely, especially for AO4 or AO6 technique.

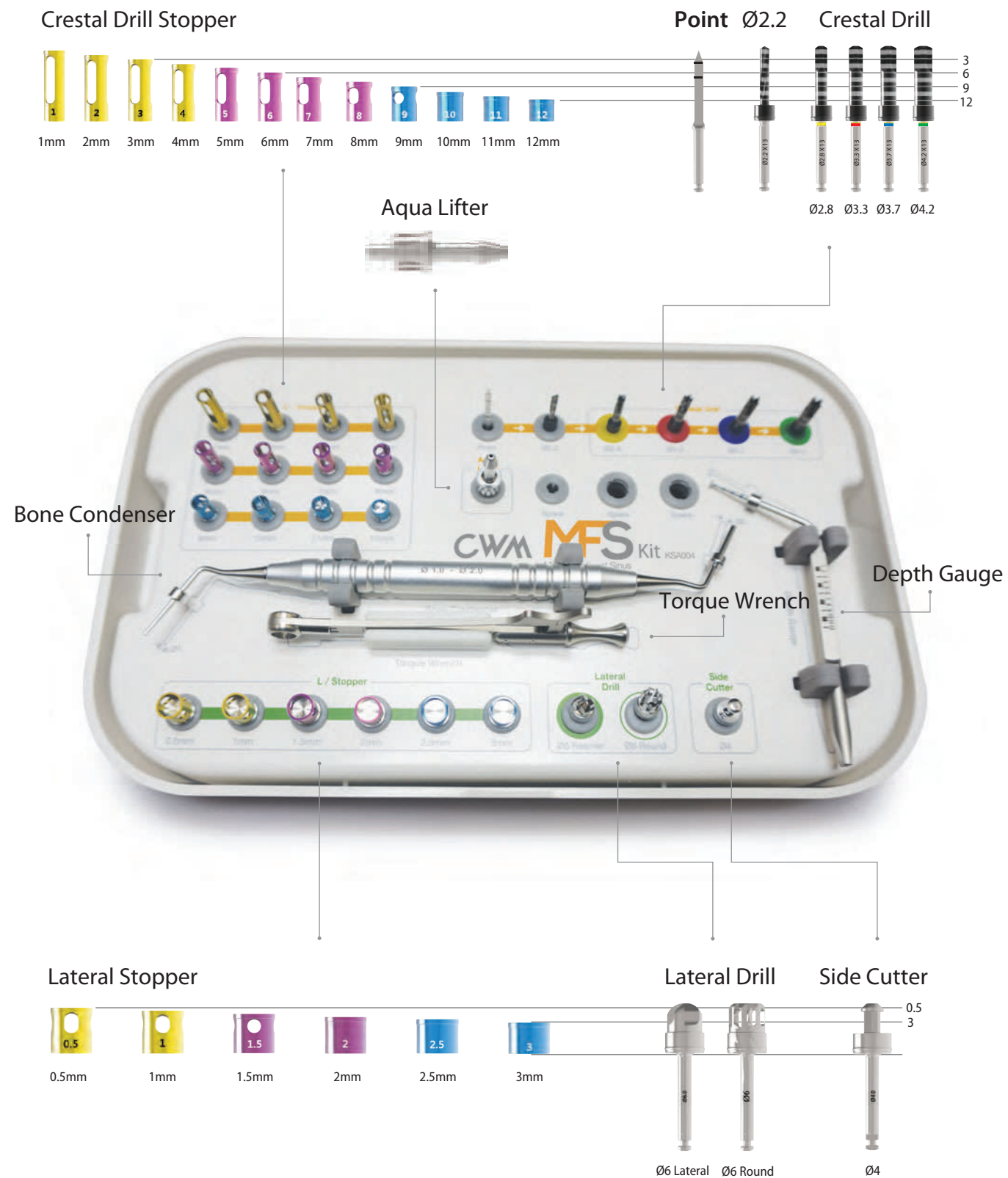
Volume-up™ Guide System

Devised for preventing food penetration and forming natural cervical area by restoring contracted buccal alveolar bone & gingiva to the original shape and width.



Multi-Functional Sinus™ Kit
MFS KIT [KSA004]

> A comprehensive kit to approach direct & indirect maxillary sinus lift simply.



Aqua Ratchet Connector



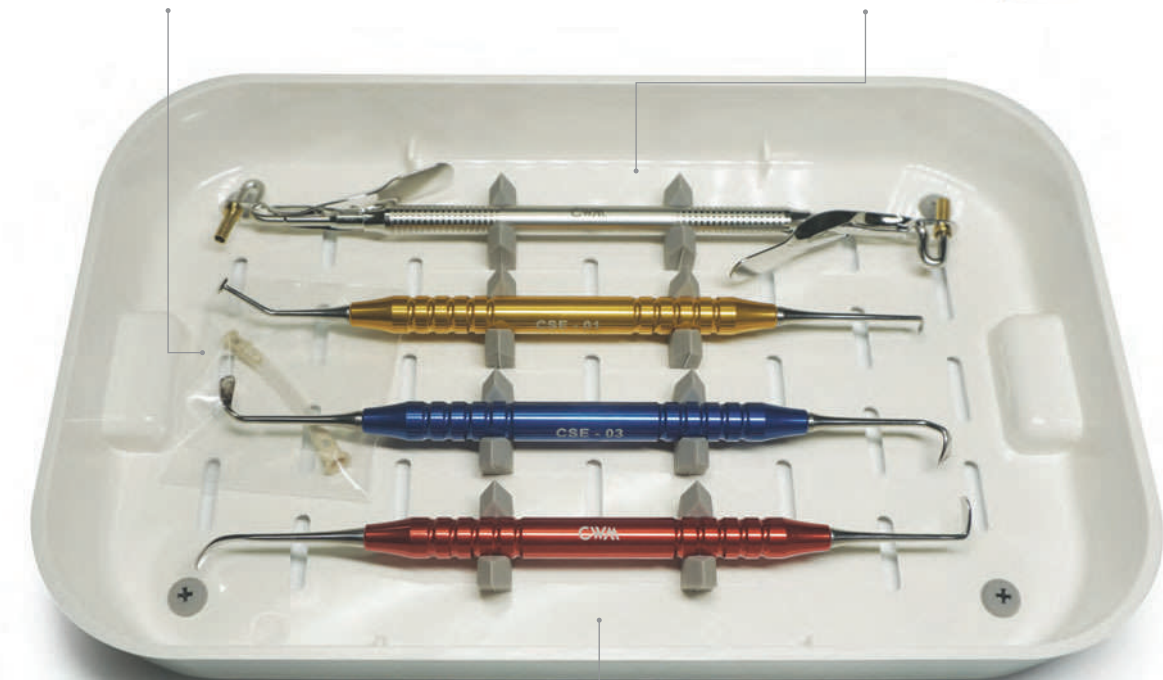
Aqua Syringe Connector



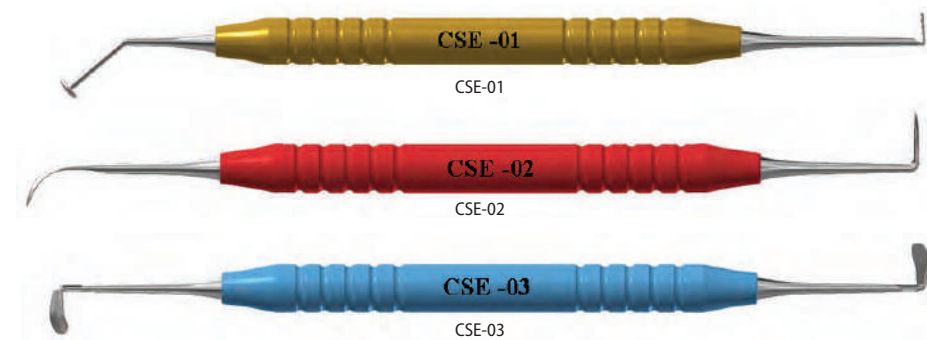
Aqua Tube



Bone Carrier



Sinus Elevator



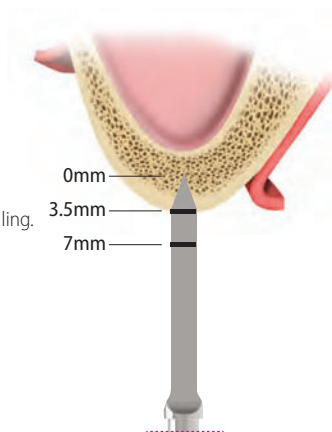
Crestal Approach - Components

1. Point Drill 800~1,000 rpm

- > Use to mark the point of perforation on cortical bone.
- > In the case of the remaining bone height is as low as 3.5mm, pay more attention when drilling.



Code	KPD01S
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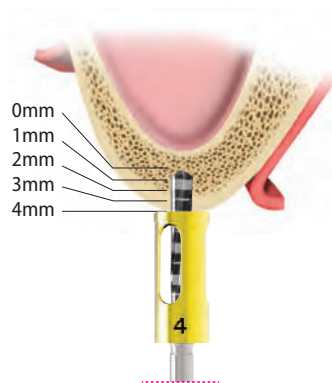


2. 2.2 Twist Drill 800~1,000 rpm

- > Use for making guide hole before using the Crestal Drill.
- > Connect the Crestal Drill Stopper according to the height of the remaining bone.

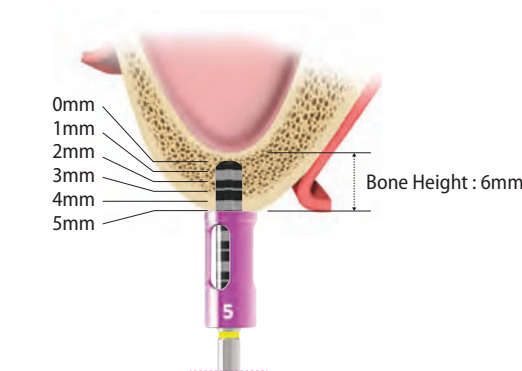


Code	KSTD22
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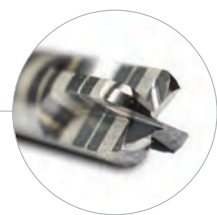
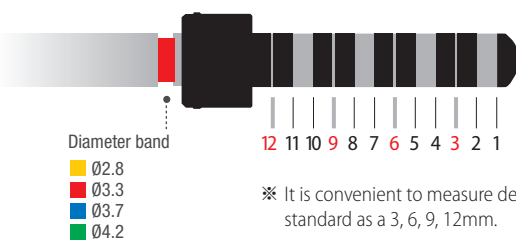


3. Crestal Drill 400~800 rpm

- > Use the Crestal Drill sequentially according to the diameter of the fixture to be placed.
- > Can also be used if sinus floor is flat, incline, septum.
- > The Crestal Drill can be used about 50 times (depending on bone quality).



Fixture Dia.	Ø3.3	Ø3.5	Ø4.0	Ø4.5 / Ø5.0
Diameter	Ø2.8	Ø3.3	Ø3.7	Ø4.2
	KSCD28	KSCD33	KSCD37	KSCD42



※ Flat floor edge minimize damage to membrane.

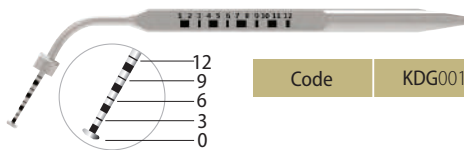
4. Crestal Drill Stopper

- > Connected with a stopper to be drilled to the same length of the cartilage height of maxillary sinus which is measured by CT.
- > If not equipped with CT, fasten the stopper one step lower than expected and gradually increase the length.

Drilling Depth	1mm	2mm	3mm	4mm	5mm	6mm
	KSDS01	KSDS02	KSDS03	KSDS04	KSDS05	KSDS06
Drilling Depth	7mm	8mm	9mm	10mm	11mm	12mm
	KSDS07	KSDS08	KSDS09	KSDS10	KSDS11	KSDS12

5. Depth Gauge

- > Measure thickness of the residual bone after checking the perforation of the cartilage of the maxillary sinus (do not open completely, only the entrance side should be opened).
- > The stopper is attached to the base of the residual bone to separate the cartilage and membrane from the maxillary sinus.



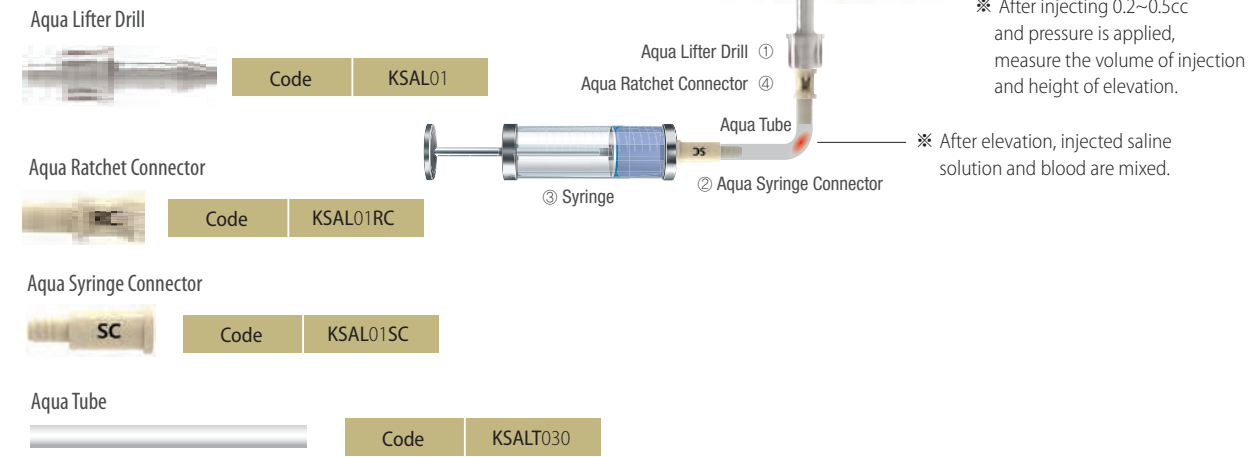
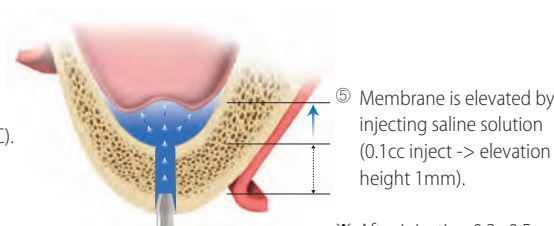
Code	KDG001S
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6. Aqua Membrane Lifter System

- > After confirming that elevation of the cartilage of maxillary sinus, elevate membrane with the Aqua Membrane Lifter System.

- ① Fasten the Aqua Lifer Drill to the drilled hole.
- ② Connect the Aqua Tube to syringe using the Aqua Syringe Connector (SC).
- ③ Inject saline solution equal to the amount of bone graft material to be used for syringe.
- ④ Tube connection to the Aqua Lifter Drill using the Aqua Ratchet Connector (RC).
- ⑤ Inject saline solution.



7. Torque Wrench



> Use the Torque Wrench to fix the Aqua Lifer Drill in the hole formed using Crestal Drill.

Code	KTW001
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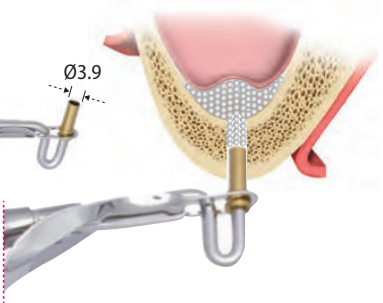


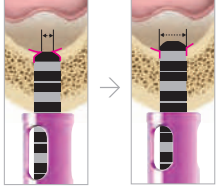
8. Bone Carrier

> Insert bone graft material using the Bone Carrier.



Code	KSBC01
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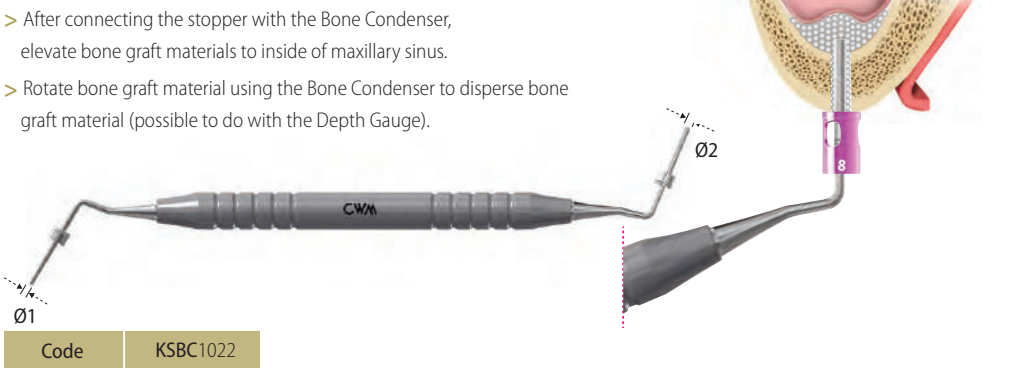


※ If you need to expand hole, drill 1mm deeper using the crestal drill.

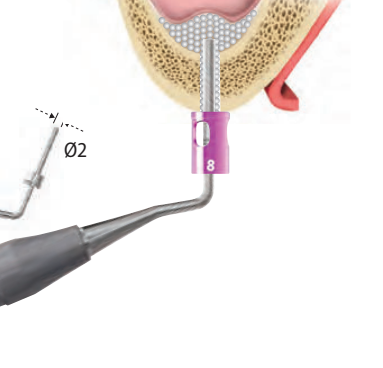
9. Bone Condenser

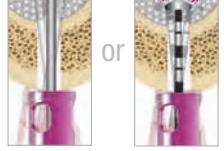
> After connecting the stopper with the Bone Condenser, elevate bone graft materials to inside of maxillary sinus.

> Rotate bone graft material using the Bone Condenser to disperse bone graft material (possible to do with the Depth Gauge).



Code	KSBC1022
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※ If you need to expand hole, drill 1mm deeper using the crestal drill.

10. Implant Drill (Final)

> Drill 1~2mm more deeply than steps of the Crestal Drill.



11. Implant Placement

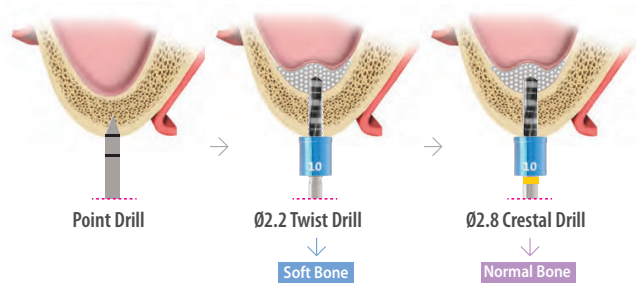
> If the residual bone is less than 3mm, do not implant the fixture, but bone graft only.



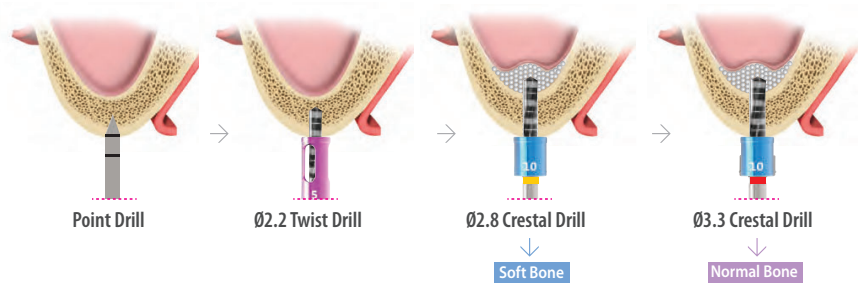
Crestal Approach - Drilling Sequence

> Placing implant over Ø 4.0 is highly recommended.

1. Ø3.3 Narrow Fixture



2. Ø3.5 Fixture



3. Ø4.0 Fixture



4. Ø4.5 Fixture



※ Ø5.0 Fixture Normal Bone : Drilling with the Final Drill before placing implants are required.

※ Use a Drill that is one step shorter than the implant (E.g. 10mm implant, 8~9mm Drill).

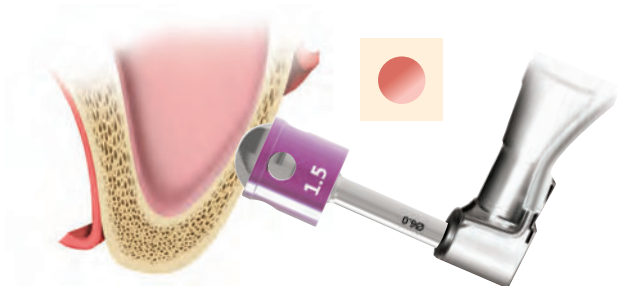
Lateral Approach - Components

1. Ø6 Lateral Reamer 800~1,000 rpm

- > Drill after fastening the stopper according to the height of the bone.
- > Round shape to prevent membrane perforation.



Code	KSLD60
------	--------

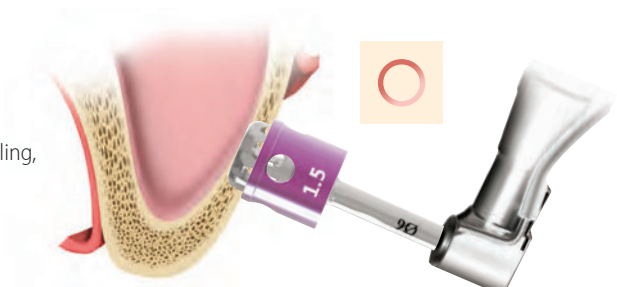


2. Ø6 Lateral Round Drill 800~1,000 rpm

- > Drill after fastening the stopper according to the height of the bone.
- > Round shaped edge.
- > The residual bone should be replaced in the original position after drilling, sinus lifting & augmentation.



Code	KSLRD60
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3. Lateral Stopper

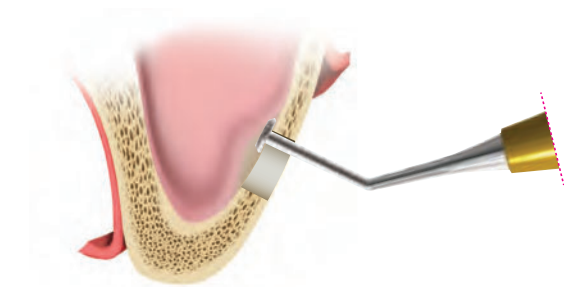
Drilling Depth	0.5mm	1mm	1.5mm	2mm	2.5mm	3mm
	KSDSL05	KSDSL10	KSDSL15	KSDSL20	KSDSL25	KSDSL30

4. Sinus Elevator

- > CSE-01 : Initial elevation of sinus membrane.



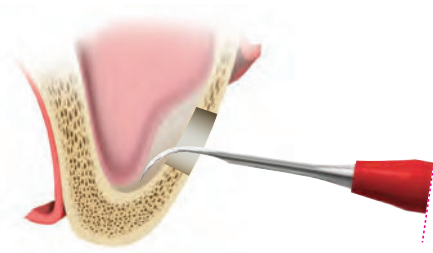
Code	KSSE01
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- > CSE-02 : as stepwise, after using CSE-01, used for elevation of sinus membrane.



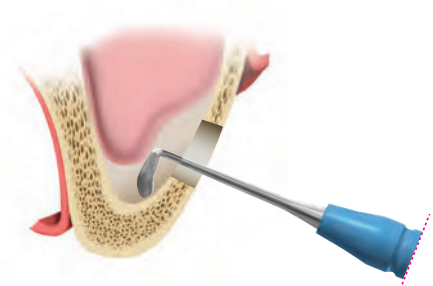
Code	KSSE02
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- > CSE-03 : as stepwise, after using CSE-02, used for elevation of sinus membrane.



Code	KSSE03
------	--------

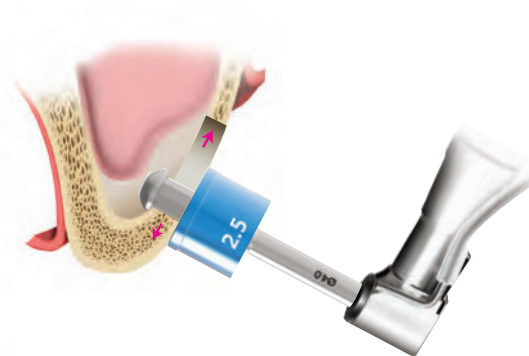


5. Ø4 Side Cutter 800~1,000 rpm

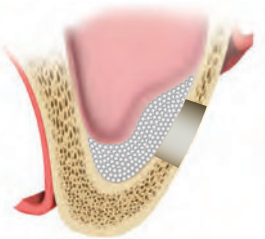
- > When you expand window, must be connected with Stopper.



Code	KSC60
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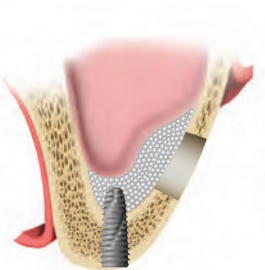
6. Sinus Bone Graft



7. Implant Drill (Final)

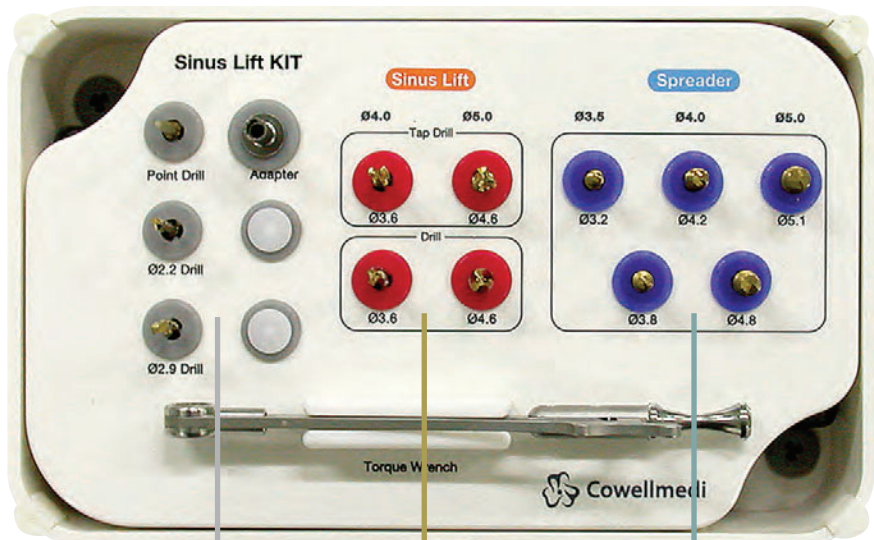


8. Implant Placement



Sinus Lift KIT [KSA001]

> Sinus Lift Kit is the world's most innovating kit for performing maxillary sinus lift, ridge splits, and bone condensing cases. This revolutionary kit contains US Patented modified Tap Drills and Spreaders in order to allow any dentists to easily lift, split, or condense surrounding bone with simple drilling. Dentists can expect more predictable results, and patients can enjoy less traumatic surgeries with shorter chair time.



For All Surgery

- > Universally used Drills / used for both sinus lift or ridge split.
- > Drilling must be accompanied with copious amounts of refrigerated sterile irrigation.

Drill Speed : 800-2,000 rpm

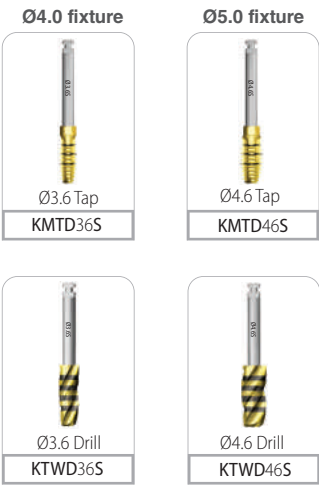


For manual operation using Torque Wrench, Adapter needs to be connected with Machine Driver.

Sinus Lift

- > Used in any maxillary sinus implantation.

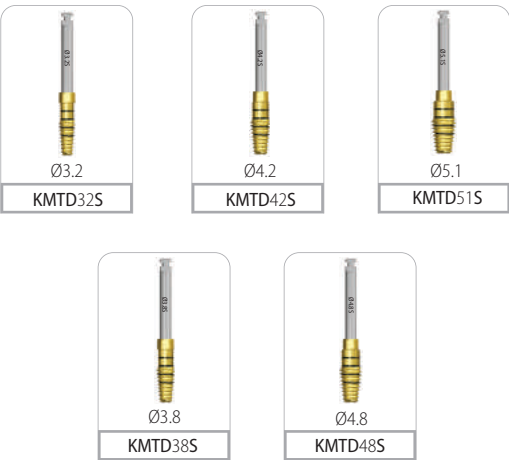
Drill Speed : 20-30 rpm
Torque : 45 N.cm



Spreader

- > Used in bone condensing or ridge split implantation.
- > Also used in maxillary sinus lift & immediate placement cases.

Drill Speed : 20-30 rpm
Torque : 45 N.cm



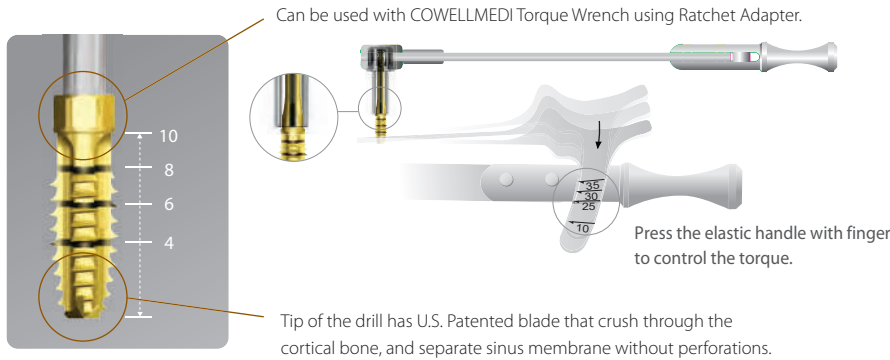
Sinus Lift

Tap Drill (Ø3.6 ,Ø4.6)

- > The Tap Drill uses low speed and high torque to grind through the maxillary bone, and safely elevates sinus without membrane perforation.
- > Must be used at 20 rpm / 40~45 N.cm.
- > No irrigation is required.



Diameter	Ø3.6	Ø4.6
	KMTD36S	KMTD46S

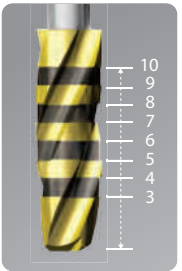


Twist Drill (Ø3.6, Ø4.6)

- > The Twist Drill is used after tapping as final drill for dense bone (Bone quality of 2 or greater), or to eliminate tapping thread in order to facilitate bone grafting.
- > Must be used at 20 rpm / 40~45 N.cm.
- > No irrigation is required.



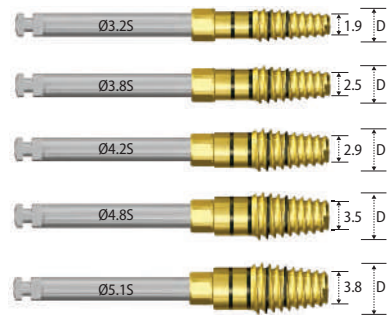
Diameter	Ø3.6	Ø4.6
	KTWD36S	KTWD46S



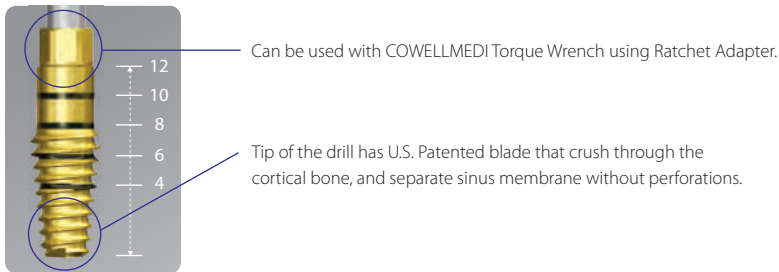
Spreader

Tap Drill (Ø3.2 , Ø3.8, Ø4.2, Ø4.8, Ø5.1)

- > The Spreader Drill is used to condense and/or spread the bone in either sinus lift or ridge split cases.
- > Must be used at 20 rpm / 40~45 N.cm.
- > No irrigation is required.



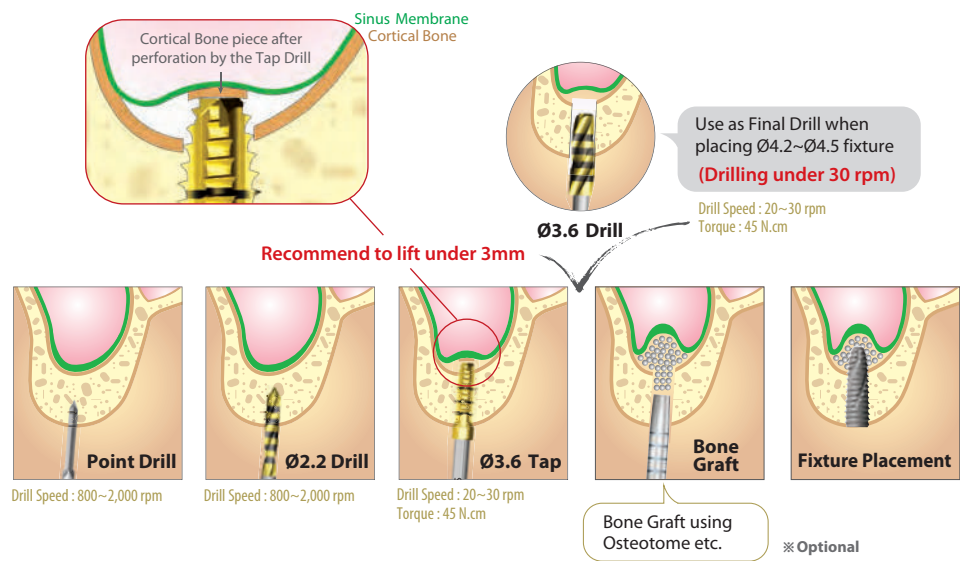
Diameter	Ø3.2	Ø3.8	Ø4.2	Ø4.8	Ø5.1
	KMTD32S	KMTD38S	KMTD42S	KMTD48S	KMTD51S



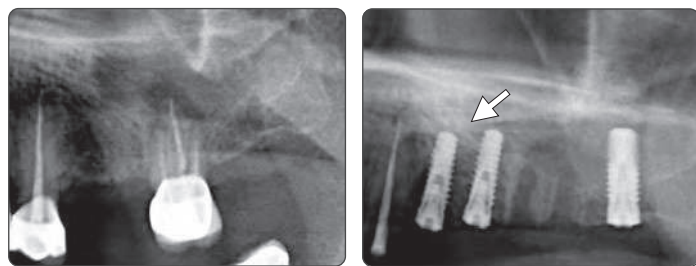
Sequence -Sinus Lift

Only use of Sinus Lift Drill

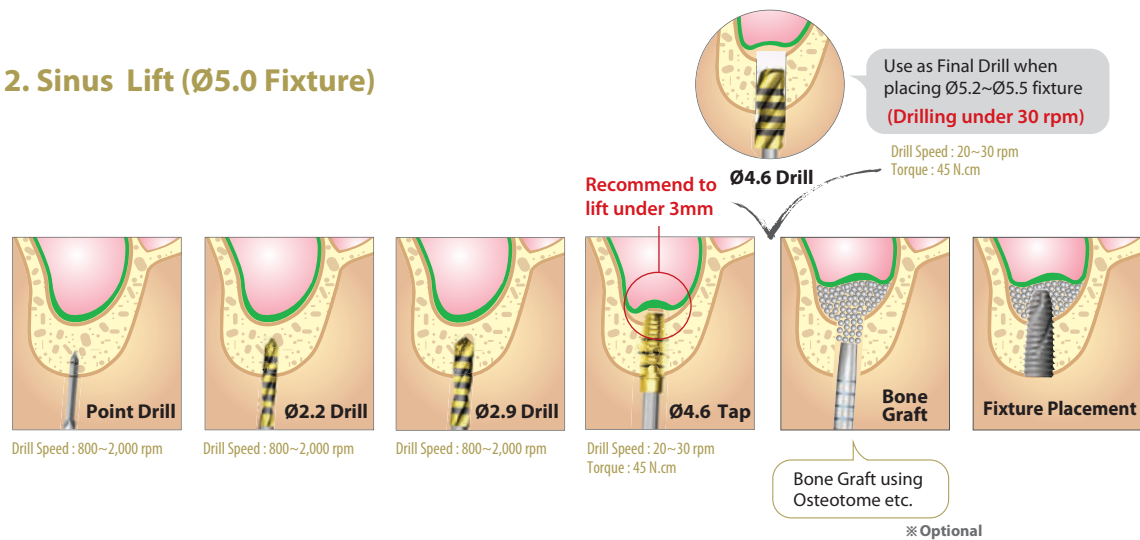
1. Sinus Lift (Ø4.0 Fixture)



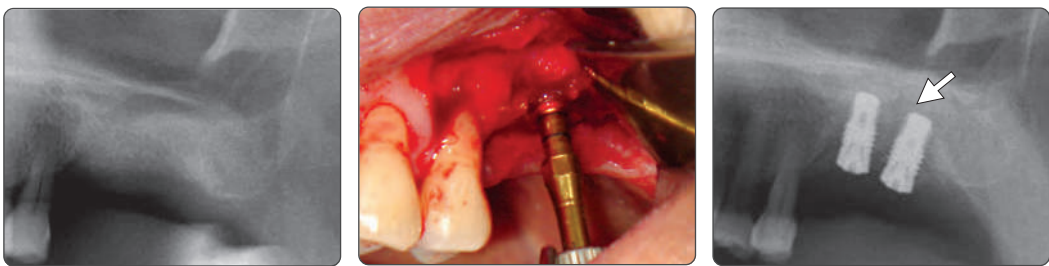
▶▶ Immediate Implantation and Sinus Lift Technique with Tap Drill (Ø4.0 Fixture)



2. Sinus Lift (Ø5.0 Fixture)

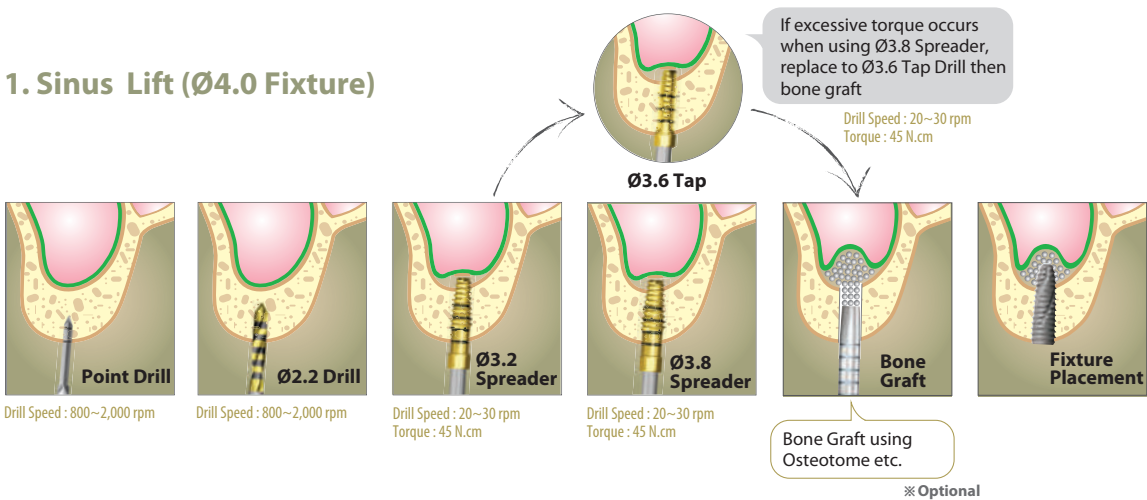


▶▶ Immediate Implantation and Sinus Lift Technique with Tap Drill (Ø5.0 Fixture)

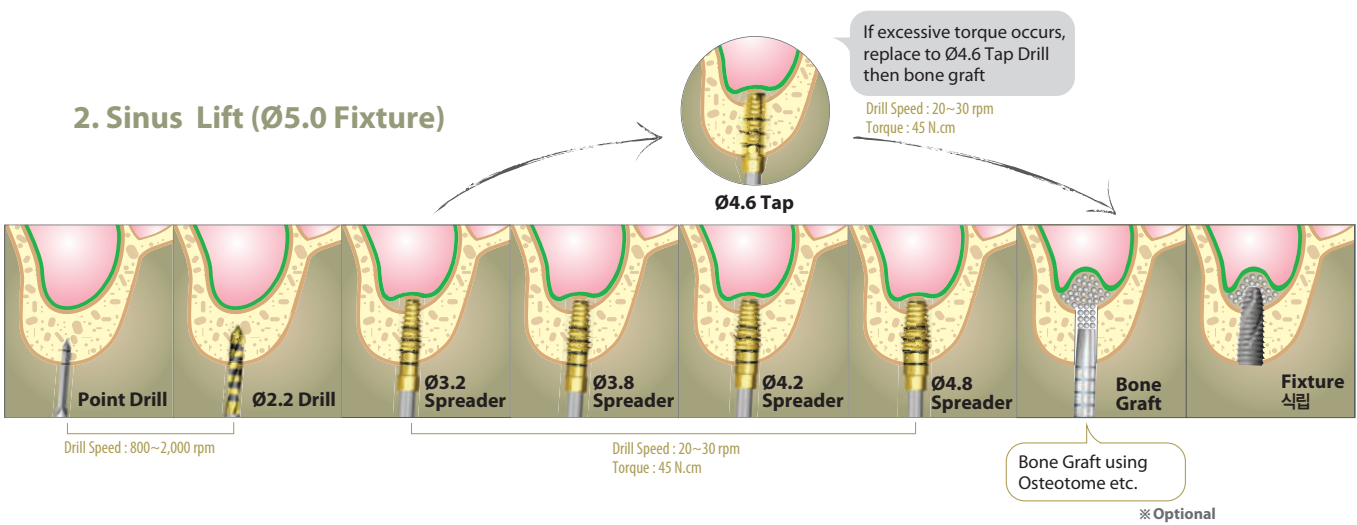


Recommend to use Sinus Lift Drill and Spreader Drill together

1. Sinus Lift (Ø4.0 Fixture)



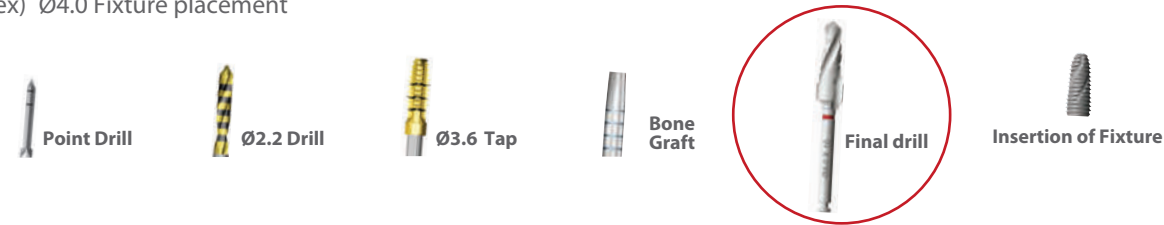
2. Sinus Lift (Ø5.0 Fixture)



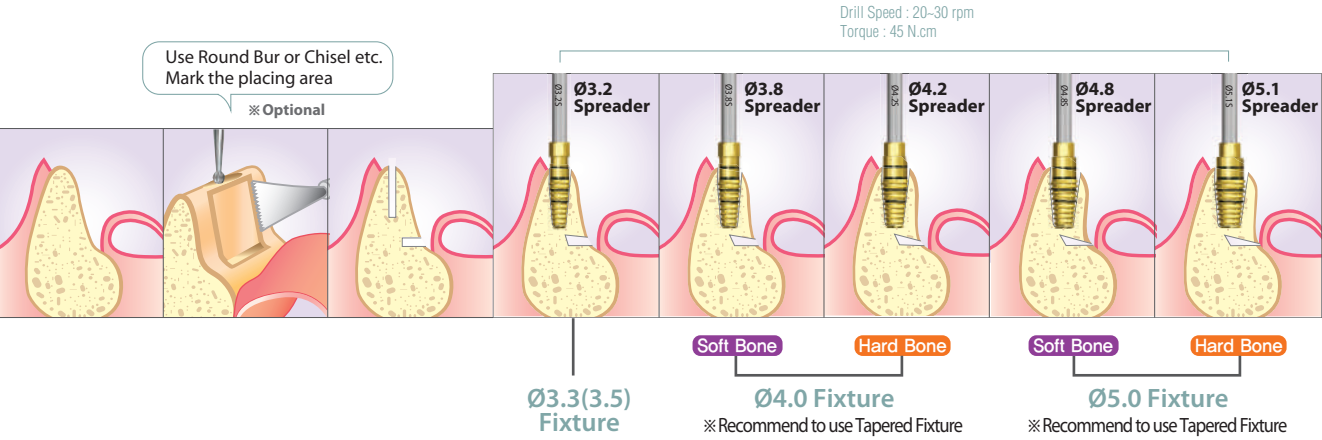
Note

- > Recommend to use Sinus Lift Drill and Spreader Drill together during the Sinus Lift operation.
- > Easily operate by using Ø3.2 Spreader rather than Point Drill.
- > Avoid to over press surrounding alveolar bone using Final Drill before fixture placement in D2.

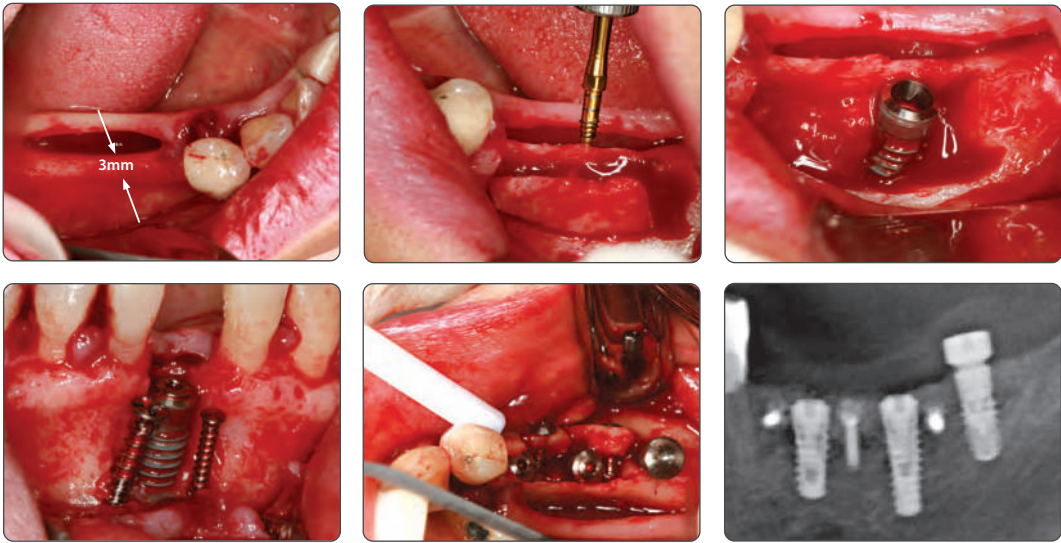
ex) Ø4.0 Fixture placement



Sequence-Spreader

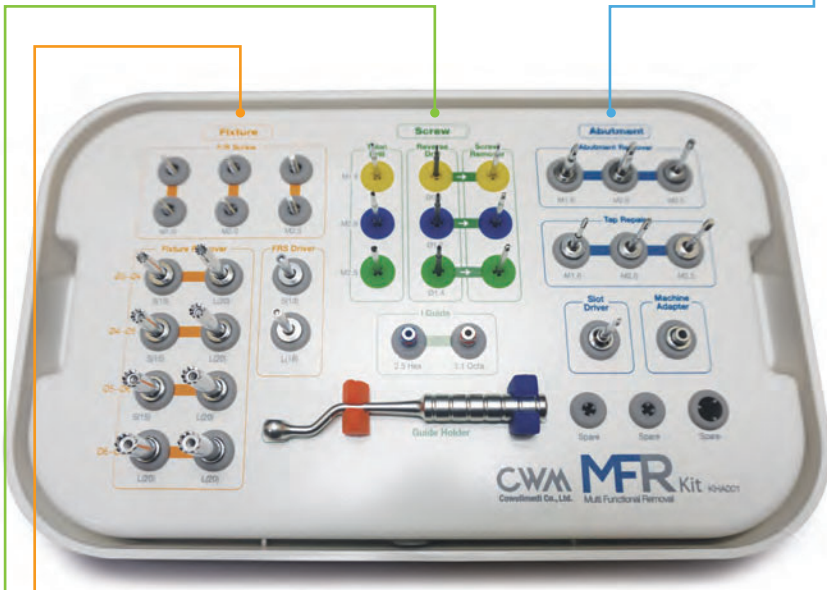


▶▶ Ridge Split and Block Bone Augmentation Technique with Spreader Drill (Ø4.0 Fixture)



Multi-Functional Removal™ Kit
MFR KIT [KHA001]

> Easy removal of fractured fixture / screw / abutment.



Abutment Removal System

Abutment Remover

Abutment Removal
KART01 / KART02
M1.6 M2.0

Abutment Removal
KART03
M2.5

Tap Repair

Tap Repair Driver
KTR16 / KTR20 / KTR25
M1.6 M2.0 M2.5

Slot Driver

Slot Driver
KHD0827

Machine Adapter

Machine Adapter
KRA13

Fixture Removal System

F/R Screw

Fixture Removal Screw
KFRS16
M1.6

Fixture Removal Screw
KFRS20
M2.0

Fixture Removal Screw
KFRS25
M2.5

Fixture Remover

Ø3~Ø4
Fixture Removal
KFR3515 / KFR3520

Ø4~Ø5
Fixture Removal
KFR4015 / KFR4020

Ø5~Ø6
Fixture Removal
KFR5015 / KFR5020

Ø6~Ø8
Fixture Removal
KFR6015 / KFR6020

FRS Driver

Fixture Removal(Sub. Narrow)
KFRSD13 / KFRSD18

Torque Wrench

KTW002

I Guide

I Guide (Sub. 2.5 Hex)
KSRIG25H

I Guide (Int. 3.1 Octa)
KSRIG31O

*Silicon O-Ring
KSRIG001

Guide Holder

KSRGH01

Talon Drill

M1.6
M2.0
M2.5

Talon Drill (Claw Drill)
KSRC08
KSRC12
KSRC14

Reverse Drill

Reverse Guide Drill
KSRGD08
KSRGD12
KSRGD14

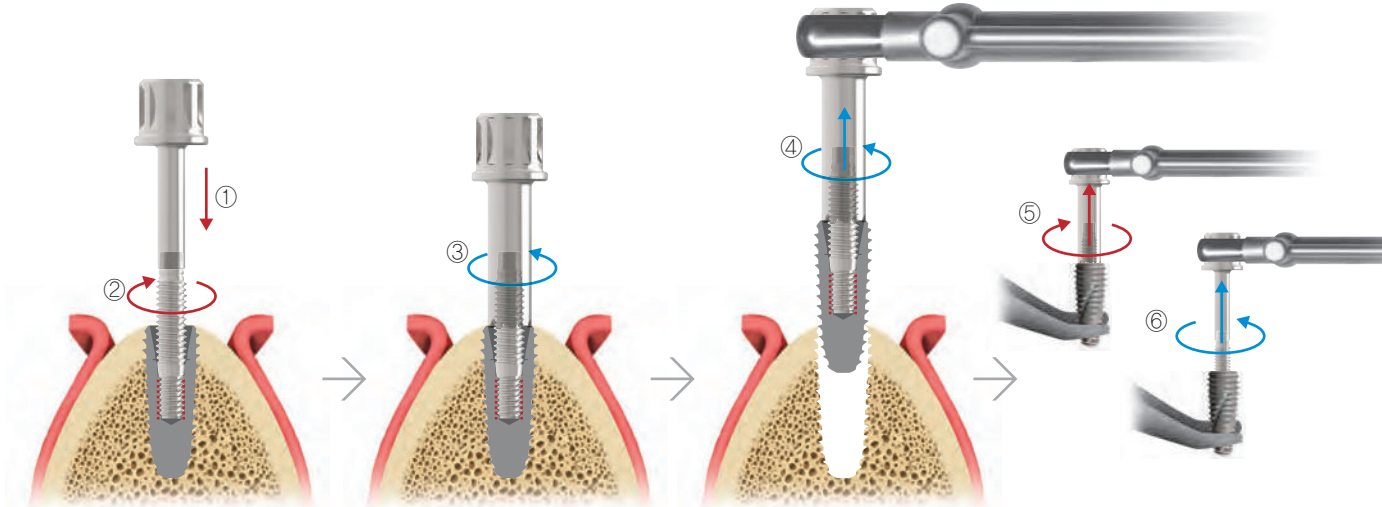
Screw Remover

Screw Remover
KSRSR08
KSRSR12
KSRSR14

MFR Kit - Components

1. Fixture Removal System

- ① Connect the F/R Screw to the FRS Driver.
- ② Connect the F/R Screw mounted FRS Driver to the fixture (clockwise 40~60 N.cm) and remove the FRS Driver.
- ③ Connect the Fixture Remover to the F/R Screw (counterclockwise).
- ④ Remove the fixture after connecting the Torque Wrench (counterclockwise, 100~400 N.cm).
- ⑤ To remove the fixture from the Fixture remover, use such device as vise to fix the Fixture Remover and connect to the Torque Wrench.
- ⑥ After connecting the FRS Driver to the F/R Screw, use the Torque Wrench to remove the F/R Screw (counterclockwise).

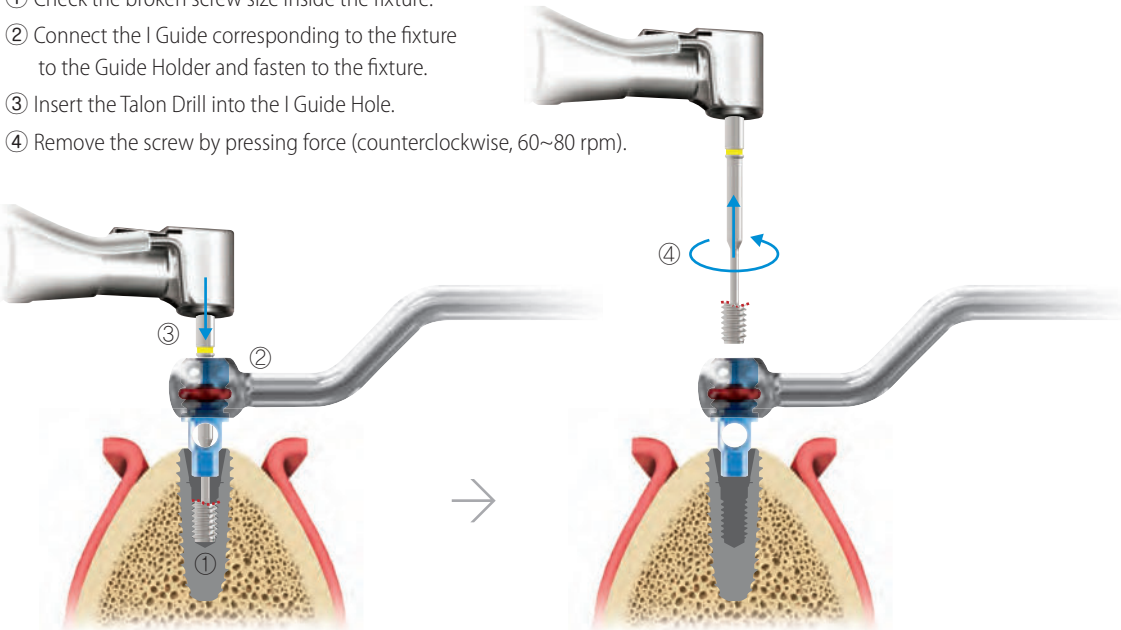


- ※ One-time use of the F/R Screw is recommended (bending or fracture may happen if more than 100 N.cm and using twice may be possible if less than 100 N.cm).
- ※ Sufficient irrigation is required when removing the fixture.
- ※ When the maximum torque is exceeded, the fixture may be bent or fractured.
- ※ If the fixture can not be removed even with maximum torque, remove the Fixture Remover & F/R Screw, remove bones around fixture using round bur and retry to remove.

2. Screw Removal System

Talon Drill

- ① Check the broken screw size inside the fixture.
- ② Connect the I Guide corresponding to the fixture to the Guide Holder and fasten to the fixture.
- ③ Insert the Talon Drill into the I Guide Hole.
- ④ Remove the screw by pressing force (counterclockwise, 60~80 rpm).

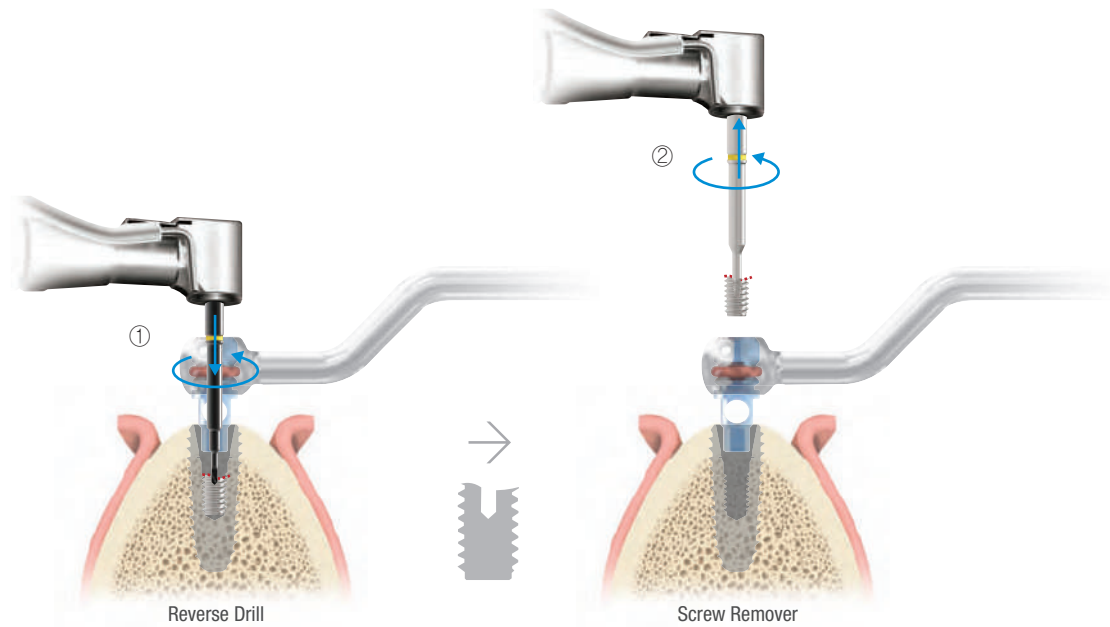


- ※ If the I Guide and fixture could not be correctly connected, the path is not correct.

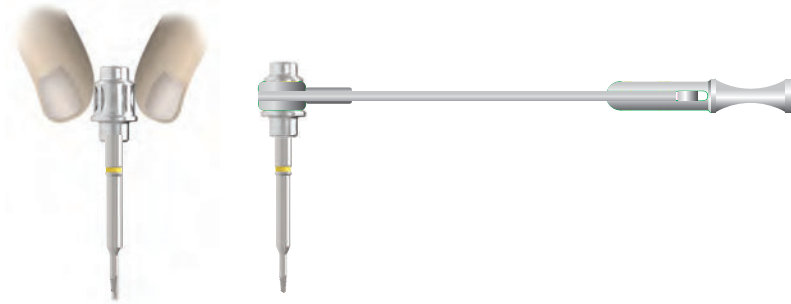
Reverse Drill & Screw Remover

If the screw could not be removed by the Talon Drill

- ① Form the hole on the fractured screw (depth 1~2mm / counterclockwise / 1,200~1,400 rpm).
- ② Use the Screw Remover according to the created drill hole, remove the screw by pressing force (counterclockwise, 80 N.cm).



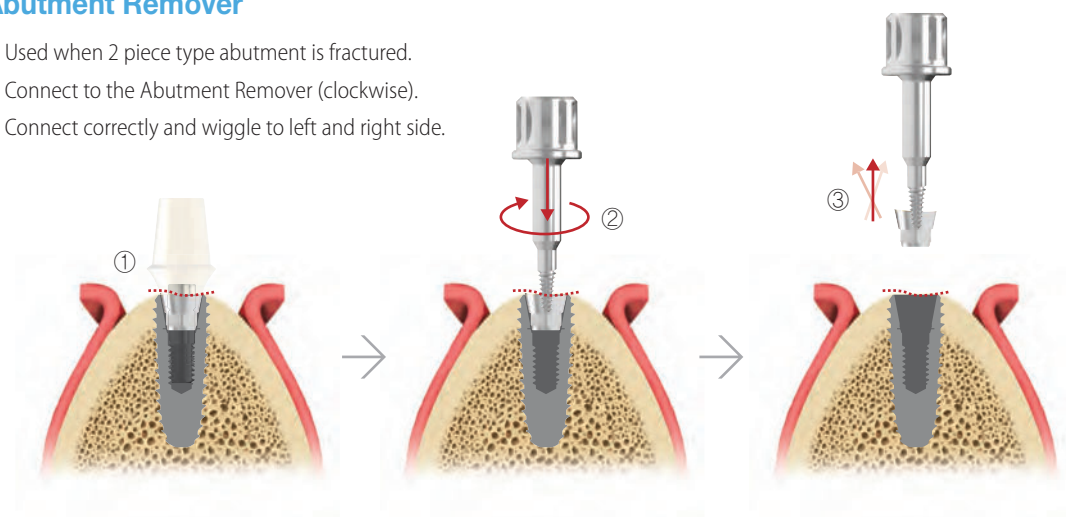
- ※ If the path of the I Guide and fixture did not match, It would be difficult to remove the screw because the drill hole is away from the center of the screw.
- ※ Reverse drilling requires removal of chips by irrigation & suction.
- ※ The fractured screw may be removed during reverse drill hole creation.
- ※ If necessary, fasten to the Machine Adapter and use the hand or Torque Wrench.



3. Abutment Removal System

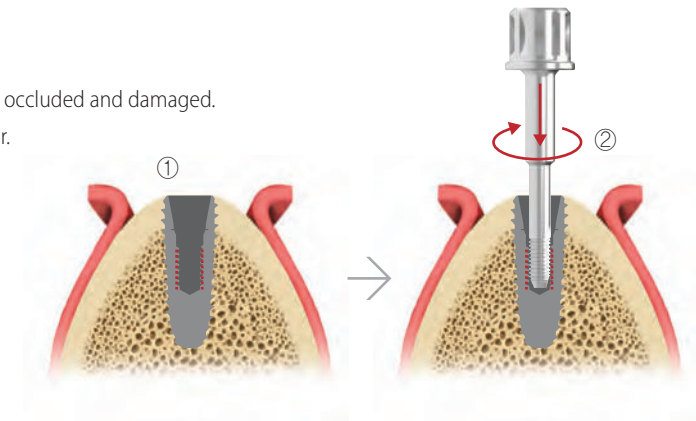
Abutment Remover

- ① Used when 2 piece type abutment is fractured.
- ② Connect to the Abutment Remover (clockwise).
- ③ Connect correctly and wiggle to left and right side.



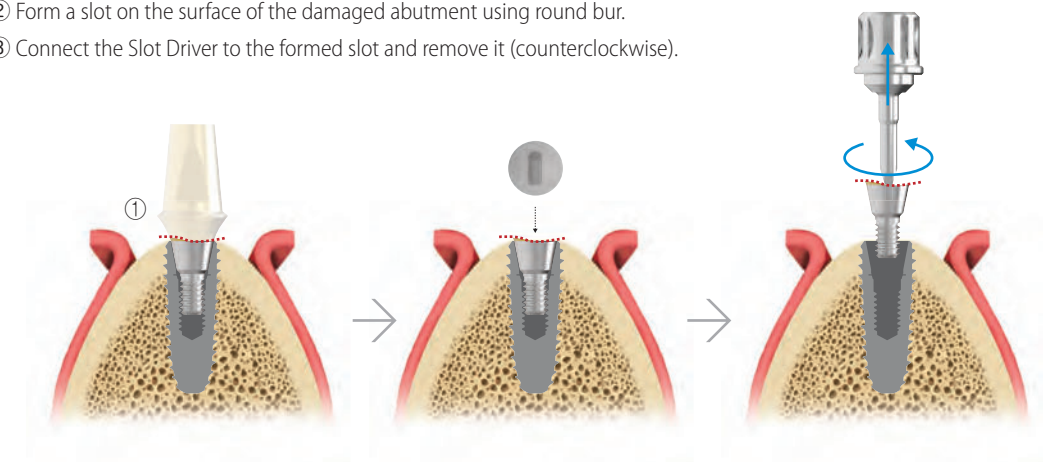
Tap Repair

- ① Used when the thread inside the fixture is occluded and damaged.
- ② Reproduce the thread using the Tap Repair.

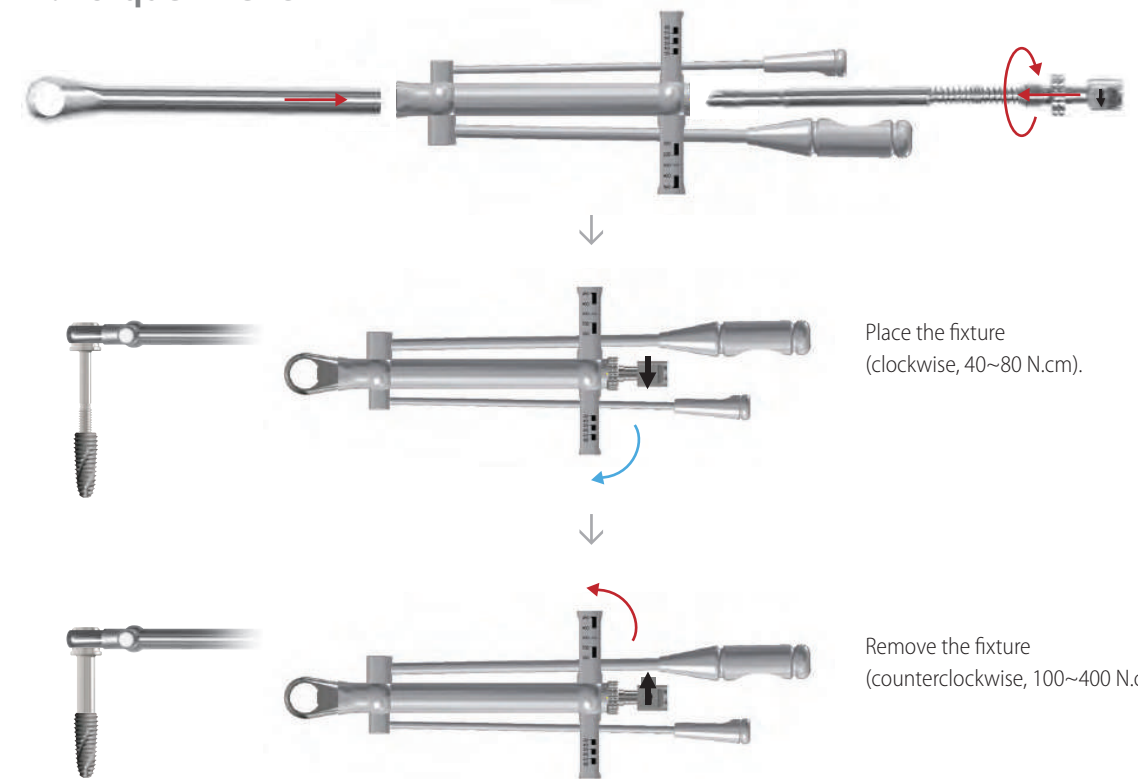


Slot Driver

- ① Used for the damaged solid abutment (1piece type), healing abutment and cover screw.
- ② Form a slot on the surface of the damaged abutment using round bur.
- ③ Connect the Slot Driver to the formed slot and remove it (counterclockwise).



4. Torque Wrench



Place the fixture
(clockwise, 40~80 N.cm).

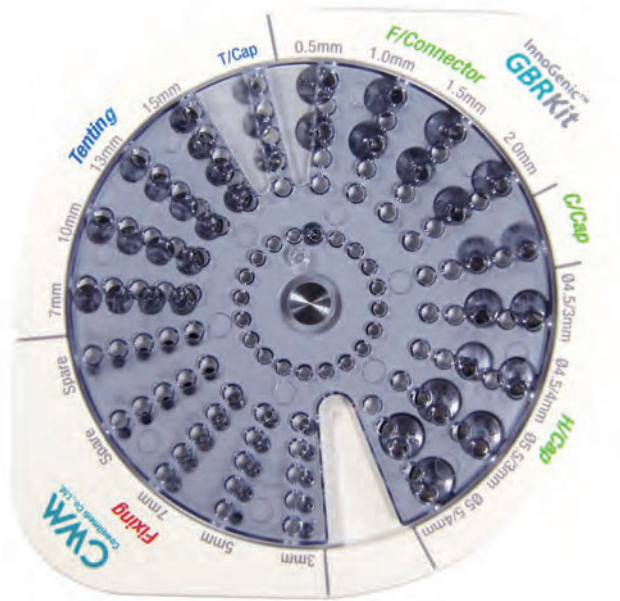
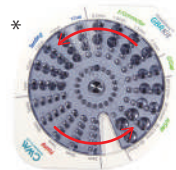
Remove the fixture
(counterclockwise, 100~400 N.cm).

- > An all-in-one solution for various types of GBR procedures.



Screw Kit KIGICS001

- Used without removing the Screw Kit from the inside of the kit tray (Remove to use if necessary only).
- Made of special material for autoclaving.
- * Rotate the upper lid to take out the selected product.



Composition

Classification	Product	Code	Quantity
Bone	Fixing Screw (Fixing)	 KIGFS03	5
		 KIGFS05	5
		 KIGFS07	5
	Tenting Screw (Tenting)	 KIGTS07	4
		 KIGTS10	4
		 KIGTS13	4
		 KIGTS15	4
	Tenting Cap (T/Cap)	 KIGTC32	3
Fixture	Fix Connector (F/Connector)	 KIGFC4505	2
		 KIGFC4510	2
		 KIGFC4515	2
		 KIGFC4520	2
	Cover Cap (C/Cap)	 KIGCC45	2
	Healing Cap (H/Cap)	 KIGHC453	2
		 KIGHC454	2
		 KIGHC553	2
		 KIGHC554	2

Empty Screw Kit KIGICS

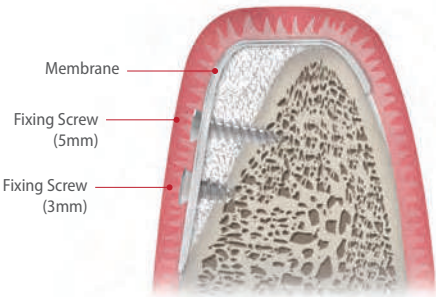
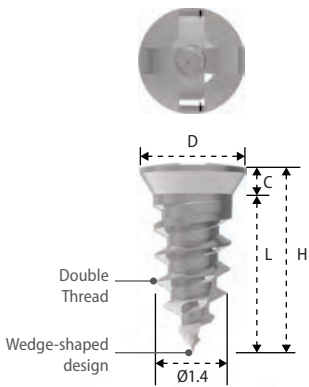


Bone

Fixing Screw (Fixing)

- Used to fix the membrane to the bone.
- Place slowly using the Fixing Driver (Machine/Handle).
- 3, 5 and 7mm length can be selected according to the bone quality.
In hard bone, use after forming a basic drill hole using the Fixing Screw Drill.
- The wedge-shaped design is advantageous for self-tapping, allowing it to be fixed without drilling in normal bone.
- The double thread shortens the placement time.

D(Ø,mm)	C(mm)	L(mm)	H(mm)	Code
2.0	0.6	3.0	3.6	KIGFS03
		5.0	5.6	KIGFS05
		7.0	7.6	KIGFS07

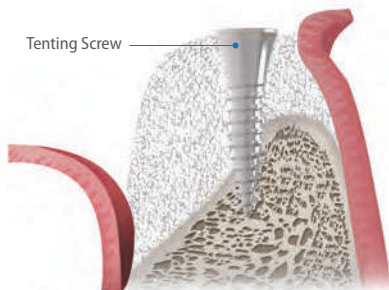
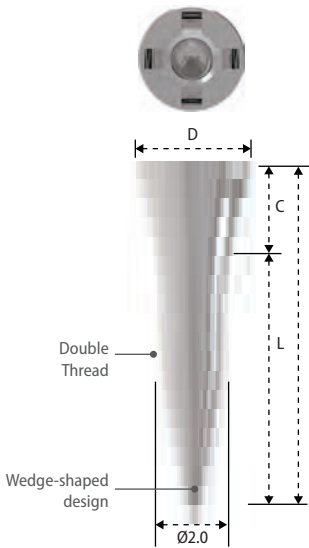


Bone

Tenting Screw (Tenting)

- Used when a large area of vertical / horizontal GBR is required.
Leave space for bone grafts.
- Place slowly using the Tenting Screw Driver (Machine/Handle).
- Recommended placement depth : Hard bone-3mm, Normal bone-5mm, Soft bone-more than 5mm.
- Initial fixation of at least 15~25 N.cm is required. Tightening more than 35 N.cm may cause fracture of the Tenting Screw so it must be fixed below 35 N.cm.
- In normal bone, it is recommended to form a hole at least 3mm deep using the Tenting Screw Drill before placing the Tenting Screw.
- The wedge-shaped design is advantageous for self tapping, allowing it to be used without drilling in normal bone.
- The double thread shortens the placement time.
- Use the Tenting Cap if necessary.

D(Ø,mm)	C(mm)	L(mm)	H(mm)	Code
3.2	2.5	7.0	9.5	KIGTS07
		10.0	12.5	KIGTS10
		13.0	15.5	KIGTS13
		15.0	17.5	KIGTS15

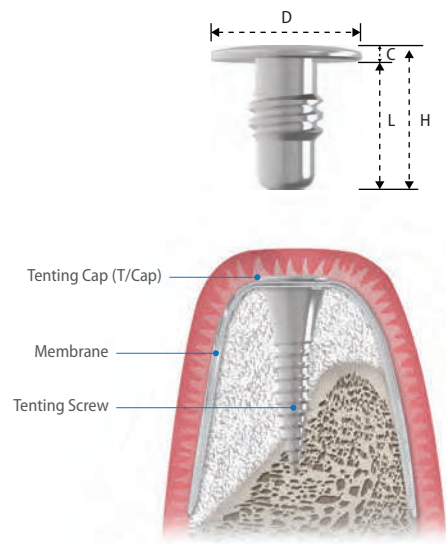


Bone

Tenting Cap (T/Cap)

- Used to fix membrane on the Tenting Screw.
- Tightened with the 0.9 Hex Driver.
- Recommended tightening torque force : 5~8 N.cm.

D(Ø,mm)	C(mm)	L(mm)	H(mm)	Code
3.2	0.3	2.8	3.1	KIGTC32

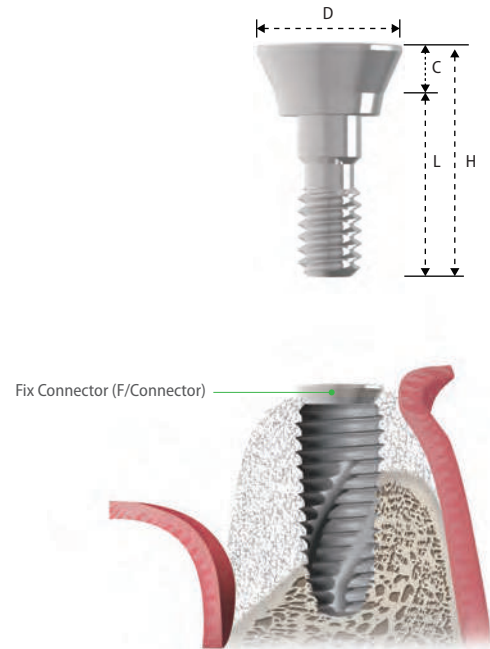


Fixture

Fix Connector (F/Connector)

- Used to fix the membrane along with the Cover Cap or Healing Cap after connecting to the fixture.
- Tightened with the 0.9 Hex Driver.
- Recommended tightening torque force: 12~15 N.cm.
- Available for the INNO Submerged, Submerged Short Fixtures and other fixtures compatible with them only.

D(Ø,mm)	C(mm)	L(mm)	H(mm)	Code
4.5	0.5	5.7	6.2	KIGFC4505
	1.0		6.7	KIGFC4510
	1.5		7.2	KIGFC4515
	2.0		7.7	KIGFC4520

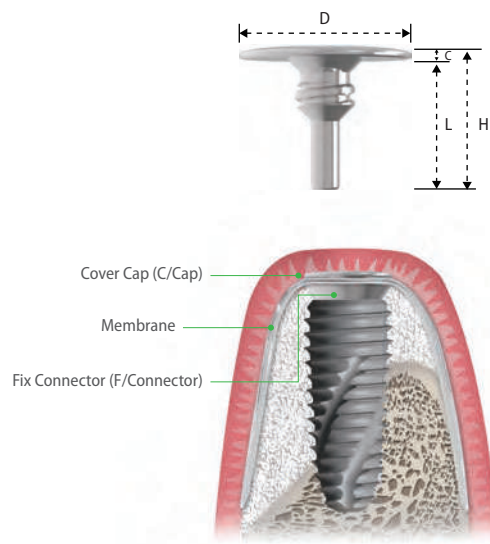


Fixture

Cover Cap (C/Cap)

- Used to fix membrane over the Fix Connector.
- For submerged surgery in case of sufficient soft tissue.
- Recommended tightened with the 0.9 Hex Driver.
- Recommended tightening torque force: 5~8 N.cm.

D(Ø,mm)	C(mm)	L(mm)	H(mm)	Code
4.5	0.3	3.4	3.7	KIGCC45

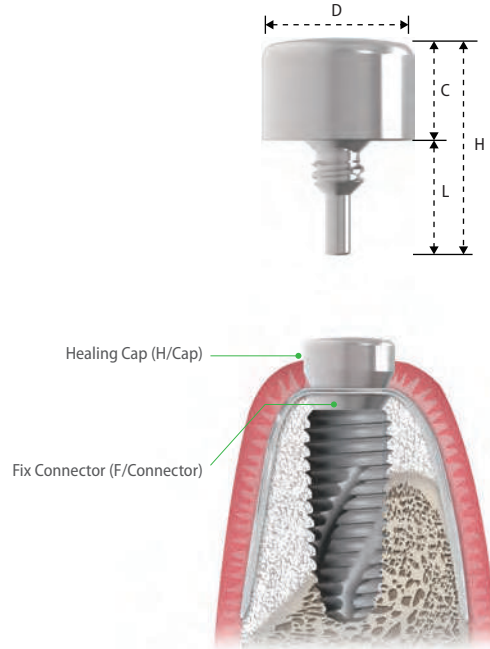


Fixture

Healing Cap (H/Cap)

- Used to fix membrane over the Fix Connector.
- For non-submerged surgery in case of insufficient soft tissue.
- Connect by using the 0.9 Hex Driver.
- Recommended tightening torque force: 5~8 N.cm.

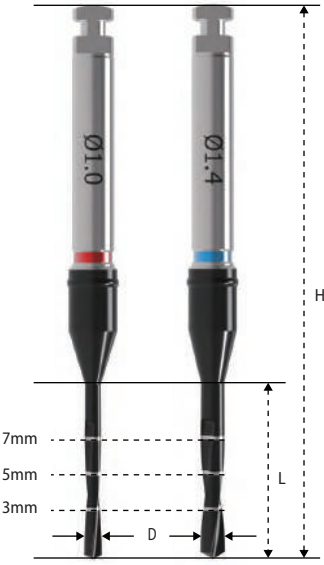
D(Ø,mm)	C(mm)	L(mm)	H(mm)	Code
4.5	3.0	3.4	6.4	KIGHC453
	4.0		7.4	KIGHC454
5.5	3.0		6.4	KIGHC553
	4.0		7.4	KIGHC554



Fixing Screw Drill & Tenting Screw Drill

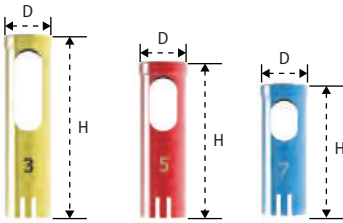
- Used to place the Fixing Screw / Tenting Screw mainly in hard bone.
- Also used to perforate cortical bone when blood supply is required.
- For normal bone, drill only 3mm deep if necessary.
- Drill before placing the Fixing Screw / Tenting Screw.
- Laser-marked at 3, 5 and 7mm long from the tip of the drill and the length can be controllable using the Drill Stoppers.
- Color-banded for distinction (Red : Fixing Screw Drill, Blue : Tenting Screw Drill).
- Recommended drilling speed : 1,000~1,200 rpm.

Classification	D(Ø,mm)	L(mm)	H(mm)	Code
Fixing Screw Drill	1.0	10	31.5	KFSD10
Tenting Screw Drill	1.4			KTSD14



Drill Stopper

- Used by connecting to the Fixing Screw Drill / Tenting Screw Drill.
- 3mm : Yellow, 5mm : Red, 7mm : Blue



Classification	D(Ø,mm)	H(mm)	Code
3mm	3.5	13.5	KIGDS03
5mm		11.5	KIGDS05
7mm		9.5	KIGDS07

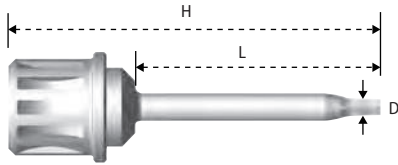


0.9 Hex Driver (Ratchet)

- Used to install the Tenting Cap, Fix Connector, Cover Cap and Healing Cap.

D(Ø,mm)	L(mm)	H(mm)	Code
1.2	8	15	*KHD0915
	14	21	KHD0921
	20	27	*KHD0927

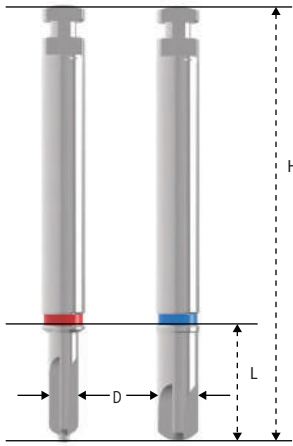
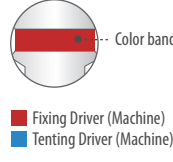
* Optional



Fixing Screw Driver & Tenting Screw Driver (Machine)

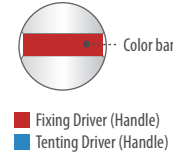
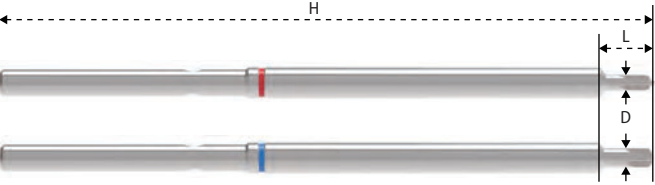
- Used to place the Fixing Screw / Tenting Screw using Contra-angle.
- Color-banded for distinction (Red : Fixing Screw Driver, Blue : Tenting Screw Driver).

Classification	D(Ø,mm)	L(mm)	H(mm)	Code
Fixing Screw Driver	1.6	6.0	24.0	KFSMD24
Tenting Screw Driver	2.2			KTSM24



Fixing Screw Driver & Tenting Screw Driver (Handle)

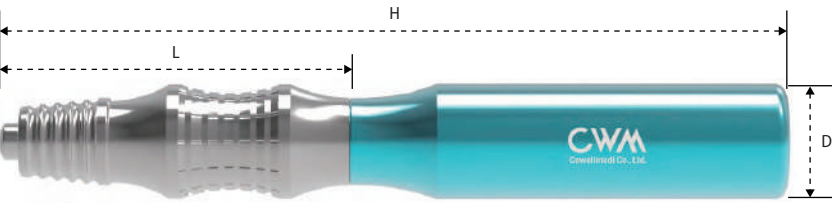
- Used to place the Fixing Screw / Tenting Screw using the Driver Handle.
- Color-banded for distinction (Red : Fixing Screw Driver, Blue : Tenting Screw Driver).



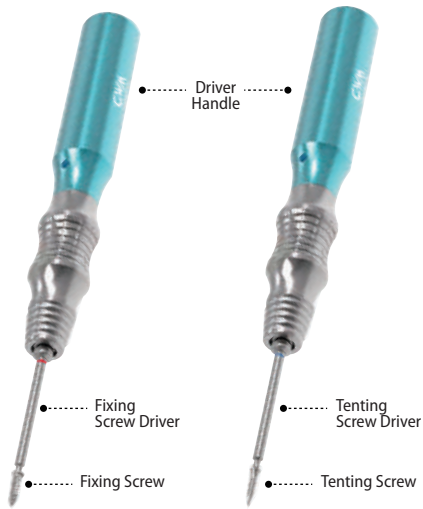
Classification	D(Ø,mm)	L(mm)	H(mm)	Code
Fixing Screw Driver	1.6	6.0	70.0	KFSHD70
Tenting Screw Driver	2.2			KTSHD70

Driver Handle

- Used to place and remove the Fixing Screw / Tenting Screw by connecting the Driver Handle.

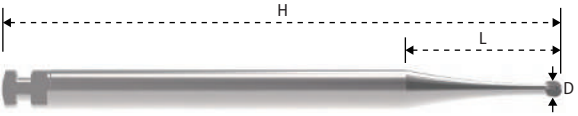


D(Ø,mm)	L(mm)	H(mm)	Code
19.8	75	135.0	KIGH

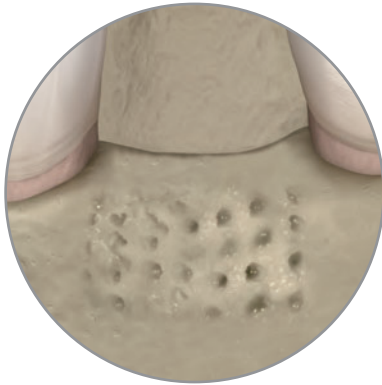


Round Bur

- Used to perforate cortical bone when blood supply is required.
- Recommended drilling speed : 1,200~1,500 rpm.

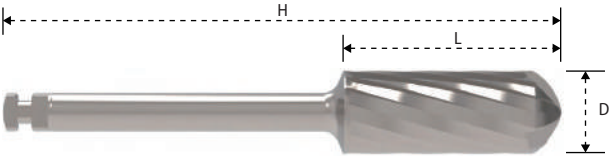


D(Ø,mm)	L(mm)	H(mm)	Code
1.0	9.5	34.0	KIGRB10

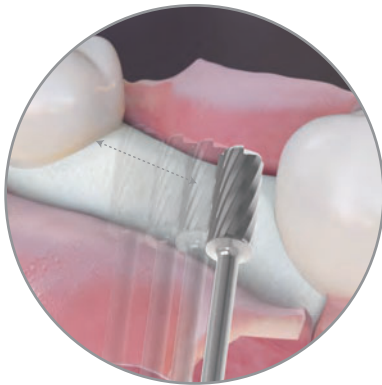


Bone Trimmer

- Used to perform osteoplasty on the outer wall of remaining bone all during GBR and to flat the bone surface for improving the fit of membrane.
- Used to remove remaining granulation tissue of bone defect part (use instead of surgical curette).
- Recommended drilling speed : 1,200~1,500 rpm.



D(Ø,mm)	L(mm)	H(mm)	Code
5.0	13	34.0	KIGBT50

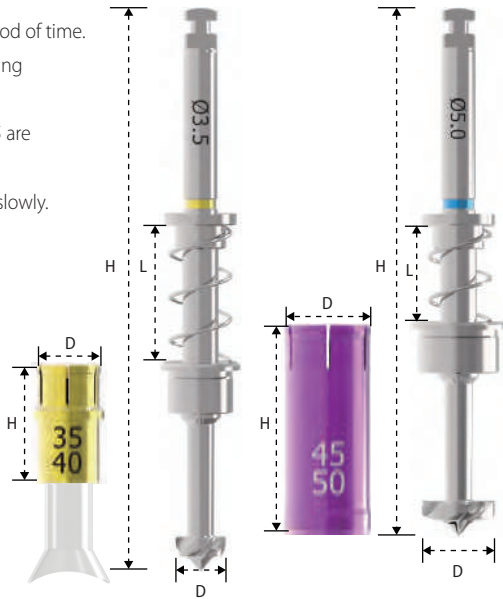


Harvesting Drill & Drill Stopper

- Drill for convenient harvesting of autogenous bone in the form of bone chip in a short period of time.
- The Silicon Shield of the Ø3.5 Harvesting Drill makes sure with no bone chip loss while drilling (Bone chip can be collected at implant site).
- 6 Silicon Shields are included in the Kit (1 is assembled with the Ø3.5 Harvesting Drill and 5 are packed in the lower tray).
- The maximum drilling depth of the Ø3.5 Harvesting Drill is 12mm, so it needs to be drilled slowly.
- Remove while rotating the drill.
- Recommended drilling speed : 300~500 rpm.

D(Ø,mm)	L(mm)	H(mm)	Code
3.5	9.5	39.2	KBH35
5.0	6.5	36.5	KBH50

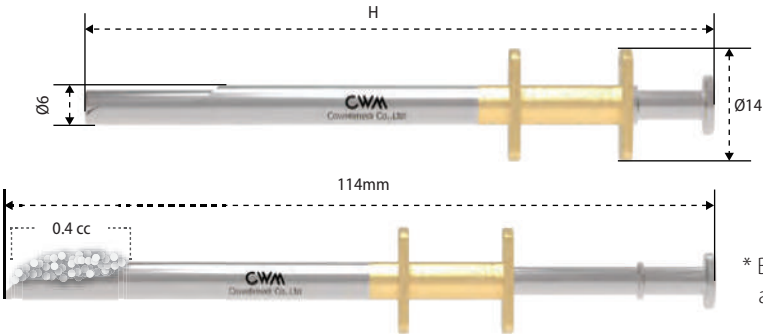
Drill Stopper	D(Ø,mm)	H(mm)	Code
	5.6	9	KBHD3540
	6	14.3	KBHD4550



* For the details of InnoGenic™ Autobone Harvester, refer the pages 236~240.

Bone Carrier

- Narrow tip is beneficially handled in most of the bone graft techniques.
- Bone graft particles can be accurately and safely injected without contamination.
- rhBMP-2 can be easily coated to the implant due to circular groove of tip.
- Bone graft particles and rhBMP-2 solution can be well mixed on the circular groove.



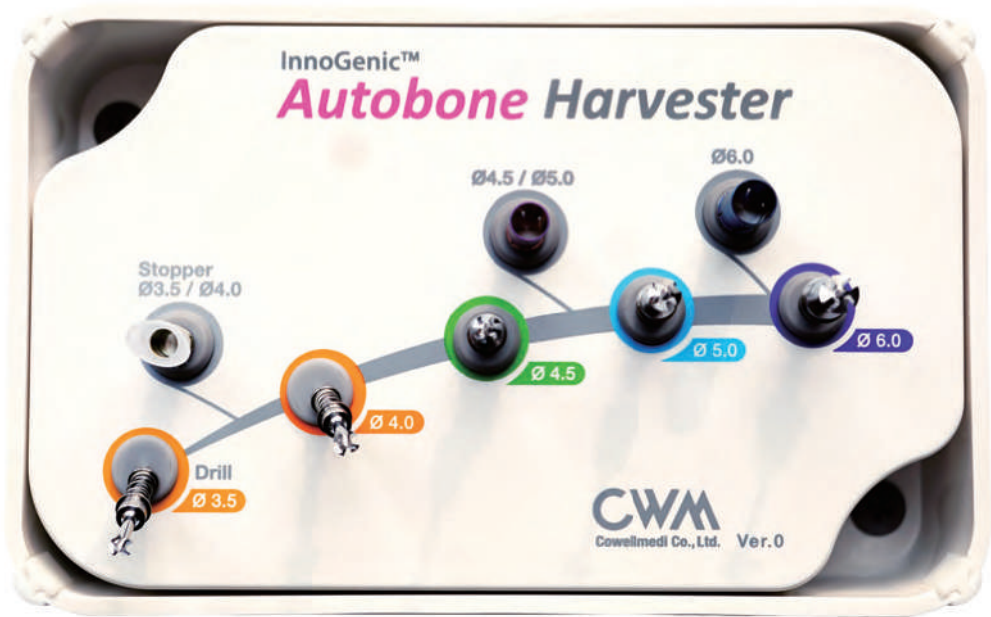
Bone Carrier	D(Ø,mm)	H(mm)	Code
	6	94	KBBC01

* Bone Carrier length is 94mm and the total length after stretching is 114mm.



InnoGenic™ Autobone Harvester [KIAH001]

> Maximize Your Return On Minimal Investment, Guaranteed!



Harvesting Drill



Drill Stopper



Silicon Shield



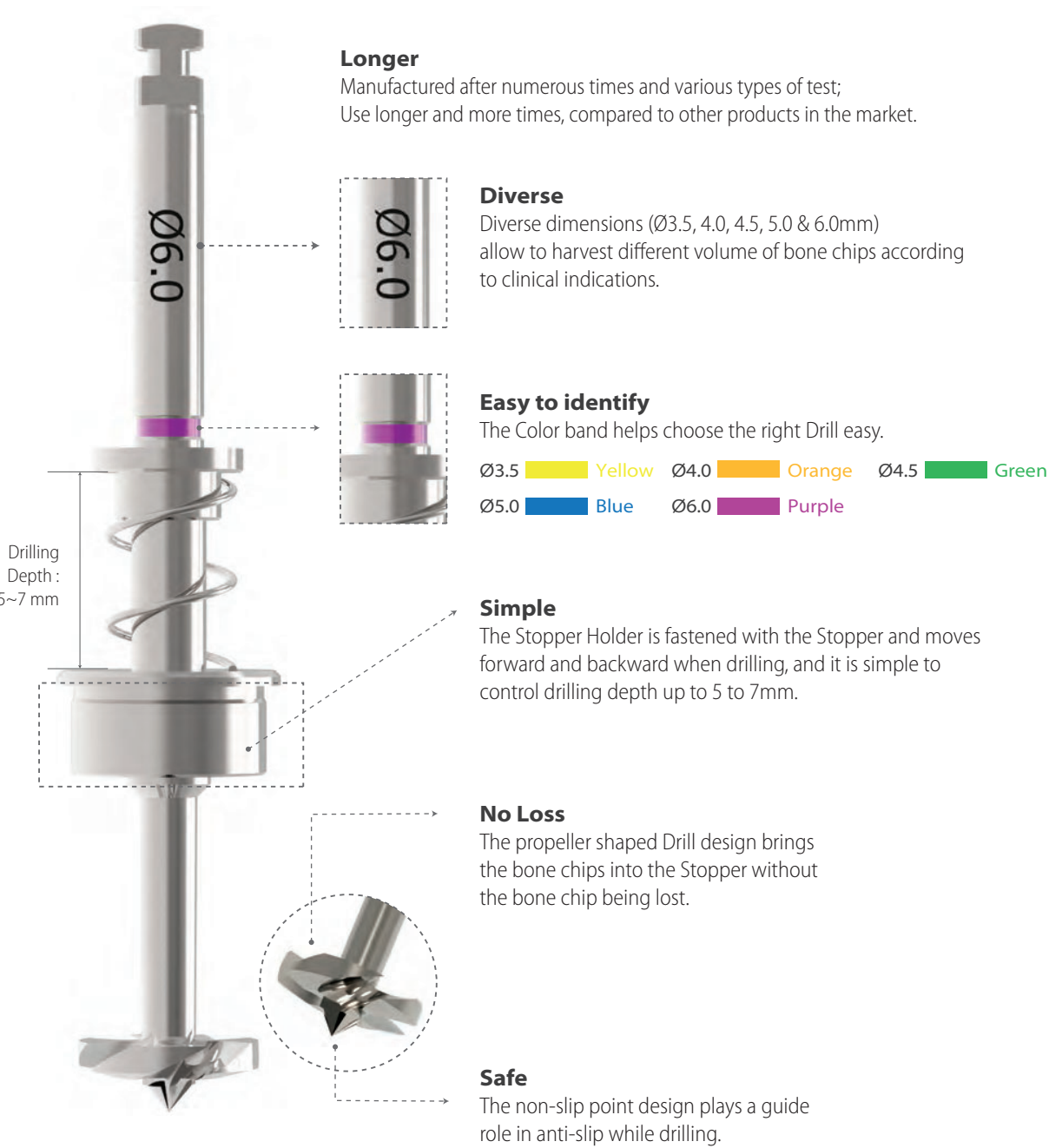
* 1EA assembled with Drill.
5EA packed in the lower tray.

Key Concepts

Maximize your return on minimal investment

The key concept of the Autobone Harvester Plus to harvest a large amount of the autogenous bone chips from the implant site that can be wasted into the suction during implant drilling procedure.

Features: Drill



Features: Stopper & Silicon Shield

For Ø3.5 & 4.0 Drill

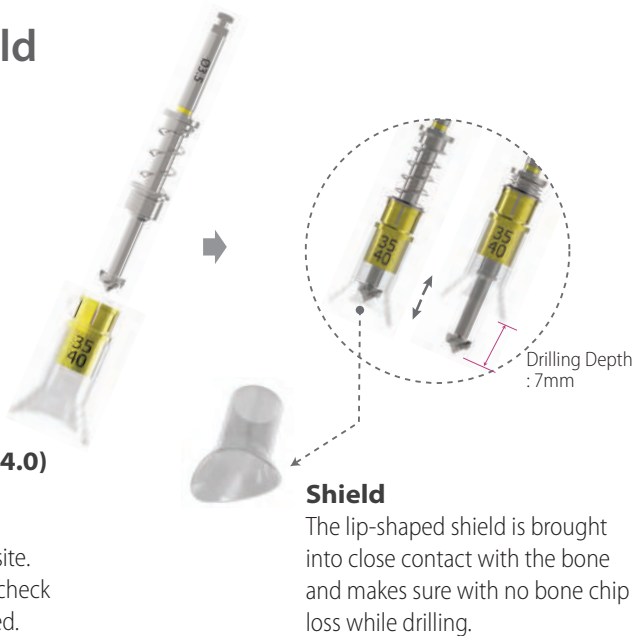


Stopper
Used by fastening to the Stopper Holder of Ø3.5 & 4.0 Drill.



Silicon Shield (*Exclusive for Ø3.5 & 4.0)

- Used by fastening to Ø3.5 & 4.0 stopper.
- Prevents deviation of bone chips.
- Allows bone chip harvesting from the implant site.
- Reusable transparent silicon material allows to check drilling position and bone chips being harvested.

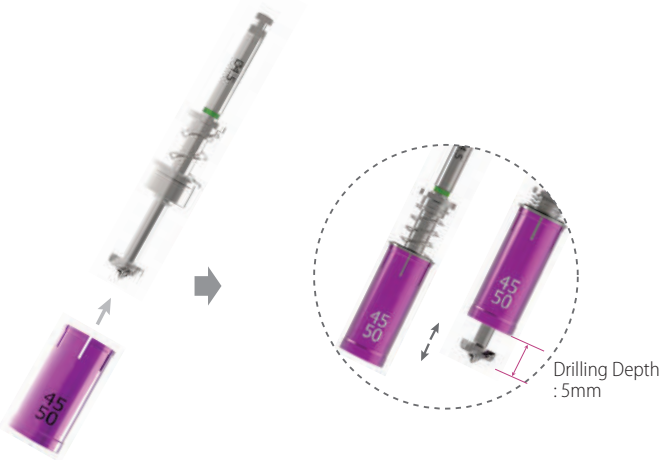


Shield
The lip-shaped shield is brought into close contact with the bone and makes sure with no bone chip loss while drilling.

For Ø4.5 & 5.0 Drill



Stopper
Used by fastening to the Stopper Holder of Ø4.5 & 5.0 Drill.

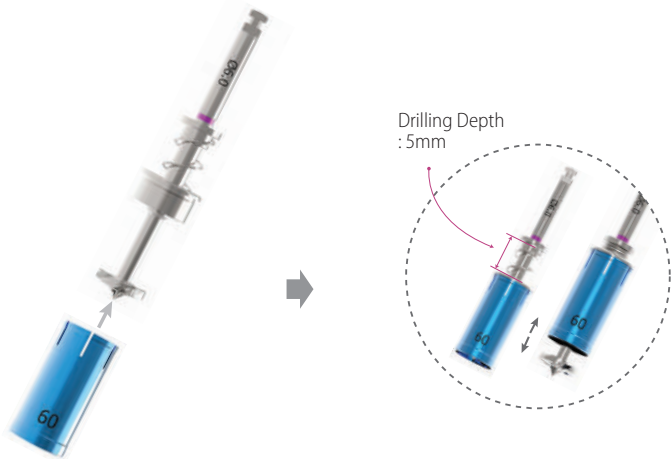


Drilling Depth : 5mm

For 6.0 Drill



Stopper
Used by fastening to the Stopper Holder of Ø6.0 Drill.



Drilling Depth : 5mm

Harvesting sequence :
Implant Site using Ø3.5/4.0
Harvesting Drill with the Silicon Shield



• Point drill to mark harvesting and implant site.



• Select Ø3.5/4.0 Drill and insert the Stopper into the selected Drill. And put the Shield on the Ø3.5&4.0 Stopper.



• Drill at 300 to 500 rpm with irrigation and harvest bone chips.



• Disassemble the Silicon Shield, the Stopper and collect the bone chips for bone grafting.



• Use Final Drill (equal to or over Ø3.5/4.0) according to the drilling protocol of the manufacturer and treatment planning.



• Place the implant.

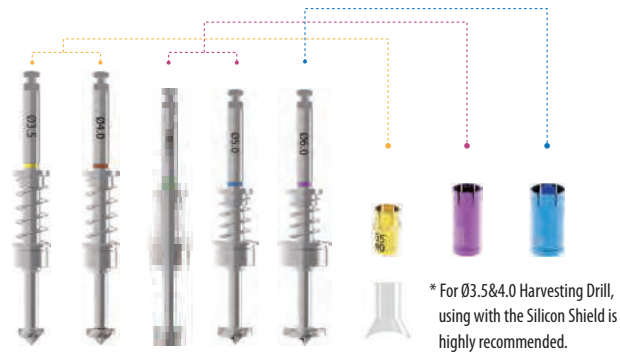


• Apply the harvested bone chips on the site.

Harvesting sequence :

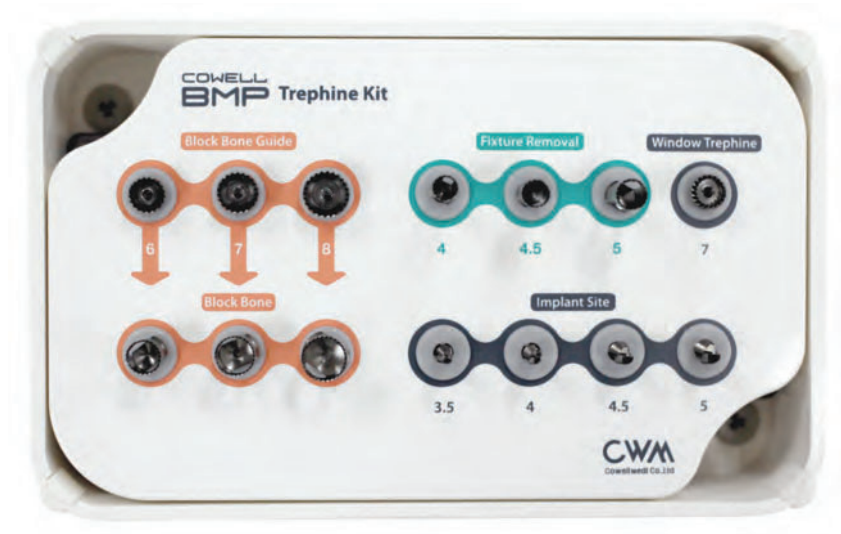
Buccal Bone Harvesting
using Ø3.5/4.0/4.5/5.0/6.0
Harvesting Drill

Select the drill according to its
diameter and clinical indications.



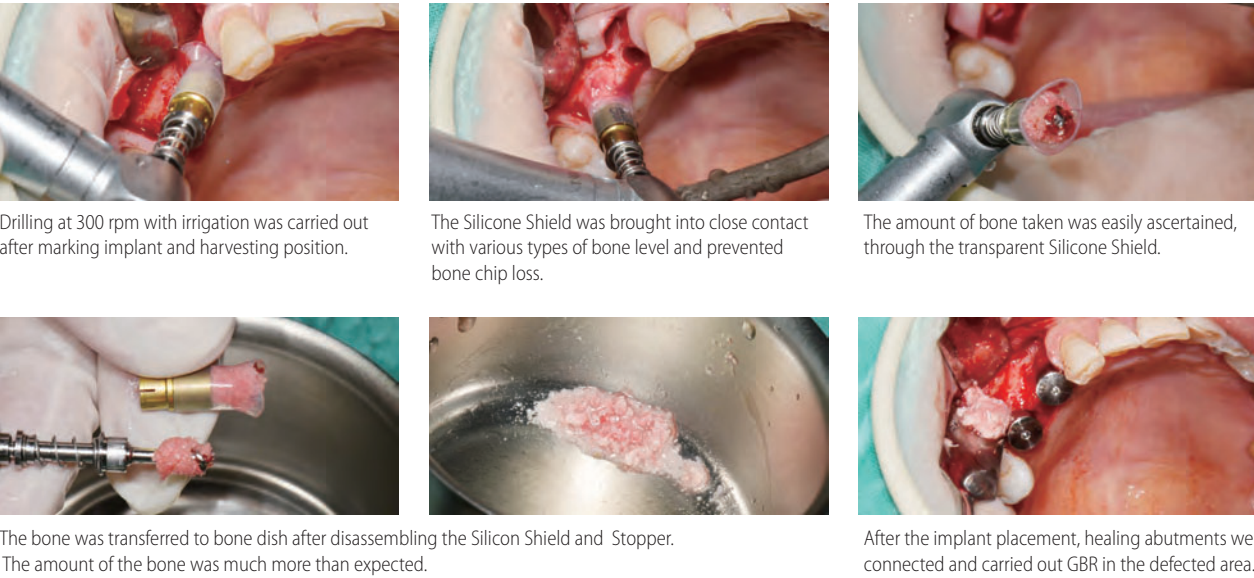
COWELL® BMP Trephine Kit [KBT001]

> An easy-to-use kit with drills and instruments for block-type bone collection, failed fixture removal, crestal & window approach for sinus lift and bone chip extraction.



A Clinical Case using Ø3.5/4.0 Harvesting Drill

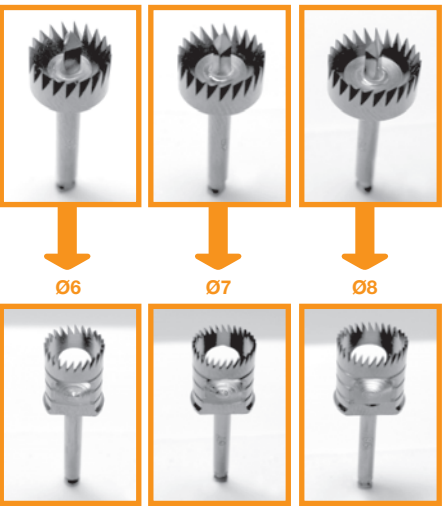
by Dr. Soohong Kim, DDS, Ph.D



* 2 Step Harvesting : Drilling to 7mm is recommended after transferring bone chips to bowl since the Stopper & Silicon Shield are fully filled with bone chips while 4mm drilling.

Trephine Drill I: Block Bone Extraction

Guide & Block Bone Trephine Drill



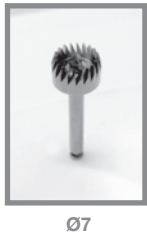
Trephine Drill II:
Failed Fixture Removal

Fixture Removal



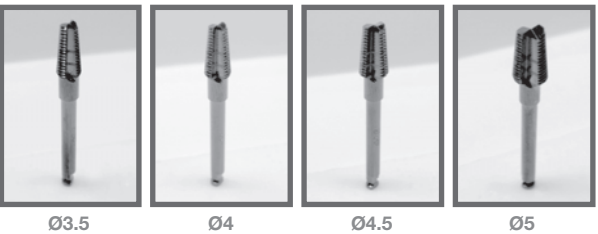
Trephine Drill III:
Window Opening for
Lateral Window Approach

Window Trephine



Implant Site Drill : Sinus Lift & Bone Chip Extraction
Prior to Implant Placement

Implant Site



Product	Diameter	Code
Block Bone Guide Drill	Ø 6.0 (Inner)	KBGT60
	Ø 7.0 (Inner)	KBGT70
	Ø 8.0 (Inner)	KBGT80
Block Bone Trephine Drill	Ø 6.0 (Inner)	KBT60
	Ø 7.0 (Inner)	KBT70
	Ø 8.0 (Inner)	KBT80
Fixture Removal Trephine Drill	Ø 4.2 (Inner)	KFRT40
	Ø 4.7 (Inner)	KFRT45
	Ø 5.2 (Inner)	KFRT50
Window Trephine Drill	Ø 7.0 (Outer)	KWTT60
Implant Site Drill	Ø 3.5 (Fixture)	KTIS35
	Ø 4.0 (Fixture)	KTIS40
	Ø 4.5 (Fixture)	KTIS45
	Ø 5.0 (Fixture)	KTIS50

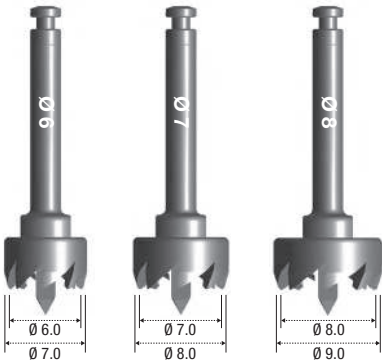
Trephine Drill I

Block Bone Extraction

This Drill allows the collection of block-type autogenous bone with a required size in the case of regenerating a wide bone defect and severe bone resorption.

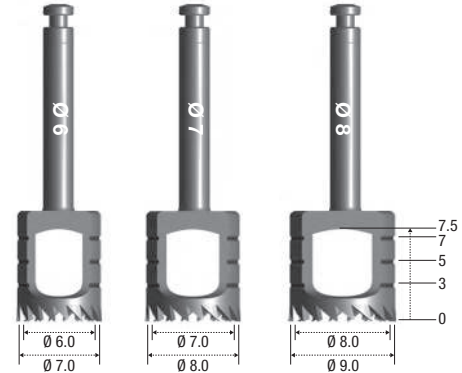
Block Bone Guide

- > This guide helps the target block bone to be accurately positioned and the Trephine Drill to be stably engaged with the bone.
- > Desired rpm: 800~1,000 rpm.



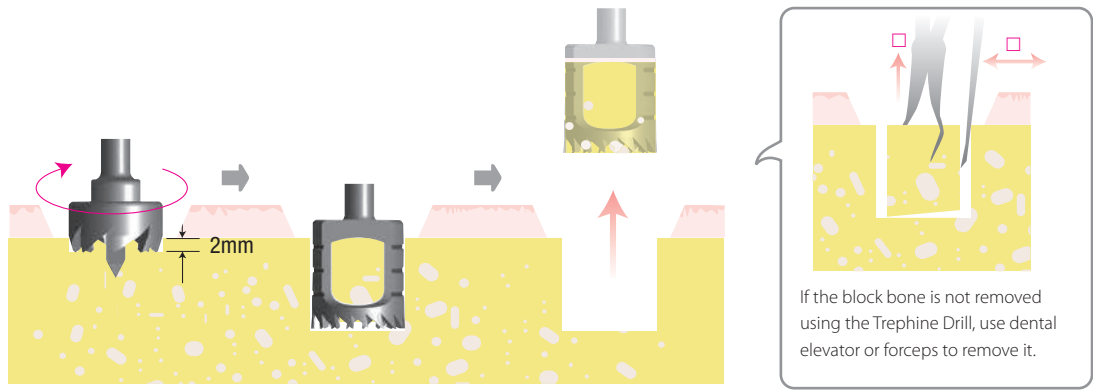
Block Bone Trephine Drill

- > This drill is engaged with the bone groove with the help of the block bone guide to collect the block bone with a desired size.
- > Desired rpm: 800~1,000 rpm.



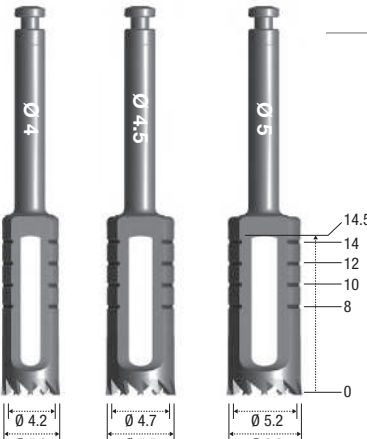
Diameter	Ø 6.0 (Inner)	Ø 7.0 (Inner)	Ø 8.0 (Inner)
	KBGT60	KBGT70	KBGT80

Diameter	Ø 6.0 (Inner)	Ø 7.0 (Inner)	Ø 8.0 (Inner)
	KBT60	KBT70	KBT80



Trephine Drill II

Failed Fixture Removal



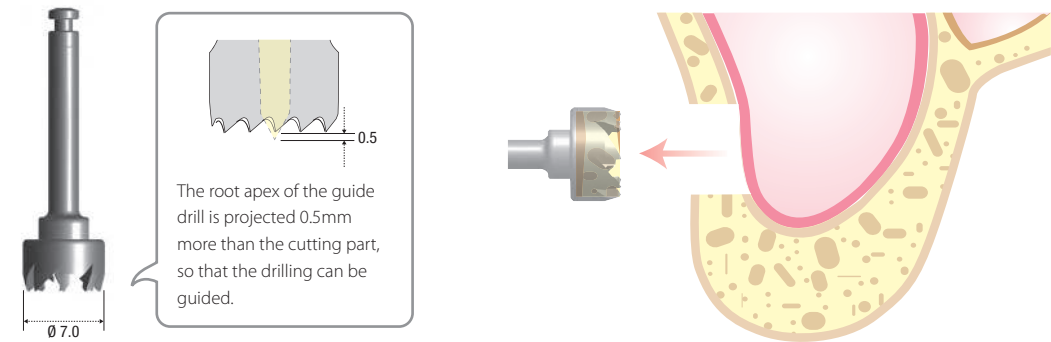
Diameter	Ø 4.2 (Inner)	Ø 4.7 (Inner)	Ø 5.2 (Inner)
	KFRT40	KFRT45	KFRT50



Trephine Drill III

Window Opening for Lateral Window Approach

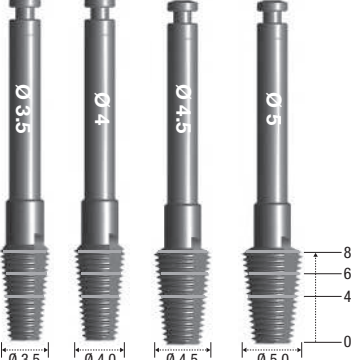
Diameter	Ø 7.0 (Outer)
	KWTT60



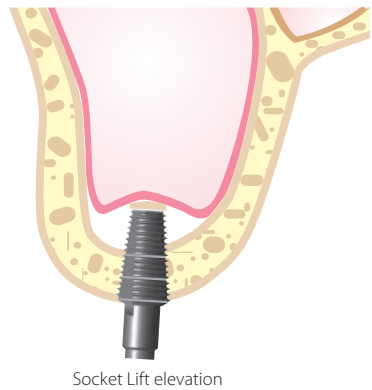
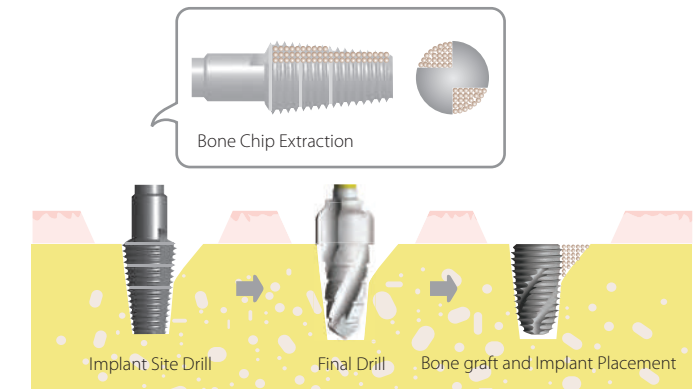
Implant Site Drill

Sinus Lift & Bone Chip Extraction Prior to Implant Placement

Diameter	Ø 3.5	Ø 4.0	Ø 4.5	Ø 5.0
	KTIS35	KTIS40	KTIS45	KTIS50

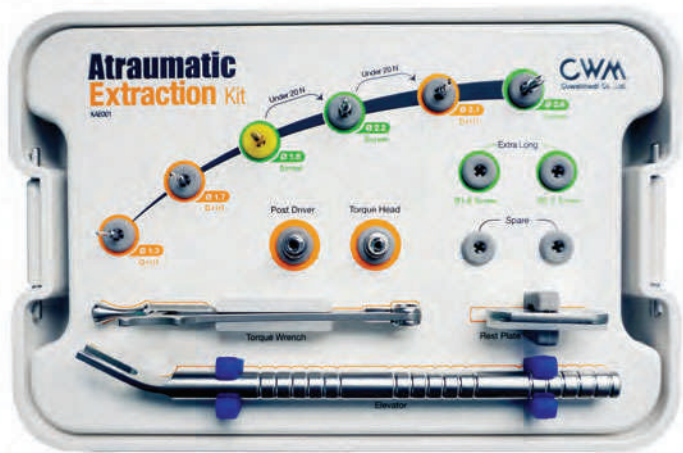


- > Used before the Final Drill is used (simplified drilling sequence).
- > Advantageous for securing autogenous bone.
- > Less rpm drilling leads to low bone heating.
- > Also used as a sinus lift tool (socket lift elevation).
- > Desired rpm : 20~30 rpm.



Atraumatic Extraction Kit [KAE001]

> Used for the immediate and effortless extraction of the root of the tooth with simple procedures.



(1) Diversity

A root extraction can be done regardless of whether residual amount of root is large or small.

(2) Safety

A root extraction without the risk of damaging adjacent teeth is possible using the Rest Plate, Elevator etc.

(3) Convenience

A very simple and convenient root extraction is possible, compared to the existing extraction method.

(4) Reduced Procedure Time

The procedure time is reduced due to the simple procedure.

Composition

Extraction Drill & Screw



Elevator



Rest Plate



Torque Wrench



Post Driver



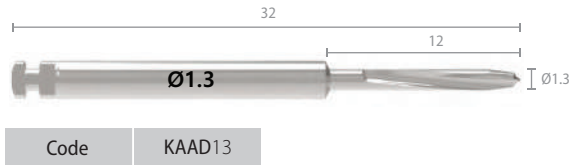
Torque Head



1. Extraction Drill

> The Extraction Drill is composed of three types of Drills (Ø1.3 / Ø1.7 / Ø2.1) that can be selected according to the case.

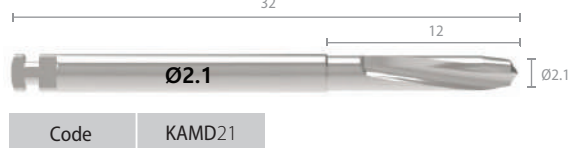
Ø1.3 Drill



Ø1.7 Drill



Ø2.1 Drill

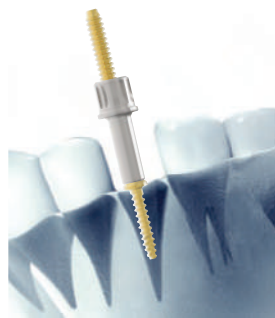
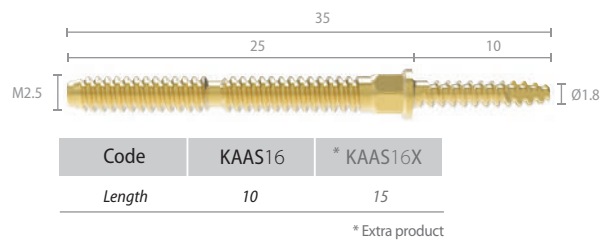


2. Extraction Screw

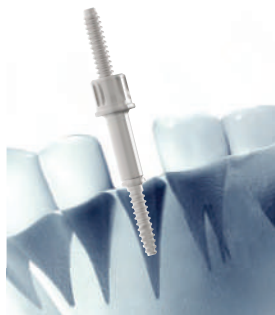
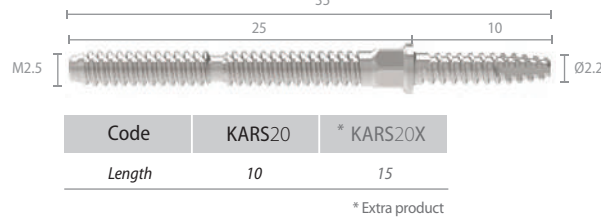
> The Extraction Screw is fastened into the hole that was created by the Extraction Drill via the Screw method, and it is stably fixed to the remaining root. It is composed of the Ø1.8 / Ø2.2 / Ø2.6 Screws that can be selected according to the Extraction Drill.

> The Ø1.8 Screw is used for vital root of which canal is not treated, after using the Ø1.7 Drill.

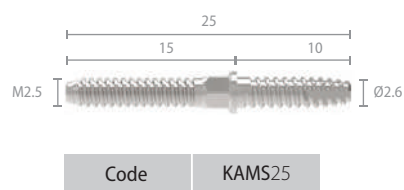
Ø1.8 Screw



Ø2.2 Screw

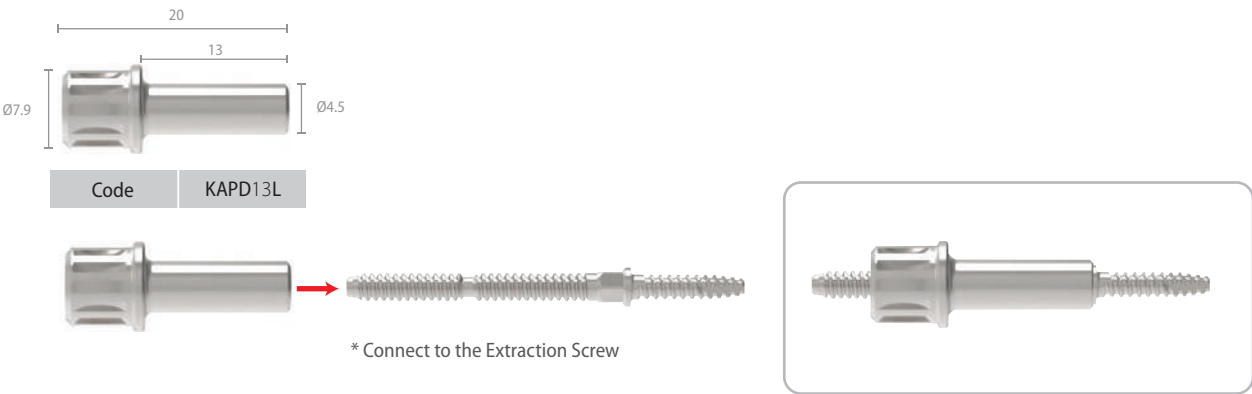


Ø2.6 Screw



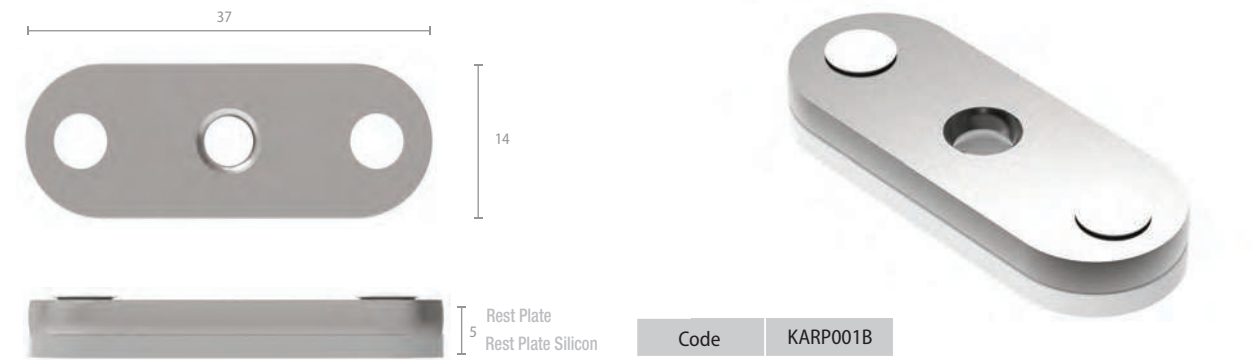
3. Post Driver

> After connecting the Post Driver to the Extraction Screw, turn the Torque Wrench in a clockwise direction in order to fix it to the hole that was created by the Extraction Drill (recommended torque : 30 N.cm or more).



4. Rest Plate

> The Rest Plate is connected between the Extraction Screw and the Torque Head. It protects the part with silicon that comes into direct contact with the adjacent teeth in order to prevent teeth damage. It also serves as a support for the Elevator and Torque Wrench.



5. Torque Head

> The Torque Head is connected to the Extraction Screw that is fixed in the tooth to be extracted. It fixes the gap of the Rest Plate and it can be used with the Elevator.
> If the root to be extracted has both distal and mesial adjacent teeth, it will be extracted with the Torque Wrench (recommended torque : 100 N.cm or less).



6. Elevator

> The Elevator is used by connecting it with the Torque Head and extracting the root by applying force toward a distal or mesial direction.



How to Use

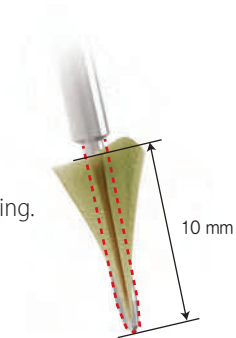
1. Extraction Drill

Create a hole on the tooth to be extracted using the Extraction Drill.



Caution A

- The Extraction Drill must follow the neural root canal during drilling.
- Drill down to at least 10mm because extraction is possible even if the Drill and Screw penetrate the root.



2. Extraction Screw

Connect the Extraction Screw to the Post Driver and fix it to the hole created by rotating it clockwise (recommended torque: Min. 20 N.cm ~Max. 25 N.cm).



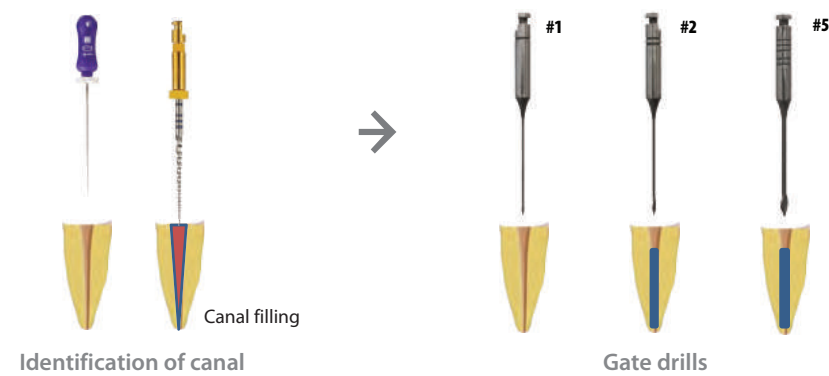
Caution B

- Drill to a depth of 10~12mm and insert the Extraction Screw at a depth of 10mm.
- Fix the Screw with 20~25 N.cm.

Connect Post Driver to the Extraction Screw.

* Drilling Sequence

Root Canal Preparation



Atraumatic Extraction kit

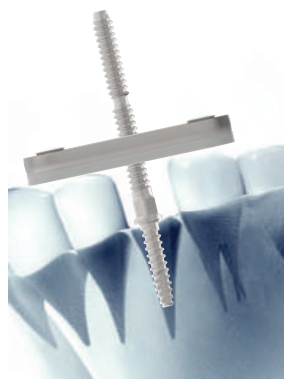


Caution C

- Fix the screw with a torque of 20~25 N.cm. If it is not applied, use a thicker Screw.
- The low torque force causes the Screw to fall out during the extraction, and the over torque force fractures tooth root.

3. Rest Plate

After removing the Post Driver, connect a Rest Plate to the Extraction Screw by taking into account the adjacent teeth.



Rest Plate

4. Torque Head

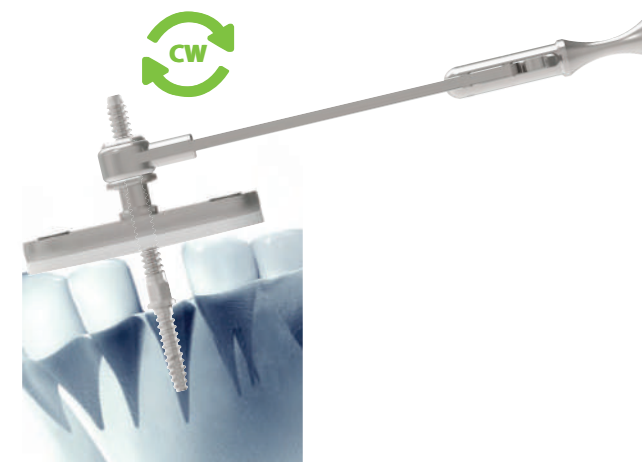
Connect the Torque Head to the Extraction Screw projected above the Rest Plate by rotating it clockwise.



Connect Torque Head to Screw

5. Torque Wrench

Extract the tooth by rotating the Torque Head clockwise using the Torque Wrench.



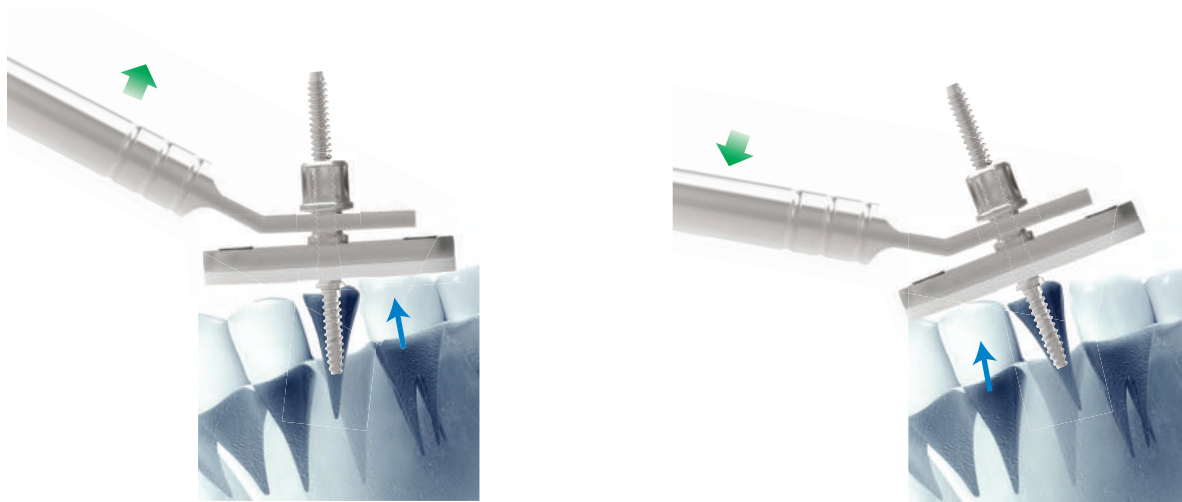
Extraction Root

Caution D

- Extraction using the Torque Wrench is possible in a root with mesiodistal root.

Caution E

- If there are adjacent teeth with 2 or higher swaying degrees, upward pulling or downward pressing should be applied using the Elevator so that the teeth will not receive force during extraction.



Caution F

- If there is an adjacent tooth projected to the mesiodistal root, it must be extracted using the Elevator.

Direct Surgical Guide Kit [KDSG002]

- > Used for a flapless surgery.
- > Served as a guide for positioning the drill while measuring the thickness of the buccal bone, thereby preventing bone resorption and reducing the burden on the patient.
- > Stable Drill positions can be guided to various cases by combining different surgical instruments (E.g., Position Guide, Linker and Width Guide).



(1) Safety

Safe operation is possible by measuring the thickness of the buccal bone in order to prevent buccal bone resorption.

(2) Reduced Pain

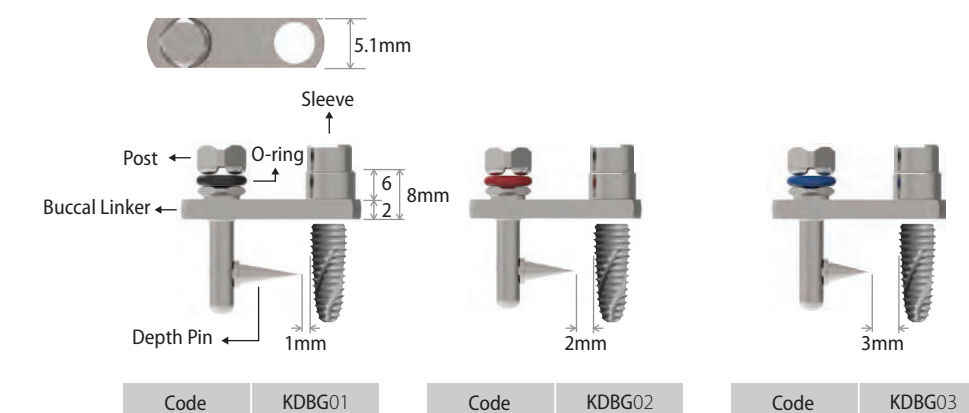
It is possible to minimize the burden on the patient by reducing the pain and swelling from a flapless surgery without going through the incision step that is carried out during the general implant surgery.

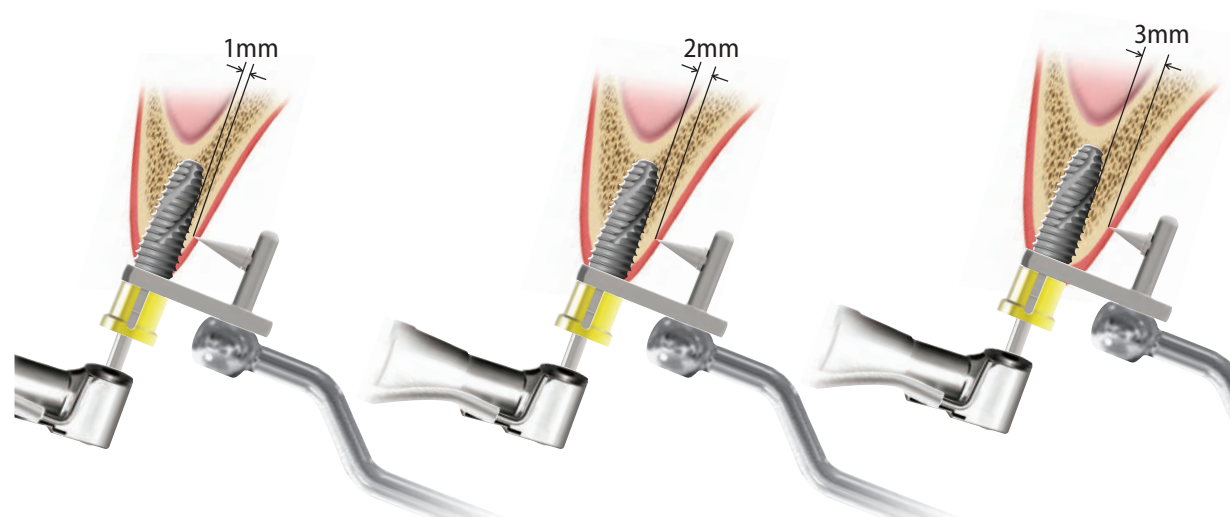
(3) Accuracy and Diversity

An accurate operation is possible depending on the bone width and implant diameter by combining the operation instruments (E.g., Linker, Position Guide and Width Guide). It can be used for various cases, such as single, bridge etc.

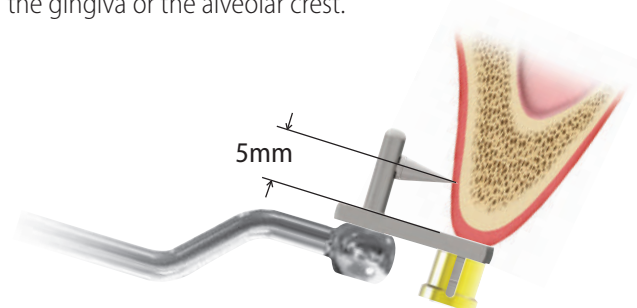
1. Buccal Position Guide

- > Use the depth pin positioned at the bottom of the guide according to the bone width and fixture diameter. This will enable you to maintain the buccal bone thickness of the implant. The guide should be connected to the guide holder.
- > The length can be distinguished with the O-ring color of the post.
- > Be careful in using the depth pin because it is extremely sharp.

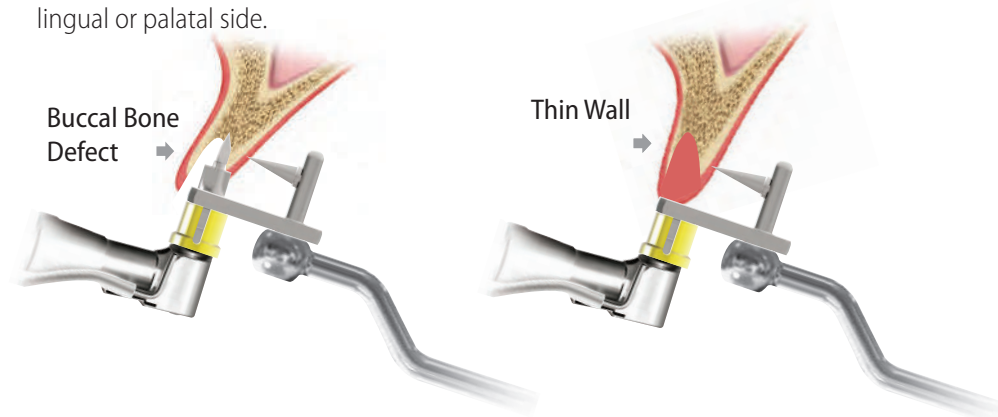




Caution A Please fix the depth pin of the Buccal Position Guide to the buccal bone surface 5mm below the gingiva or the alveolar crest.

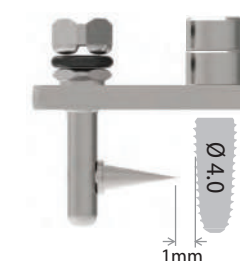


Caution B In a defective buccal bone or a thin buccal bone due to tooth extraction, fix the depth pin of the Buccal Position Guide to the surface 5mm below the gingival or the alveolar crest, from the lingual or palatal side.



Caution C Select the 1, 2 or 3mm Buccal Position Guide depending on the alveolar bone width and implant diameter to determine the buccal bone thickness.

Bucco-palatal bone width

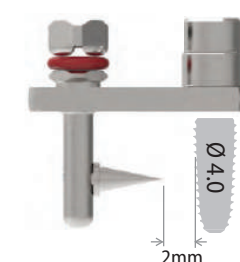


Fixture diameter

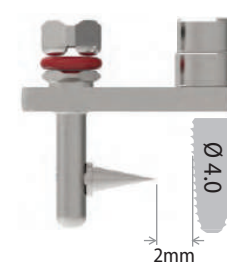


Black O-Ring
Under 7mm bone width,
under Ø4.0mm fixture

Bucco-palatal bone width

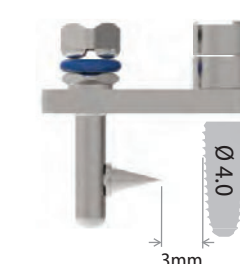


Fixture diameter



Red O-Ring
Bone Width 7~9mm,
Ø4.0mm~Ø4.5mm fixture

Bucco-palatal bone width



Fixture diameter



Blue O-Ring
Over 9mm Bone Width,
Ø5mm fixture

2. Width Guide

> Select the 7, 8, 9, or 10mm-width guide according to the implant crown diameter, mount it on the Buccal Position Guide, and Drill the center of the implant (the size is distinguished by color).



Ø7
Code KDWG07



Ø8
Code KDWG08

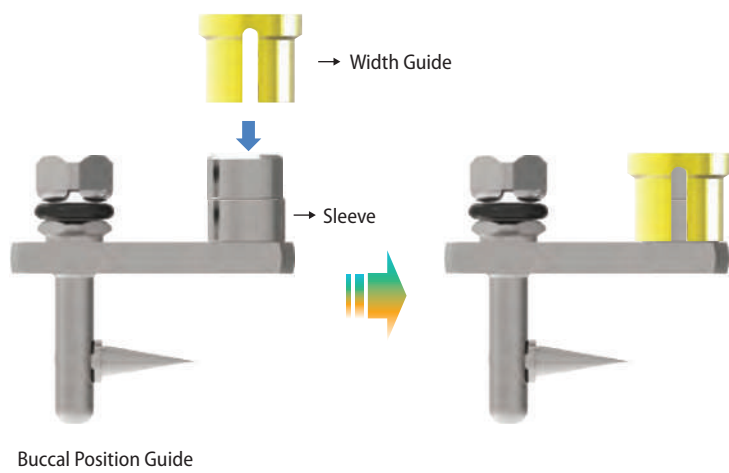


Ø9
Code KDWG09



Ø10
Code KDWG10

The width guide is used by connecting it with the sleeve of the Buccal Position Guide.



How to use according to the mesiodistal dimension-1
(Use of the Buccal Position Guide)

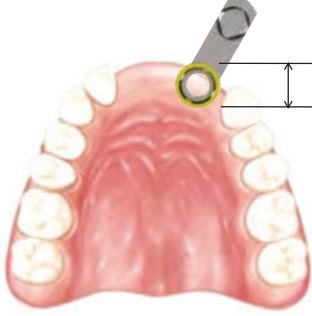




Buccal Position Guide
Mesiodistal Dimension

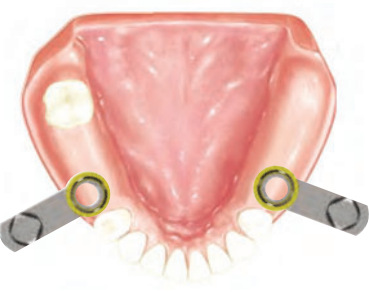
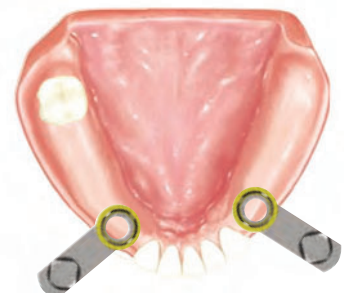
Mandible	Central incisor	Lateral incisor
Mesiodistal dimension	5.4	6.0

How to use according to the mesiodistal dimension-2
(Use of the combined Width Guides)

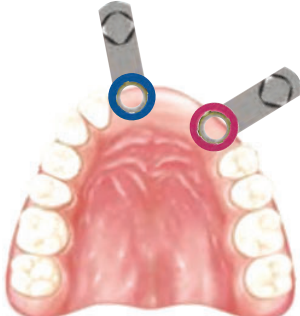


7mm
8mm
9mm
10mm

Maxilla	Lat. Incisor	1 st Premolar	2 nd Premolar
Mesiodistal dimension	7.3	7.7	7.3



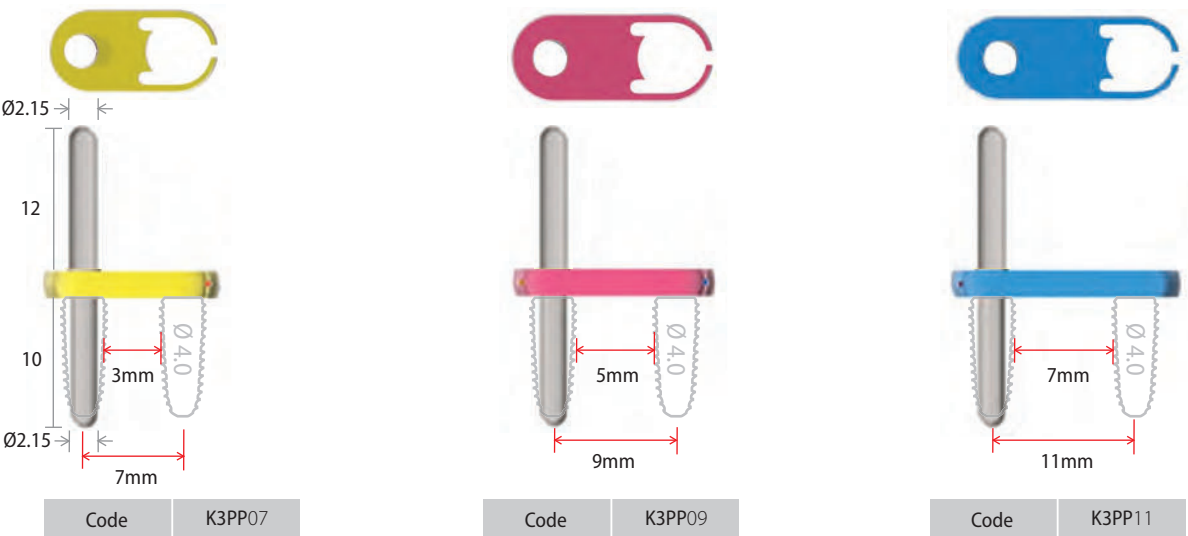
Mandible	Canine	1 st Premolar	2 nd Premolar
Mesiodistal dimension	7.2	7.3	7.3



Maxilla	Central Incisor	Canine	1 st Molar	2 nd Molar	Mandible	1 st Molar	2 nd Molar
Mesiodistal dimension	9.2	8.3	10.5	9.5	Mesiodistal dimension	11	10

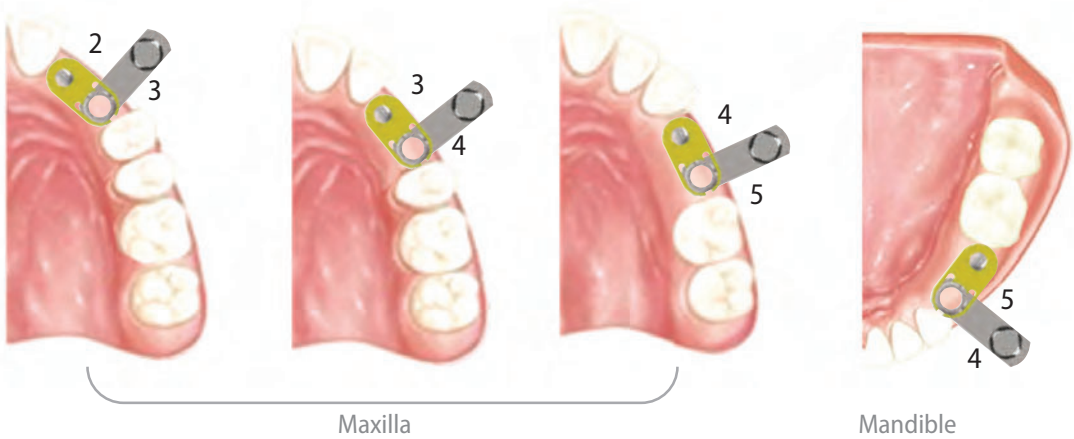
3. Position Guide

- > Guide the Drill position according to the distance between implant centerlines (7, 9, 11mm).
The device consists of three gaps : 3mm, 5mm, and 7mm from the Ø4mm fixture interface.
- > In continuous implants, select the 7, 9, or 11mm Position Guide according to the crown size, and mount it on the Buccal Position Guide to drill.

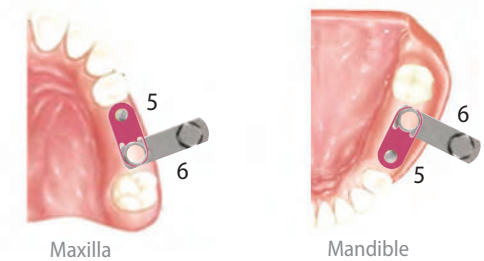


* The Position Guide must be used in combination with the Buccal Position Guide and linker.
It cannot guide the Drill position accurately when used alone.

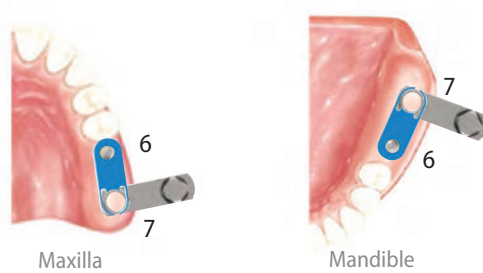
Application of the 7mm Position Guide
(when the mesiodistal distance between the two missing teeth is at least 14mm)



Application of the 9mm Position Guide
(when the mesiodistal distance between the two missing teeth is at least 16mm)

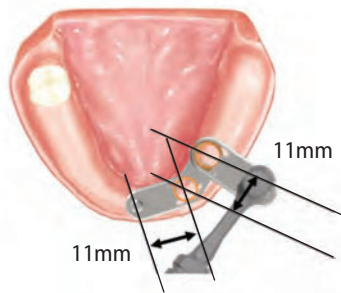
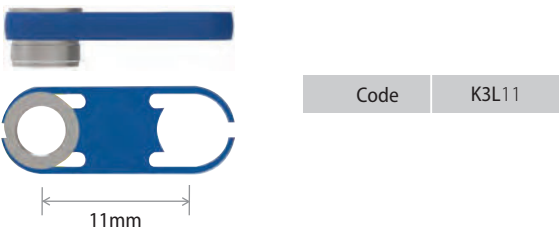


Application of the 11mm Position Guide
(when the mesiodistal distance between the two missing teeth is at least 18mm)



4. Linker

- > When you perform prosthesis with a bridge in a continuous implant, connect the 11mm Linker to the position guide and the Buccal Position Guide to drill.



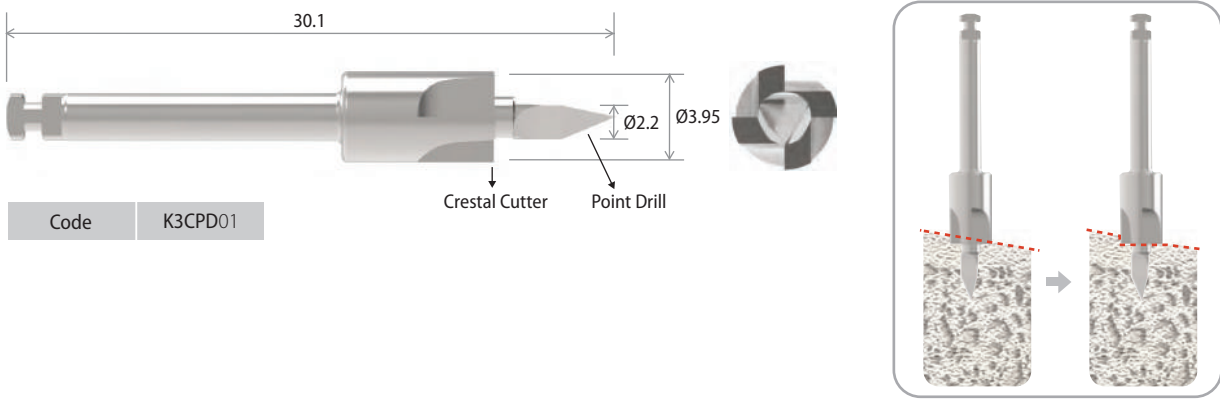
Assembly

① Position Guide + Linker ② Position Guide + Linker + Buccal Position Guide

① The Linker is connected to the Position Guide by setting the linker sleeve in a downward position.
② After connecting the Linker by setting the sleeve of the Buccal Position Guide in a downward position, it can be used by adjusting it according to the mesiodistal distance.

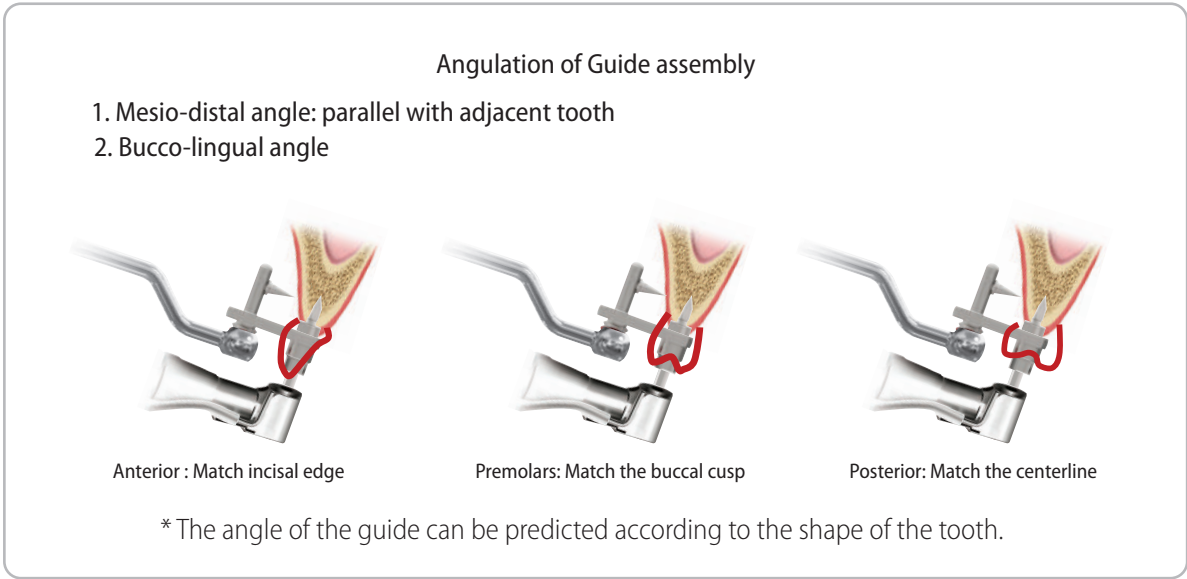
5. Point / Crestal Cutter Drill

- > A hole is created on the cortical bone in order to facilitate the Initial Drill.
- > The gingiva residue is removed while flattening the uneven alveolar bone surface.

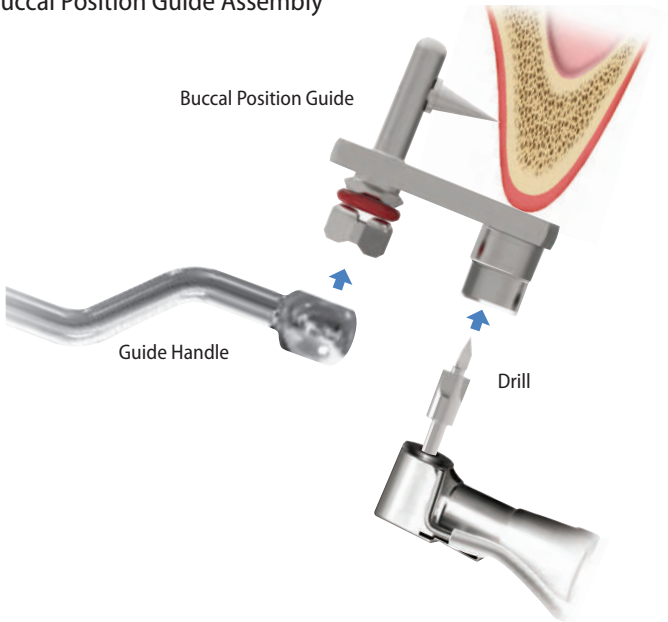


6. Guide Handle

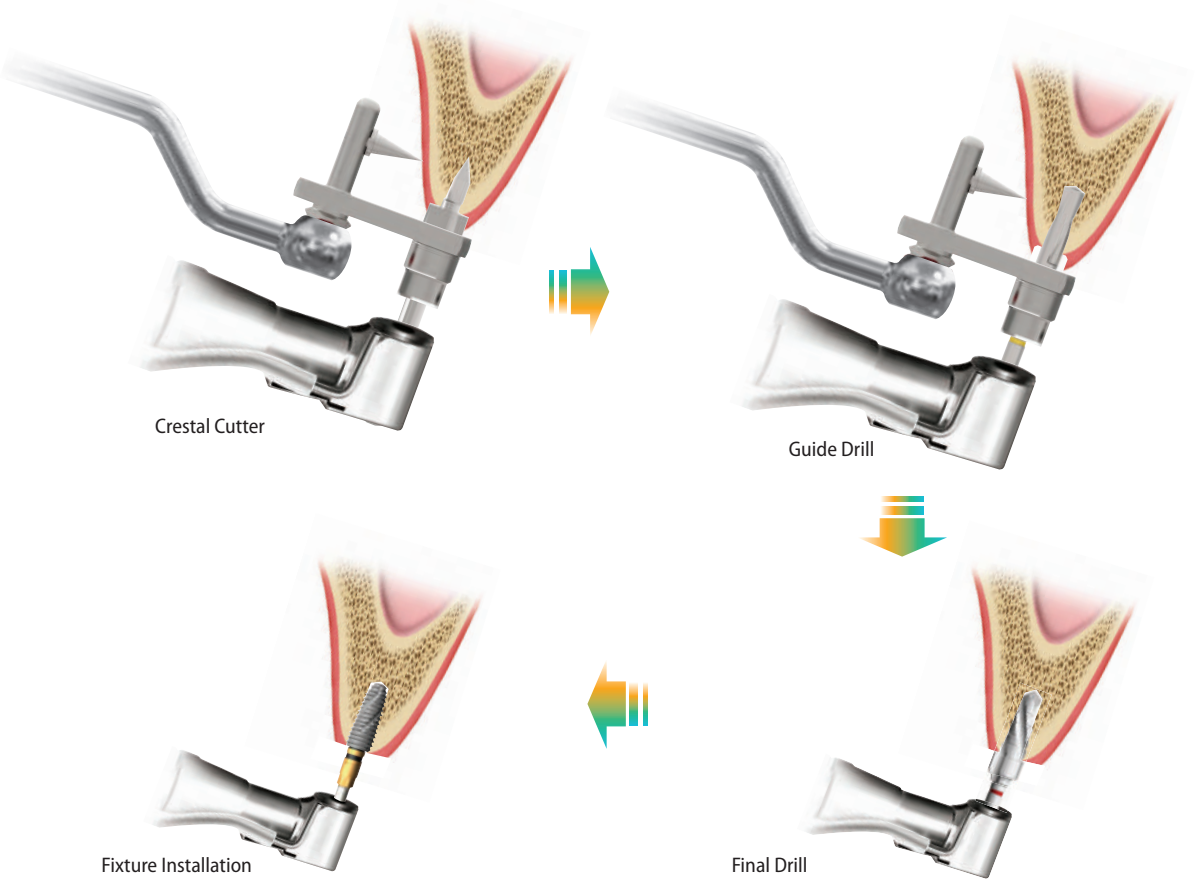
- > The Guide Handle guides the position and direction by connecting it with the Buccal Position Guide.



Buccal Position Guide Assembly



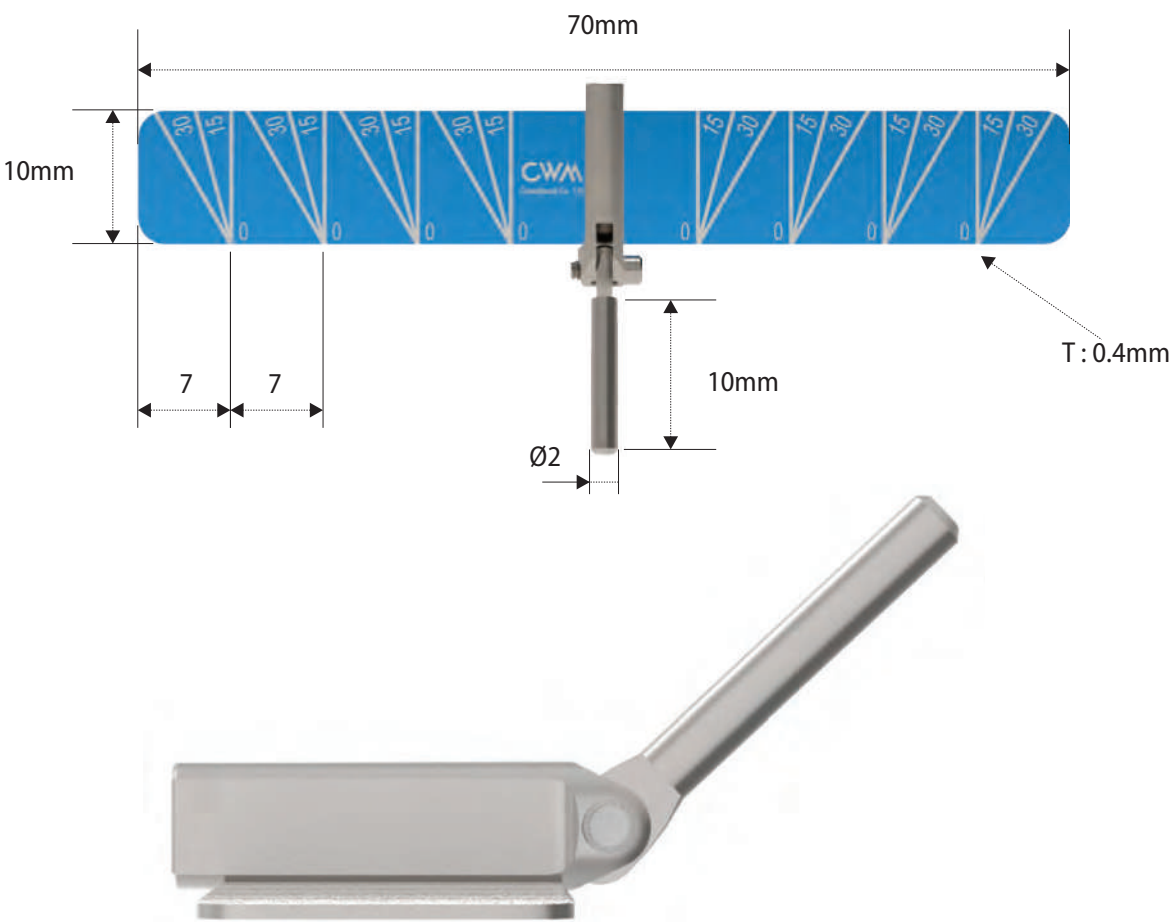
Drilling Sequence (Flapless Surgery)



* Form basic holes with a crystal cutter. Then, select a drilling sequence according to the implant diameter.

AO4 Surgical Stent [KDSS001]

> Guide the position of Implant and Drill.



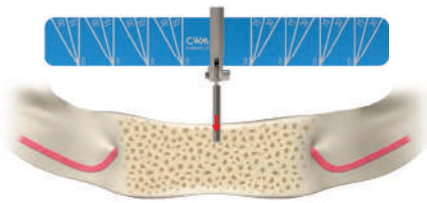
Characteristic

- > Guide the position of the implant and drill during implant placement.
- > It improves the stability and accuracy in surgery, and it can shorten the time.
- > By preventing the loss of healthy gums as much as possible, pre-fabricated prostheses can be placed immediately after surgery without the need for gum restoration.
- > Angled line allows more precise and predictable surgery.

Eligible for

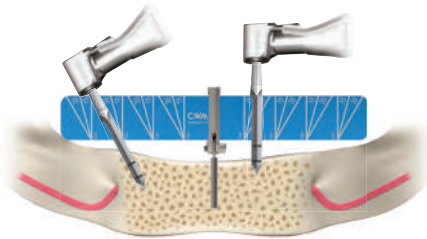
- > A toothless patient.
- > Patient who do not want long-period of surgery.
- > Patients suffering from adult diseases such as hypertension and diabetes.
- > Patients who need precise implant treatment.

Instruction



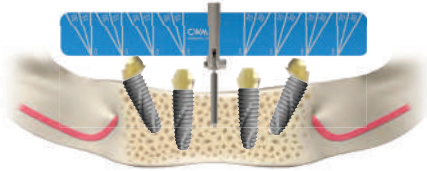
Place the AO4 Surgical Stent

- Make an incision for flap lift.
- Place the AO4 Surgical Stent using Ø2mm Twist Drill.
 - * It is needed to check the position of mental foramen.



Place the INNO Fixture

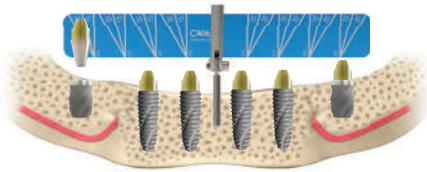
- Drill with reference to the angled line and place the fixture.



Place the Multi S&A Abutment

- After placing the INNO fixture, connect the Multi S&A Abutment according to the site.
 - * Posterior site : Place the Multi A abutment (30°) with 30 N.cm torque force.
 - * Anterior site : Place the Multi A abutment (15°) or the Multi S abutment with 15 N.cm torque force (it is possible to allow emergence of the prosthetic screw).

or



Placement Lock Abutment

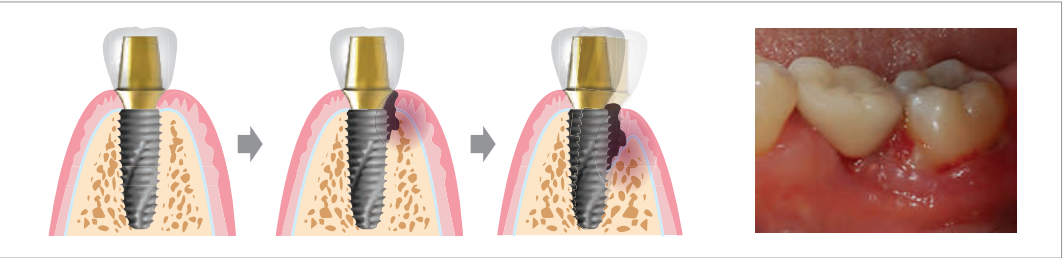
- After placing the INNO Fixture, connect Lock Abutment according to the site.
 - * If implant placement at an angle is not appropriate or not desired, using the INNO Sub. Short Implant is highly recommended.

Volume-up™ Guide System

> Devised for preventing food penetration and forming natural cervical area by restoring contracted buccal alveolar bone & gingiva to the original shape and width.

1. CONCEPT

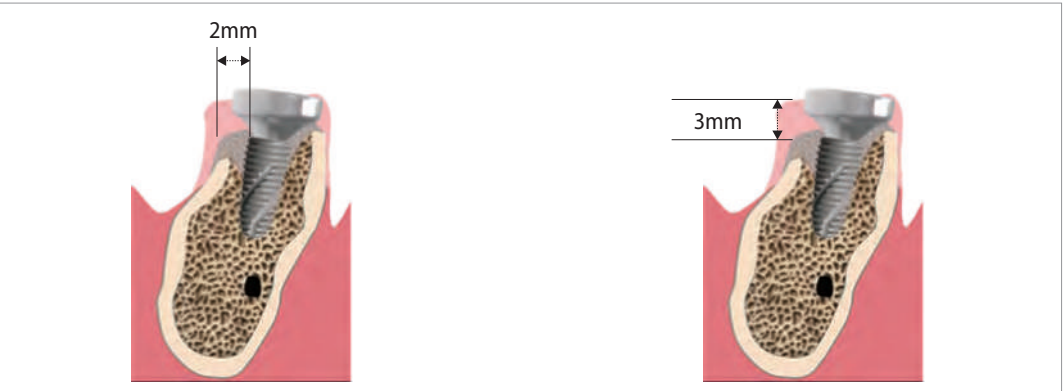
- Peri-implant inflammations represent serious diseases after dental implant treatment, which affect both the surrounding hard and soft tissue.



To achieve long term success of implant without complications like peri-implantitis, right position of fixture with min. 2mm of buccal bone width for buccal gingival regeneration and alveolar bone regeneration at min. 3mm lower position to maintain gingival height is extremely essential.

Min. 2mm of buccal bone regeneration to maintain having buccal gingiva.
(Int J Periodontics Restorative Dent 2005)

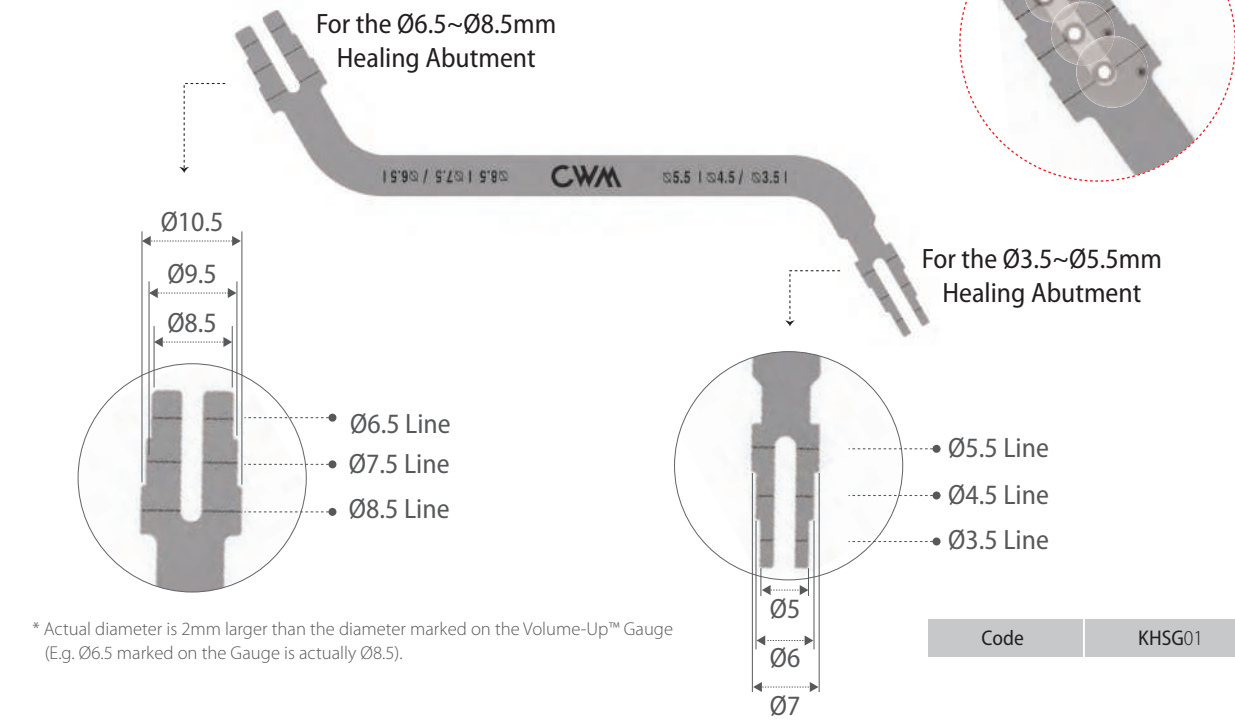
Alveolar bone regeneration at minimum 3mm lower position to maintain gingival height.
(Clin Oral Implants Res 2000;11: 1–11.)



The Volume-up™ Guide System helps place implant in the right position according to 2 abovementioned clinical factors and helps select right dimension of the Healing Abutment to be used as a scaffold while gingival forming.

2. SPECIFICATION

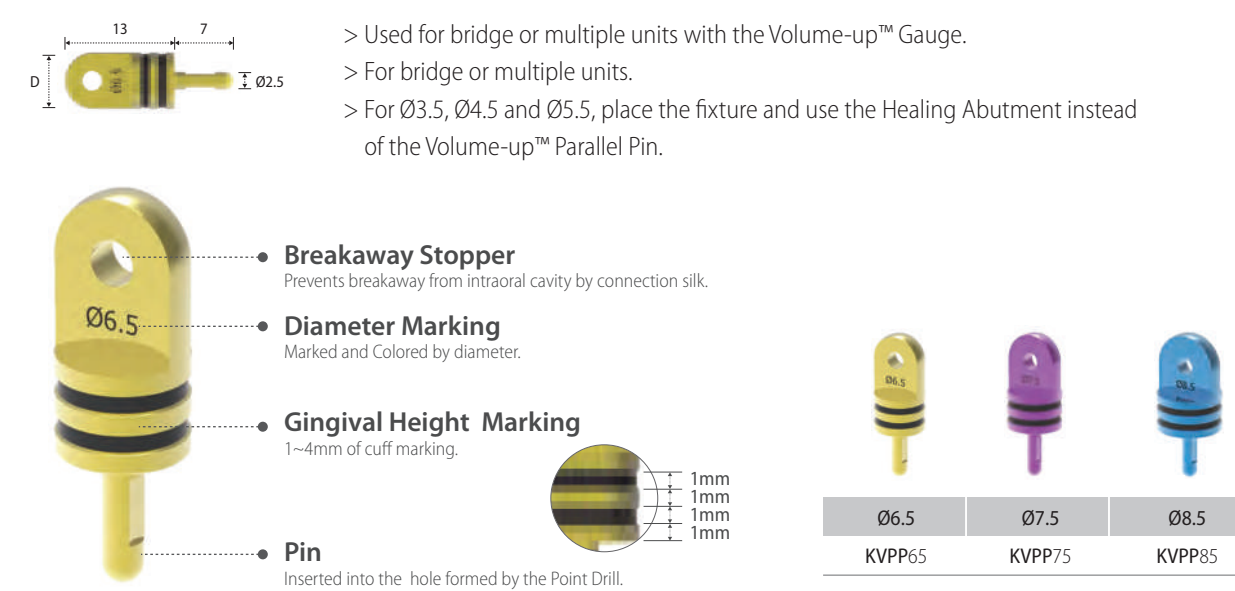
Volume-up™ Gauge



- > Used to guide the position of implant placement and to guide the election of the Healing Abutment dimensions in order to keep the cervical portion of the implant prosthesis at the natural tooth width.
- > Used with the Volume-up™ Parallel Pin for multiple units or bridge.
- > Used with Point Drill (Ø2.1mm or less).
- > Laser marking identifiable from any position.

※ For the selection of the Healing Abutment, refer the pages 34, 63, 81 & 100.

Volume-up™ Parallel Pin



3. PROCEDURE

I. Single Implant



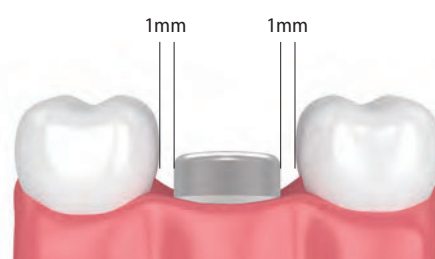
Set the Volume-up™ Gauge on the implant site according to the diameter line marked on the Volume Up™ Gauge.



Position the Point Drill in the drill insertion groove of the Volume-up™ Gauge.



Drill and place implant in accordance with the manufacturer's implantation sequence.



If implant placement torque is equal to or over 20~30 N.cm, connect the Healing Abutment. If not, connect the Cover Screw and do primary closure.

II. Multiple Implants & Bridge



Set the Volume-up™ Gauge and position the Point Drill.



Insert the Volume-up™ Parallel Pin into the hole formed after point drilling.



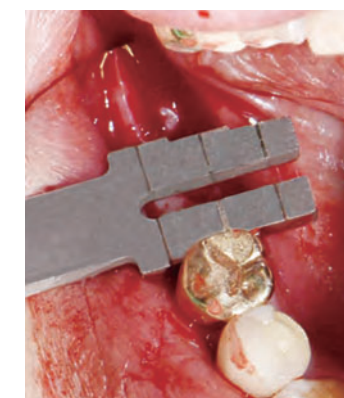
Carry out the same as the previous step.

* For the selection of the Healing Abutment, refer the pages 34, 63, 81 & 100.

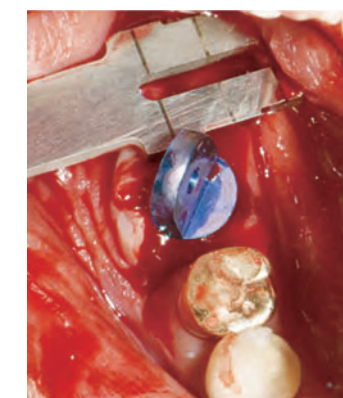
4. CLINICAL CASE



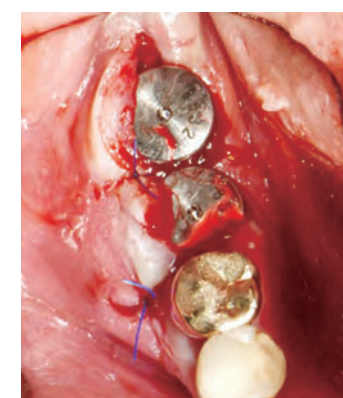
Preoperative view of the healed ridge.



The Volume-up™ Gauge was set to the 8.5 line and point drilling was carried out.



The Ø8.5 Volume-up™ Parallel Pin was inserted to the hole formed by point drilling and point drilling was done at the next site guided by the Volume-up™ Gauge.



The Ø8.5 Healing Abutments were placed after initial & final drilling and fixture placement and bone grafting, and the site was sutured.



After 4 weeks, the contracted buccal alveolar bone & gingiva to the natural shape and width were restored. Which will allow esthetically and functionally great prosthesis fabrication preventing food permeation.

COWELL® REGENERATIVE SOLUTION

Inspire confidence through a comprehensive approach

COWELL®
REGENERATIVE
SOLUTION

MegaDerm™ Plus

The acellular dermal matrix can carry out the functional blocks of the membrane due to its long absorption period (soft tissue penetration protection) and is the first in the world with the basement membrane layer removed to maximize the transplant engraftment rate.

COWELL® BMP & INNO GF Kit

The world's first E.rhBMP-2, (E.Coli derived Recombinant Human Bone Morphogenetic Protein type 2), as a growth factor that induces bone and cartilage formation. It is a retinoid mediator that plays a key role in osteoblast differentiation.

INNO-CaP

Osteoconductive synthetic bone graft material consisting of CaP is completely resorpted and progressively replaced by vital bone in the healing period.

DiaDerm® M

Biodegradable atelocollagen membrane is used for GTR & GBR operation. The product, made from high purity atelocollagen, has high biocompatibility, mechanical strength and resistance to enzymatic degradation and flexibility.



INNO OSS & INNO OSS Allo

Allograft composed of 50% of cortical and the other 50% of cancellous. FDBA has been proven out its efficiency and safety by the highest-level pharmacological standards of AATB and is being a global standard of allograft.

InnoGenic™ Non-resorbable membranes

The products consisting of Titanium reinforced PTFE membrane (Wifi-Mesh), PTFE membrane (PTFE-Mesh) and Titanium mesh (Ti-Mesh) are non-resorbable membranes to be applied over intraoral defects, especially, tooth extraction and bone augmented sites.

DiaBone

A xenograft is perfectly fused to natural human bone. Diabone has fast blood penetration by giving great hydrophilicity and 3-Dimensional structure which allow optimal cell attachment and blood absorption.

1. Composition of COWELL® BMP

- COWELL® BMP is bone graft material based on the E.rhBMP-2 (E.Coli derived Recombinant Human Bone Morphogenetic Protein type 2), developed for the first time in the world. COWELL® BMP is supported with 10 years of clinical data and over 40 studies.
- BCP as a carrier allows maintenance of space.

2. Features of COWELL® BMP

- Primary closure for soft tissue regeneration is not required.
- Regenerates adherent gingiva.
- Simplifies challenging bone grafting and soft tissue regeneration.
- Acts directly on stem cells.
- Induces bone regeneration without infection in extraction socket.
- Contains 1mg of bone morphogenic protein per 1g of the particle.
(1g of autologous bone contains 2ng of bone morphogenic protein)

3. Application

A. Orthopedics

Bone grafts

- Fractures : Tibia, Radius, Ulna.
- Spine Fusion (Degenerative Disc Disease) :
Interbody cage, Posteolateral.

Injection Device

- Lengthening : Distraction osteogenesis.
- Osteoporosis : Hip joint fracture.
- Bone Defect : Bone cyst.
- Bone Fusion : Foot/shoulder revision.

B. Dentistry

Bone grafts

- Severely resorbed alveolar ridges.
- Tooth extraction socket.
- Alveolar bone loss.
- Maxillary sinus bone loss.
- Bone-inductive implant : Coated implant.
- Maxillofacial reconstruction.

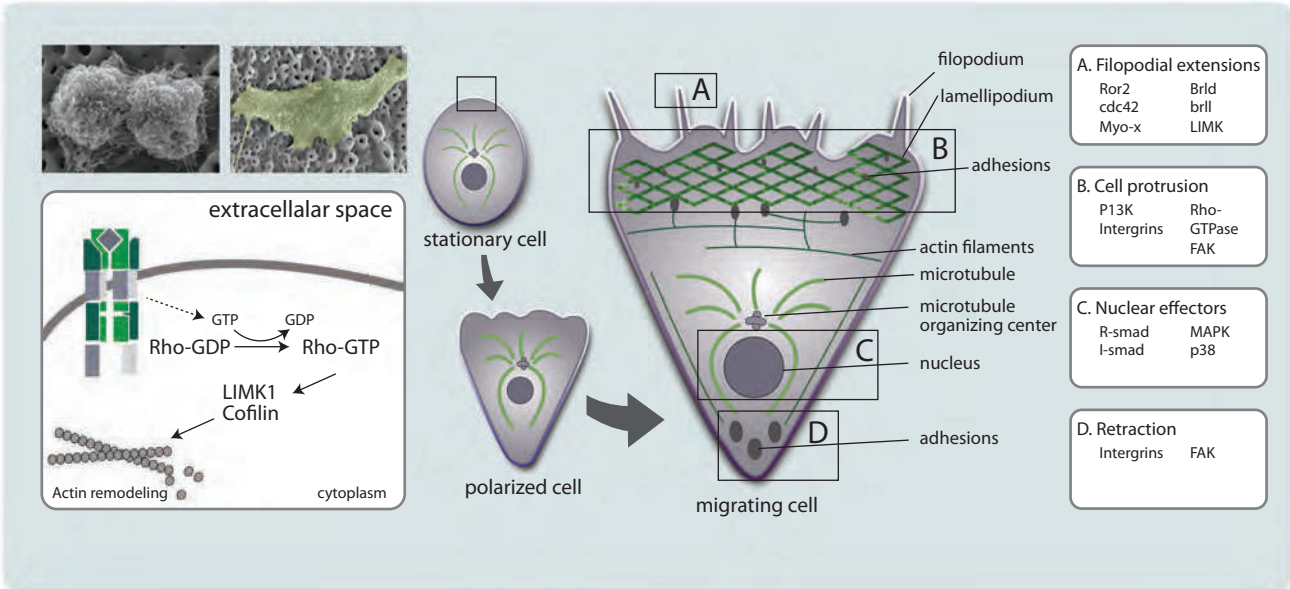
C. Dermatology

Soft Tissue grafts

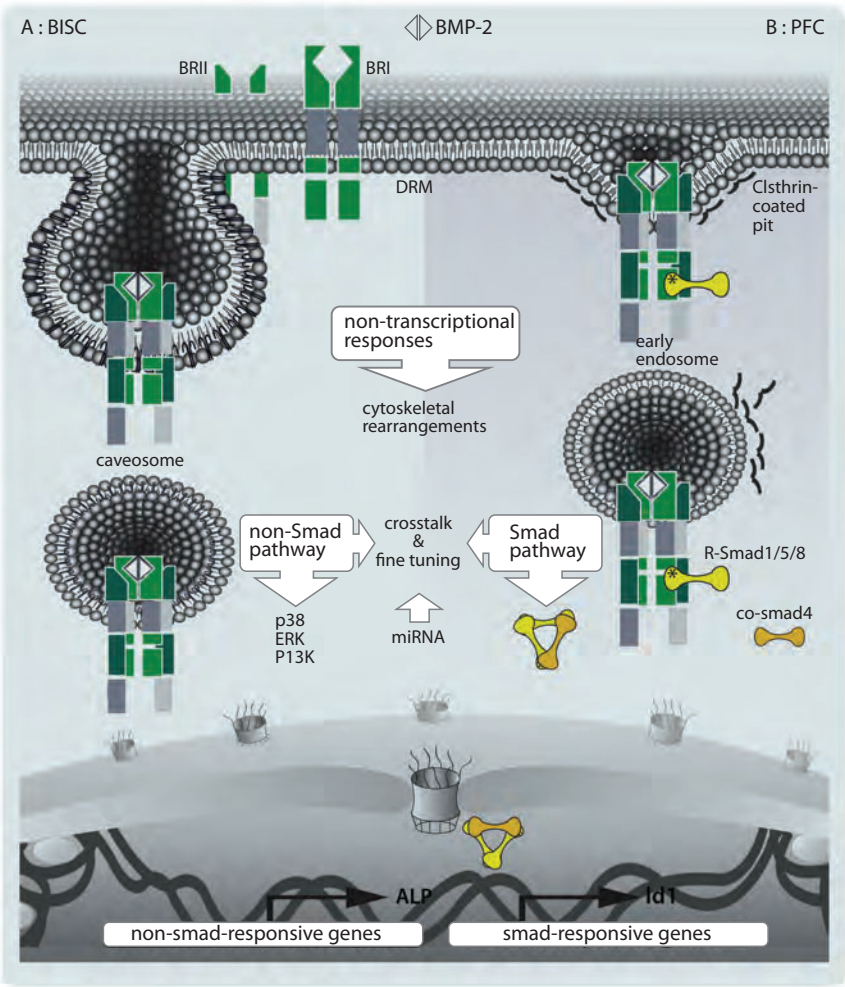
- Damaged skin regeneration.
- Diabetes ulcer.

4. Mechanism of Action of COWELL® BMP

A. Migration of Cells with lamellipodia



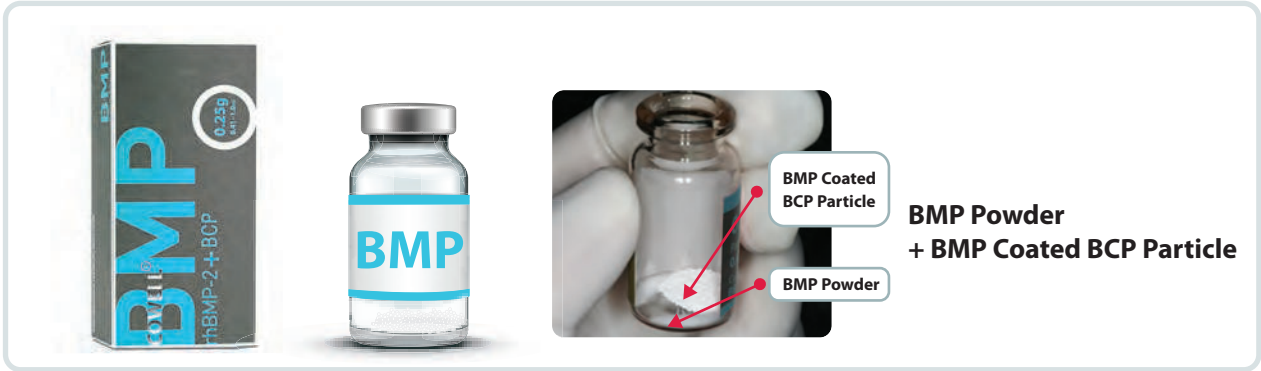
B. Cellular mechanisms



- BMP-2 adheres to the membrane of stem cell and induces expression of genes of nucleus. Then, BMP-2 migrates to recipient site.
- BMP-2 growth factor, Twist-2 transcriptional factor, and VEGF growth factor synthesize and secrete endogenous growth factor.
- Proliferation of osteoblast of osteocyte, and proliferation of fibroblast in dermis and keratinocyte of the skin.
- Twist-2 transcriptional factor induces tissue regeneration in osseous tissue and adherent gingival area.

5. Product Type

COWELL® BMP (One vial)

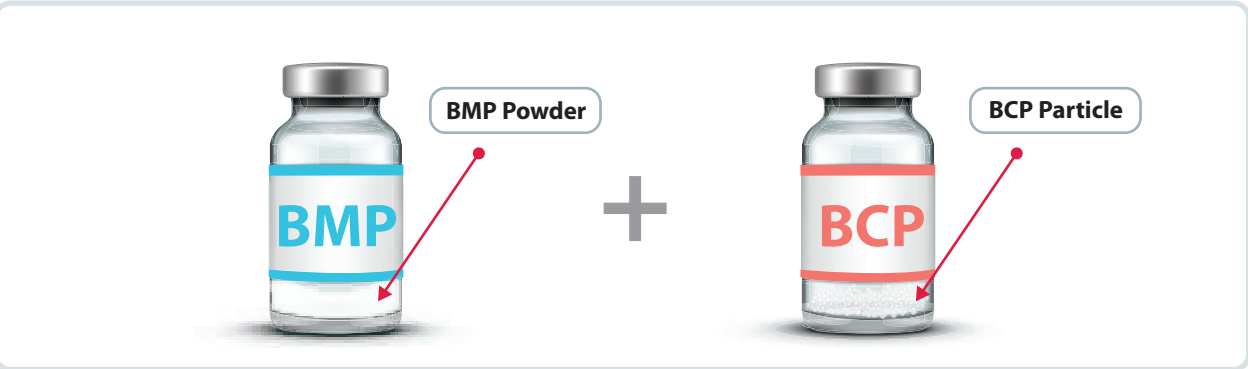


• Dose and particle size of the COWELL® BMP

														
<table><tr><th>Product Code</th><th>Particle Size</th></tr><tr><td>BB1010</td><td>0.41~1.0mm</td></tr></table>	Product Code	Particle Size	BB1010	0.41~1.0mm	<table><tr><th>Product Code</th><th>Particle Size</th></tr><tr><td>BB1025</td><td>0.41~1.0mm</td></tr></table>	Product Code	Particle Size	BB1025	0.41~1.0mm	<table><tr><th>Product Code</th><th>Particle Size</th></tr><tr><td>BB1050</td><td>0.41~1.0mm</td></tr></table>	Product Code	Particle Size	BB1050	0.41~1.0mm
Product Code	Particle Size													
BB1010	0.41~1.0mm													
Product Code	Particle Size													
BB1025	0.41~1.0mm													
Product Code	Particle Size													
BB1050	0.41~1.0mm													

※ A vial of 0.1g can be used for less than one extraction socket, while 0.25g/0.5g can be used for maxillary sinus or for the wide bone defect area.

COWELL® BMP Plus (Two vials)



• Dose and particle size of the COWELL® BMP Plus.

BMP 0.1mg			
Product Code	BMP Dose	Particle Dose	Particle Size
EBB0125	0.1mg	0.25g	0.41~1.0mm
EBB0105	0.1mg	0.5g	0.41~1.0mm
EBB1110	0.1mg	1g	0.41~1.0mm
EBB1220	0.1mg	2g	0.41~1.0mm

BMP 0.5mg			
Product Code	BMP Dose	Particle Dose	Particle Size
EBB0525	0.5mg	0.25g	0.41~1.0mm
EBB0505	0.5mg	0.5g	0.41~1.0mm
EBB1150	0.5mg	1g	0.41~1.0mm
EBB1250	0.5mg	2g	0.41~1.0mm

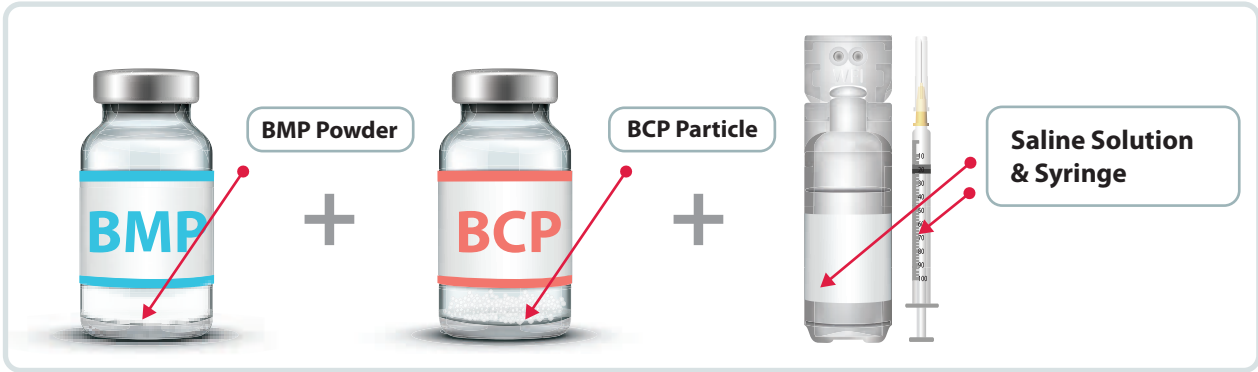
BMP 2mg			
Product Code	BMP Dose	Particle Dose	Particle Size
EBB2025	2mg	0.25g	0.41~1.0mm
EBB2050	2mg	0.5g	0.41~1.0mm
EBB2011	2mg	1g	0.41~1.0mm
EBB2012	2mg	2g	0.41~1.0mm

BMP 0.25mg			
Product Code	BMP Dose	Particle Dose	Particle Size
EBB2525	0.25mg	0.25g	0.41~1.0mm
EBB2505	0.25mg	0.5g	0.41~1.0mm
EBB1125	0.25mg	1g	0.41~1.0mm
EBB1225	0.25mg	2g	0.41~1.0mm

BMP 1mg			
Product Code	BMP Dose	Particle Dose	Particle Size
EBB1025	1mg	0.25g	0.41~1.0mm
EBB1050	1mg	0.5g	0.41~1.0mm
EBB1011	1mg	1g	0.41~1.0mm
EBB1012	1mg	2g	0.41~1.0mm



INNO GF Kit (Two vials + Saline Solution + Syringe)



• Dose and particle size of the INNO GF Kit.

BMP 0.1mg

Product Code	BMP Dose	Particle Dose	Particle Size
IBB0125	0.1mg	0.25g	0.41~1.0mm
IBB0105	0.1mg	0.5g	0.41~1.0mm
IBB1110	0.1mg	1g	0.41~1.0mm
IBB1220	0.1mg	2g	0.41~1.0mm

BMP 0.25mg

Product Code	BMP Dose	Particle Dose	Particle Size
IBB2525	0.25mg	0.25g	0.41~1.0mm
IBB2505	0.25mg	0.5g	0.41~1.0mm
IBB1125	0.25mg	1g	0.41~1.0mm
IBB1225	0.25mg	2g	0.41~1.0mm

BMP 0.5mg

Product Code	BMP Dose	Particle Dose	Particle Size
IBB0525	0.5mg	0.25g	0.41~1.0mm
IBB0505	0.5mg	0.5g	0.41~1.0mm
IBB1150	0.5mg	1g	0.41~1.0mm
IBB1250	0.5mg	2g	0.41~1.0mm

BMP 1mg

Product Code	BMP Dose	Particle Dose	Particle Size
IBB1025	1mg	0.25g	0.41~1.0mm
IBB1050	1mg	0.5g	0.41~1.0mm
IBB1011	1mg	1g	0.41~1.0mm
IBB1012	1mg	2g	0.41~1.0mm

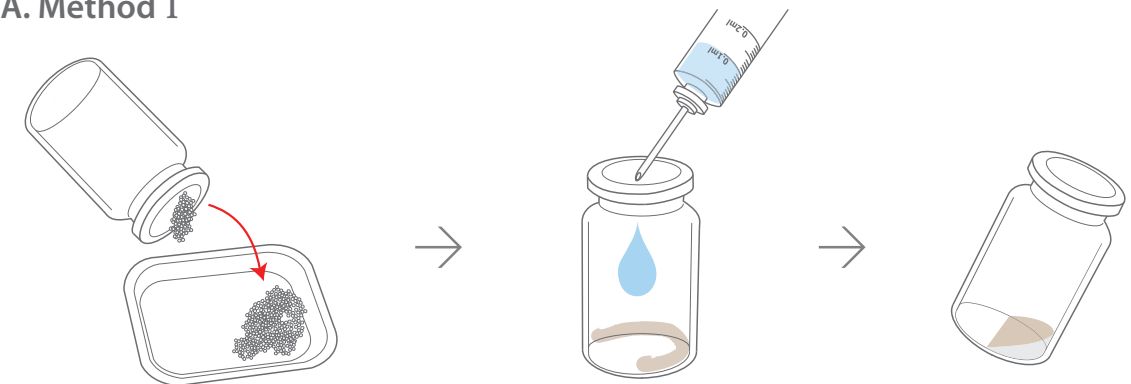
BMP 2mg

Product Code	BMP Dose	Particle Dose	Particle Size
IBB2025	2mg	0.25g	0.41~1.0mm
IBB2050	2mg	0.5g	0.41~1.0mm
IBB2011	2mg	1g	0.41~1.0mm
IBB2012	2mg	2g	0.41~1.0mm



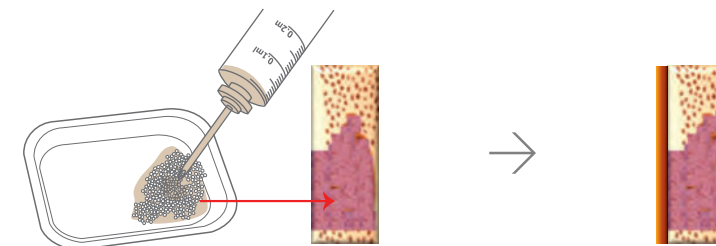
6. User Guide COWELL® BMP

A. Method I



a. Transfer BCP graft material (Vial I).

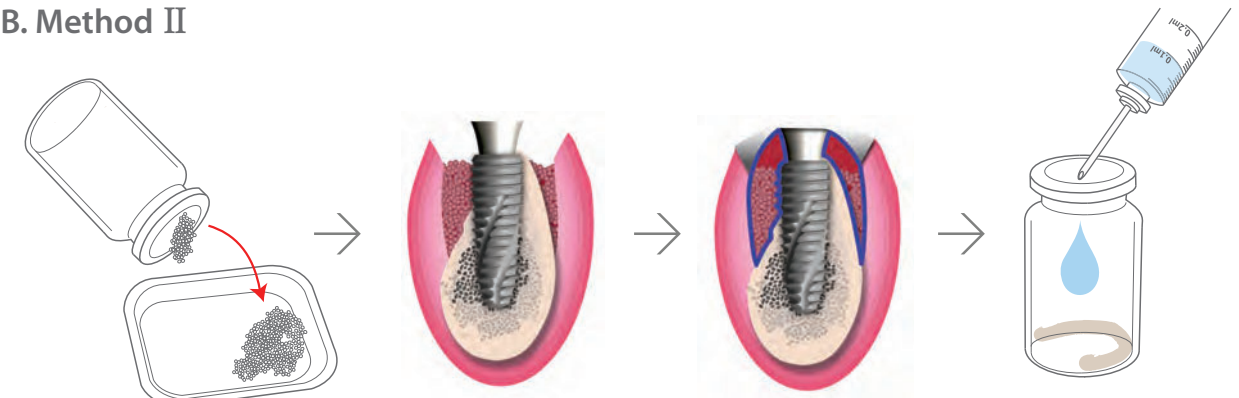
b. Inject distilled water into vial II with lyophilized rhBMP-2 powder in it and mix with the powder.



c. Mix BMP solution with BCP or plus autogenic / allograft and apply into the recipient site.

d. Cover the defect area using a barrier membrane or suture natural soft tissue without membrane.

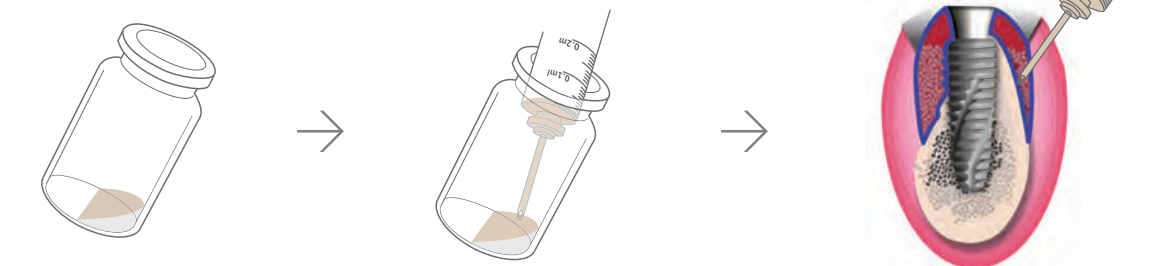
B. Method II



a. Transfer BCP graft material (Vial I) into a container.

b. Apply BCP into the recipient site and cover the defect area using a barrier membrane or suture natural soft tissue without membrane.

c. Inject distilled water into lyophilized rhBMP-2 powder (vial II).



d. Mix rhBMP-2 with distilled water (saline solution) and wait for 10 to 15 seconds before using.

e. Aspirate the mixture using a syringe.

f. Inject BMP solution through soft tissue until needle of syringe reaches bone.

C. Method III



a. Inject distilled water into vial II with lyophilized rhBMP-2 power in it and mix with the powder.

b. Aspirate the mixture using a syringe.



c. Hydrate BMP-2 solution into membrane.

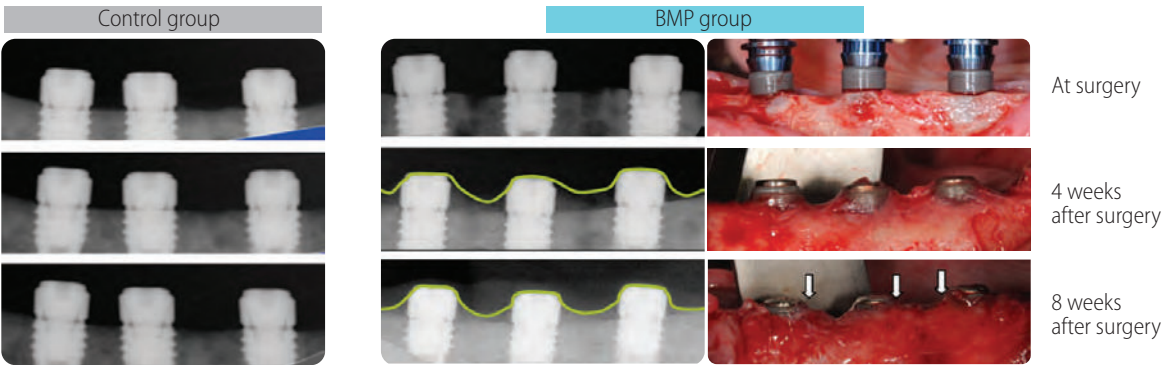
d. Apply BMP-2 solution soaked membrane to damaged site.

Dose of distilled water to make the mixture (BMP-2 Solution)

BMP Dose	Distilled Water Dose	BMP Dose	Distilled Water Dose
0.1mg	0.1ml	2mg	1.6ml
0.25mg	0.2ml	5mg	4ml
0.5mg	0.4ml	10mg	8ml
1mg	0.8ml	20mg	16ml

7. Study Result on COWELL® BMP

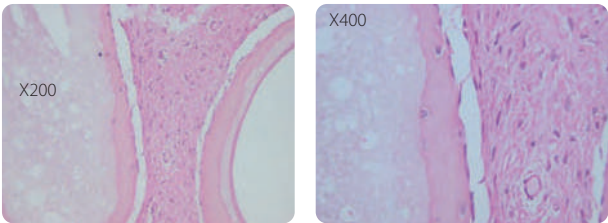
In Vivo Study



Jung-Bo Huh, et al., Alveolar ridge augmentation using anodized implants coated with Escherichia coli-derived recombinant human bone morphogenetic protein 2 (Beagle dog).

- Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2011.

Histologic Findings : Tissue specimen collected approximately four months after the maxillary sinus grafting (human)



- New bone was formed around the graft material.
- No inflammatory reaction was observed in connective tissue.
- Proliferation of collagen fiber was observed.
- Proliferation of fibrocyte was observed.
- Osteoblast was observed on the surface of newly formed bone.

8. Clinical Data of COWELL® BMP

- Vertical height of surrounding bone was compared three months after grafting in extraction socket.
- The study was conducted at Seoul National University Bundang Hospital, Yonsei University Dental Hospital, and Korea University Guro Hospital.

Group		Average	SD	95%CI	†P value
Height	Control	-1.087	1.413	(-1.565, -0.609)	0.0006**
	Experiment	-0.059	0.960	(-0.384, 0.266)	
Width at 75% ESL	Control	1.405	1.753	(0.812, 1.998)	0.346
	Experiment	1.863	2.310	(1.081, 2.644)	
Width at 50% ESL	Control	0.542	1.157	(0.15, 0.934)	0.016*
	Experiment	1.239	1.249	(0.816, 1.662)	
Width at 25% ESL	Control	0.006	1.149	(-0.383, 0.395)	<0.0001**
	Experiment	1.279	1.387	(0.81, 1.749)	

ESL : Extraction Socket Level *,*P*<.05, **,*P*<.01, †: Student t-test

Jung-Bo Huh, et al., Multicenter, randomized clinical trial on the efficacy and safety of Escherichia-coli-derived rhBMP-2 with β-Tricalcium phosphate and hydroxyapatite in human extraction sockets.

- J Adv Prosthodont 2011;4 -134.

INNO-CaP

Calcium Phosphate , Synthetic Bone Graft

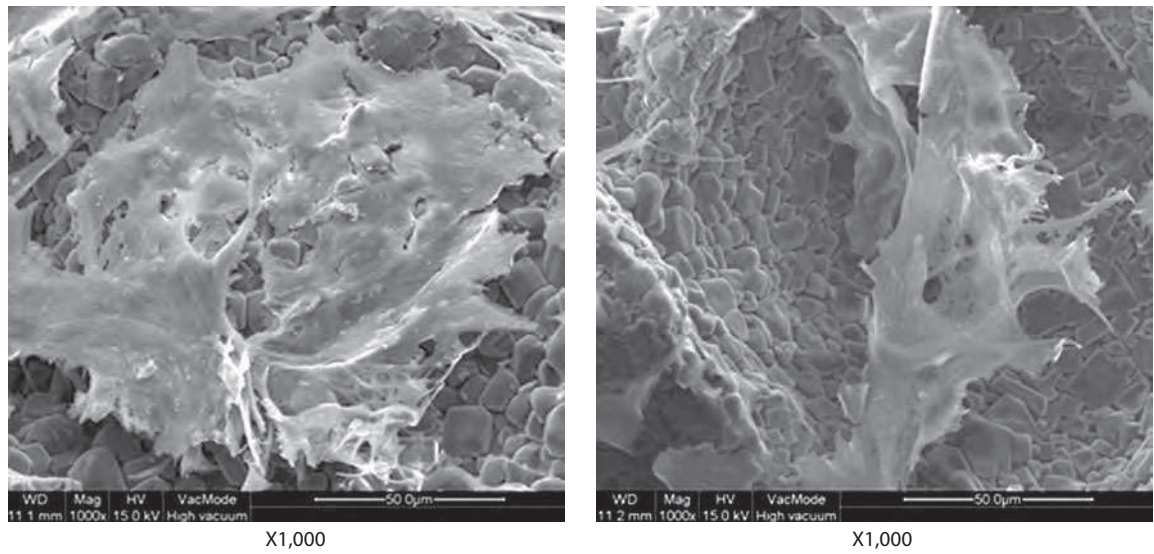
Osteoconductive resorbable synthetic bone graft material

- INNO-CaP is a osteoconductive synthetic resorbable bone graft material consisting of Calcium Phosphate.
- INNO-CaP is completely resorpted and progressively replaced by normal-structured bone in the healing period.

Excellent Biocompatibility and Conductivity

- The characteristic biocompatibility and conductivity of the INNO-CaP represent the most safety.

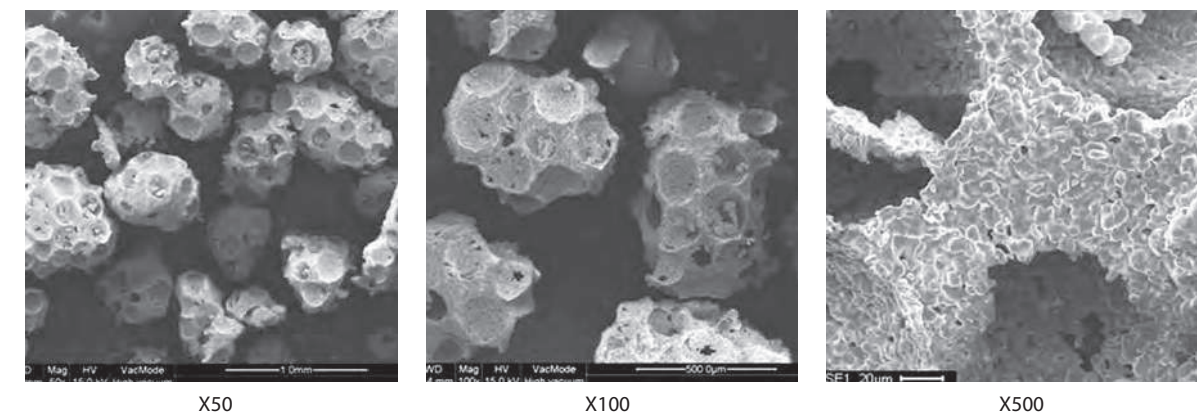
Cell culture SEM images (14 days)



A porosity for new bone ingrowth

- The porosity promotes ingrowth of osteoblast, osteoclast and growth factors.

Particle surface SEM image



Indications

Sinus graft surgery

- For sinus graft, INNO-CaP is used alone or in combination with the other graft materials.
- Various healing period according to residual bone height.

residual bone height	less than 1mm	2~4mm	more than 4 mm
implant placement	post operation 9~12 months	post operation 6 months	simultaneous placement

GBR (Guided Bone Regeneration)

- Minimize the amount of autogenous bone.
- Sub-graft materials.
- Vertical and lateral augmentation.
- Using with the COWELL® BMP is highly recommended.

Dose and Particle Size

Product Code	Particle Size	Particle Dose
IG1025	0.4~1.0mm	0.25g
IG1050		0.5g
IG1001		1g
IG1002		2g
IG1425	1.0~1.4mm	0.25g
IG1450		0.5g
IG1401		1g
IG1402		2g



INNO OSS & INNO OSS Allo

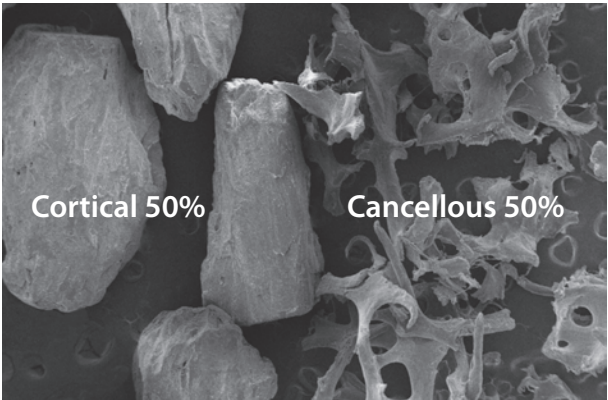
Allograft
FDBA, Cortical 50% Cancellous 50%

Product Features

- This product is made up of human tissue from trusted donors whose gender, age, and medical history were checked to ensure that their tissue could be used safely.
- It is an ideal combination of 50% cortical powder and 50% cancellous powder for bone induction.
- The 50% cortical powder maintains the space of the transplanted area during the new bone formation due to the delayed absorption rate. [OsteoConduction]
- 50% cancellous powder is rich in minerals and collagen that promote cell adhesion, bone remodeling, and vascular re-formation. [OsteoInduction]
- To prevent cross-infection by a different donor, the process is done by a single donor.
- Under the higher-level pharmacological standards (medical criteria) of the American Association of Tissue Banks (AATB), we sampled, processed and distributed the allograft tissue.
- We recommend use of this product with the COWELL® BMP.
- The difference between INNO OSS and INNO OSS Allo is classification of the product only. INNO OSS is classified as a HUMAN TISSUE and INNO OSS Allo is a MEDICAL DEVICE.



SEM Image



Dose and Particle Size

Type	Product Code	Particle Size	Particle Dose
INNO OSS	OSS3	0.3~0.8mm	0.3cc
	OSS6	0.3~0.8mm	0.6cc
INNO OSS Allo	OSS3P	0.3~0.8mm	0.3cc
	OSS6P	0.3~0.8mm	0.6cc

Method of Use

1

Remove the syringe's rubber cap.

2

Hydrate it in saline solution.

3

Turn and pull out the syringe cap to remove it.

4

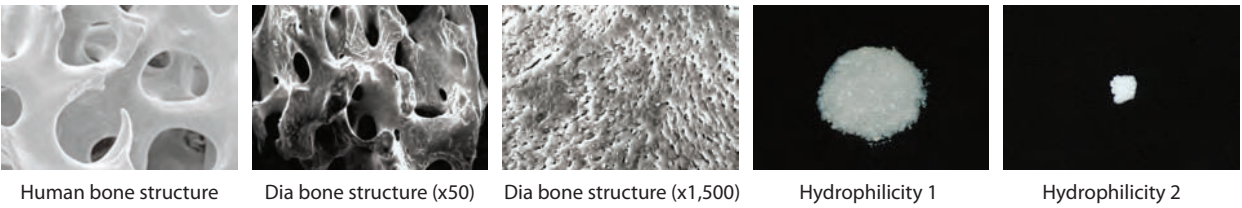
Graft it in the desired area.

DiaBONE

Bovine Bone Substitute

A Bone 100% fused to Natural Human Bone

- Fast blood penetration.
- Great hydrophilicity.
- 3-Dimensional structure.
- Easy to handle.
- Maximizes bone fusion.
- Mutually connected porous structure.
- Optimal cell attachment and blood absorption.
- Stimulates activity of osteoclast and osteoblast.



Safe & Trustable Material

- Made of 100% bovine bone.
- Cleansing over 30 times to perfectly remove organic substances.
- Firmed bone formation as highly dense.
- 100% pure HA & 99.73% of bone crystallization.



(New bone formation clearly observed around grafted bone site)

Volume and Particle Size

Product Code	Particle Size	Volume
G2015	0.25~1.0mm	0.15g
G2025	0.25~1.0mm	0.25g
G2050	0.25~1.0mm	0.5g
G2100	0.25~1.0mm	1g
G2200	0.25~1.0mm	2g

Product Code	Particle Size	Volume
G5015	1.0~2.0mm	0.15g
G5025	1.0~2.0mm	0.25g
G5050	1.0~2.0mm	0.5g
G5100	1.0~2.0mm	1g
G5200	1.0~2.0mm	2g

MEGA DERM™ PLUS

Acellular Dermal Matrix

Product Features

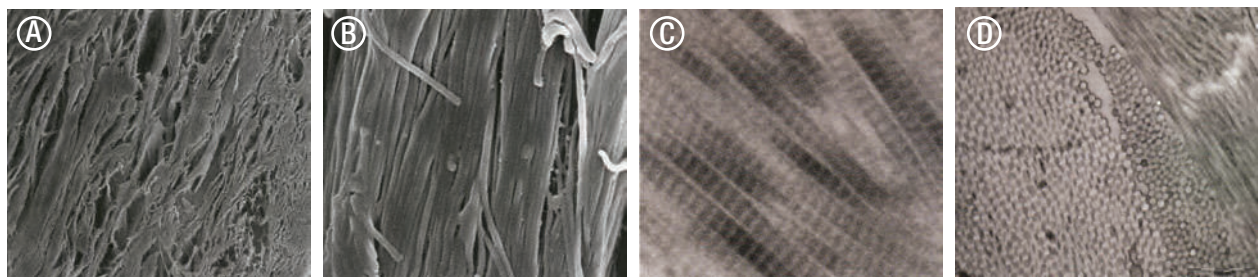
- This product can carry out the functional blocks of the membrane (soft tissue penetration protection) due to its long absorption period, and has excellent manipulability.
- Unlike other imported complete products, this product is produced under the stringent standards of the FDA in Korea.
- The world's first E-Beam sterilization can induce safe and prompt engraftment.
- E-Beam is safe and can be effectively sterilized without destroying the collagen tissue structure.
- This product is the first in the world with the basement membrane layer removed (patent pending) to maximize the transplant engraftment rate.
- This shows the high engraftment rate after the transplant by maximizing the influx of fibroblasts and/or the neovascularization. (Patent Application No. 10-2012-0026616)



Application

- Mucogingival defect.
- Soft tissue formation around the implant area.
- Wide perforation in the Schneiderian membrane.

SEM Images (These have kept the collagen structure after the E-Beam sterilization.)

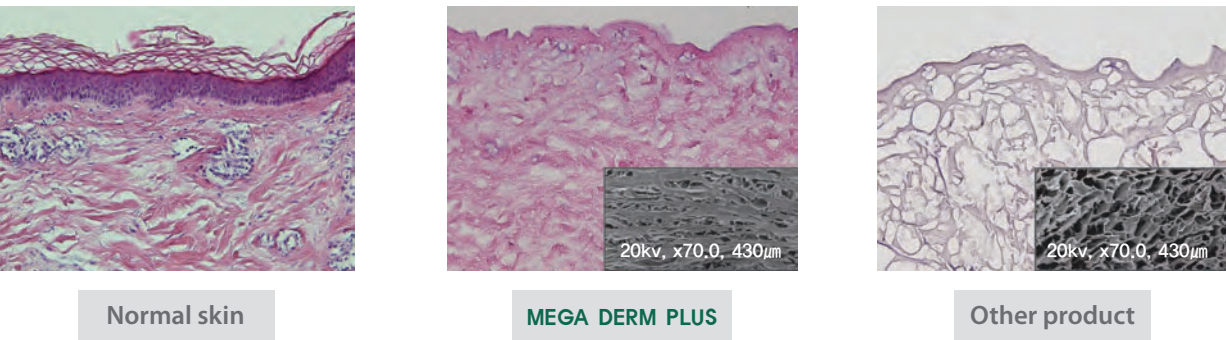


A. SEM (x200) B. SEM (x20,000) C. TEM (Transverse section) D. TEM (Cross section)

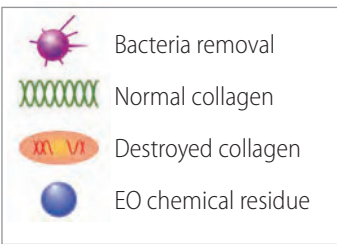
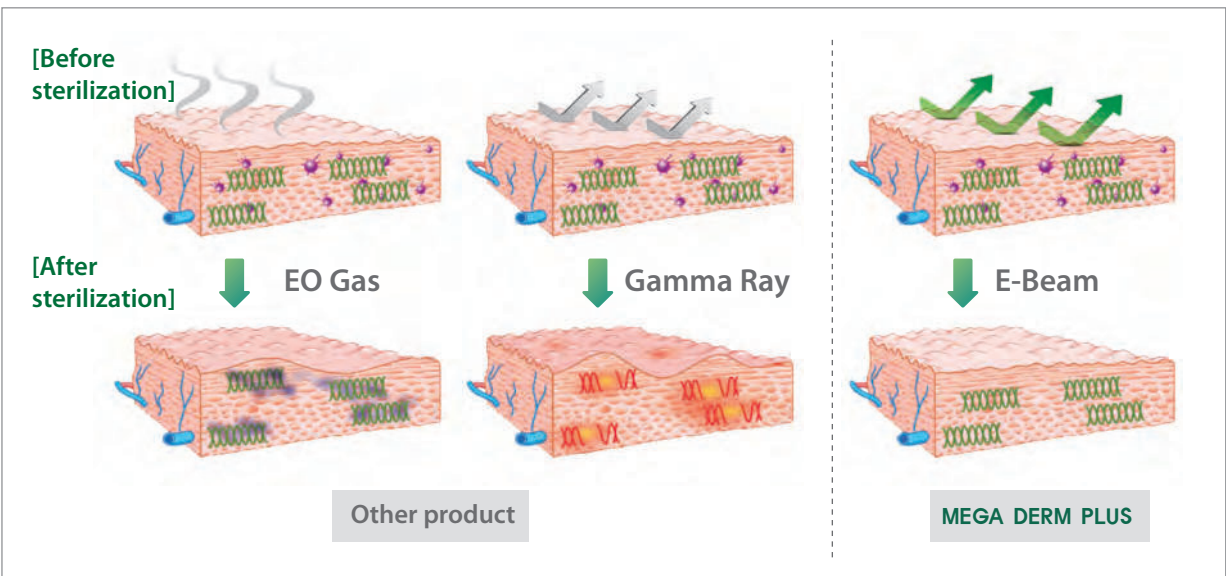
Specifications

Product Code	Size	Thickness
D1520P	15x20mm	0.5~0.7mm
D1525P	15x25mm	0.5~0.7mm

MEGA DERM PLUS three-dimensional structure of the dermis



The world's first 'E-Beam' sterilization that does not destroy the collagen structure



Diaderm® M

Biodegradable Atelocollagen Membrane

GTR(Guided Tissue Regeneration) GBR(Guided Bone Regeneration) membrane

- Diaderm® is a dental membrane used for GTR (Guided Tissue Regeneration) and GBR (Guided Bone Regeneration) operation.
- Diaderm® helps restoration of alveolar bone and protect operation site from infiltration of an epithelial cell and exterior circumstances.
- Diaderm® made from high purity atelocollagen has high biocompatibility, mechanical strength, resistance to enzymatic degradation and flexibility.

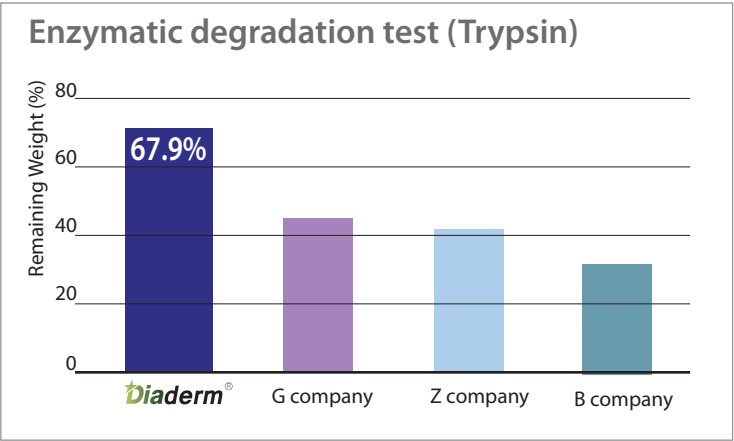
Product Features

- High biocompatibility.
- Induces restoration of tissue.
- Closes wound site completely.
- Sustains space for bone reproduction.
- Easy to handle and operate.



Resistance against enzymatic degradation

- Diaderm® has higher resistance to enzymatic-degradation compared to products from other manufacturers.



Storage and Shelf Life

- Store at 1-30°C
- Shelf Life : 3 years from the date of manufacture

Specifications

Product Code	Size
AS-007020	15X30mm

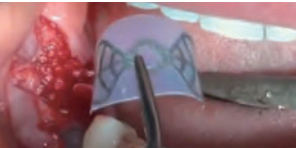
InnoGenic™ Non-resorbable Membrane

InnoGenic™ Wifi-Mesh and InnoGenic™ PTFE-Mesh

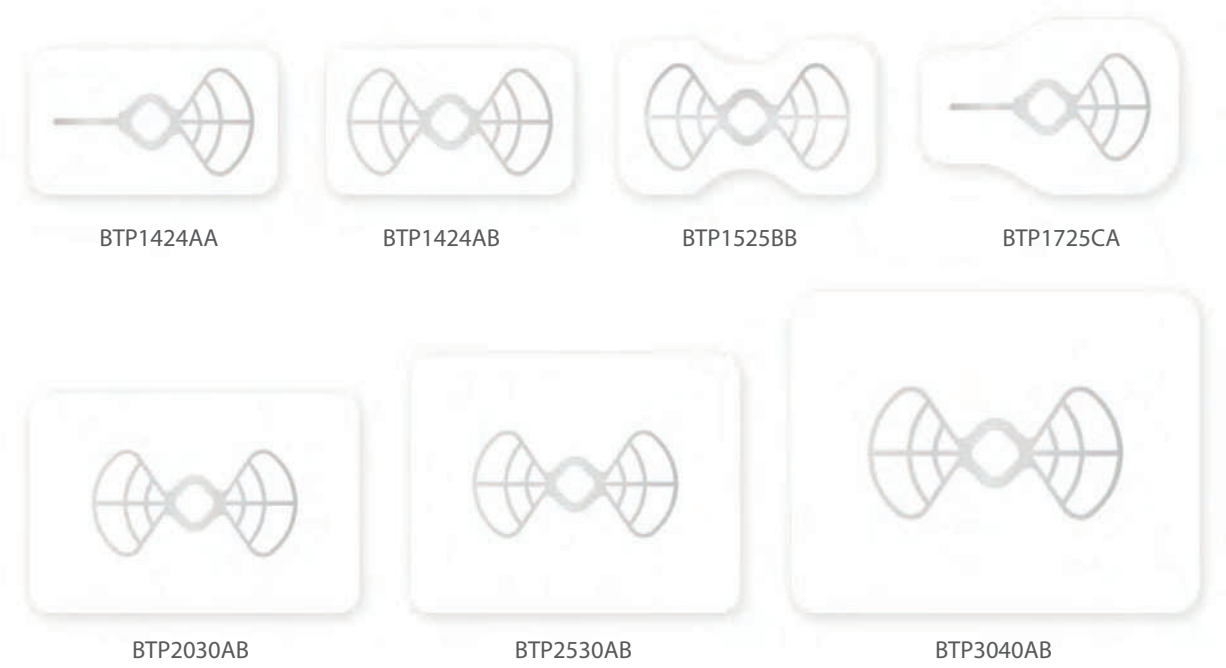
- The InnoGenic™ Wifi-Mesh, PTFE-Mesh and Ti-Mesh are non-resorbable barrier membrane to be applied over intraoral defects, especially, tooth extraction and bone augmented sites. The InnoGenic™ Wifi-Mesh and PTFE-Mesh are made of proprietary 100% PTFE, the polytetrafluoroethylene (teflon) sheet which is a biologically inactive and tissue compatible material and the InnoGenic™ Wifi-Mesh is reinforced with titanium frames (Titanium Gr II, ASTM F 67) embedded between two layers of PTFE sheets.

InnoGenic™ Wifi-Mesh

> Packing unit : 1ea



Product Code	Size	Thickness
BTP1424AA	14X24	0.25
BTP1424AB	14X24	0.25
BTP1525BB	15X25	0.25
BTP1725CA	17X25	0.25
BTP2030AB	20X30	0.25
BTP2530AB	25X30	0.25
BTP3040AB	30X40	0.25



Clinical Case using the Wifi-Mesh



• Periodontitis with local osteomyelitis of #45 & 47



• Bone graft using INNO-OSS™ Allo



• Shielding soft tissue penetration using Wifi-Mesh

3 months later



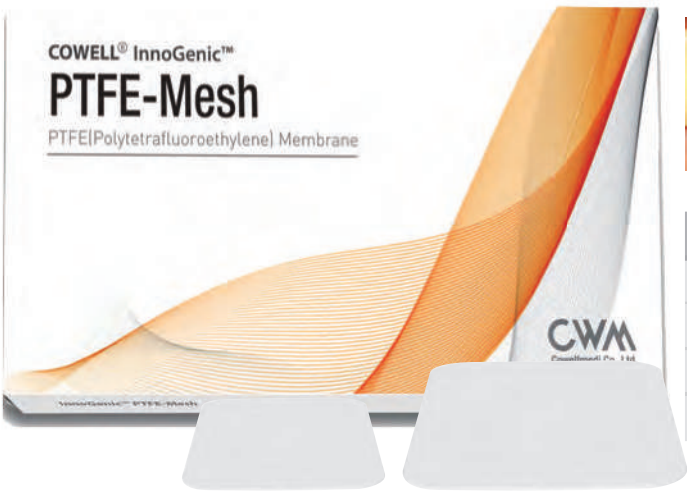
• Removal of Wifi-Mesh



• Dense periosteum layer has been formed

InnoGenic™ PTFE-Mesh

> Packing unit : Sea

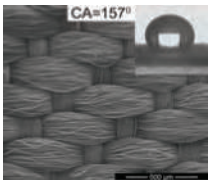
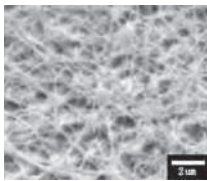
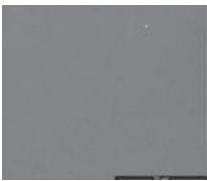


Product Code	Size	Thickness
TS17251	17 x 25	0.1
TS24301	24 x 30	0.1
TS17252	17 x 25	0.2
TS24302	24 x 30	0.2

Features

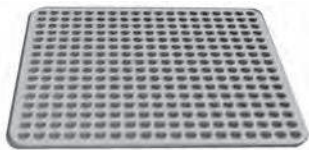
- **Non-resorbable :** Made of 100% non-resorbable material for users to modulate healing period.
- **Non-porous (0.0 μm) + Open Membrane Sheet Technique :** Prevention of infection or other possible defects caused from passage or integration of bacteria through porosity of plaster and it even allows to apply Open Membrane Sheet Technique.
- **Prevention of Displacement :** Not only being sutured along with gingival but also using **InnoGenic™ GBR Kit** inserted and fixed into the hole of titanium frame allows displacement of the products.
- **Close to Transparency :** Observation of the healing of the underlying tissue through almost transparent PTFE surface allows more predictable result and helps determine removal time easier.
- **Easy to be Customized :** Easy to modify the shape according to shape and dimension of the defect.
- **Easy to be Removed :** Put a hook in the hole of the titanium frame of the InnoGenic™ Wifi-Mesh and in any center part of the InnoGenic™ PTFE-Mesh and remove.

Comparison to other similar products sold in market

Classification	Product A	Product B	InnoGenic™ Wifi-Mesh & PTFE-Mesh
SEM Photograph			
Ultrastructure	Fiber	Filter	Sheet
Bacterial infection at exposure	Bacterial toxin penetration between filters at 50 μm intervals	Bacterial toxin penetration between filters at 2 μm intervals	No Bacterial toxin penetration thanks to non porous structure
Action on Exposure	Instant Removal	Removal on week 3 to 4	Safe for more than 6 weeks
Shielding Function against Fiber Cell	High	High	Extremely High
Shape-keeping Capability against External Force	Large Deformation	Shrinkable Deformation	No Deformation

InnoGenic™ Ti-Mesh

- The InnoGenic™ Ti-Mesh is made of stamping titanium sheet, also Titanium Gr II, ASTM F 67, which is 100% commercially pure titanium. The InnoGenic™ Ti-Mesh is non-resorbable surgical mesh to be applied over intraoral defects, especially, tooth extraction and bone augmented sites.



Product Code	Size	Thickness
TMP210	25 x 34	0.07
TMP211	25 x 34	0.1

Features

- **Easy to be Customized :** Easy to modify the shape according to shape and dimension of the defect.
- **Prevention of Displacement :** Prevents displacement of the InnoGenic™ Ti-Mesh using the **InnoGenic™ GBR Kit** inserted and fixed into the 1mm hole of the Ti-Mesh Frame.
- **No Memory :** The problem of Majority of Titanium Meshes in the market is resilience of the products after certain time. Due to this problem, patients go through serious pain. The InnoGenic™ Ti-Mesh is, however, made after many times of stamping process, the InnoGenic™ Ti-Mesh does not come back to the original shape after shape is formed.

Ver.28
Help your daily practice superior



CWM-Ver.28

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