



Cowellmedi® Implant Solutions

Driven by Purpose. Proven by Science.

Ver. 33



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Cowellmedi® Implant Solutions

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The Birth of Korean Dental Implants

Cowellmedi
Where Innovation Comes to Life

- **Innovation-Driven:**
Leading the future with HydroX7 and E.rhBMP-2.
- **Proven Performance:**
Trusted by science, proven over time.
- **Global Reach:**
Certified worldwide, connected everywhere.



[1994] BIOPLANT™



Developed Korea's first dental implant by Dr. Soohong Kim.

[2002] AXIS Implant™



Introduced a wedge-type implant optimized for low bone density.

[2004] Industrial Medal



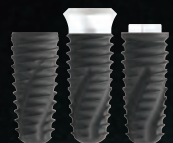
Awarded for the development of Korea's first dental implant.

[2010] COWELL® BMP



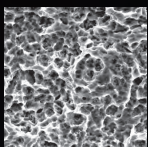
Launched the world's first E.rhBMP-2 based bone graft material.

[2012] INNO Implant System®



Introduced Cowellmedi's flagship implant featuring HydroX7.

[2015] HydroX7



Developed HydroX7.

[2019] Presidential Citation



Published a clinical case collection with a record of Cowellmedi® Implant System for over 20 years.

[2024] Presidential Citation



Recognized for contributions to the national industry through trade.

[2025] Cowellmedi Global Innovation Centre



FREE Software for guided surgery
One software - All Functions

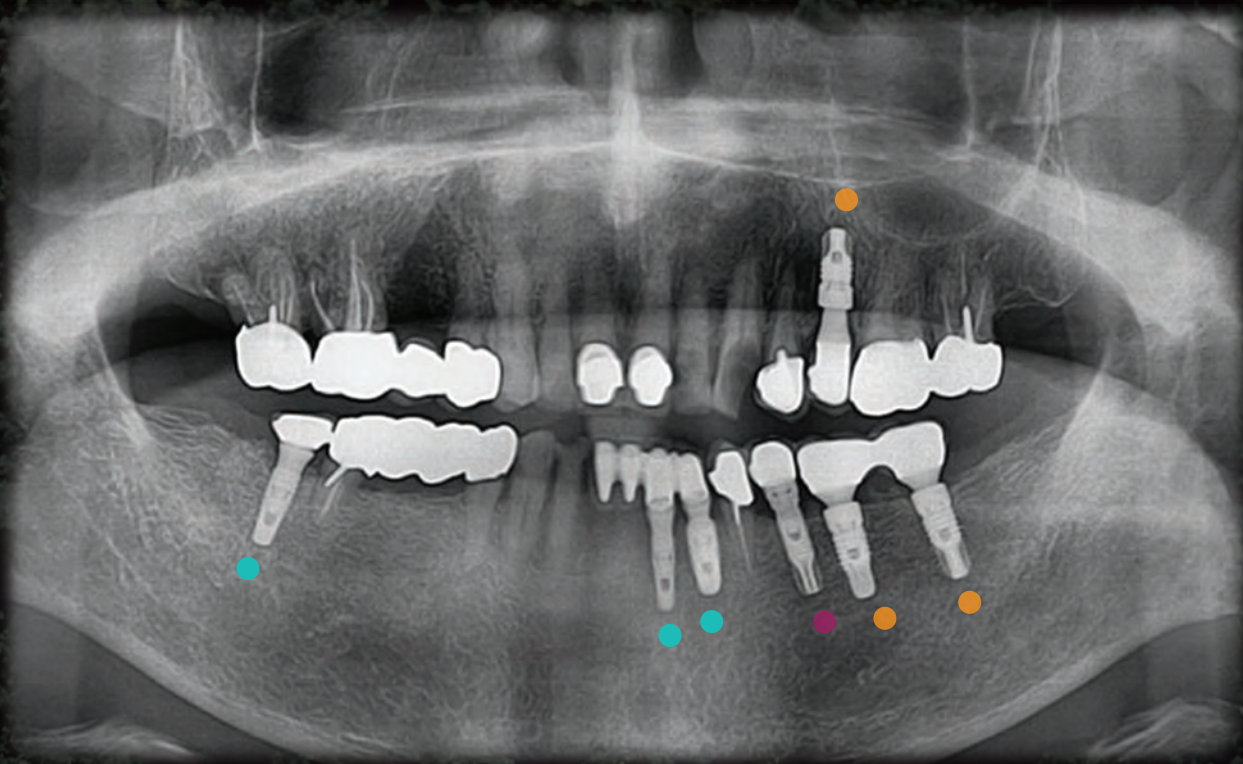
[2025] Cowellmedi Global Innovation Centre



Completed in Busan, Korea.

SINCE
1994

Where It All Began : **Korea's Oldest** Implant Case



Bioplant



Atlas



INNO

BIOPLANT(#35) : 1st dental implant, launched in 1994.

ATLAS (#25, #36, #37): Korea's 1st dental implant with ASD surface treatment.

INNO (#32, #33, #47): Cowellmedi's 4th generation implant featuring HydroX7 treated surface.



Cowellmedi
Where Innovation Comes to Life

Cowellmedi
Global Innovation Centre

Cowellmedi Global Innovation Centre

Where Innovation Comes to Play

Located in Busan, South Korea, Cowellmedi Global Innovation Centre is the core hub for advancing the science, technology, and education that define the future of implant dentistry. As a fully integrated space combining R&D, manufacturing, clinical training, and global communication, Cowellmedi Global Innovation Centre enables faster, smarter, and more collaborative innovation, bringing ideas to life and delivering value directly to clinicians and patients around the world.

Key Functions

- **Integrated Research and Development**

Research divisions in implant, surface, digital, and biomaterials collaborate to develop next-generation implant solutions, including integrating bioactive growth factors, genetically engineered biomaterials, advanced macro/micro implant designs, nanoscale surfaces, and AI-driven digital treatment workflows.

- **Manufacturing & Technology**

From surface treatment and precision CNC machining to kit assembly and packaging, the smart production infrastructure ensures quality, efficiency, and scalability.

- **Education & Collaboration**

Through conference halls and live demonstration environments, Cowellmedi Global Innovation Centre provide hands-on training and real-time knowledge sharing for global clinicians.

- **Corporate Communication**

Lounge-style cafeterias, meeting areas, and exhibition spaces are designed to host international partners, fostering transparency, trust, and long-term collaboration.

A Space Designed for Global Growth

- **R&D Zone: Cowellmedi Science Hub**

(Integrated R&D · Implant · Digital · Surface · Biomaterials)

- **Office & Communication Zone**

- **Production Zone**

- **Conference & Exhibition Halls**

- **Corporate Wellness Centre & Utility Facilities**

Cowellmedi Global Innovation Centre is more than a building—it's the beating heart of innovation, where science, technology, and care converge to redefine implant dentistry on a global scale.

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 1st dental implant, BIOPLANT™.
• Successfully localized dental implants for the first time in Korea.
- 1998** • Founded Asrahi Medical.
- 1999** • Established R&D corporation with Pusan National University's Oral and Biotechnology Research Center.
- 2000** • Incorporated as Cowellmedi Co., Ltd.
• Obtained ISO 9001.
- 2002** • Developed ASD surface treatment for dental implants for the first time in Korea.
- 2003** • Obtained US FDA approval for BIOPLANT™.
- 2004** • Awarded an industrial medal from the Korean government for developing Korea's 1st dental implant.
- 2005** • Obtained CE, ISO 13485, and GMP.
- 2006** • Established Cowellmedi USA and Cowellmedi Taiwan.
• Founded Cowellmedi Tissue Engineering Institute for Growth Factors.
- 2007** • Obtained a KR patent for E.rhBMP-2-coated dental implants
(E. coli-derived recombinant human bone morphogenetic protein type-2), commercialized for the first time in the world.
- 2008** • Completed preclinical trials on E.rhBMP-2 (COWELL® BMP).
- 2009** • Obtained MFDS approval for clinical trials on COWELL® BMP.
- 2010** • Obtained MFDS manufacturing and sales approval for COWELL® BMP.
• Hosted the 1st BMP World Symposium in Seoul, Korea.
- 2011** • Obtained a US patent for E.rhBMP-2 coated implant.
• Signed a co-promotion agreement with Il-Dong Pharmaceutical for COWELL® BMP.

COWELLMEDI

[kavəl:medi]

Noun, singular

1. Cowellmedi is a manufacturer of dental implants, regenerative materials, instruments and The company is well known as the manufacturer that developed and launched Korea's first dental implant, called Bioplant™. As one of key players in dental healthcare industry, the company was founded in having obtained a patent in Korea and USA for its rhBMP-2 implant surface coating technology, Cowellmedi has attracted attention from the world dental community as a dental implant manufacturer.

- 2012**
 - Obtained MFDS approval for E.rhBMP-2 spinal fusion clinical trial.
 - Launched INNO Implant System®.
- 2013**
 - Obtained US FDA approval for INNO Implant System®.
 - Developed Multi Abutment System.
- 2014**
 - Established REID (Research & Education in Implant Dentistry).
 - Hosted CIC 2014 (Cowellmedi® International Conference), Seoul, Korea.
- 2015**
 - Developed HydroX7 implant surface.
 - Hosted CIC 2015, Madrid, Spain.
- 2016**
 - Established Cowellmedi China.
 - Hosted CIC 2016, Seoul, Korea
- 2017**
 - Launched Sonator 80's System™, an implant-supported overdenture system.
 - Hosted CIC 2017, Bangkok, Thailand.
- 2018**
 - Selected as a Global Intellectual Property (IP) Star Enterprise.
 - Hosted CIC 2018, Prague, Czech Republic.
- 2019**
 - Published a clinical case collection featuring over 20 years of Cowellmedi implant outcomes.
 - Hosted CIC 2019, Jeju, Korea.
- 2020**
 - Obtained MDSAP (Medical Device Single Audit Program).
 - Launched SFIT (SpreadFit™) Cementless Solution.
- 2021**
 - Obtained CE for Wifi-Mesh™ and PTFE-Mesh™.
 - Obtained Health Canada approval for INNO Implant System®.
- 2022**
 - Acquired the site for Cowellmedi Global Innovation Centre in Busan, Korea.
 - Hosted Cowellmedi® EMEA Conference, Antalya, Turkey.
- 2023**
 - Published a pioneering book on BMP-2, showcasing its clinical value and innovation.
 - Hosted CIC 2023 (Cowellmedi International Conference), Rome, Italy.
- 2024**
 - Launched INNO X® and INNO V® Implant Systems.
 - Awarded Presidential Citation from the Korean government.
- 2025**
 - Completed the construction of Cowellmedi Global Innovation Centre in Busan, Korea.
 - Launched INNO PLAN™, an advanced surgical guide and implant planning software.



Research and Education in Implant Dentistry.

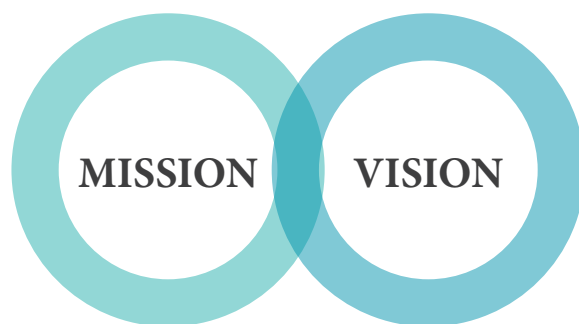
REID (Research and Education in Implant Dentistry) is a premier global institute shaping the future of implant dentistry.

Founded with a clear mission, REID leads innovation by developing advanced technologies, establishing scientifically proven treatment concepts, and creating next-generation products that elevate clinical outcomes in implant dentistry and beyond.

REID is also a hub for world-class education, providing dental professionals with hands-on training, curated lectures, and real-world knowledge from renowned global experts.

Today, REID is more open and accessible than ever—connecting clinicians worldwide with practical clinical solutions, collaborative learning environments, and a global community of forward-thinkers.

Whether you're here to learn, lead, or share—REID is where innovation meets collaboration, shaping the future of implant dentistry.



MISSION

To advance the global standard of implant dentistry by equipping dental professionals with multidisciplinary education, cutting-edge treatment concepts, and high-quality research—all for the benefit of patients worldwide.

VISION

- Shaping the future of implant dentistry and related fields through continuous innovation.
- Becoming a world-class provider of education and research in implant dentistry.
- Expanding a global network to foster idea-sharing and clinical excellence.
- Offering accessible, high-impact training systems for dental professionals around the world.



Cowellmedi® Implant Systems

Engineered for Innovation. Designed for Life.

* For digital prosthetics, refer to page 232.

MINI PLUS (Cement / Ball)

Designed for mandible anterior spaces and edentulous arch. Semi-permanent or temporary solution for anterior spaces with the extremely narrow ridge.

Volume-up Healing Abutment

Optimized to prevent food impaction and restore the contracted buccal alveolar bone and gingiva to their original contour, creating an esthetic cervical profile.

INNO Narrow

Designed for the anterior esthetic zone with the narrow alveolar ridge. Double tapered threads acquire higher primary stability through a wedge action.

INNO Short

Designed for severe bone resorption—featuring a dual platform-switching design to minimize cortical bone compression and enhance long-term stability.

INNO S

Designed for high primary stability in low-density bone, featuring wide and deep threads with self-tapping cutting edges.

INNO Internal

Designed for optimal soft tissue management and simplified prosthetic procedures—ideal for posterior regions, one-stage surgery, and reduced risk of peri-implantitis.

INNO External

Designed to minimize microleakage and enhance clinical safety—featuring a stable external interface, proven sealing performance, and easy prosthetic handling.

INNO Submerged

Designed to handle all clinical scenario—immediate implant placement, immediate loading, depth adjustment, maxillary sinus procedures, and more.

INNO X

Designed for enhanced primary stability and faster insertion—based on the proven INNO Submerged implant, with a wider thread pitch and more aggressive design for excellent performance in soft bone and immediate placement cases.

INNO V

Designed to improve soft tissue adaptation and preserve crestal bone—with a narrower neck that supports better biological response and superior esthetic outcomes.



Meta G UCLA Abutment

Castable abutment with a metal base, modifiable into angulated, telescopic, or custom abutments.

Easy Temporary Abutment

Temporary restoration for the anterior esthetic zone, offering a simpler, speedier, and safer chairside procedure.

Angulated Abutment

A prosthetic solution frequently used in the anterior zone, improving alignment and esthetics in cases requiring angled restoration.

Milling Abutment

A customizable abutment for hand milling, ideal for crafting accurate, patient-specific prosthetics with excellent fit and esthetics.

Temporary Abutment

A convenient option for provisional use in the posterior area, enabling reliable chairside treatment.

Multi Abutment

Suitable for both fully and partially edentulous arches. A wide range of prosthetic options, along with its round-shaped design, accommodates various clinical needs.

Lock Abutment

Developed for the same purpose as the Multi Abutment, but optimized for prosthetic restorations in narrow ridges.

Ball Abutment

Used to treat patients requiring basic implant-supported overdenture care at an affordable cost.

Sonator Abutment

Designed for use with removable implant supported overdentures, whether fully or partially retained by implants in the maxilla or mandible.

Beauty-up Abutment

Specifically designed to address esthetic and functional challenges when Screw Retained prosthesis with an angulated screw channel is required in the anterior region.

Cemented Abutment

A straight abutment fixed with standard prosthetic screws, suitable for cases with favorable implant positioning and applicable to both SCRP and CRP.



Processing Workflow

CNC Machining



High-precision machining is performed using advanced CNC systems integrated with COWELL® Class 1000 tolerance control. Operated by a world-class technical team, this ensures consistent accuracy and product excellence.



Surface Treatment



HydroX7 surface treatment enhances implant integration through its advanced surface characteristics. This innovative technology promotes faster and stronger osseointegration, supporting early loading and long-term clinical success



Inspection



Each component undergoes rigorous inspection using high-resolution instruments such as optical profilers, stereoscopic microscopes, and micrometer scopes. These specialized devices ensure flawless quality control tailored for dental implant manufacturing.

Cleansing



A multi-step cleansing process involving ultrasonic waves and triple-distilled water, followed by vacuum and heat drying, guarantees residue-free sterility and exceptional product safety.



Packing and Sterilization



Products are hygienically packaged in Class 1000 cleanrooms and sterilized using gamma-ray irradiation with medical-grade isotopes, ensuring the highest level of biocompatibility and safety.



Shipping Warehouse



Final products are carefully sorted and stored in climate-controlled warehouses, ensuring immediate availability and dependable global delivery

Cowellmedi Warranty

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

1. Guarantee beneficiary and scope

Products	Period	Conditions	Remarks
Fixture	Lifetime	Replacement with an equivalent Fixture	The warranty period begins on the date of sale

2. Scope of Warranty

- 1) Quality Coverage
 - > Applies when the defect is due to flaws in the material or manufacturing process.
- 2) Surgical Coverage
 - > Applies when the implant fails to achieve osseointegration with the bone.

3. Claim Procedure

- 1) If an issue arises after implant placement, the responsible personnel must be contacted within 30 days of the procedure.
- 2) Upon contact, a Customer Complaint Report must be completed and submitted along with the product in question.

4. Exclusions from Warranty Service

- Warranty service shall not be provided in the following cases:
 - 1) If the implant is placed in patients with diabetes or alcohol dependency.
 - 2) If the implant is placed in patients with a history of systemic diseases that make surgical procedures difficult.
 - 3) If the implant is placed in patients who are dependent on habitual medications.
 - 4) If the procedure is not performed according to the official Cowellmedi protocol.
 - 5) If the procedure does not comply with biological indications (e.g., the distance between the buccal wall and the implant must be at least 2 mm).
 - 6) If contaminated surgical instruments are used during the procedure.
 - 7) If the implant is placed in patients suffering from tissue infection or cellular contamination.
 - 8) If components from other manufacturers are mixed with Cowellmedi® Implant System.
 - 9) If the investigation by the responsible personnel concludes that the issue is unrelated to Cowellmedi-manufactured products.
 - 10) If the product is not stored at room temperature in a dry environment, or if contamination occurs after opening.
 - 11) If the required information, especially the product Lot number, serial number, or X-ray images, is not provided.
 - 12) If the product in question is not returned.
 - 13) If the product is damaged due to improper handling or negligence.
 - 14) If the packaging is opened and the product is no longer sterile.
 - 15) If the remaining shelf life of the unopened product is less than one-quarter of its original expiry period.

Package System

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

A. Color classification by fixture type

Type	Submerged (Sub.)				
Model	INNO Submerged	INNO X	INNO V	INNO Short	INNO S
Package					
Connection	 Blue				

Type	Submerged Narrow (Sub-N.)	Internal (Int.)	External (Ext.)	1 Body Cement (1C.)	1 Body Ball (1B.)
Model	INNO Narrow	INNO Internal	INNO External	MINI PLUS Cement	MINI PLUS Ball
Package					
Connection	 Emerald	 Orange	 Green	 Pink	

B. External Label Marking and Color Coding by Fixture Diameter and Type

- > Fixture diameter is color-coded on the external label.
- > This product is sterilized and must not be reused after opening.
- > After opening the ampule, ensure it is securely fastened to prevent accidental dropping.
- > Store in a dry place at room temperature and take care to prevent contamination once opened.
- > Do not use expired products; discard them immediately.

20A060040A0004

WS174010mm

INNO Sub. Fixture



INNO Sub. Fixture

(No-Mount)

PRODUCT NAME : INNO Implant System®

CATALOG No. [REF] : ST4010SM

SIZE : Ø4.0X10mm(Sub.Hex.Taper)

LOT NO. [LOT] : 22A060040A

DATE OF MANUFACTURE [MM] : 2022-01-06

USE BY [YY] : 2027-01-05

PACKING UNIT : 1EA

STORAGE CONDITION : Store at temperature (1°C~30°C) and in a dry place.

 Do Not Reuse

 Caution

 Consult Instructions for Use

STERILE [R]

Sterilized Using Irradiation 1°C

30°C Temperature Limit (1°C~30°C)

MD Medical Device

Single Sterile Barrier System

Manufacturer  Cowellmedi

Cowellmedi Co., Ltd.

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Website: <http://www.cowellmedi.com>

EC-Representative [EC REP] : AR Experts B.V.

Boeingavenue 209, 1119PD Schiphol-Rijk, The Netherlands



(01) 08800016106725

(11) 220106

(10) 22A060040A

(21) 0004

Rx Only

 2460 

MEDICAL DEVICE

CWM-L-004 (Ver.8)

* Actual product label design and content may vary according to regulatory requirements.

												
Diameter Model (Type)	Ø2.5	Ø3.0	Ø3.1	Ø3.3	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5	Ø6.0	Ø6.5	Ø7.0
	Bisque	Green	Burgundy	Orange	Yellow	Emerald	Red	Pink	Violet	Gray	Pine	Blue
INNO Submerged (Sub.)	-	-	-	-	✓	✓	✓	✓	-	✓	-	-
INNO X (Sub.)	-	-	-	-	✓	✓	✓	✓	✓	✓	-	✓
INNO V (Sub.)	-	-	-	-	✓	✓	✓	✓	-	✓	-	✓
INNO Short (Sub.)	-	-	-	-	-	✓	✓	✓	✓	✓	-	-
INNO S (Sub.)	-	-	-	-	-	✓	✓	✓	✓	✓	✓	✓
INNO Narrow (Sub-N.)	-	-	✓	✓	-	-	-	-	-	-	-	-
INNO Internal (Int.)	-	-	-	-	✓	-	✓	✓	-	✓	✓	-
INNO External (Ext.)	-	-	-	-	✓	✓	✓	✓	-	✓	✓	-
MINI PLUS Cement (1C.)	✓	✓	-	-	-	-	-	-	-	-	-	-
MINI PLUS Ball (1B.)	✓	✓	-	-	-	-	-	-	-	-	-	-

018 Package System

2. Fixture user guide (Embedded in the packaging)

- > The user guide is enclosed within the product packaging.

Cowellmedi® 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 a 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 the 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 the 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 10N.cm to prevent the intrusion of a foreign substance in the fixture. 2) Surgery - The Second Stage a. Incise gingival of the upper part of fixture subsequent to bone fusion and remove Cover Screw, tighten up Healing Abutment and start gingival curing for a 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 diseases such as hematomycrasia or diabetes and undernourishment. e. Any patient who is not suitable for operation. 5. Warnings Implant surgery and restoration involve 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 the 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 risks, 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. Post-implant Management 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, again depending on the bone quality. If pressure is applied to the fixture during the healing period, such as in mastication, early fixation may not be achieved or osseointegration of the fixture may not occur within the healing period. b. Once the operator clinically determines that sufficient osseointegration has been achieved, he/she should begin producing the dental prosthesis. c. The Lot Number Identification Tag and the X-ray film should be attached to the patient's chart, to track the product when needed. 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 the product at room temperature and in a dry place. b. The fixture, fixture mount, and cover screw have been cleaned and sterilized through radiation (gamma irradiation) and are ready for use. c. The product packages should be opened just before their use during the operation. Expired products should not be used. d. Only appropriate sterilized surgical tools made specifically for dental implants should be used during the operation. 11. Expiration date The 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, it should not be used under any circumstances if open. b. Every product is disposable. It should not be reused. Cowellmedi Co., Ltd. 48, Hakgam-daero 221beon-gil, Sasang-gu, Busan, 617-801, Republic of Korea Tel. +82-51-312-2027-8 Fax. +82-51-316-2628 https://www.cowellmedi.com D/T Cowellmedi USA INC. 218 Trianon LN Villanova PA 19085-1442 USA Tel. +1-623-939-1344 Fax. +1-623-939-1472 EC-REPRESENTATIVE Certification Experts B.V. Amerlandseweg 7, 3621 ZC Breukelen, The Netherlands       2021. 09. 02 / CWM-I-007 (Ver.8)

* Actual product label design and content may vary according to regulatory requirements.

3. Fixture Packaging Opening and Extraction Sequence



Taking out the ampule



- 1 Press the dotted area on the upper part of the box to open it, and take out the sterilized blister pack.



- 2 Remove the moisture-resistant paper on the back of the blister pack, and gently drop the ampule onto the palm of a practitioner or onto surgical drapes.

Fixture separation



- 1 Hold the ampule with both hands and twist it 45 degrees to separate the middle part. Take care to prevent the fixture from falling.



- 2 Fixtures are fastened in two ways:
1) No-Mount → Fasten using Fixture Driver.
2) Pre-Mount → Fasten using Mount Driver.

Cover Screw separation

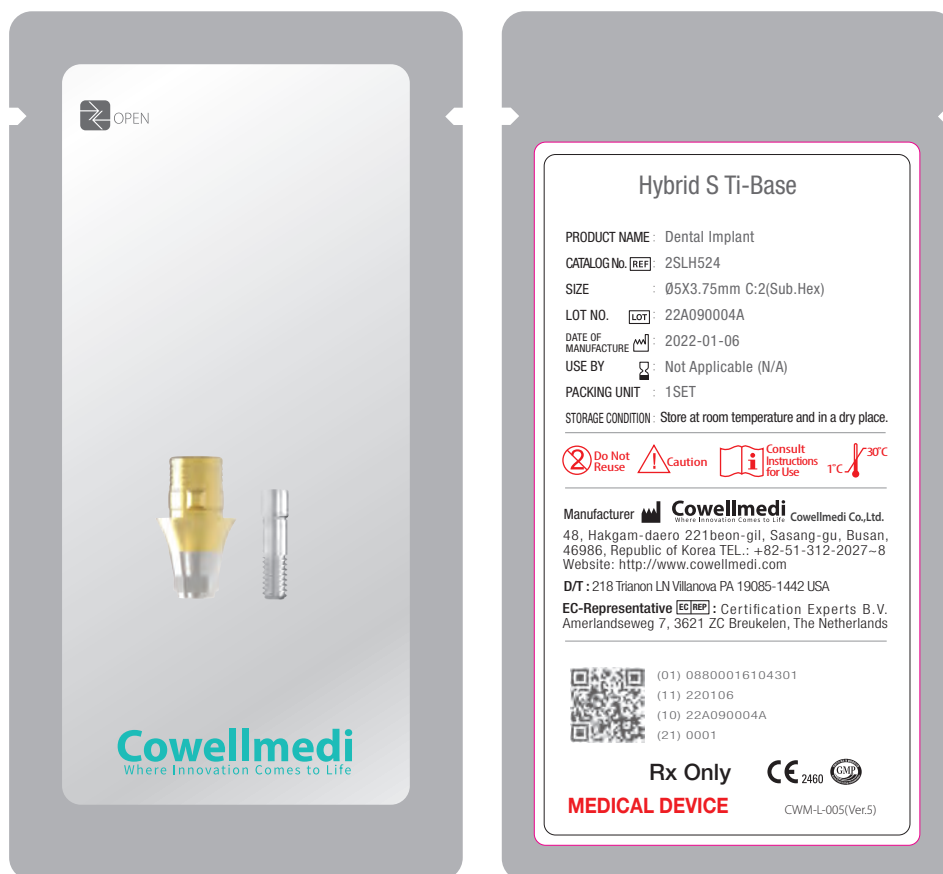


- 1 Separate the upper part of the ampule.



- 2 Fasten Hex Driver onto Cover Screw completely. Exercise caution to prevent patients from swallowing Cover Screw during placement.

4. Abutment packaging and external label marking



* Actual product label design and content may vary according to regulatory requirements.

5. Surgical Kit packaging and external label marking



* Actual product label design and content may vary according to regulatory requirements.

Fixture Types and Dedicated Surgical Kit System

1. Fixture Types

> Optimized design for a wide range of clinical cases, including immediate placement and loading, placement level and depth adjustment, narrow or atrophic ridges, sinus lift procedures, and more.

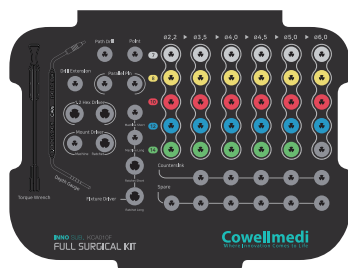
Type	Submerged (Sub.)				
Model	INNO Submerged	INNO X	INNO V	INNO Short	INNO S
Package					
Connection	 Blue				

Type	Submerged Narrow (Sub-N.)	Internal (Int.)	External (Ext.)	1 Body Cement (1C.)	1 Body Ball (1B.)
Model	INNO Narrow	INNO Internal	INNO External	MINI PLUS Cement	MINI PLUS Ball
Package					
Connection	 Emerald	 Orange	 Green	 Pink	

2. Dedicated Surgical Kit System

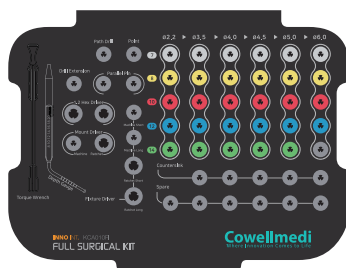
> Dedicated surgical kits specialized for each fixture type.

Sub. Full [KCA010F]



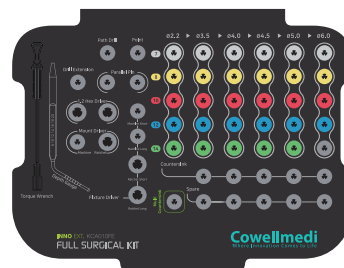
> For INNO Submerged, INNO X, and INNO V.

Int. Full [KCA010FI]



> For INNO Internal.

Ext. Full [KCA010FE]



> For INNO External.

Sub. Smart [KSA002]



> For INNO Submerged, INNO X, and INNO V.

Sub. Short [KSI001]



> For INNO Short.

Sub. S [KSI002]



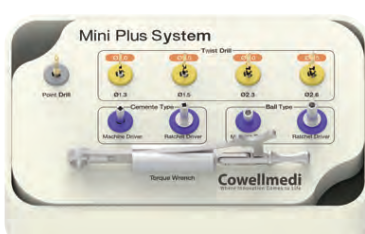
> For INNO S.

Sub-N. Narrow [KNA001]



> For INNO Narrow.

MINI PLUS [KMA003]



> For MINI PLUS

3. All-in-One Drill Protocol: Reduced drilling steps using only initial and final drills

> Chair time is reduced as the fixture can be placed with only three drilling steps for standard bone quality (Ø3.5 to 4.5).



Prosthetic Protocol for Abutments

1. Fixture-Level Impression and Prosthesis Fabrication

• Two-Piece Screw Retained Abutments

Submerged: Temporary | Easy Temporary | Meta G UCLA | Plastic UCLA

Submerged Narrow: Meta G UCLA

Internal: Meta G UCLA

External: Temporary

• Two-Piece Screw-Cement Retained / Cement Retained Abutments

Submerged: Cemented | Angulated | Beauty-up | Milling | Meta G UCLA | Plastic UCLA

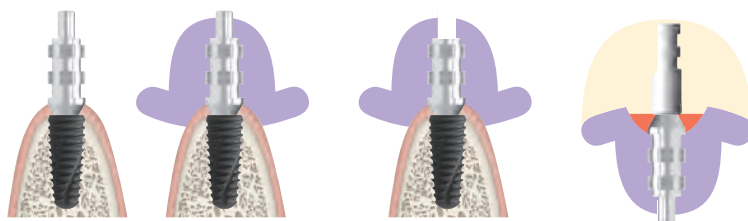
Hybrid S | Hybrid L | Hybrid A | Ti-Block

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

Pick-up (Open Tray)

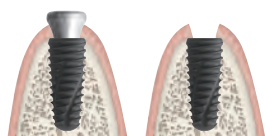


Connect Pick-up Impression Coping & Guide Pin, and take the impression with the open tray.

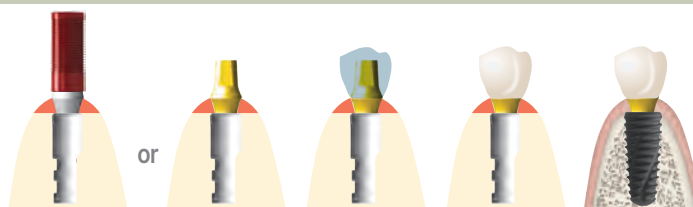
Single Crown: Hex / Octa Type
Bridge: Non-Hex / Non-Octa Type

Remove Guide Pin.

Connect Replica to Pick-up Impression Coping seated in the impression. Form the gingiva and pour stone into the tray to fabricate the working cast.



Remove Healing Abutment.

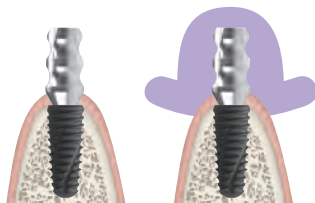


Connect the abutment with Replica in the working cast.

Wax build-up on the abutment. Complete the final prosthesis.

Try in the final prosthesis with the fixture.

Transfer (Closed Tray)

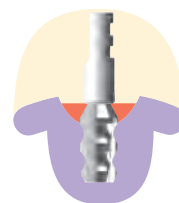


Connect Transfer Post & Guide Pin, and take the impression with the closed tray.

Single Crown: Hex / Octa Type
Bridge: Non-Hex / Non-Octa Type



Connect Replica with Transfer Post removed from the impression body.



Interlock Transfer Post into the impression body. Form the gingiva and pour stone into the tray for the working cast.

2. Abutment-Level Impression - Prosthesis Fabrication

• Two / One-Piece Screw Retained Abutments

Submerged: Multi S | Multi A | Lock

Submerged Narrow: Multi S | Multi A

• One-Piece Cemented Retained Abutments

Submerged: Absolute | Straight (Direct)

Submerged Narrow: Straight

Internal: Solid | Shoulder

External: Shoulder

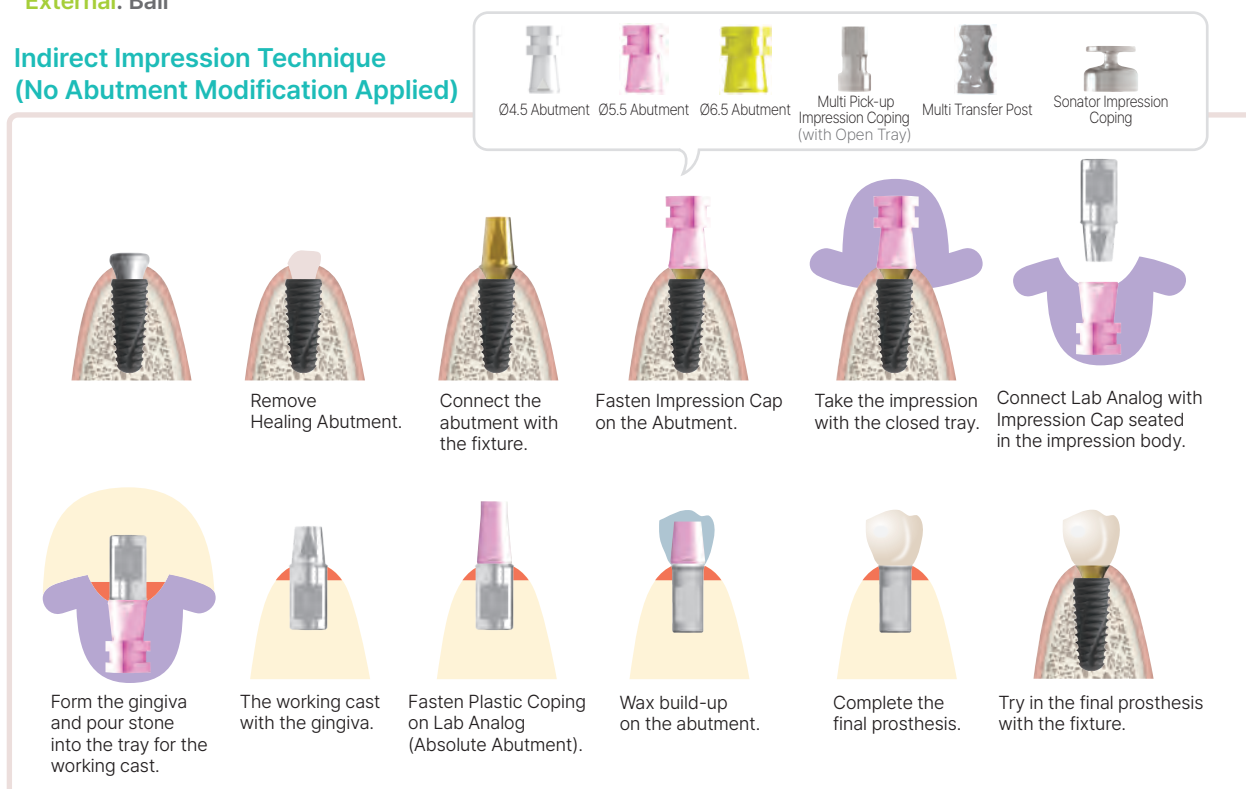
• Two / One-Piece Attachment Retained Abutments

Submerged: Sonator S | Sonator A | Ball

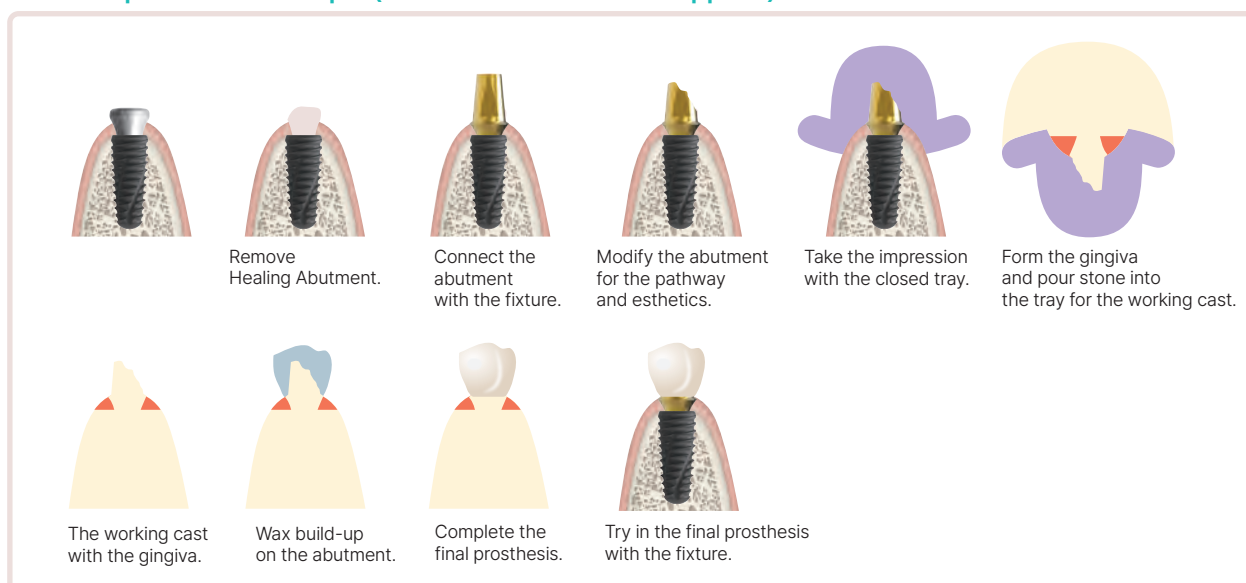
Internal: Sonator S | Ball

External: Ball

Indirect Impression Technique (No Abutment Modification Applied)



Direct Impression Technique (Abutment Modification Applied)





HYDRO

Awakened by H₂O. Perfected by pH7.4.



**Activated by nature.
Perfected by pH7.4 surface engineering.**

HydroX7 Surface Treatment

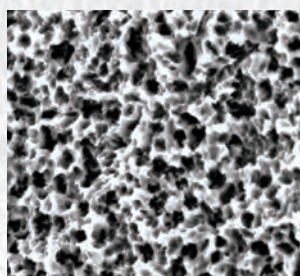
Activated by nature. Perfected by pH7.4 surface engineering.

Exclusively developed by Cowellmedi, HydroX7 is a next-generation implant surface inspired by nature and perfected by pH7 engineering. It features ultrahydrophilicity, biological neutrality, uniform nanostructures, and exceptional cleanliness.

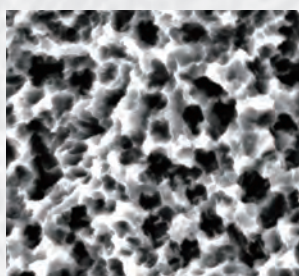
Its long-lasting hydrophilicity is preserved in dry packaging, removing the need for additional activation steps that rely on temporary effects or liquid storage. The precisely engineered nanostructure provides mechanical stability and structural consistency.

By promoting cell-to-cell communication from the early healing stage, HydroX7 supports enhanced osseointegration and biological stability, contributing to predictable and long-term clinical success.

Completed through a 22+ step cutting-edge process, including 10-stage etching, 12-stage ultra-pure cleaning, and multiple specialized treatments.



Macro, Micro-Fit / 3,000X



Macro, Micro-Fit / 5,000X



Nano-Fit(Roughness) / 100,000X



Nano-Fit(Roughness) / 200,000X

7 Key Advantages of HydroX7

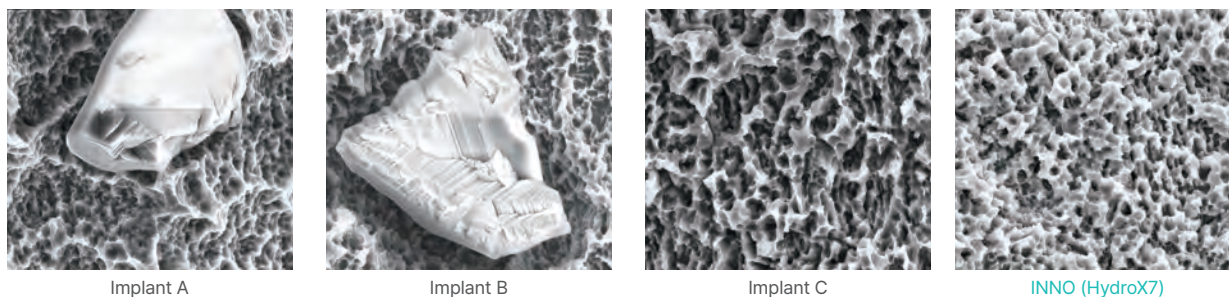
- Accelerated Osseointegration:**
 Promotes rapid adsorption of proteins and growth factors, facilitating early cell attachment and stable bone healing.
- Sustained Hydrophilicity in Dry State:**
 Maintains ultrahydrophilicity without the need for liquid storage or activation tools, which often provide only temporary effects and risk contamination.
- Biocompatible Neutral Surface:**
 Creates a physiologically favorable environment that promotes cell viability and reduces inflammation through its stable neutral pH of 7.4.
- Engineered Nanotopography:**
 Uniform micro- and nanoscale structures enhance cellular response and promote efficient tissue integration.
- Residue-Free HA Blasting:**
 Only hydroxyapatite is used for surface roughening without residual particles, avoiding the neurotoxic and cytotoxic risks associated with Al_2O_3 .
- Verified Cleanliness:**
 Demonstrated by advanced surface analysis to be free from organic and inorganic contaminants, ensuring optimal biological compatibility.
- Versatile Clinical Applicability:**
 Delivers consistent performance across a broad range of cases, including those involving complex or compromised conditions.

1. SEM/EDS Analysis on Implant Surface Integrity and Purity

A. Overview

- > This analysis evaluated the surface integrity and elemental purity of four dental implants using Scanning Electron Microscopy (SEM) and Energy Dispersive Spectroscopy (EDS). The goal was to detect surface contamination and assess the cleanliness and stability of implant surfaces following sandblasting and packaging processes.

B. Key Findings



Implant	Implant A					Implant B				Implant C			INNO (HydroX7)		
Element	Top	Middle	Bottom	Blasting Media	Storage Solution	Top	Middle	Bottom	Blasting Media	Top	Middle	Bottom	Top	Middle	Bottom
Ti	82.62	82.76	81.54	32.94	77.64	94.89	96.47	97.7	6.98	97.24	96.8	96.08	98.8	97.96	98.51
C	3.77	6.48	5.23	7.02	3.64	5.11	3.53	2.8	4.23	4.14	4.8	3.4	1.8	3.06	2.23
O	N/D	N/D	N/D	42.8	N/D	N/D	N/D	N/D	50.27	N/D	N/D	N/D	N/D	N/D	N/D
Zr	12.61	12.92	13.23	7.67	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
F	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	1.55	N/D	N/D	N/D
Na	N/D	N/D	N/D	N/D	11.44	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Cl	N/D	N/D	N/D	N/D	7.27	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D	N/D
Al	N/D	N/D	N/D	39.6	N/D	N/D	N/D	N/D	38.52	N/D	N/D	N/D	N/D	N/D	N/D

* Analyzed by Bio Research Institute, Cowellmedi Co., Ltd.

- > Aluminum oxide (Al_2O_3) was detected on Implant A and B, which is known to pose neurotoxic and cytotoxic risks.
- > Fluorine was observed on Implant C, with potential to trigger inflammatory responses and delay osseointegration.
- > INNO was the only one in which no residue was detected.

C. Conclusion

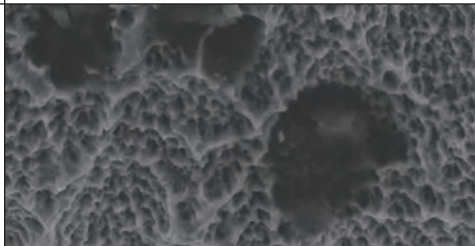
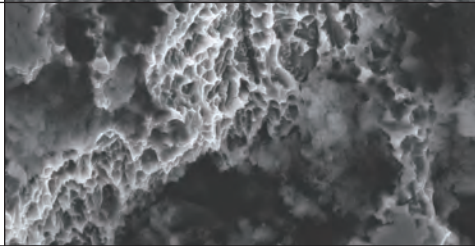
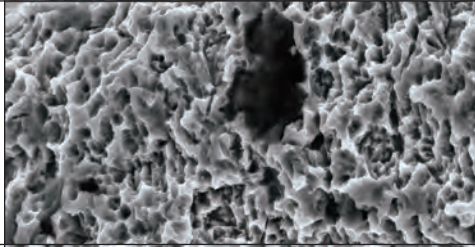
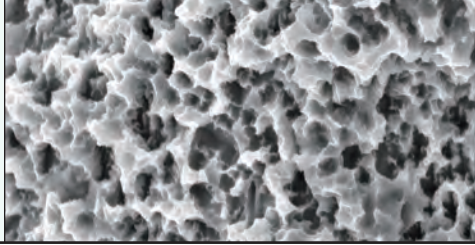
- > HydroX7-treated INNO demonstrated the highest level of purity and integrity among the evaluated implant surfaces. While others showed signs of residual contaminants that could negatively impact biocompatibility and osseointegration, HydroX7's advanced surface treatment process resulted in a residue-free surface, supporting optimal biological response and clinical safety

2. Torque Resistance Analysis of Implant Surface Structures

A. Overview

- > This analysis evaluated the microstructural stability of four dental implants after insertion into D2 bone. Using a digital torque gauge, implants were inserted at 30, 40, 50, 60, 70, and 80 N·cm. Post-insertion surface morphology was analyzed via scanning electron microscopy (SEM) to assess structural changes and damage thresholds under increasing torque.

B. Key Findings

Implant	SEM Image	Torque (N·cm)	Extent of Microstructural Damage (μm)	Result
Implant A		30	N/D	Maintained
		40	N/D	Maintained
		50	9.3~24.1	Severely Damaged
		60	9.0~26.4	Severely Damaged
		70	9.5~28.1	Severely Damaged
		80	11.0~43.4	Severely Damaged
Implant B		30	N/D	Maintained
		40	N/D	Maintained
		50	8.8~14.3	Severely Damaged
		60	12.8~42.4	Severely Damaged
		70	9.8~35.9	Severely Damaged
		80	16.8~57.5	Severely Damaged
Implant C		30	8.8~26.6	Severely Damaged
		40	17.6~23.8	Severely Damaged
		50	10.0~20.8	Severely Damaged
		60	7.5~15.3	Severely Damaged
		70	12.0~20.6	Severely Damaged
		80	19.6~20.1	Severely Damaged
INNO (HydroX7)		30	N/D	Maintained
		40	N/D	Maintained
		50	N/D	Maintained
		60	N/D	Maintained
		70	N/D	Maintained
		80	N/D	Maintained

* Analyzed by Bio Research Institute, Cowellmedi Co., Ltd.

- > Implant A and Implant B exhibited microstructural collapse, including pore destruction starting at 50 N·cm.
- > Implant C showed early surface destruction, with significant microstructural collapse evident from 30 N·cm.
- > INNO maintained microstructural integrity up to 80 N·cm.

C. Conclusion

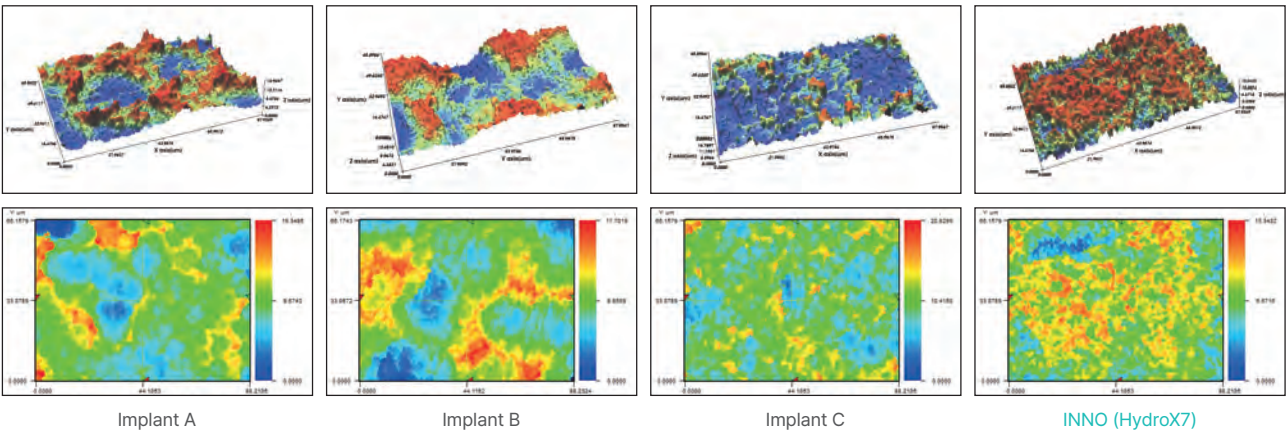
- > HydroX7-treated INNO demonstrated the highest resistance to torque-induced surface damage among the evaluated implants, maintaining microstructural integrity even under high insertion torque. This suggests superior mechanical stability and durability of HydroX7, making it a reliable option for clinical cases requiring high insertion torque without compromising surface features critical for osseointegration

3. Non-Contact Implant Surface Roughness Analysis

A. Overview

> This analysis evaluated the surface roughness and surface area enlargement of four dental implants using a non-contact 3D optical profilometer. The assessment was conducted to determine whether each implant met the optimal surface characteristics that promote effective osseointegration without increasing the risk of bacterial adhesion or inflammation.

B. Key Findings



Implant	Implant A	Implant B	Implant C	INNO (HydroX7)
Sdr(%)	219	215.33	239	243
Sa(μm)	2.04	2.61	1.79	1.88
StDev(μm)	0.15	0.27	0.1	0.02

※ Sa: Arithmetic Mean Height, Sdr: Developed Interfacial Area Ratio, StDev: Standard Deviation
※ Analyzed by NPR Korea.

- > Implant A and Implant B exceeded the upper limit of surface roughness (2.04 μm and 2.61 μm respectively).
- > Implant C recorded the lowest surface roughness at 1.79 μm.
- > INNO demonstrated a surface roughness of 1.88 μm, which falls within the ideal range, and exhibited the lowest standard deviation (±0.02 μm), and also showed the highest surface area ratio at 243%.

C. Conclusion

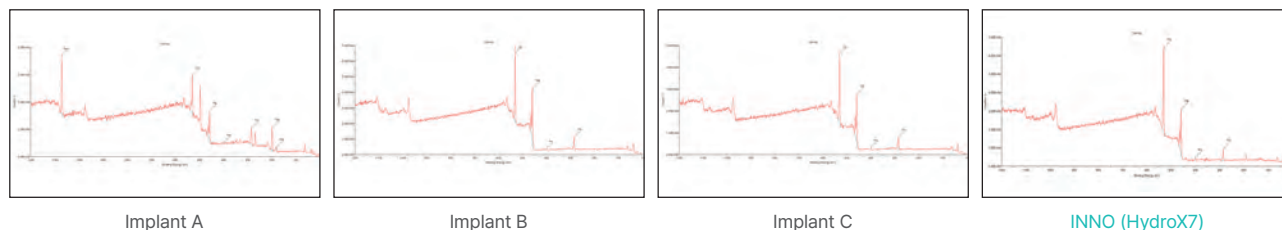
> Among the four evaluated implant systems, HydroX7-treated INNO demonstrated the most favorable surface characteristics for osseointegration. It exhibited an ideal surface roughness with the lowest standard deviation, indicating a highly uniform surface. Additionally, it showed the highest surface area ratio at 243%, suggesting an optimal topography for bone cell attachment. Overall, HydroX7 offers a well-balanced combination of roughness uniformity and topographical advantage.

4. XPS Elemental Analysis of Implant Surfaces

A. Overview

- > This analysis employed X-ray Photoelectron Spectroscopy (XPS) to assess the surface chemical composition of four dental implants, focusing on the shallower surface layers compared to those examined by Energy Dispersive Spectroscopy (EDS). The objective was to compare the oxide layer characteristics across the different implant surfaces.

B. Key Findings



Element	Implant A	Implant B	Implant C	INNO (HydroX7)
C1s	30.83%	23.63%	26.32%	17.82%
Cl2p	19.13%	N/D	N/D	N/D
N1s	0.60%	0.51%	1.64%	1.48%
Na1s	19.48%	N/D	N/D	N/D
O1s	21.74%	54.02%	52.65%	66.37%
Ti2p	7.11%	21.83%	19.38%	14.33%
Zr3d	1.11%	N/D	N/D	N/D
Total	100%	100%	100%	100%

* $\pm 1\%$ of Nitrogen is commonly detected as background noise from the XPS equipment.

* Analyzed by Korea Basic Science Institute.

- > Implant A exhibited the highest carbon content along with additional elements that were not detected in other samples.
- > Implants B and C showed a moderate degree of oxide layer formation.
- > INNO demonstrated the lowest carbon content and the highest oxygen level, indicating a well-developed titanium oxide layer that is beneficial for osseointegration.

C. Conclusion

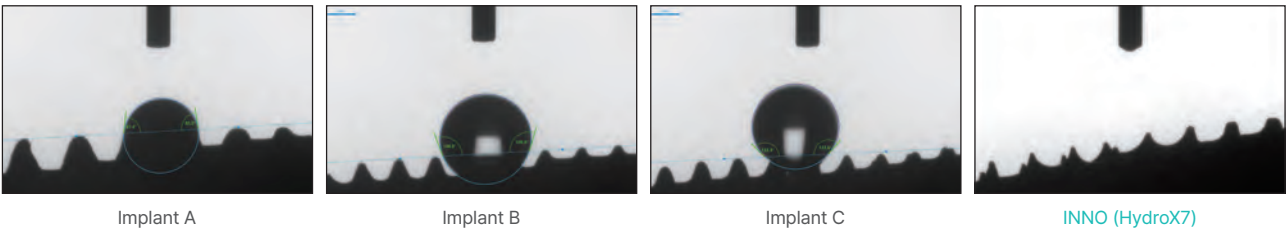
- > The XPS results demonstrate that the HydroX7-treated INNO implant exhibits a more oxidized surface with significantly higher oxygen levels and lower carbon content compared to others. This indicates the formation of a well-developed and stable titanium oxide layer, which enhances surface reactivity and biocompatibility. These characteristics confirm the effectiveness of HydroX7's advanced surface treatment in maintaining excellent hydrophilicity, a critical factor for promoting early-stage osseointegration.

5. Quantitative Analysis of Implant Surface Wettability

A. Overview

> This analysis evaluated the surface wettability of four dental implants by measuring the contact angle of water droplets placed on each surface. Using a high-resolution contact angle goniometer, the wettability was classified based on the measured angles: hydrophilic (<90°), hydrophobic (>90°), and ultrahydrophilic (<10°).

B. Key Findings



Implant	Implant A	Implant B	Implant C	INNO (HydroX7)
Mean CA(r) [°]	83.2	109	133.5	Below measurable range

※ Analyzed by Kumoh National Institute of Technology.

- > Implant A showed a contact angle of 83.2°, indicating a hydrophilic surface.
- > Implants B and C exhibited contact angles well above 90°, indicating hydrophobic surfaces (109.0° and 133.5 ° respectively).
- > INNO was the only implant exhibiting ultrahydrophilicity, with a contact angle too low to measure, demonstrating exceptional water absorption and spreading behavior.

C. Conclusion

> Among the four evaluated implants, HydroX7-treated INNO exhibited the most favorable wettability, achieving ultrahydrophilic characteristics with a contact angle below measurable limits. In contrast, Implant B and C were found to be hydrophobic, while Implant A showed moderate hydrophilicity. These results confirm HydroX7 implant surface treatment provides excellent hydrophilic performance, which can contribute positively not only to early-stage osseointegration but also to long-term stability.



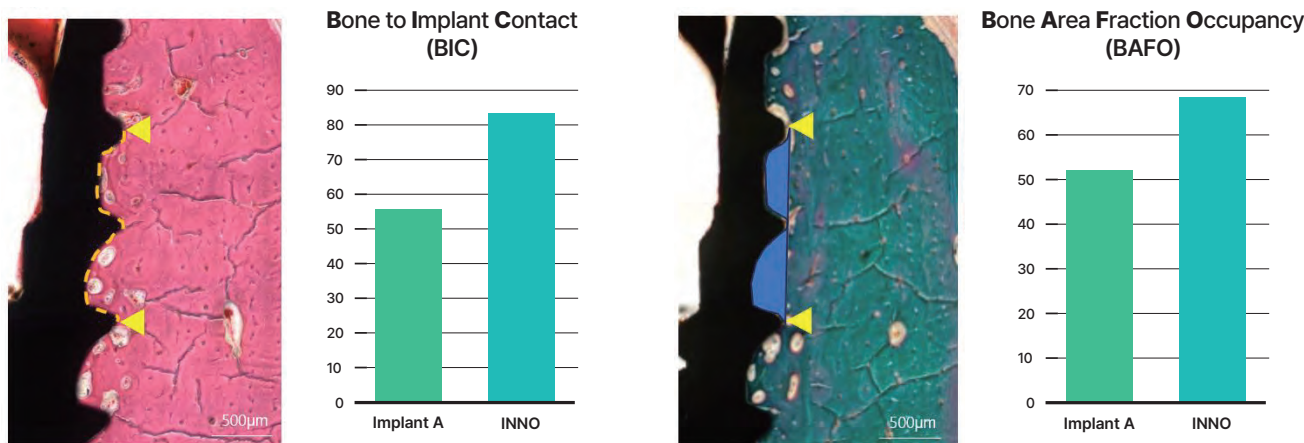
Capillarity in the actual clinical setting promoted rapid blood penetration.

6. Comparative Study of Implant Surface Osseointegration I

A. Overview

> This study evaluated the osseointegration performance of HydroX7-treated INNO (Cowellmedi, South Korea) compared to Implant A using a beagle mandible model. Following bilateral premolar extraction and implant placement, bone integration was assessed over 8 weeks through histological analysis, radiographic imaging, and quantitative measurements including Bone-to-Implant Contact (BIC) and Bone Area Fraction Occupancy (BAFO).

B. Key Findings



- > Bone-to-Implant Contact (BIC) was significantly higher in INNO ($82.25\% \pm 6.96$) compared to Implant A ($55.91\% \pm 13.37$, $p < 0.01$), indicating enhanced direct bone integration.
- > Bone Area Fraction Occupancy (BAFO) also showed a higher value in INNO ($67.34\% \pm 10.01$) versus Implant A ($53.61\% \pm 14.34$), suggesting improved bone fill around the implants.
- > Micro CT analysis showed a trend toward increased bone volume and density in INNO.
- > No adverse effects, such as inflammation, implant exposure, or tissue reaction, were observed during the study.

Group	BIC (%)	BAFO (%)
Implant A	55.91 ± 13.37	55.91 ± 13.37
INNO (HydroX7)	82.25 ± 6.96	82.25 ± 6.96

C. Conclusion

> The results confirm that HydroX7-treated INNO exhibits excellent osseointegration performance. Significantly higher BIC values indicate stronger and more stable bone-to-implant contact, while the increased BAFO supports enhanced peri-implant bone regeneration. These findings suggest HydroX7-treated INNO as a reliable and effective solution for long-term clinical success.

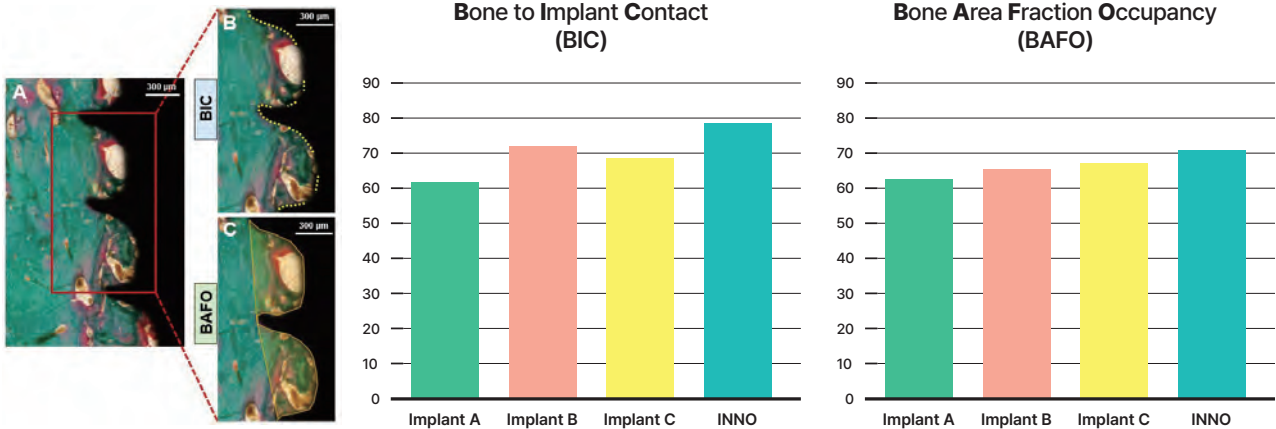
* Reference: BMC_PS_22_06 , Biomaterial R&BD Center, Chonnam National University.

6. Comparative Study of Implant Surface Osseointegration II

A. Overview

> This study aimed to evaluate and compare the osseointegration performance of four dental implants, including HydroX7-treated INNO (Cowellmedi, South Korea), using a beagle bilateral mandible model. After extracting premolars and placing implants, outcomes were assessed over an 8-week period through clinical observation, radiography, micro-CT, and histological analysis, with particular focus on Bone-to-Implant Contact (BIC) and Bone Area Fraction Occupancy (BAFO).

B. Key Findings



- > INNO recorded the highest Bone to Implant Contact, BIC ($79.32\% \pm 3.69$).
- > INNO also demonstrated the highest Bone Area Fraction Occupancy, BAFO ($73.54\% \pm 2.64\%$).
- > Micro CT analysis showed a trend toward increased bone volume and density in INNO.
- > No adverse effects, such as inflammation, implant exposure, or tissue reaction, were observed during the study.

Group	BIC (%)	BAFO (%)
Implant A	66.5 ± 2.67	66.94 ± 3.26
Implant B	72.8 ± 3.56	69.46 ± 4.24
Implant C	70.58 ± 4.5	71.51 ± 3.58
INNO (HydroX7)	79.32 ± 3.69	73.54 ± 2.64

C. Conclusion

> HydroX7-treated INNO demonstrated the most favorable outcomes among all groups, showing the highest trends in bone-to-implant contact (BIC) and bone area fraction occupancy (BAFO). These findings highlight the outstanding osseointegration performance of HydroX7-treated INNO, indicating its potential for more stable and effective clinical outcomes.

※ Reference: BMC24_001, Biomaterial R&BD Center, Chonnam National University.

SUB.
HEXAGON
SYSTEM



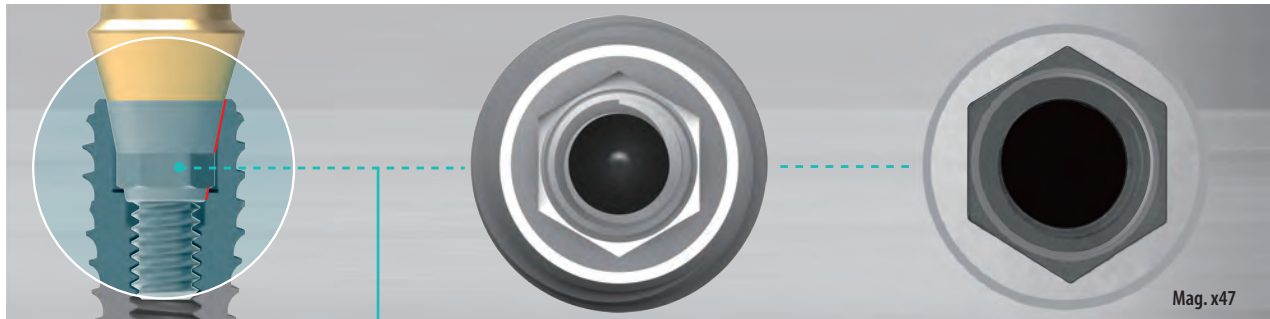
INNO Implant System®

INNO Submerged



INNO Submerged

• Design Concept Overview



• Tapered Internal Hex Connection with Dual Contact

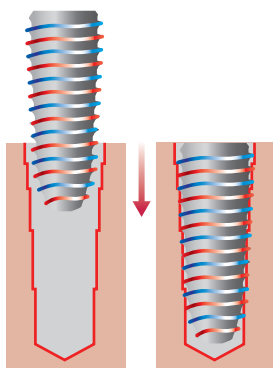
- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Wide and Deep Upper Threads

- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Double Tapered Threads

- > Deliver excellent primary stability in poor bone conditions.
- > Allow over half-depth insertion with just 2 to 4 turns.
- > Ensure wedge-effect stability, even with minimal rotation.



Geometry Matched Fixture and Drill

- > Reduces placement time with ≥ 5 mm initial depth and efficient engagement.

Platform Neck

- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Open Threads

- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

4 Spiral Cutting Edges

- > Improve self-tapping efficiency with sharp contours.
- > Allow smoother insertion with higher initial stability.
- > Accommodates bone chips effectively.

Convex Apex with Sharp Cutting Edges

- > Protects the Schneiderian membrane during sinus procedures.
- > Enhance stability in fresh extraction sockets.



INNO Submerged

• Fixture Specifications



- > Type: Submerged.
- > Surface Treatment: HydroX7.
- > Connection: Morse-Tapered Internal Hexagon (11° Taper, Hex 2.5).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



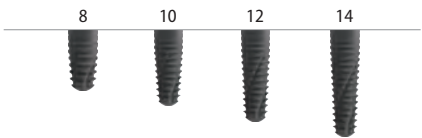
Fixture Code Structure

S	T	40	10	S	M	
Type	Body	Diameter	Length	Surface	Mount	
Submerged	Taper	Ø4.0	10mm	SLA-integrated	No-Mount	ST4010SM

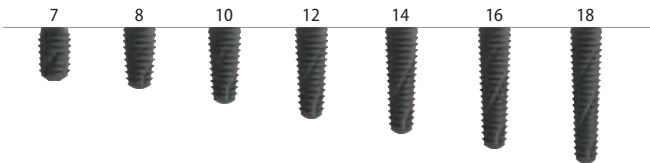
S	T	40	10	S		
Type	Body	Diameter	Length	Surface	Mount	
Submerged	Taper	Ø4.0	10mm	SLA-integrated	Pre-Mount	ST4010S

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

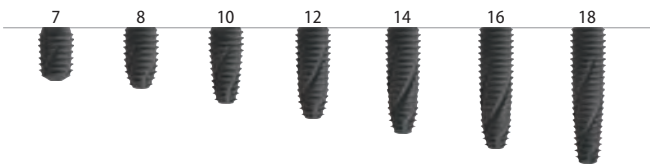
Diameter (Actual Size)	
Ø3.5 (Ø3.7)	
Length	
7	-
8	ST3508SM
10	ST3510SM
12	ST3512SM
14	ST3514SM



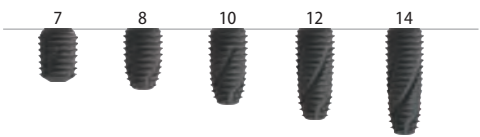
Diameter (Actual Size)	
Ø4.0 (Ø4.2)	
Length	
7	ST4007SM
8	ST4008SM
10	ST4010SM
12	ST4012SM
14	ST4014SM
16	ST4016SM
18	ST4018SM



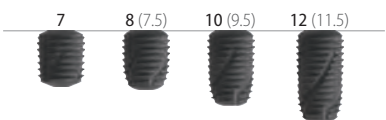
Diameter (Actual Size)	
Ø4.5 (Ø4.6)	
Length	
7	ST4507SM
8	ST4508SM
10	ST4510SM
12	ST4512SM
14	ST4514SM
16	ST4516SM
18	ST4518SM



Diameter (Actual Size)	
Ø5.0 (Ø5.1)	
Length	
7	ST5007SM
8	ST5008SM
10	ST5010SM
12	ST5012SM
14	ST5014SM

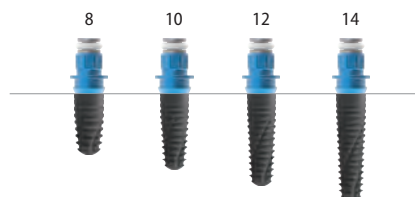


Diameter	
Ø6.0	
Length (Actual Size)	
7	ST6007SM
8 (7.5)	ST6008SM
10 (9.5)	ST6010SM
12 (11.5)	ST6012SM
14	-

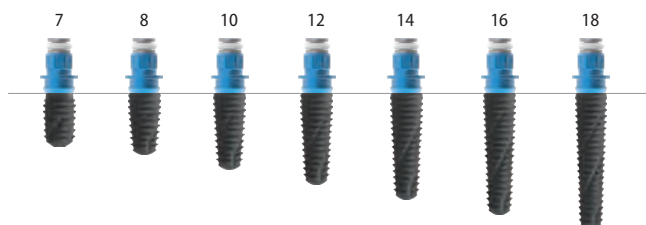


Pre-Mount > Packing unit: 1 Fixture + 1 Mount + 1 Cover Screw.

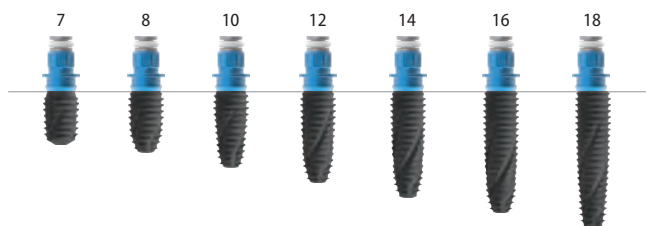
Diameter (Actual Size)	Ø3.5 (Ø3.7)
Length	
7	-
8	ST3508S
10	ST3510S
12	ST3512S
14	ST3514S



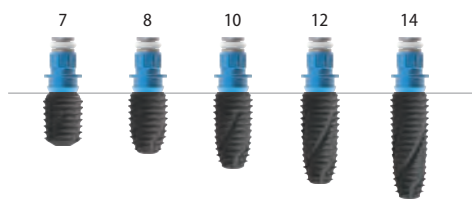
Diameter (Actual Size)	Ø4.0 (Ø4.2)
Length	
7	ST4007S
8	ST4008S
10	ST4010S
12	ST4012S
14	ST4014S
16	ST4016S
18	ST4018S



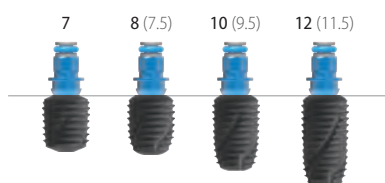
Diameter (Actual Size)	Ø4.5 (Ø4.6)
Length	
7	ST4507S
8	ST4508S
10	ST4510S
12	ST4512S
14	ST4514S
16	ST4516S
18	ST4518S



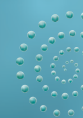
Diameter (Actual Size)	Ø5.0 (Ø5.1)
Length	
7	ST5007S
8	ST5008S
10	ST5010S
12	ST5012S
14	ST5014S



Diameter	Ø6.0
Length (Actual Size)	
7	ST6007S
8 (7.5)	ST6008S
10 (9.5)	ST6010S
12 (11.5)	ST6012S
14	-

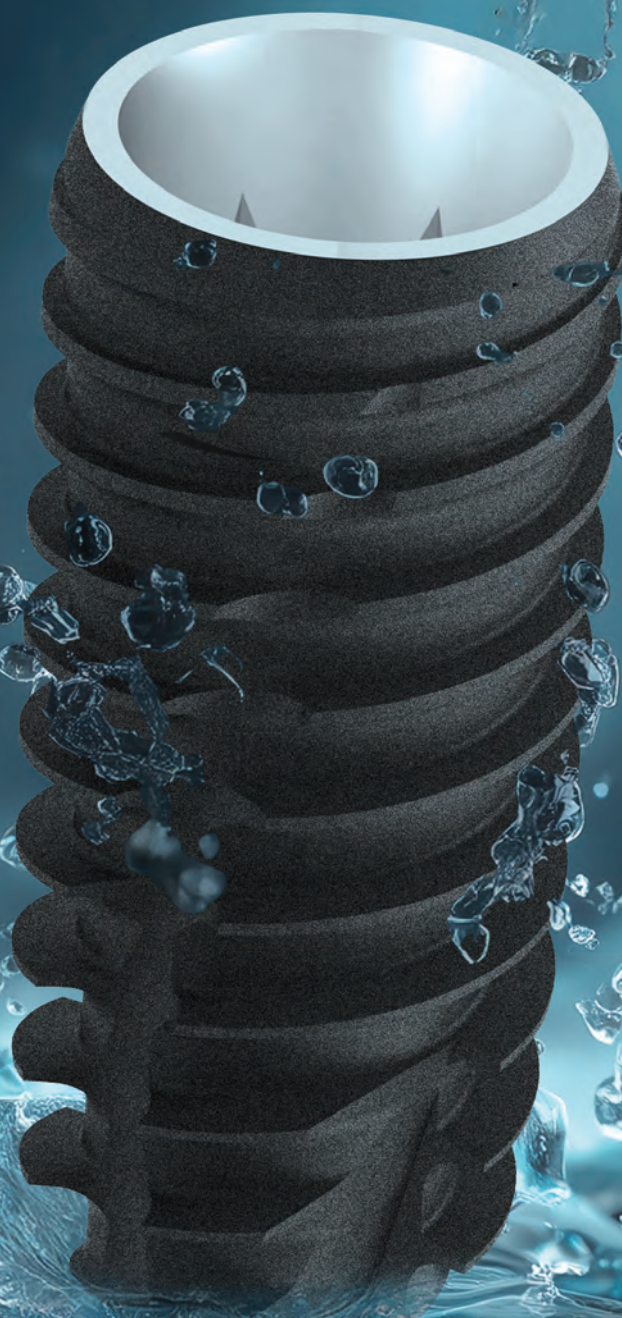


SUB.
HEXAGON
SYSTEM

 **HYDROX7**
Awakened by H₂O. Perfected by pH7.4.

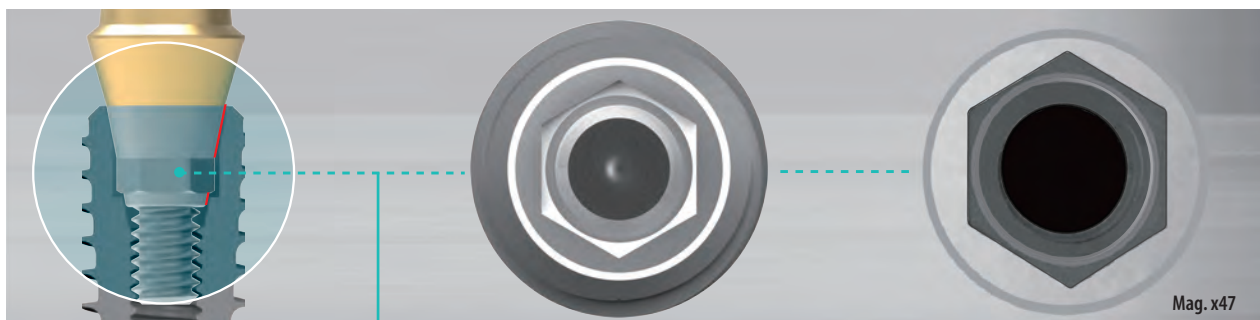
INNO Implant System®

INNO X



INNO X

• Design Concept Overview



• Tapered Internal Hex Connection with Dual Contact

- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Wide and Deep Upper Threads

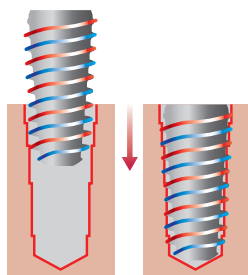
- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Double Tapered Threads

- > Deliver excellent primary stability in poor bone conditions.
- > Allow over half-depth insertion with just 2 to 4 turns.
- > Ensure wedge-effect stability, even with minimal rotation.

2 Spiral Round Cutting Edges

- > Accommodate bone chips effectively.
- > Improve self-tapping efficiency with sharp contours.
- > Allow smoother insertion with higher initial stability.



Geometry Matched Fixture and Drill

- > Reduces placement time with ≥ 5 mm initial depth and efficient engagement.

Platform Neck

- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Open Threads

- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

Penetrative Threads

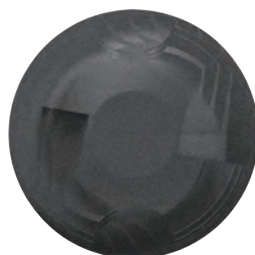
- > Increase the bone contact surface, enhancing primary stability.
- > Ensure high stability even in soft bone conditions.
- > Promote bone density enhancement through a wedge effect.

2 Flat Cutting Edge

- > Improve self-tapping efficiency with sharp contours.
- > Enhance placement speed and stability even in high-density bone.

Convex Apex with Sharp Cutting Edges

- > Protects the Schneiderian membrane during sinus procedures.
- > Enhance stability in fresh extraction sockets.



Reverse Trapezoid Buttress Threads

- > A unique design by Cowellmedi, combining a trapezoidal shape with a reverse buttress structure.
- > Ensure optimal primary stability across all bone quality from D1 to D4.
- > Minimize bone compression from axial forces and provide excellent stress distribution.

INNO X

• Fixture Specifications



- > Type: Submerged.
- > Surface Treatment: HydroX7.
- > Connection: Morse-Tapered Internal Hexagon (11° Taper, Hex 2.5).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



Fixture Code Structure

S	T	X	40	10	S	M
Type Submerged	Body Taper	Model X	Diameter Ø4.0	Length 10mm	Surface SLA-integrated	Mount No-Mount

STX4010SM

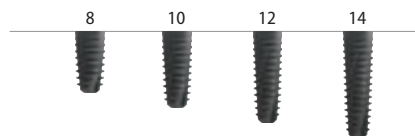
S	T	X	40	10	S	
Type Submerged	Body Taper	Model X	Diameter Ø4.0	Length 10mm	Surface SLA-integrated	Mount Pre-Mount

STX4010S

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

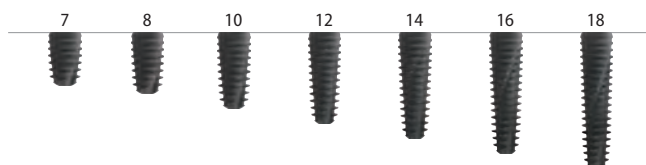
Diameter
(Actual Size) **Ø3.5 (Ø3.8)**
Length

7	-
8	STX3508SM
10	STX3510SM
12	STX3512SM
14	STX3514SM



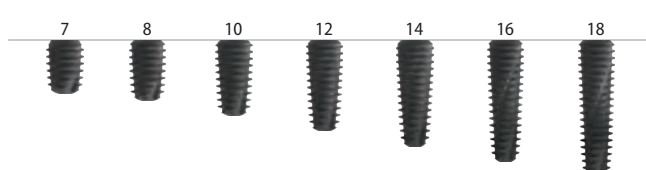
Diameter
(Actual Size) **Ø4.0 (Ø4.3)**
Length

7	STX4007SM
8	STX4008SM
10	STX4010SM
12	STX4012SM
14	STX4014SM
16	STX4016SM
18	STX4018SM



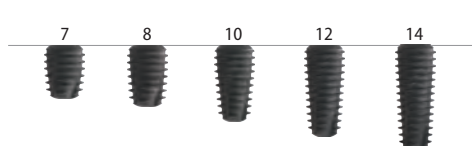
Diameter
(Actual Size) **Ø4.5 (Ø4.8)**
Length

7	STX4507SM
8	STX4508SM
10	STX4510SM
12	STX4512SM
14	STX4514SM
16	STX4516SM
18	STX4518SM



Diameter
(Actual Size) **Ø5.0 (Ø5.3)**
Length

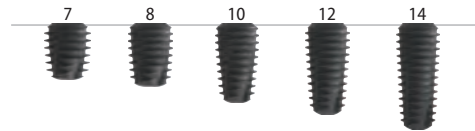
7	STX5007SM
8	STX5008SM
10	STX5010SM
12	STX5012SM
14	STX5014SM



Diameter
(Actual Size) **Ø5.5 (Ø5.8)**

Length

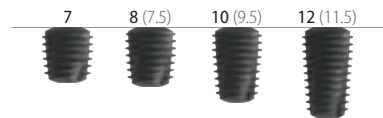
7	STX5507SM
8	STX5508SM
10	STX5510SM
12	STX5512SM
14	STX5514SM



Diameter
(Actual Size) **Ø6.0 (Ø6.3)**

Length
(Actual Size)

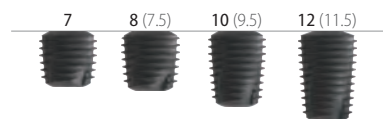
7	STX6007SM
8 (7.5)	STX6008SM
10 (9.5)	STX6010SM
12 (11.5)	STX6012SM
14	-



Diameter
(Actual Size) **Ø7.0 (Ø7.3)**

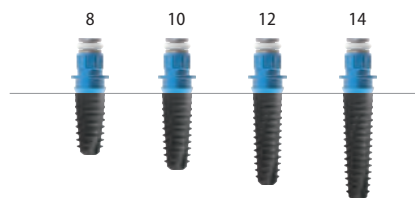
Length
(Actual Size)

7	STX7007SM
8 (7.5)	STX7008SM
10 (9.5)	STX7010SM
12 (11.5)	STX7012SM
14	-

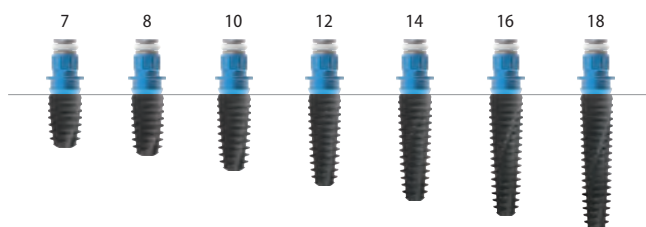


Pre-Mount > Packing unit: 1 Fixture + 1 Mount + 1 Cover Screw.

Diameter (Actual Size)	Ø3.5 (Ø3.8)
Length	
7	-
8	STX3508S
10	STX3510S
12	STX3512S
14	STX3514S



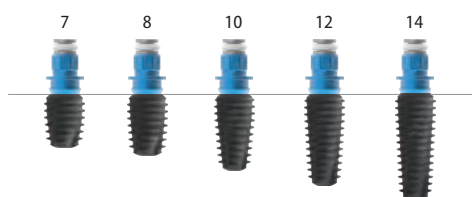
Diameter (Actual Size)	Ø4.0 (Ø4.3)
Length	
7	STX4007S
8	STX4008S
10	STX4010S
12	STX4012S
14	STX4014S
16	STX4016S
18	STX4018S



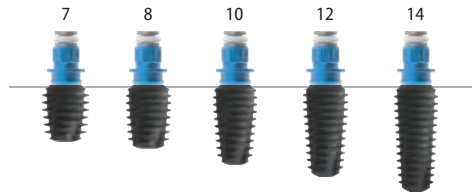
Diameter (Actual Size)	Ø4.5 (Ø4.8)
Length	
7	STX4507S
8	STX4508S
10	STX4510S
12	STX4512S
14	STX4514S
16	STX4516S
18	STX4518S



Diameter (Actual Size)	Ø5.0 (Ø5.3)
Length	
7	STX5007S
8	STX5008S
10	STX5010S
12	STX5012S
14	STX5014S



Diameter (Actual Size)		Ø5.5 (Ø5.8)
Length		
7	STX5507S	
8	STX5508S	
10	STX5510S	
12	STX5512S	
14	STX5514S	



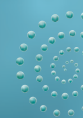
Diameter (Actual Size)		Ø6.0 (Ø6.3)
Length (Actual Size)		
7	STX6007S	
8 (7.5)	STX6008S	
10 (9.5)	STX6010S	
12 (11.5)	STX6012S	
14	-	



Diameter (Actual Size)		Ø7.0 (Ø7.3)
Length (Actual Size)		
7	STX7007SM	
8 (7.5)	STX7008SM	
10 (9.5)	STX7010SM	
12 (11.5)	STX7012SM	
14	-	

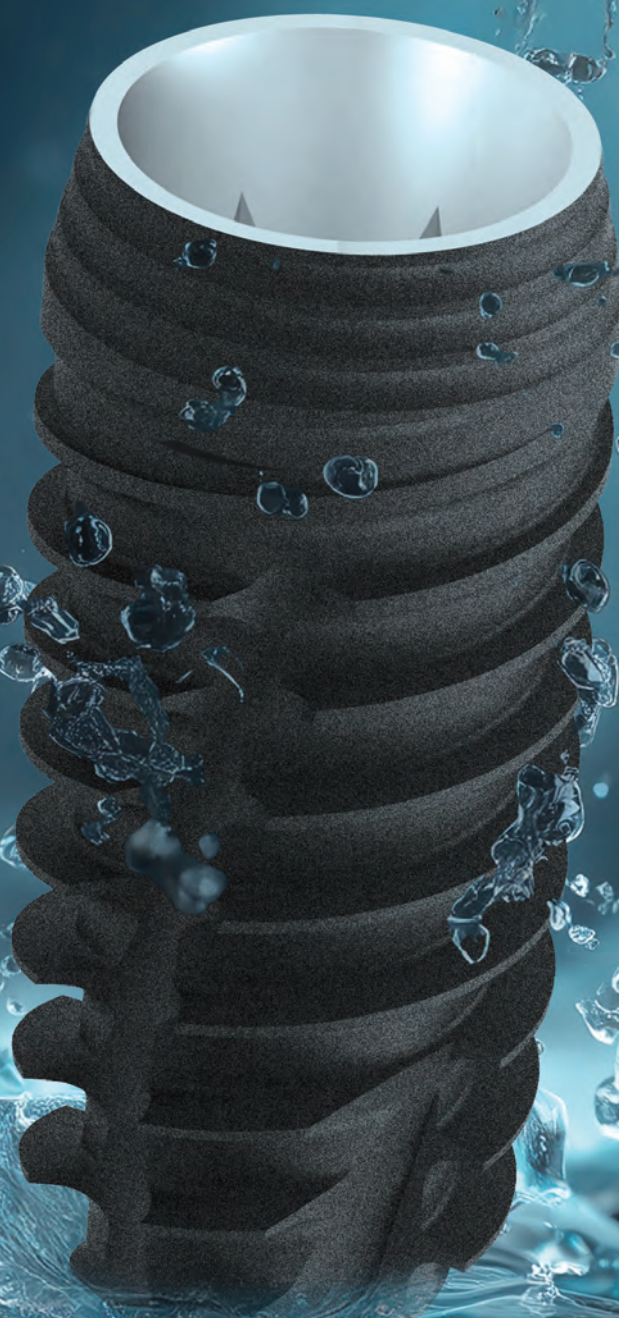


SUB.
HEXAGON
SYSTEM

 **HYDROX7**
Awakened by H₂O. Perfected by pH7.4.

INNO Implant System®

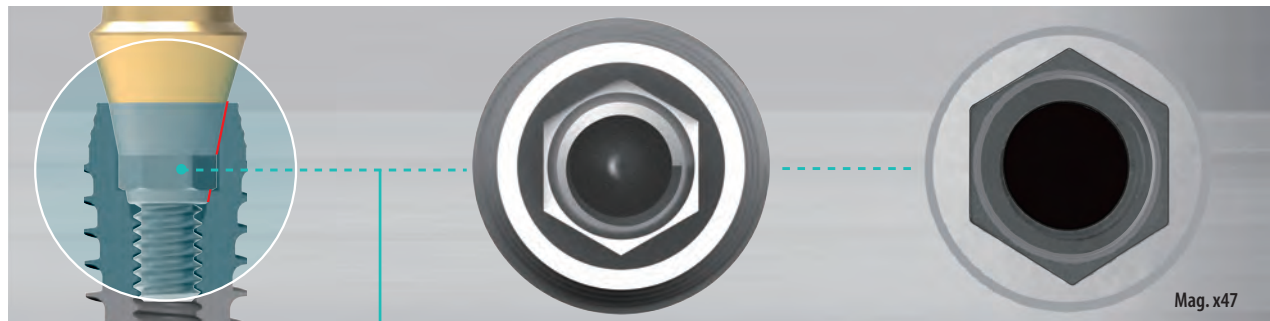
INNO V



INNO V 047

INNO V

• Design Concept Overview



• Tapered Internal Hex Connection with Dual Contact

- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Wide and Deep Upper Threads

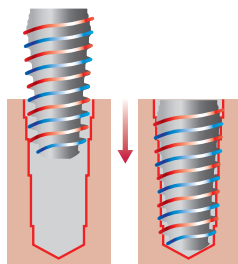
- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Double Tapered Threads

- > Deliver excellent primary stability in poor bone conditions.
- > Allow over half-depth insertion with just 2 to 4 turns.
- > Ensure wedge-effect stability, even with minimal rotation.

2 Spiral Round Cutting Edges

- > Accommodate bone chips effectively.
- > Improve self-tapping efficiency with sharp contours.
- > Allow smoother insertion with higher initial stability.



Geometry Matched Fixture and Drill

- > Reduces placement time with ≥ 5 mm initial depth and efficient engagement.

Conical Platform with Segmented Grooves

- > Allows soft tissue adaptation and reduces stress to preserve crestal bone.
- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Open Threads

- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

Penetrative Threads

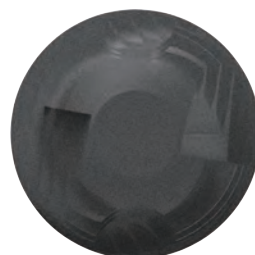
- > Increase the bone contact surface, enhancing primary stability.
- > Ensure high stability even in soft bone conditions.
- > Promote bone density enhancement through a wedge effect.

2 Flat Cutting Edge

- > Improve self-tapping efficiency with sharp contours.
- > Enhance placement speed and stability even in high-density bone.

Convex Apex with Sharp Cutting Edges

- > Protects the Schneiderian membrane during sinus procedures.
- > Enhance stability in fresh extraction sockets.



Reverse Trapezoid Buttress Threads

- > A unique design by Cowellmedi, combining a trapezoidal shape with a reverse buttress structure.
- > Ensure optimal primary stability across all bone quality from D1 to D4.
- > Minimize bone compression from axial forces and provide excellent stress distribution.

INNO V

• Fixture Specifications



- > Type: Submerged.
- > Surface Treatment: HydroX7.
- > Connection: Morse-Tapered Internal Hexagon (11° Taper, Hex 2.5).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



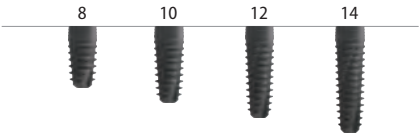
Fixture Code Structure

S	T	V	40	10	S	M	STV4010SM
Type Submerged	Body Taper	Model V	Diameter Ø4.0	Length 10mm	Surface SLA-integrated	Mount No-Mount	

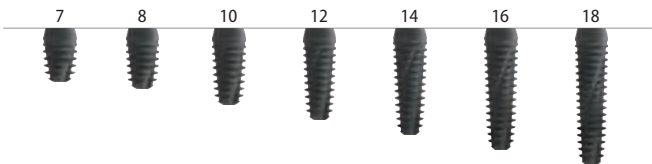
S	T	V	40	10	S		STV4010S
Type Submerged	Body Taper	Model V	Diameter Ø4.0	Length 10mm	Surface SLA-integrated	Mount Pre-Mount	

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

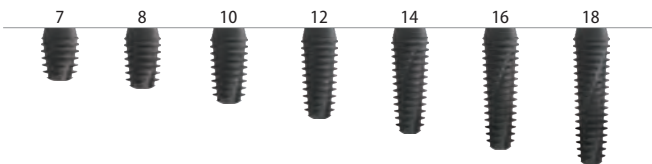
Diameter (Actual Size)		Ø3.5 (Ø3.8)
Length		
7	-	
8	STV3508SM	
10	STV3510SM	
12	STV3512SM	
14	STV3514SM	



Diameter (Actual Size)		Ø4.0 (Ø4.3)
Length		
7	STV4007SM	
8	STV4008SM	
10	STV4010SM	
12	STV4012SM	
14	STV4014SM	
16	STV4016SM	
18	STV4018SM	

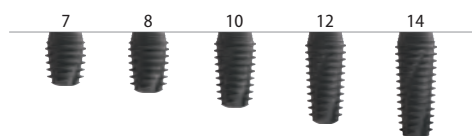


Diameter (Actual Size)		Ø4.5 (Ø4.8)
Length		
7	STV4507SM	
8	STV4508SM	
10	STV4510SM	
12	STV4512SM	
14	STV4514SM	
16	STV4516SM	
18	STV4518SM	



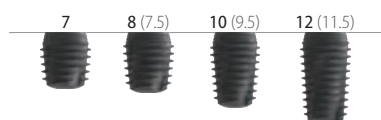
Diameter
(Actual Size) **Ø5.0 (Ø5.3)**
Length

7	STV5007SM
8	STV5008SM
10	STV5010SM
12	STV5012SM
14	STV5014SM



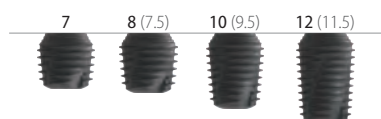
Diameter
(Actual Size) **Ø6.0 (Ø6.3)**
Length
(Actual Size)

7	STV6007SM
8 (7.5)	STV6008SM
10 (9.5)	STV6010SM
12 (11.5)	STV6012SM
14	-



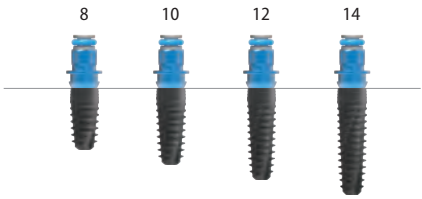
Diameter
(Actual Size) **Ø7.0 (Ø7.3)**
Length
(Actual Size)

7	STV7007SM
8 (7.5)	STV7008SM
10 (9.5)	STV7010SM
12 (11.5)	STV7012SM
14	-

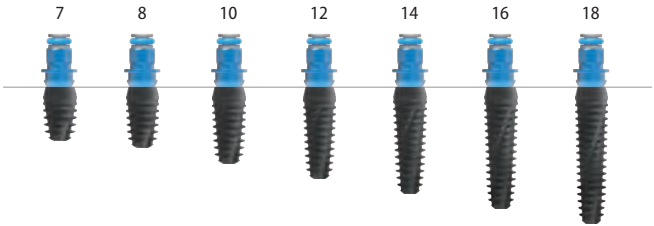


Pre-Mount > Packing unit: 1 Fixture + 1 Mount + 1 Cover Screw.

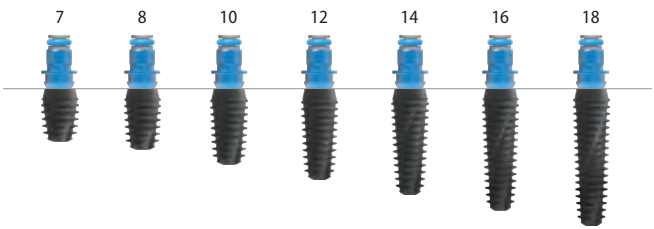
Diameter (Actual Size)	
Ø3.5 (Ø3.8)	
Length	
7	-
8	STV3508S
10	STV3510S
12	STV3512S
14	STV3514S



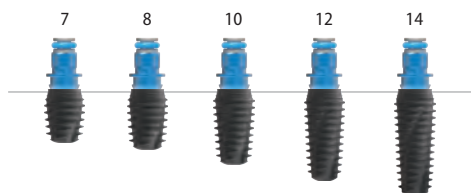
Diameter (Actual Size)	
Ø4.0 (Ø4.3)	
Length	
7	STV4007S
8	STV4008S
10	STV4010S
12	STV4012S
14	STV4014S
16	STV4016S
18	STV4018S



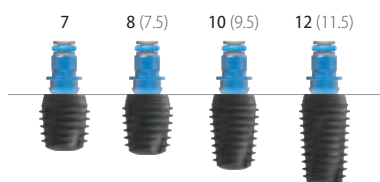
Diameter (Actual Size)	
Ø4.5 (Ø4.8)	
Length	
7	STV4507S
8	STV4508S
10	STV4510S
12	STV4512S
14	STV4514S
16	STV4516S
18	STV4518S



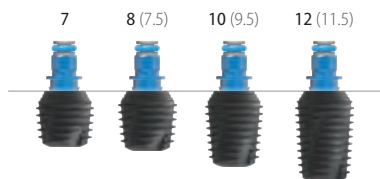
Diameter (Actual Size)	
Ø5.0 (Ø5.3)	
Length	
7	STV5007S
8	STV5008S
10	STV5010S
12	STV5012S
14	STV5014S



Diameter (Actual Size)	
Ø6.0 (Ø6.3)	
Length (Actual Size)	
7	STV6007S
8 (7.5)	STV6008S
10 (9.5)	STV6010S
12 (11.5)	STV6012S
14	-



Diameter (Actual Size)	
Ø7.0 (Ø7.3)	
Length (Actual Size)	
7	STV7007S
8 (7.5)	STV7008S
10 (9.5)	STV7010S
12 (11.5)	STV7012S
14	-

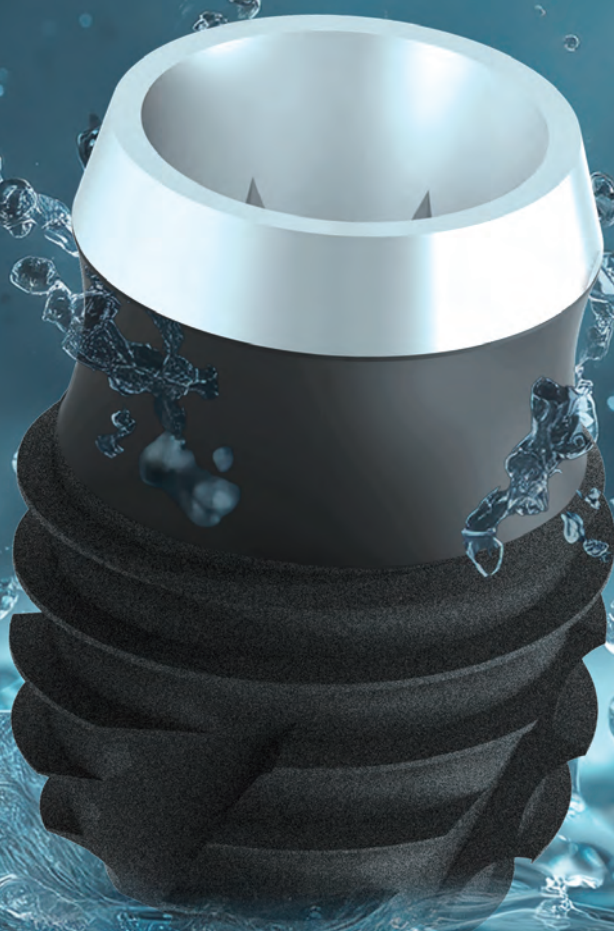


SUB.
HEXAGON
SYSTEM



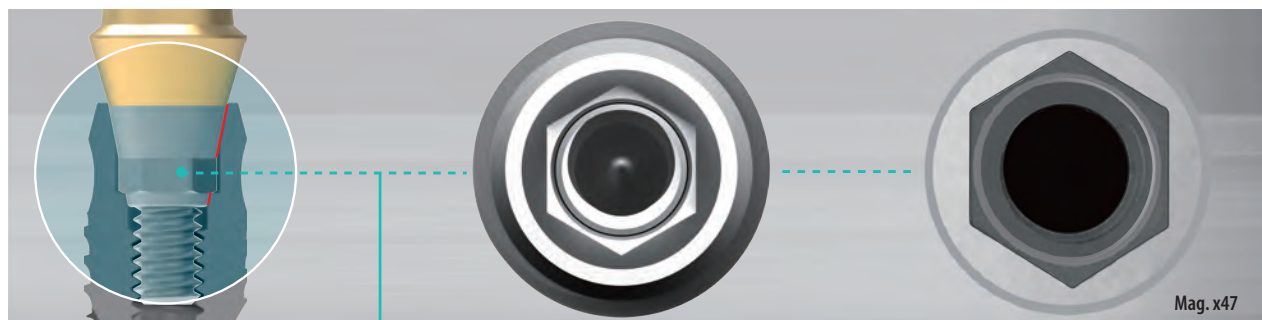
INNO Implant System®

INNO Short



INNO Short

• Design Concept Overview



• Tapered Internal Hex Connection with Dual Contact

- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Beveled Machined Collar (1mm)

- > Promotes load distribution at the bone-implant interface.
- > Enables stable soft tissue attachment while minimizing tissue irritation.
- > Supports better tissue contour and emergence profile for natural-looking results.

HA Blasted Surface (2mm)

- > Suitable for both bone and tissue level placement, ensuring consistent biological performance and clinical outcomes.
- > Promotes both bone integration at the bone level.
- > Supports stable soft tissue attachment at the tissue level.

Hydro X7 Surface (4mm)

- > Enhances protein adsorption and cellular response, accelerating early bone healing and integration.
- > Maintains strong primary and secondary stability even in soft or low-quality bone, making it ideal for challenging clinical cases.
- > Ensures quick blood penetration into the microstructure, creating a favorable environment for bone regeneration.

4 Flat Cutting Edges

- > Improve self-tapping efficiency with sharp contours.
- > Enhance placement speed and stability even in high-density bone.

Integrated Platform

- > Allows prosthetic connection without damaging the crestal bone.
- > Simplifies prosthesis connection, scanning, and impression taking.
- > Ensures consistent prosthetic seating by maintaining a stable and unified connection level.

Concave Collar

- > Features a self-cleansing design that supports peri-implant hygiene.
- > Promotes soft tissue induction and stabilization while preserving soft tissue thickness.
- > Enhances stress distribution and promotes crestal bone preservation with a double platform switching effect.

Open Threads

- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

Wide and Deep Threads

- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Flat Apex with Sharp Cutting Edges

- > Allow for efficient bone engagement during the final insertion phase, improving primary stability.
- > Suitable for immediate placement in extraction sockets.
- > Prevent excessive advancement during drilling, enhancing surgical safety.

INNO Short

• Fixture Specifications



- > Type: Submerged.
- > Surface Treatment: HydroX7.
- > Connection: Morse-Tapered Internal Hexagon (11° Taper, Hex 2.5).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).

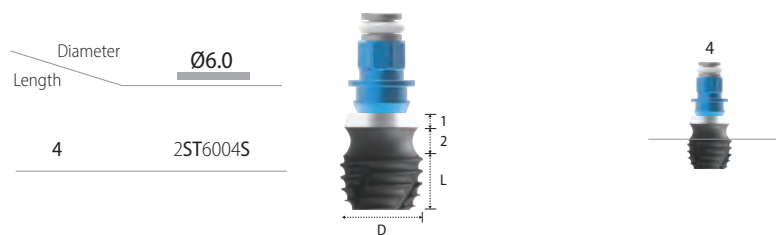
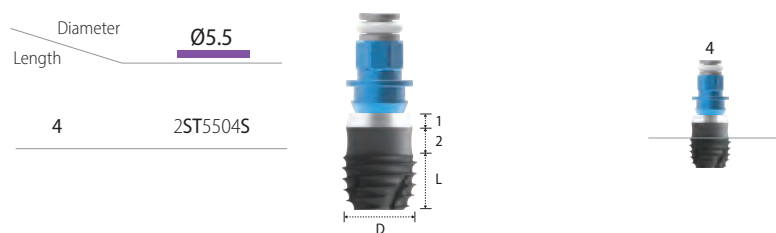
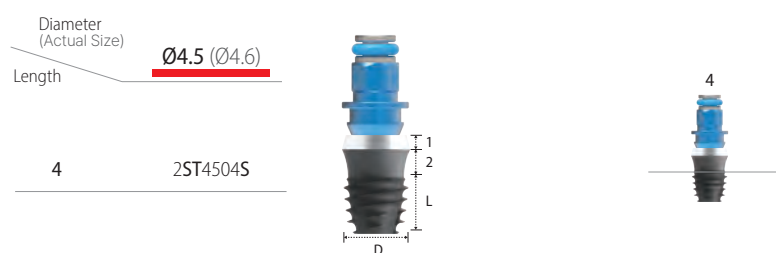
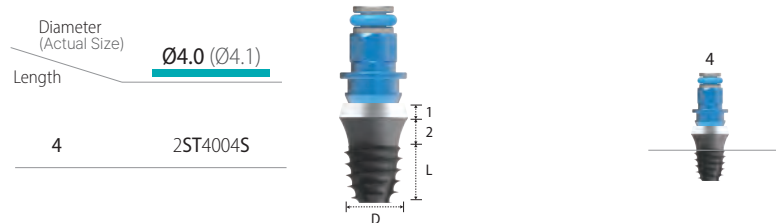


Fixture Code Structure

2	S	T	50	04	S	
Model	Type	Body	Diameter	Length	Surface	Mount
Short 2	Submerged	Taper	Ø5.0	04mm	SLA-integrated	Pre-Mount

2ST5004S

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



SUB.
HEXAGON
SYSTEM



INNO Implant System®

INNO S



INNO S

• Design Concept Overview



• Tapered Internal Hex Connection with Dual Contact

- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Open Thread

- > Enable deeper placement without additional drilling.

Thread Length (4.5/5.5/6.5mm)

- > Thread lengths can be selected as 4.5 / 5.5 / 6.5 mm depending on the amount of residual bone for implant placement.

2 Flat Cutting Edge

- > Improve self-tapping efficiency with sharp contours.

Platform Neck

- > Allows soft tissue adaptation and reduces stress to preserve crestal bone.
- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Wide and Deep Threads

- > The deep and wide (0.8 pitch) thread increases the functional surface area at the bone-implant interface, enhancing primary stability in low-density bone or in areas with high occlusal load.

2 Spiral Round Cutting Edges

- > Increased hydrophilicity efficiency and accommodation of bone chips within the cutting-edge pocket.

Flat Apex with Sharp Cutting Edges

- > Allow for efficient bone engagement during the final insertion phase, improving primary stability.
- > Suitable for immediate placement in extraction sockets.
- > Prevent excessive advancement during drilling, enhancing surgical safety.



Reverse Trapezoid Buttress Threads

- > A unique design by Cowellmedi, combining a trapezoidal shape with a reverse buttress structure.
- > Ensure optimal primary stability across all bone quality from D1 to D4.
- > Minimize bone compression from axial forces and provide excellent stress distribution.

INNO S

• Fixture Specifications



- > Type: Submerged.
- > Surface Treatment: HydroX7.
- > Connection: Morse-Tapered Internal Hexagon (11° Taper, Hex 2.5).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



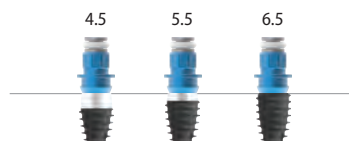
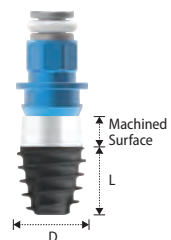
Fixture Code Structure

S	T	S	50	04	S		STS5004S
Type Submerged	Body Taper	Type INNO S	Diameter Ø5.0	Length 04mm	Surface SLA-integrated	Mount Pre-Mount	

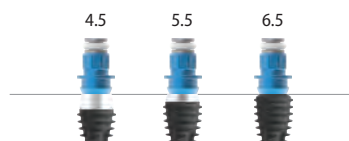
Pre-Mount > Packing unit: 1 Fixture + 1 Mount + 1 Cover Screw.

Diameter (Actual Size)	Length	
Ø4.0 (Ø4.1)		
4.5	STS4004S	
5.5	STS4005S	
6.5	STS4006S	

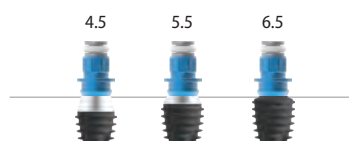
Diameter	Ø4.5
Length	
4.5	STS4504S
5.5	STS4505S
6.5	STS4506S



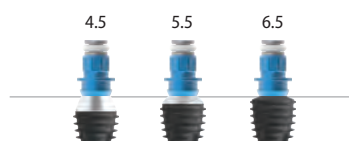
Diameter	Ø5.0
Length	
4.5	STS5004S
5.5	STS5005S
6.5	STS5006S



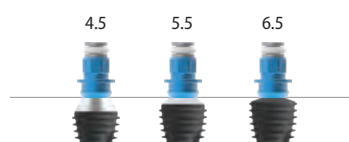
Diameter	Ø5.5
Length	
4.5	STS5504S
5.5	STS5505S
6.5	STS5506S



Diameter	Ø6.0
Length	
4.5	STS6004S
5.5	STS6005S
6.5	STS6006S



Diameter	Ø6.5
Length	
4.5	STS6504S
5.5	STS6505S
6.5	STS6506S



Diameter	Ø7.0
Length	
4.5	STS7004S
5.5	STS7005S
6.5	STS7006S





INNO Submerged Type Implant (Sub.)

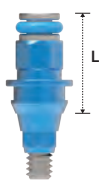
• System Flow

Fixture	Abutment								
Hex 2.5  INNO Submerged Hex 2.5  INNO X Hex 2.5  INNO V Hex 2.5  INNO Short Hex 2.5  INNO S	Prosthetic Procedure I								
	Prosthetic Procedure II								
	Prosthetic Procedure III								
	Prosthetic Procedure IV								
	Prosthetic Procedure V								
	Prosthetic Procedure VI								

* For digital prosthetics, refer to page 237.

	Impression			
Fixture-Level Impression				
	Replica	Bite Impression Coping	Pick-up Impression Coping	Transfer Post
Abutment-Level Impression				
	Multi Protection Cap	Multi Pick-up Impression Coping	Multi Transfer Post	Multi Lab Analog
				
	Absolute Protection Cap	Absolute Impression Cap	Absolute Lab Analog	Absolute Plastic Coping
	Direct Impression			
				
	Sonator Impression Coping	Sonator Lab Analog		
				
	Ball Analog			

Fixture Mount



Length	7.4
2SMHR001	

- > Packing unit: 1 Mount + 1 Mount Screw.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

Cover Screw

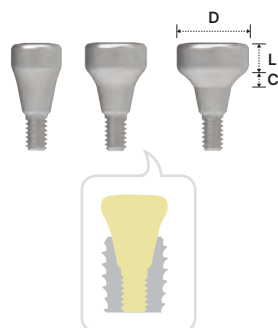


Diameter Length	Ø3.35	Ø3.75	Ø4.15
3	2SCS000		
4.2		*2SCS001	
5.2			*2SCS002

- > Packing unit: 1 Cover Screw.
- > Used to seal the conical interface of the fixture.
- > Longer Cover Screws for deeper fixture placement.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

*Optional Product.

Healing Abutment

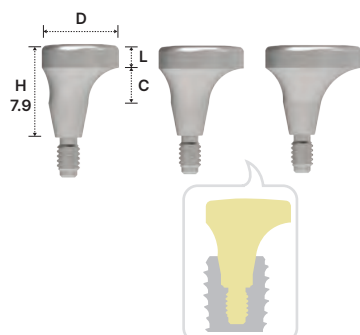


Diameter	Ø4.0		Ø4.5		Ø5.0		Ø5.5	
Length Cuff	1	2	1	2	1	2	1	2
1	2HS4011		2HS4511		2HS5011		2HS5511	
2		2HS4022		2HS4522		2HS5022		2HS5522
3		2HS4032		2HS4532		2HS5032		2HS5532
4		2HS4042		2HS4542		2HS5042		2HS5542
5		2HS4052		2HS4552		2HS5052		2HS5552
6		2HS4062		2HS4562		2HS5062		2HS5562
7		2HS4072		2HS4572		2HS5072		2HS5572

Diameter	Ø6.0		Ø6.5		Ø7.0		Ø7.5/Ø8.5/Ø9.5	
Length Cuff	1	2	1	2	1	2	2	
1	2HS6011		2HS6511		2HS7011		Cuff 3	
2		2HS6022		2HS6522		2HS7022		
3		2HS6032		2HS6532		2HS7032		2HS7532
4		2HS6042		2HS6542		2HS7042		2HS8532
5		2HS6052		2HS6552		2HS7052		2HS9532
6		2HS6062		2HS6562		2HS7062		
7		2HS6072		2HS6572		2HS7072		

- > Packing unit: 1 Healing Abutment.
- > For gingival remodeling during soft tissue healing.
- > Selected based on gingival height and abutment type.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 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 Volume-up Healing Abutment + 1 Abutment Screw.
- > Used to shape gingival tissue and alveolar bone to mimic natural anatomy and prevent deep penetration.
- > Recommended for use with Volume-up Guide System™ and COWELL® BMP.
- > Selected based on gingival height and abutment type.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.



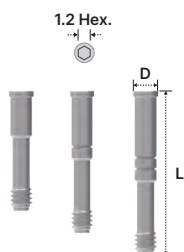
Scan Healing Abutment



Diameter	Ø4.5			Ø5.5			Ø6.5		
Length Cuff	3	4	5	3	4	5	3	4	5
2	2SHS455			2SHS555			2SHS655		
3		2SHS457			2SHS557			2SHS657	
4	2SHS459			2SHS559			2SHS659		

- > Packing unit: 1 Scan Healing Abutment + 1 Scan Healing Abutment Screw.
- > For remodeling gingival contour during soft tissue healing.
- > For intra-oral scanner.
- > Connected with Scan Healing Abutment Screw.
- > Select the abutment according to gingival height and abutment type.
- > Use the Scan Healing Holder (Ø4.5: SHC45, Ø5.5: SHC55, Ø6.5: SHC65).
- > Tightened with Hex Driver.
- > Tightening torque: 10 N·cm.

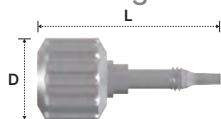
Scan Healing Abutment Screw



Diameter Length	10.9	12.9	14.9
2.15	2SHS50	2SHS70	2SHS90

- > 2SHS50: 2SH455 / 2SH555 / 2SH655.
- > 2SHS70: 2SH457 / 2SH557 / 2SH657.
- > 2SHS90: 2SH459 / 2SH559 / 2SH659.
- > Tightened with Hex Driver and Torque Wrench.

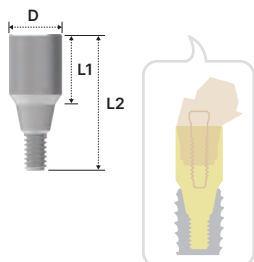
Scan Healing Driver



Diameter Length	Ø7.82
17.1	SHCD

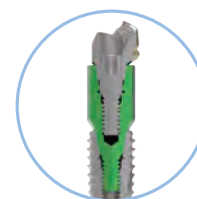
- > Packing unit: 1 Scan Healing Holder + 1 Scan Healing Driver.
- > To position Scan Healing Abutment.

Extension Abutment



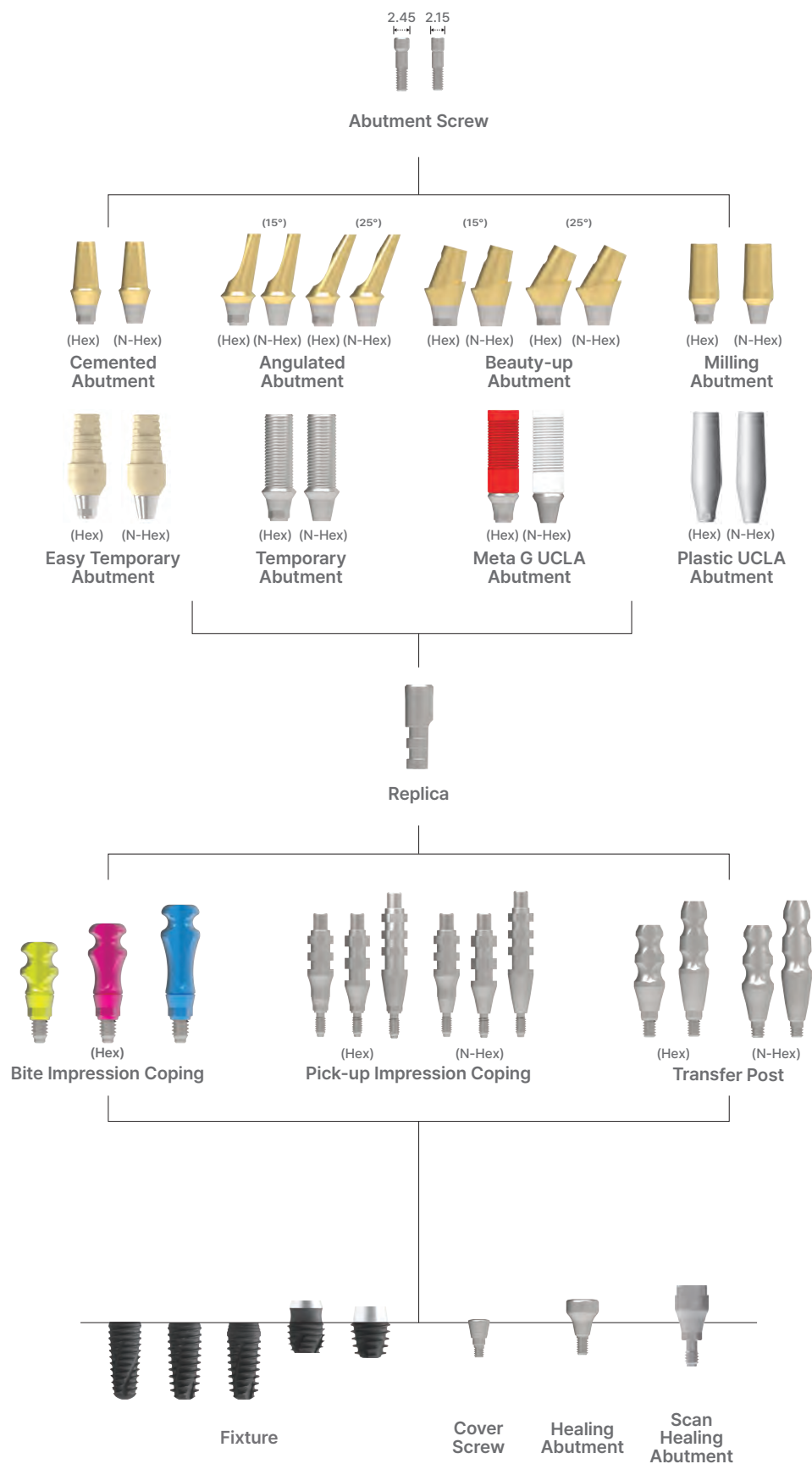
Code	D(Ø)	L1(mm)	L2(mm)
2SEH4516	4.5	6	11.7
2SEH4517	4.5	7	12.7
2SEH4518	4.5	8	13.7

- > Packing unit: 1 Extension Abutment.
- > For deep gingiva or bone loss cases with limited prosthetic space using standard abutments.
- > Placed between fixture and abutment to compensate for low gingiva.
- > Compatible with existing abutments due to identical internal connection with fixture.
- > Tightening torque: 30 N·cm.
- > Tightened using Fixture Driver.

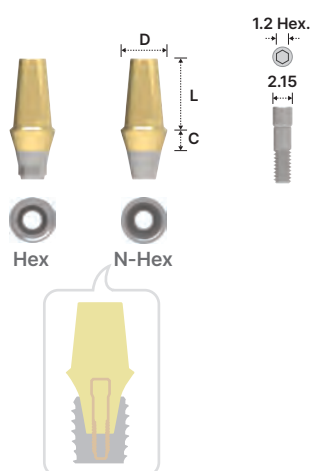


Prosthetic Procedure I

• Components Selection Guide for Cemented and UCLA Abutments



Cemented Abutment



Type	Hex								
Diameter	Ø4.5			Ø5.0			Ø5.5		
$\frac{\text{Length}}{\text{Cuff}}$	4	5.5	7	4	5.5	7	4	5.5	7
1	2SCH4514	2SCH4515	2SCH4517	2SCH5014	2SCH5015	2SCH5017	2SCH5514	2SCH5515	2SCH5517
2	2SCH4524	2SCH4525	2SCH4527	2SCH5024	2SCH5025	2SCH5027	2SCH5524	2SCH5525	2SCH5527
3	2SCH4534	2SCH4535	2SCH4537	2SCH5034	2SCH5035	2SCH5037	2SCH5534	2SCH5535	2SCH5537
4	2SCH4544	2SCH4545	2SCH4547	2SCH5044	2SCH5045	2SCH5047	2SCH5544	2SCH5545	2SCH5547
5	2SCH4554	2SCH4555	2SCH4557	2SCH5054	2SCH5055	2SCH5057	2SCH5554	2SCH5555	2SCH5557

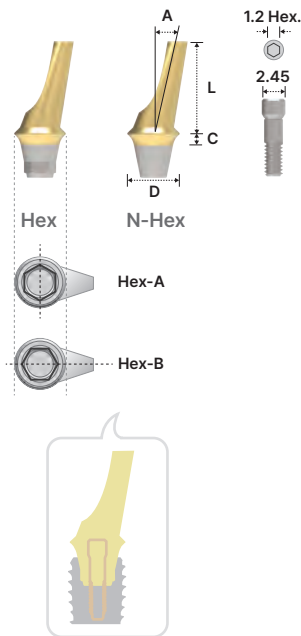
Type	Hex					
Diameter	Ø6.0			Ø6.5		
$\frac{\text{Length}}{\text{Cuff}}$	4	5.5	7	4	5.5	7
1	2SCH6014	2SCH6015	2SCH6017	2SCH6514	2SCH6515	2SCH6517
2	2SCH6024	2SCH6025	2SCH6027	2SCH6524	2SCH6525	2SCH6527
3	2SCH6034	2SCH6035	2SCH6037	2SCH6534	2SCH6535	2SCH6537
4	2SCH6044	2SCH6045	2SCH6047	2SCH6544	2SCH6545	2SCH6547
5	2SCH6054	2SCH6055	2SCH6057	2SCH6554	2SCH6555	2SCH6557

Type	N-Hex								
Diameter	Ø4.5			Ø5.0			Ø5.5		
$\frac{\text{Length}}{\text{Cuff}}$	4	5.5	7	4	5.5	7	4	5.5	7
1	2SCN4514	2SCN4515	2SCN4517	2SCN5014	2SCN5015	2SCN5017	2SCN5514	2SCN5515	2SCN5517
2	2SCN4524	2SCN4525	2SCN4527	2SCN5024	2SCN5025	2SCN5027	2SCN5524	2SCN5525	2SCN5527
3	2SCN4534	2SCN4535	2SCN4537	2SCN5034	2SCN5035	2SCN5037	2SCN5534	2SCN5535	2SCN5537
4	2SCN4544	2SCN4545	2SCN4547	2SCN5044	2SCN5045	2SCN5047	2SCN5544	2SCN5545	2SCN5547
5	2SCN4554	2SCN4555	2SCN4557	2SCN5054	2SCN5055	2SCN5057	2SCN5554	2SCN5555	2SCN5557

Type	N-Hex					
Diameter	Ø6.0			Ø6.5		
$\frac{\text{Length}}{\text{Cuff}}$	4	5.5	7	4	5.5	7
1	2SCN6014	2SCN6015	2SCN6017	2SCN6514	2SCN6515	2SCN6517
2	2SCN6024	2SCN6025	2SCN6027	2SCN6524	2SCN6525	2SCN6527
3	2SCN6034	2SCN6035	2SCN6037	2SCN6534	2SCN6535	2SCN6537
4	2SCN6044	2SCN6045	2SCN6047	2SCN6544	2SCN6545	2SCN6547
5	2SCN6054	2SCN6055	2SCN6057	2SCN6554	2SCN6555	2SCN6557

- > Packing unit: 1 Cemented Abutment + 1 Abutment Screw.
- > For Screw-Cement / Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Gold color for more translucent restoration.
- > Connected with Abutment Screw (2SSHR200).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

Angulated Abutment

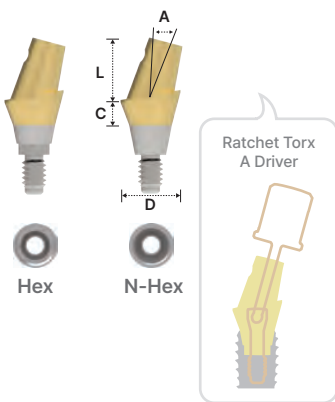


Type	Hex-A				Hex-B			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(25°)	Ø5.5(15°)	Ø5.5(25°)	Ø4.5(15°)	Ø4.5(25°)	Ø5.5(15°)	Ø5.5(25°)
Length Cuff	8	8	8	8	8	8	8	8
1	2SAH45151	2SAH45251	2SAH55151	2SAH55251	2SAH45151B	2SAH45251B	2SAH55151B	2SAH55251B
2	2SAH45152	2SAH45252	2SAH55152	2SAH55252	2SAH45152B	2SAH45252B	2SAH55152B	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 Angulated Abutment + 1 Abutment Screw.
- > For Screw-Cement / Cement Retained Prosthesis.
- > Solution for the anterior esthetic zone.
- > Gold color for more translucent restoration.
- > Select Hex-A or Hex-B depending on the fixture placement direction.
- > Connected with Abutment Screw (2SSHR100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N·cm.
- > Fixture-level impression.

Beauty-up Abutment



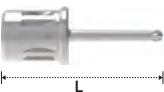
Type	Hex	N-Hex	Hex	N-Hex
Diameter(Angle)	Ø3.8 (15°)	Ø3.8 (15°)	Ø3.8 (25°)	Ø3.8 (25°)
Length Cuff	5	5	5	5
2	2SBH381525	2SBN381525	2SBH382525	2SBN382525

- > Packing unit: 1 Beauty-up Abutment (Inbuilt Abutment Screw).
- > For Screw-Cement Retained Prosthesis with angulated screw channel.
- > Esthetic gingival line and oval shape for a more natural-looking prosthesis.
- > Tightened with Machine / Ratchet Torx A Driver using Torque Wrench.
- > Tightening torque: 30 N·cm.
- > Fixture-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

* Machine / Ratchet Torx A Driver



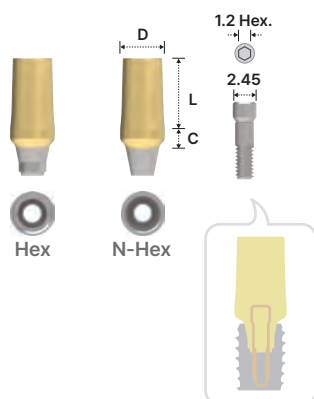
Length	Type	Ratchet
22		KMATD18S
28		KMATD18L



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

- > Enhanced stability against internal slippage or fracture due to the wide contact area between Ratchet Torx A Driver and dedicated Torx Abutment Screws.
- > Tightening torque: 30 N·cm (Max. 50 N·cm).

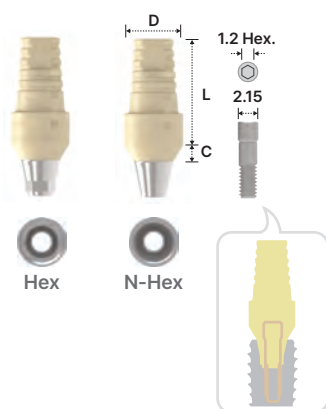
Milling Abutment



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 / Cement Retained Prosthesis.
- > Block abutment for customized contouring.
- > Gold color for more translucent restoration.
- > Connected with Abutment Screw (2SSHR100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

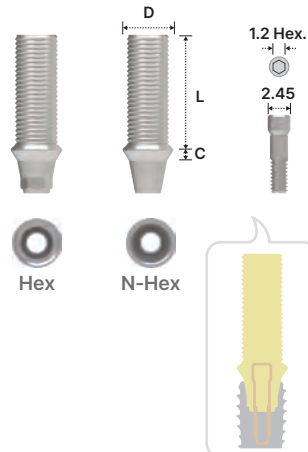
Easy Temporary Abutment



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 a more esthetic and simpler chairside procedure in temporary restorations.
- > Venerable polymer material.
- > Titanium core for strength.
- > Connected with Abutment Screw (2SSHR200).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.
- > Fixture-level impression.

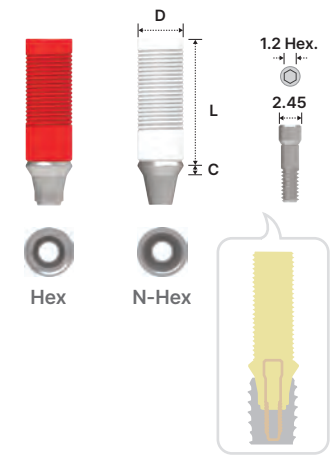
Temporary Abutment



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

- > Packing unit: 1 Temporary Abutment + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > For provisional restoration.
- > Connected with Abutment Screw (2SSHR100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.
- > Fixture-level impression.

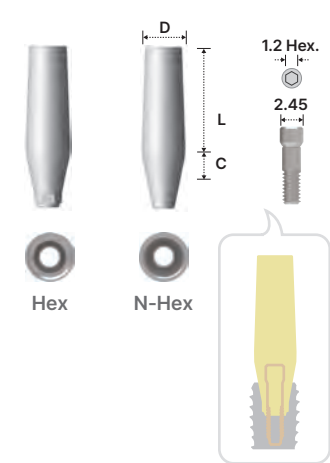
Meta G UCLA Abutment



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

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

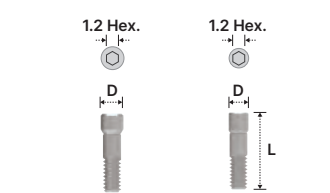
Plastic UCLA Abutment



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

- > Packing unit: 1 Plastic UCLA Abutment + 1 Abutment Screw.
- > Intended for the same use as Meta G UCLA Abutment, but with lower connection accuracy during lab procedures.
- > PMMA material.
- > Connected with Abutment Screw (2SSHR200).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: Finger light force during wax pattern fabrication (30 N-cm after casting).
- > Fixture-level impression.

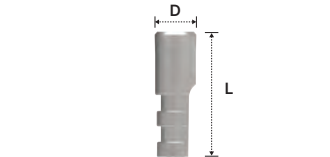
Abutment Screw



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

- > Packing unit: 1 Abutment Screw.
- > 2SSHR100: Angulated, Milling, Temporary, Meta G UCLA, and Plastic UCLA Abutment.
- > 2SSHR200: Cemented Abutment and Easy Temporary Abutment.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

Replica



Diameter Length	Ø4.0
12	2SRHR001

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

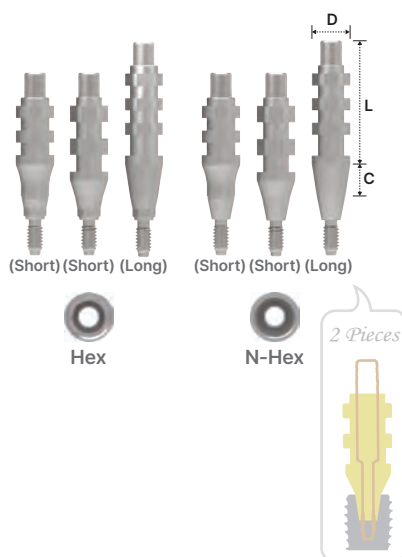
Bite Impression Coping



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 for simultaneous bite and impression taking.
- > For Bite tray impression (Closed tray).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N-cm.
- > Fixture-level impression.

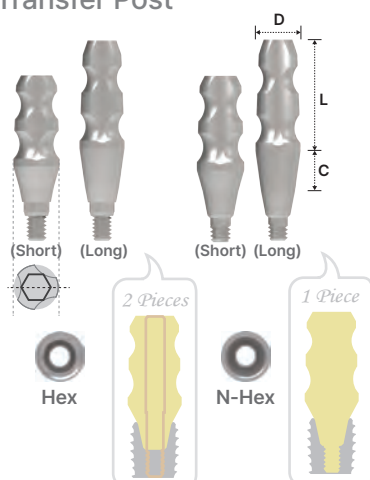
Pick-up Impression Coping



Type	Hex			N-Hex		
Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Length / Cuff	12 (Short)/4	2SIH454S	2SIH554S	2SIH654S	2SIN454S	2SIN554S
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.
- > For open tray impression.
- > Connected with Guide Pin (2SISR001SS / 2SISR001SL).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N-cm.
- > Fixture-level impression.

Transfer Post

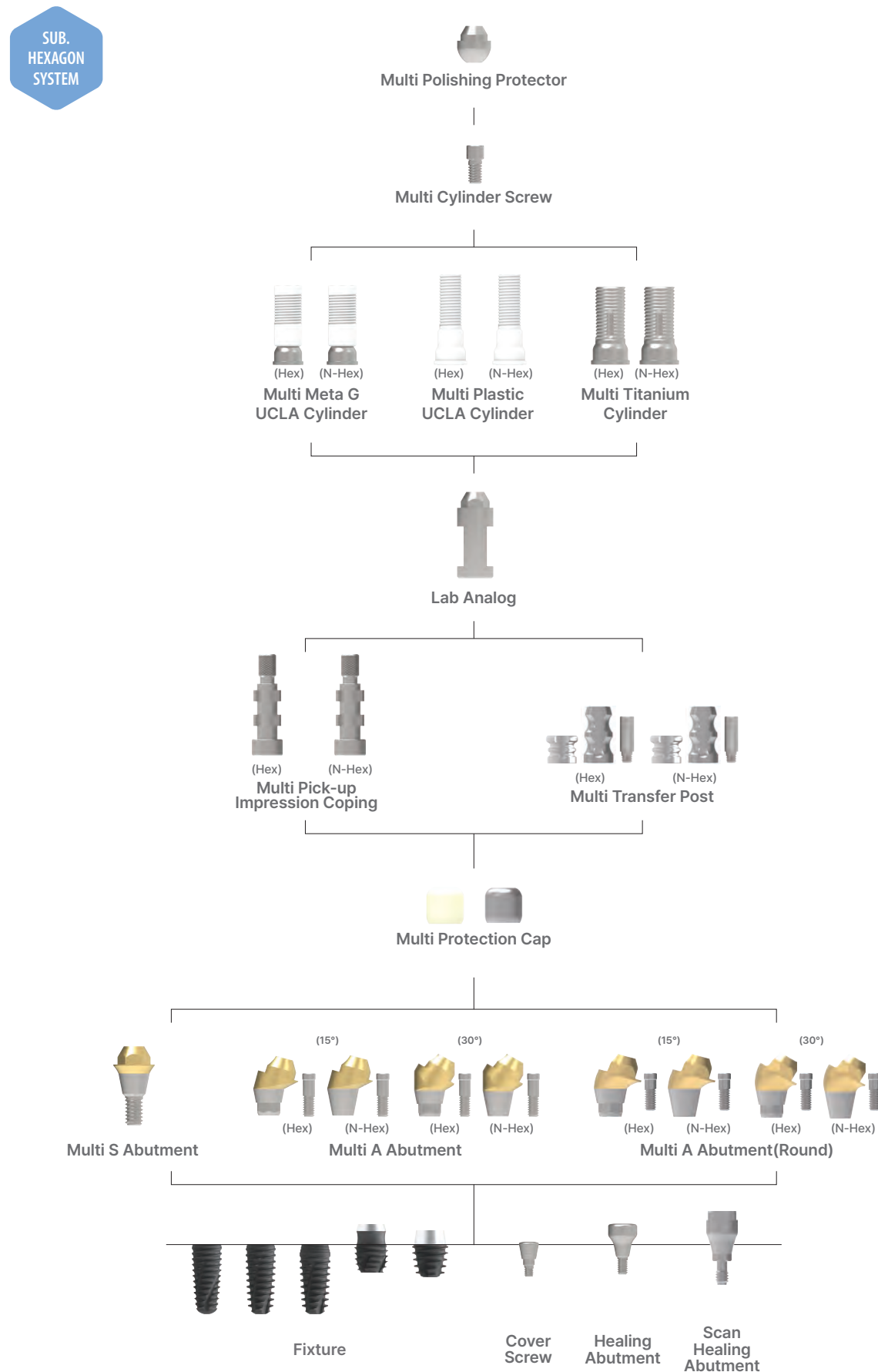


Type	Hex			N-Hex		
Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Length / Cuff	9 (Short)/2	2STH45S	2STH55S	2STH65S	2STN45S	2STN55S
11 (Long)/4	2STH45L	2STH55L	2STH65L	2STN45L	2STN55L	2STN65L

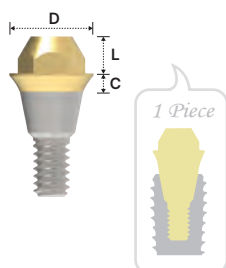
- > Packing unit: Hex - 1 Transfer Post + 1 Guide Pin, N-Hex - 1 Transfer Post (1 piece).
- > For closed tray impression.
- > Connected with Guide Pin (2STH001SS / 2STH001SL).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N-cm.
- > Fixture-level impression.

Prosthetic Procedure II

• Component Selection Guide for Multi Abutments



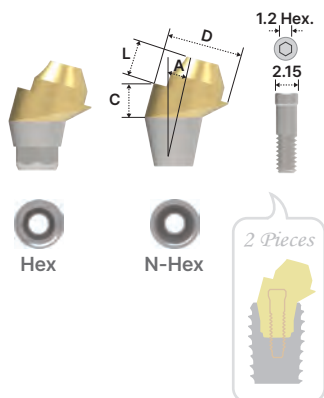
Multi S Abutment



Diameter	Ø4.5	Ø5.5
Cuff / Length	2	2
1	2SMS451	2SMS551
2	2SMS452	2SMS552
3	2SMS453	2SMS553
4	2SMS454	2SMS554
5	2SMS455	2SMS555
6	2SMS456	2SMS556
7	2SMS457	2SMS557
8	2SMS458	2SMS558
9	2SMS459	2SMS559

- > Packing unit: 1 Multi S Abutment (integrated with screw and abutment).
- > For Screw Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Use Multi S Holder for a more stable position.
- > Tightened with Machine / Ratchet Multi S Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide

Multi A Abutment

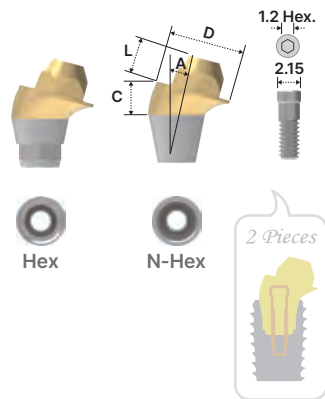


Type	Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff / Length	2	2	2	2
2	● 2SMAH45152			
3(*3.5)	★ 2SMAH45153	● 2SMAH45303	★ 2SMAH55153	★ 2SMAH55303*
4	★ 2SMAH45154	★ 2SMAH45304	★ 2SMAH55154	★ 2SMAH55304
5			★ 2SMAH55155	★ 2SMAH55305

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(*3.5)	★ 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.
- > Use Multi A Holder for a more stable position.
- > Connected with Abutment Screw (2SSHR300: ★ / 2SSHR400: ●).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

Multi A Abutment(Round)

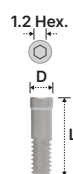


Type	Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2
2	2SMAH451520R			
2.5	2SMAH451525R			
3	2SMAH451530R	2SMAH453030R	2SMAH551530R	
3.5	2SMAH451535R	2SMAH453035R		2SMAH553030R
4	2SMAH451540R	2SMAH453040R	2SMAH551540R	2SMAH553040R
4.5	2SMAH451545R			
5	2SMAH451550R	2SMAH453050R	2SMAH551550R	2SMAH553050R
6	2SMAH451560R	2SMAH453060R		
7	2SMAH451570R	2SMAH453070R		
8	2SMAH451580R	2SMAH453080R		

Type	N- Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff Length	2	2	2	2
2	2SMAN451520R			
2.5	2SMAN451525R			
3	2SMAN451530R	2SMAN453030R	2SMAN551530R	
3.5	2SMAN451535R	2SMAN453035R		2SMAN553030R
4	2SMAN451540R	2SMAN453040R	2SMAN551540R	2SMAN553040R
4.5	2SMAN451545R			
5	2SMAN451550R	2SMAN453050R	2SMAN551550R	2SMAN553050R
6	2SMAN451560R	2SMAN453060R		
7	2SMAN451570R	2SMAN453070R		
8	2SMAN451580R	2SMAN453080R		

- > Packing unit: 1 Multi A Abutment(Round) + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Use Multi A Holder for a more stable position.
- > Connected with Abutment Screw (2SSHR400).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

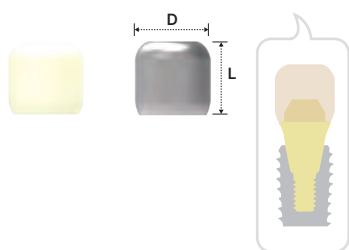
Abutment Screw



Length	7.5	6.5
Diameter	2.15 ★ 2SSHR300	2.15 ● 2SSHR400

- > Packing unit: 1 Abutment Screw.
- > Used with Multi A Abutment.
- > Choose by abutment dimensions.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

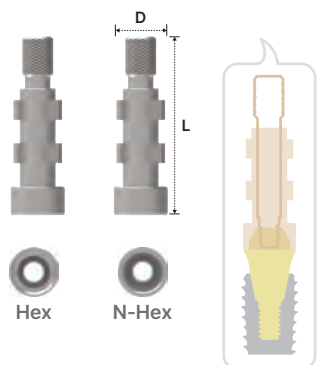
Multi Protection Cap



Material	Plastic		Metal	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter / Length	Ø5.2	Ø6.2	Ø5.2	Ø6.2
5	2SMPC45	2SMPC55	2SMPC45M	2SMPC55M

- > Packing unit: 1 Multi Protection Cap.
- > Protection from cheek and tongue for the gingival healing period.
- > Alternative usage for the sub-structure of the temporary prosthesis.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N·cm.

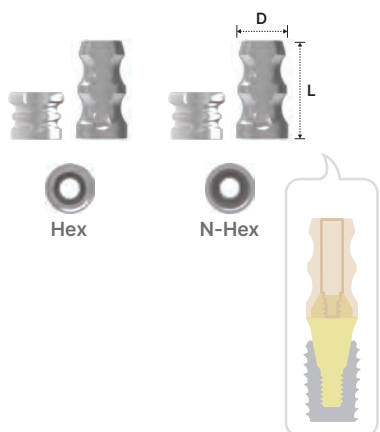
Multi Pick-up Impression Coping



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter / Length	Ø4.65	Ø5.65	Ø4.65	Ø5.65
16	2SMIH45	2SMIH55	2SMIN45	2SMIN55

- > Packing unit: 1 Multi Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with Guide Pin (2SMGP012).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 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 / Length	Ø4.5	Ø5.5	Ø4.5	Ø5.5
5	2SMTH455	2SMTH555	2SMTN455	2SMTN555
6	2SMTH45	2SMTH55	2SMTN45	2SMTN55

- > Packing unit: 1 Multi Transfer Post + 1 Guide Pin.
- > For closed tray impression.
- > Connected with Guide Pin (2SMTHS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N·cm.
- > Abutment-level impression.

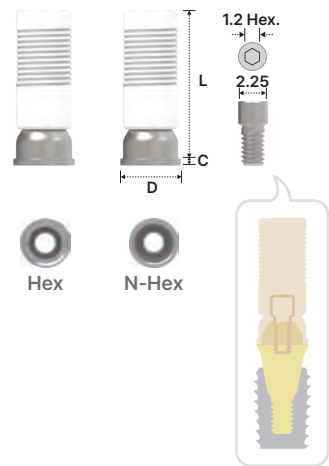
Multi Lab Analog



Multi S & A Abutment Diameter	Ø4.5	Ø5.5
Diameter / Length	Ø4.5	Ø5.5
2	2SMA45	2SMA55

- > Packing unit: 1 Multi Lab Analog.
- > Replication of the abutment shape in the working cast.
- > Choose by abutment dimensions.

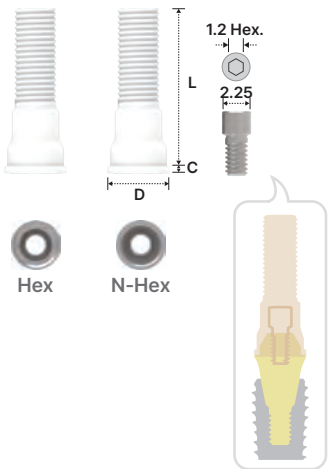
Multi Meta G UCLA Cylinder



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 Cuff	10.9	10.9	10.9	10.9
0.5	2SCCH45	2SCCH55	2SCCN45	2SCCN55

- > Packing unit: 1 Meta G UCLA Cylinder + 1 Multi Cylinder Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Modifiable to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.

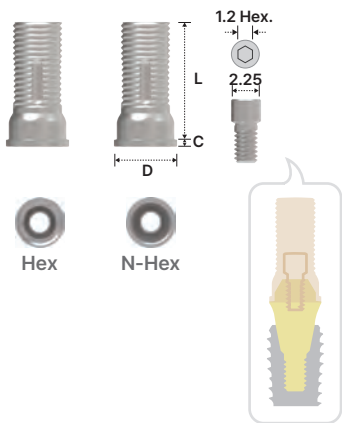
Multi Plastic UCLA Cylinder



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 Cuff	11.5	11.5	11.5	11.5
0.5	2SMPH45	2SMPH55	2SMPN45	2SMPN55

- > Packing unit: 1 Plastic UCLA Cylinder + 1 Multi Cylinder Screw.
- > Intended for the same use as Meta G UCLA Abutment, but with lower connection accuracy during lab procedures.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: Finger light force during wax pattern fabrication (20 N-cm after casting).

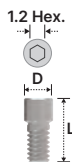
Multi Titanium Cylinder



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 Cuff	8.5	8.5	8.5	8.5
0.5	2STCH45	2STCH55	2STCN45	2STCN55

- > Packing unit: 1 Multi Titanium Cylinder + 1 Multi Cylinder Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.

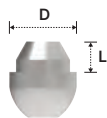
Multi Cylinder Screw



Diameter Length	Ø2.25
5	2SMCS100

- > Packing unit: 1 Multi Cylinder Screw.
- > Used with Multi Meta G UCLA, Plastic UCLA, and Titanium Cylinder.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

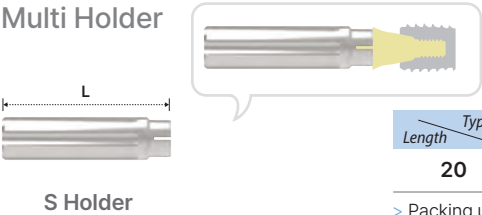
Multi Polishing Protector



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.
- > For prosthetic margin protection during polishing.

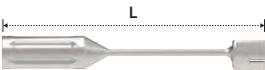
Multi Holder



S Holder

Type Length	Hand
20	KMHS01

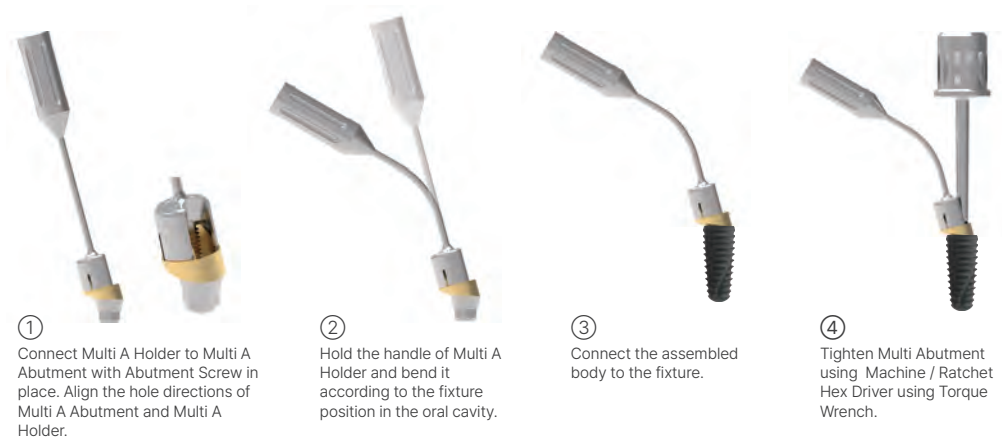
- > Packing unit: 1 Multi S Holder.
- > For more stable positioning of Multi S Abutment.



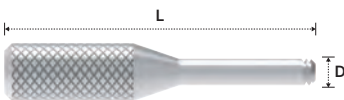
A Holder

Type Length	Hand
32	KMHA01

- > Packing unit: 1 Multi A Holder.
- > For more stable positioning of Multi A Abutment.



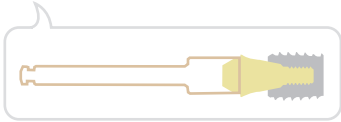
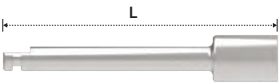
Abutment Carrier



Diameter Length	Ø1.76
20.5	2SMAC001

- > Packing unit: 1 Abutment Carrier.
- > For more stable positioning of Multi S / A Abutment.

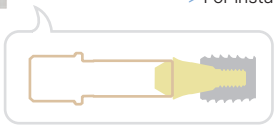
Machine Multi S Driver



Length	Type	Machine
27.5		KMMSD21L

- > Packing unit: 1 Machine Multi S Driver.
- > For installing and removing Multi S Abutment using a machine.

Ratchet Multi S Driver



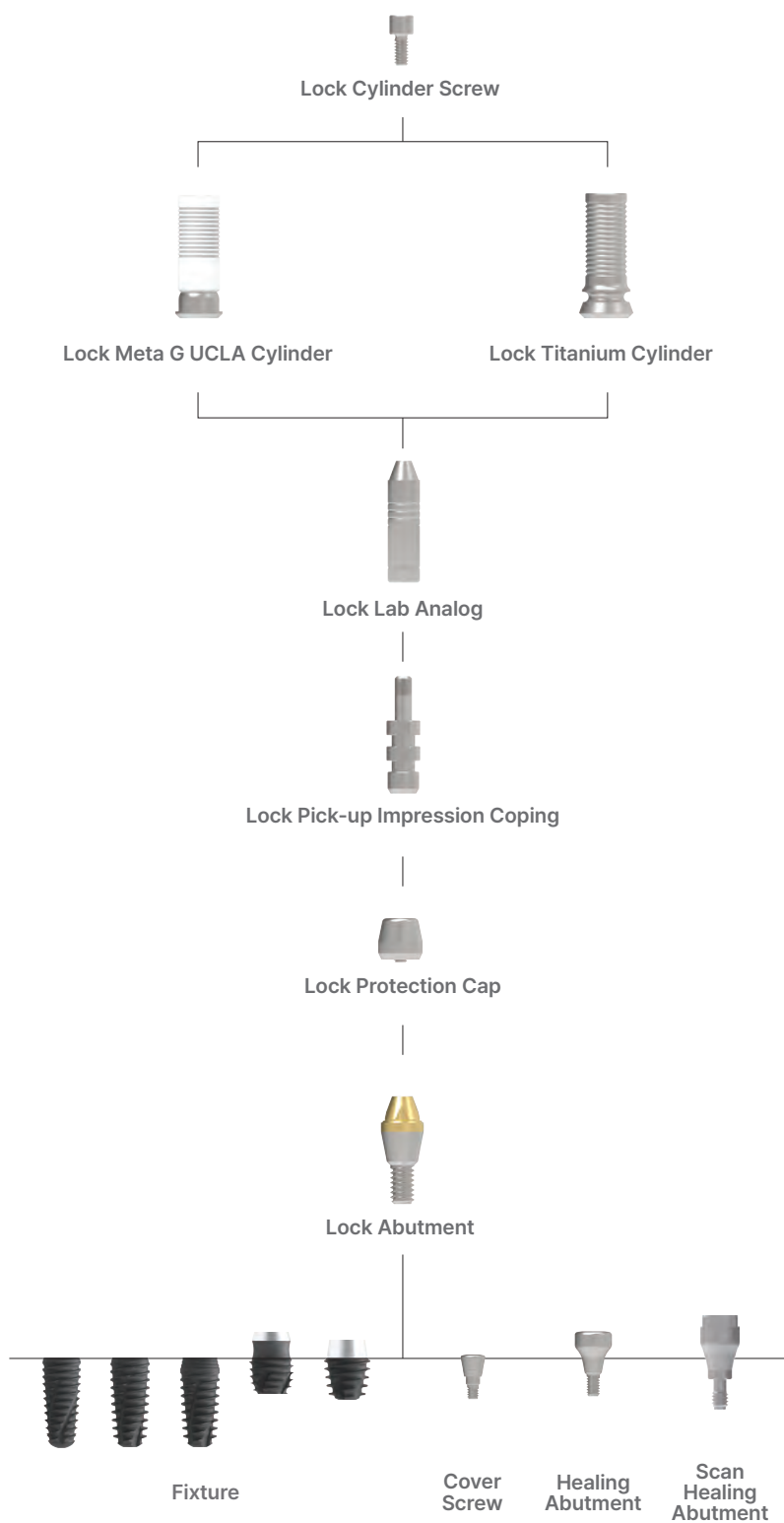
Length	Type	Ratchet
22		KRMSD15L

- > Packing unit: 1 Ratchet Multi S Driver.
- > For installing and removing Multi S Abutment using Torque Wrench.

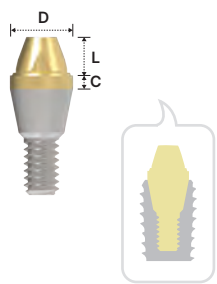
Prosthetic Procedure III

• Component Selection Guide for Lock Abutment

SUB.
HEXAGON
SYSTEM



Lock Abutment



Diameter	Ø3.5
Cuff / Length	2.15
0.5	2SLA400
1	2SLA410
2	2SLA420
3	2SLA430
4	2SLA440

- > Packing unit: 1 Lock Abutment (integrated with screw and abutment).
- > For Screw Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Tightened with Ratchet Lock Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

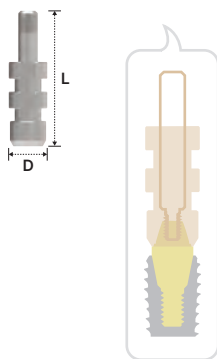
Lock Protection Cap



Lock Abutment Diameter	Ø3.5
Diameter / Length	Ø4.3
4	2SLP45

- > Packing unit: 1 Lock Protection Cap.
- > Protection from cheek and tongue for the gingival healing period.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

Lock Pick-up Impression Coping



Lock Abutment Diameter	Ø3.5
Diameter / Length	Ø4.3
16	2SLIH45

- > Packing unit: 1 Lock Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with Guide Pin (2SLIH45S).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N-cm.
- > Abutment-level impression.

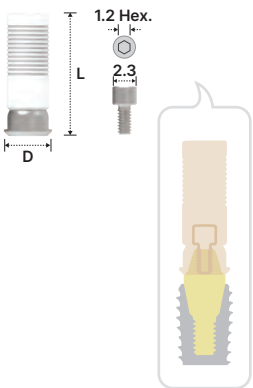
Lock Lab Analog



Lock Abutment Diameter	Ø3.5
Diameter / Length	Ø3.5
2.15	2SLA45

- > Packing unit: 1 Lock Lab Analog.
- > Replication of the abutment shape in the working cast.

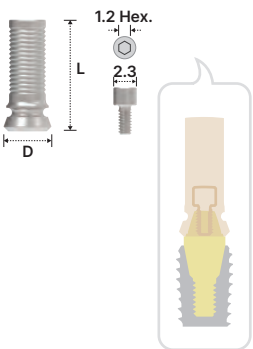
Lock Meta G UCLA Cylinder



Lock Abutment Diameter	Ø3.5
Diameter / Length	Ø4.3
11.2	2SLCH45

- > Packing unit: 1 Lock Meta G UCLA Cylinder + 1 Lock Cylinder Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Modifiable to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with Multi Cylinder Screw (2SLCS200).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.

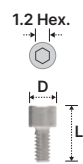
Lock Titanium Cylinder



Lock Abutment Diameter	Ø3.5
Diameter / Length	Ø4.3
10	2SLTH45

- > Packing unit: 1 Lock Titanium Cylinder + 1 Lock Cylinder Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Connected with Multi Cylinder Screw (2SLCS200).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.

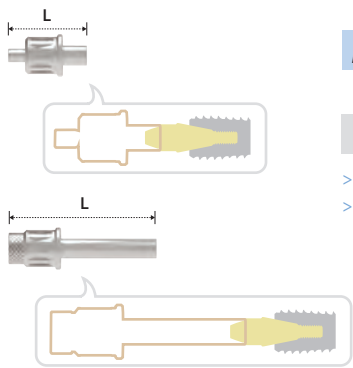
Lock Cylinder Screw



Diameter Length	
4.8	Ø2.3 2SLCS200

- > Packing unit: 1 Lock Cylinder Screw.
- > Used with Lock Meta G UCLA and Titanium Cylinder.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

Ratchet Lock Driver



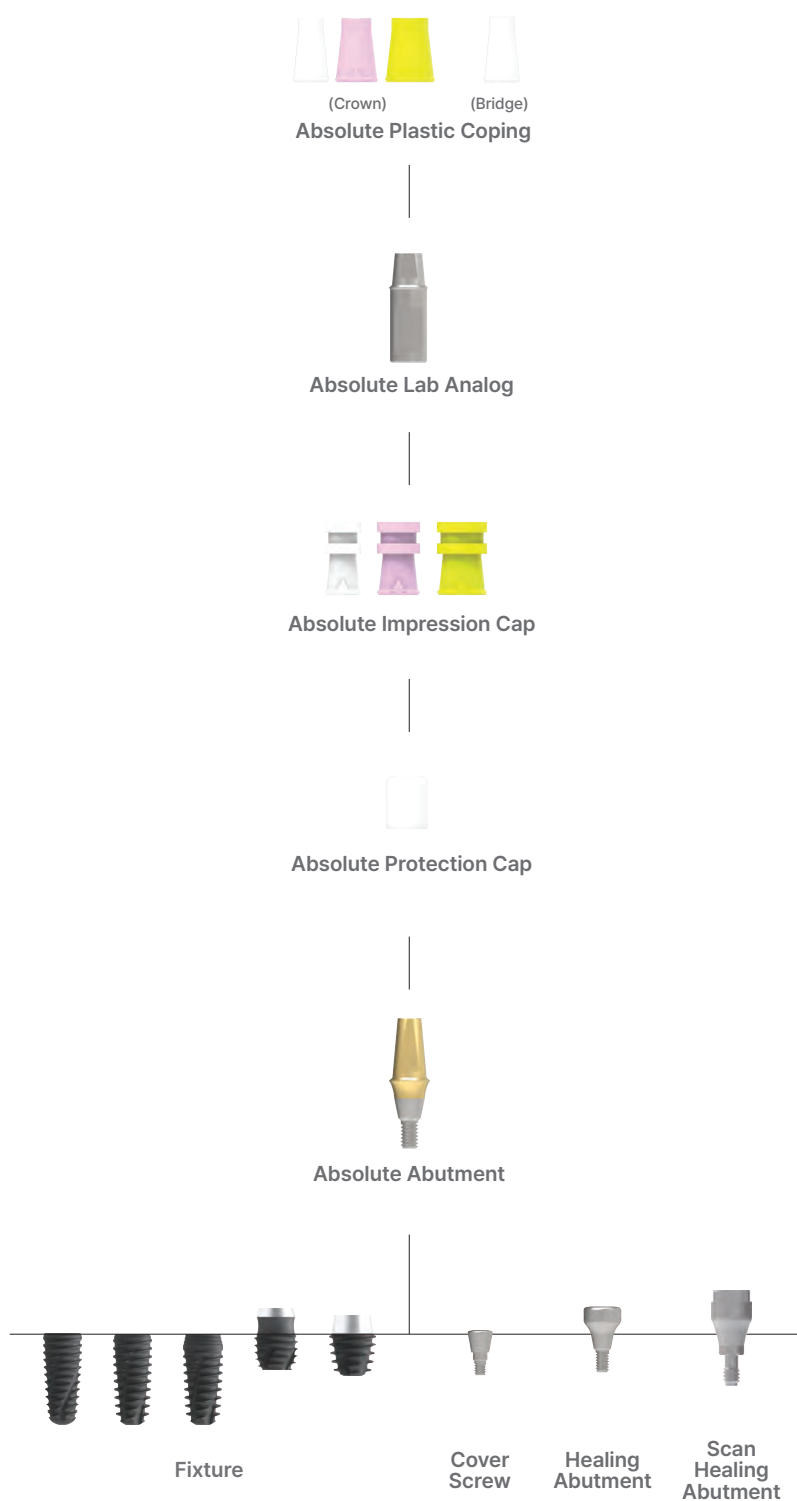
Type Length	
14.2	Ratchet KRLRD18
28.5	KRLRD28

- > Packing unit: 1 Ratchet Lock Driver.
- > For installing and removing Lock Abutment using Torque Wrench.

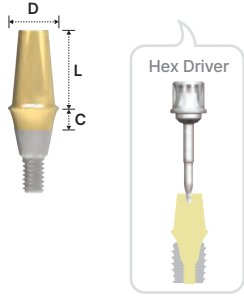
Prosthetic Procedure IV

- Component Selection Guide for Absolute Abutment

SUB.
HEXAGON
SYSTEM



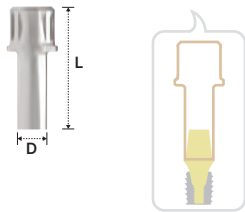
Absolute Abutment



Diameter	Ø4.5			Ø5.5			Ø6.5		
Length Cuff	4	5.5	7	4	5.5	7	4	5.5	7
1	2SAC4514	2SAC4515	2SAC4517	2SAC5514	2SAC5515	2SAC5517	2SAC6514	2SAC6515	2SAC6517
2	2SAC4524	2SAC4525	2SAC4527	2SAC5524	2SAC5525	2SAC5527	2SAC6524	2SAC6525	2SAC6527
3	2SAC4534	2SAC4535	2SAC4537	2SAC5534	2SAC5535	2SAC5537	2SAC6534	2SAC6535	2SAC6537
4	2SAC4544	2SAC4545	2SAC4547	2SAC5544	2SAC5545	2SAC5547	2SAC6544	2SAC6545	2SAC6547
5	2SAC4554	2SAC4555	2SAC4557	2SAC5554	2SAC5555	2SAC5557	2SAC6554	2SAC6555	2SAC6557

- > Packing unit: 1 Absolute Abutment (integrated with screw and abutment) + 1 Absolute Protection Cap.
- > For Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Gold color for more translucent restoration.
- > Tightened with Machine / Ratchet Hex Driver or Ratchet Absolute Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.

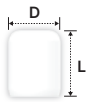
Absolute Ratchet Driver



Type	Ratchet		
Absolute Abutment Length	Ø4.5	Ø5.5	Ø6.5
19	KRAD4512S	KRAD5512S	KRAD6512S
26		KRAD4519L	KRAD5519L
			KRAD6519L

- > Packing unit: 1 Ratchet Absolute Driver.
- > For installing and removing Absolute Abutment using Torque Wrench.

Absolute Protection Cap



Absolute Abutment Diameter	Ø4.5	Ø5.5	Ø6.5
Diameter Length	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 the gingival healing period.
- > Alternative usage for the sub-structure of the temporary prosthesis.
- > Available for cemented abutment.

Absolute Impression Cap



Absolute Abutment Diameter	Ø4.5	Ø5.5	Ø6.5
Diameter Length	Ø5.5	Ø6.5	Ø7.5
10.3	2SIC45	2SIC55	2SIC65

- > Packing unit: 1 Absolute Impression Cap.
- > For closed tray impression.
- > Confirm locking of the abutment by rotating it in both clockwise and counterclockwise directions.
- > Abutment-level impression.
- > Available for cemented abutment.

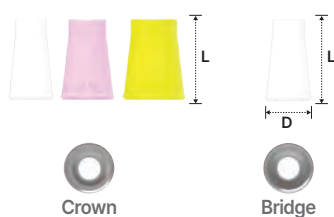
Absolute Lab Analog



Absolute Abutment Diameter	Ø4.5	Ø5.5	Ø6.5
Diameter 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.
- > Replication of the abutment shape in the working cast.
- > Choose by abutment dimensions.

Absolute Plastic Coping (Burn-Out Cylinder)

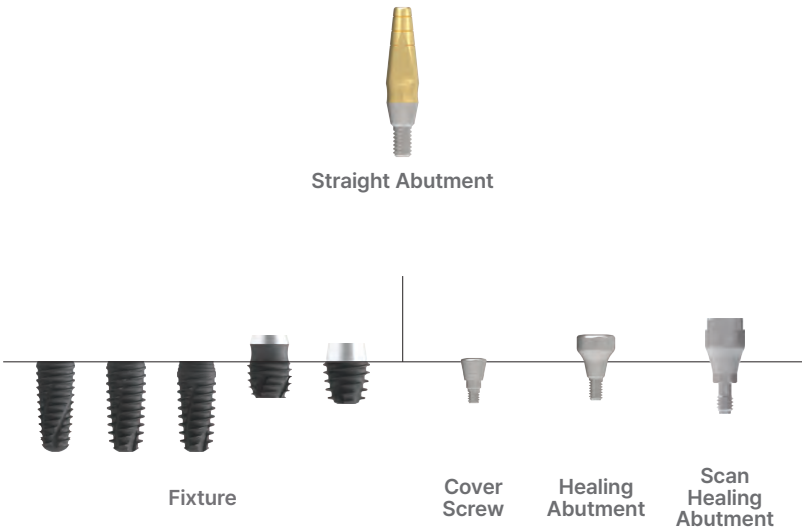


Type	Crown			Bridge		
Absolute Abutment Diameter	Ø4.5	Ø5.5	Ø6.5	Ø4.5	Ø5.5	Ø6.5
Diameter Length	Ø5.1	Ø6.1	Ø7.1	Ø5.1	Ø6.1	Ø7.1
10	2SHBC45	2SHBC55	2SHBC65	2SHBB45	2SHBB55	2SHBB65

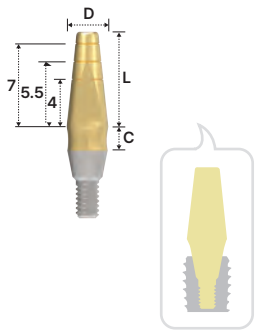
- > Packing unit: 1 Absolute Plastic Coping.
- > Intended for burnout and casting into the metal framework.
- > Choose by abutment dimensions.
- > Available for cemented abutment.

Prosthetic Procedure V

• Component Selection Guide for Straight Abutment



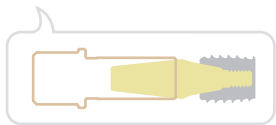
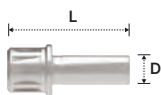
Straight Abutment



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 (integrated with screw and abutment).
- > For Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Gold color for more translucent restoration.
- > Tightened with Ratchet Shoulder Driver.
- > Tightening torque: 30 N-cm.
- > Direct impression.

Ratchet Shoulder Driver

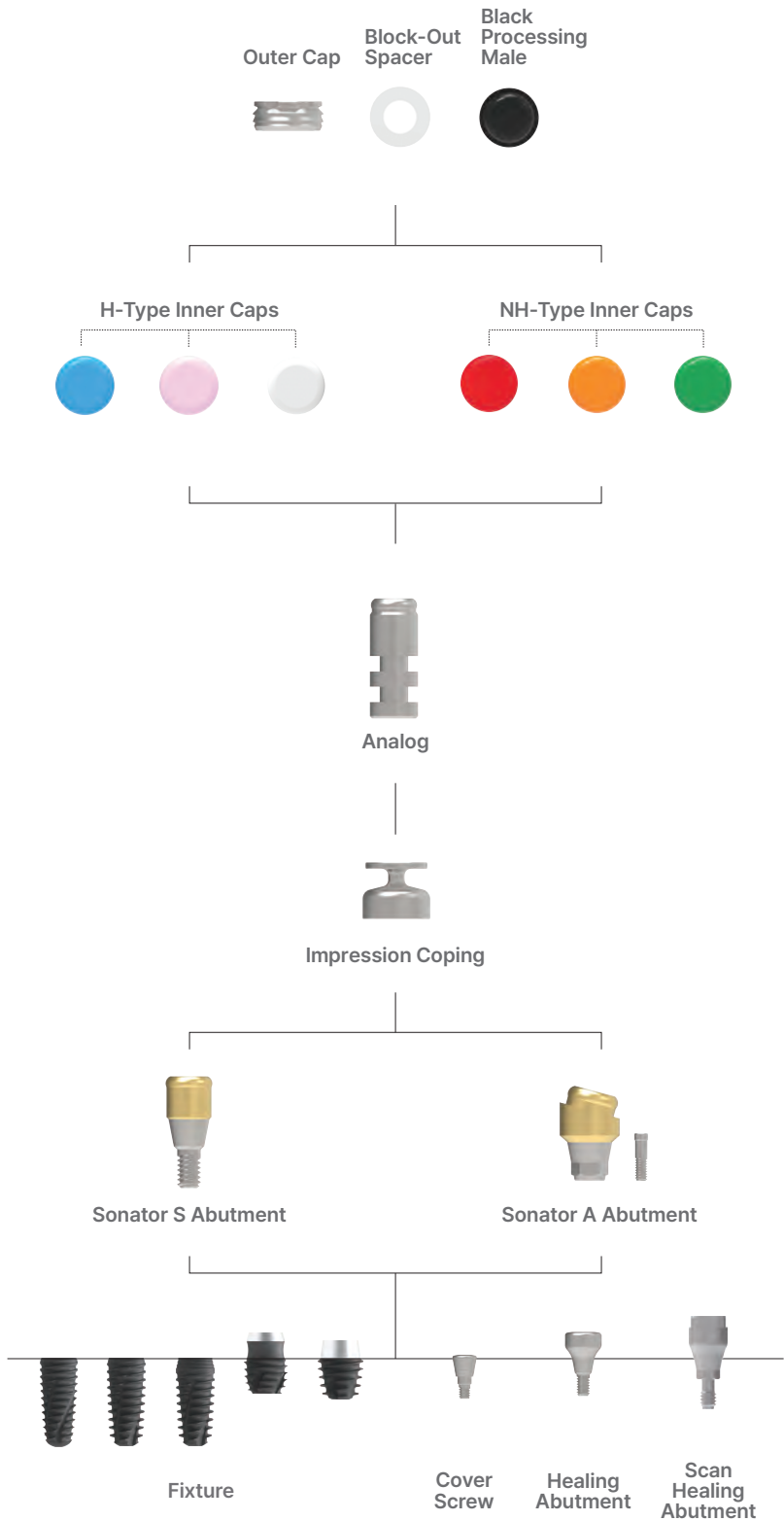


Type	Ratchet			
Straight Abutment Length	Ø4.5		Ø5.5	
12	KRR12S		KRW12S	
19		KRR19L		KRW19L

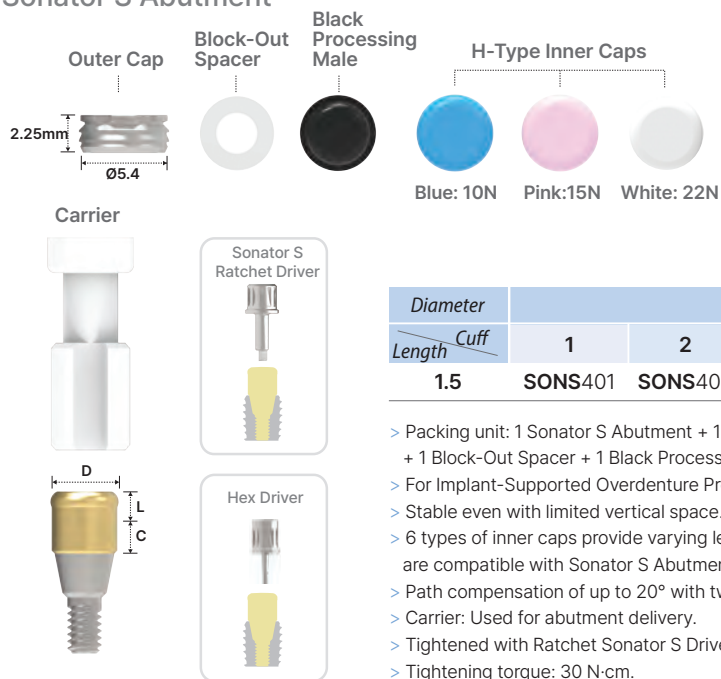
- > Packing unit: 1 Ratchet Shoulder Driver.
- > For installing and removing Straight Abutment using Torque Wrench.

Prosthetic Procedure VI

- Component Selection Guide for Sonator Abutments



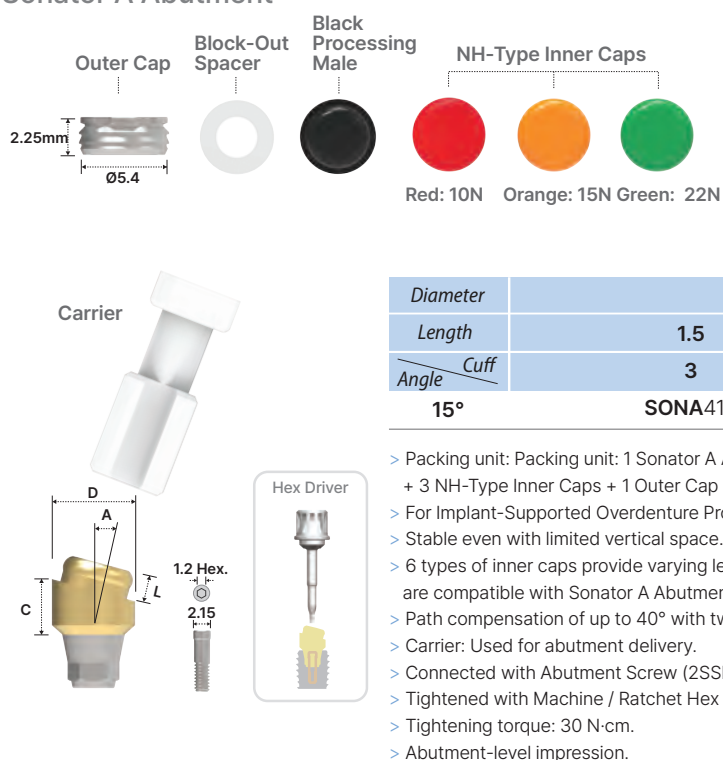
Sonator S Abutment



Diameter	Ø4.0					
Length	1	2	3	4	5	6
Cuff	1.5	2	3	4	5	6
	SONS401	SONS402	SONS403	SONS404	SONS405	SONS406

- > Packing unit: 1 Sonator S Abutment + 1 Carrier + 3 H-Type Inner Caps + 1 Outer Cap + 1 Block-Out Spacer + 1 Black Processing Male.
- > For Implant-Supported Overdenture Prosthesis.
- > Stable even with limited vertical space.
- > 6 types of inner caps provide varying levels of retention (both H / NH-Type inner caps are compatible with Sonator S Abutment).
- > Path compensation of up to 20° with two implants.
- > Carrier: Used for abutment delivery.
- > Tightened with Ratchet Sonator S Driver or Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.

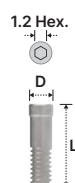
Sonator A Abutment



Diameter	Ø4.5	
Length	1.5	3.0
Angle	3	3
Cuff	15°	SONA415
		SONA430

- > Packing unit: Packing unit: 1 Sonator A Abutment + 1 Abutment Screw + 1 Carrier + 3 NH-Type Inner Caps + 1 Outer Cap + 1 Block-out Spacer + 1 Black Processing Male.
- > For Implant-Supported Overdenture Prosthesis.
- > Stable even with limited vertical space.
- > 6 types of inner caps provide varying levels of retention (both H / NH-Type inner caps are compatible with Sonator A Abutment).
- > Path compensation of up to 40° with two implants.
- > Carrier: Used for abutment delivery.
- > Connected with Abutment Screw (2SSHR300).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.

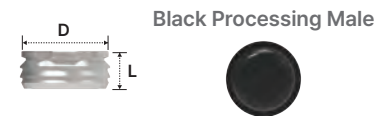
Abutment Screw



Diameter	Ø2.15
Length	7.5
	2SSHR300

- > Packing unit: 1 Abutment Screw.
- > Used with Sonator A Abutment.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

Outer Cap



Diameter Length	Ø5.4
2.25	SONOC01

- > Packing unit: 2 Outer Caps + 2 Black Processing Males.
- > Black Processing Male: Inserted and removed with Sonator I&R Tool.

H-Type Inner Cap



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

- > Packing unit: 3 Inner Caps (1 Blue, 1 Pink, and 1 White) + 3 Block-Out Spacers.
- > Mainly used for Sonator S Abutment.
- > Path compensation of up to 20° with two implants.
- > Inserted and removed with Sonator I&R Tool.

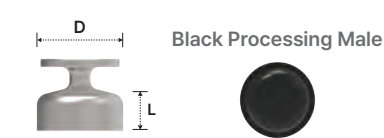
NH-Type Inner Cap



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

- > Packing unit: 3 Inner Caps (1 Red, 1 Orange, and 1 Green) + 3 Block-Out Spacers.
- > Mainly used for Sonator A Abutment.
- > Path compensation of up to 40° with two implants.
- > Inserted and removed with Sonator I&R Tool.

Sonator Impression Coping



Diameter Length	Ø4.8
3	SONIP04

- > Packing unit: 4 Sonator Impression Copings.
- > For closed tray impression.
- > Used over Sonator S / A Abutment after placing Block-Out Spacer.
- > Abutment-level impression.

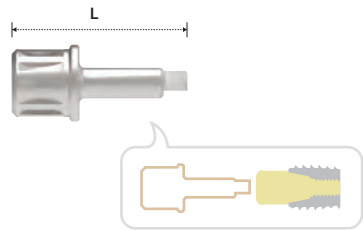
Sonator Lab Analog



Diameter Length	
1.4	Ø4
	SONLA04

- > Packing unit: 4 Sonator Lab Analogs.
- > Replication of the abutment shape in the working cast.

Ratchet Sonator S Driver

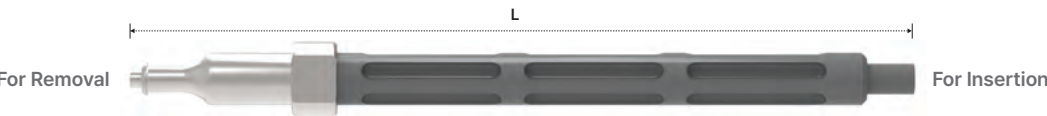


Type Length	
18.4	Ratchet
	SONRD19L

- > Packing unit: 1 Ratchet Sonator S Driver.
- > For installing and removing Sonator S Abutment using Torque Wrench.

Sonator I&R Tool

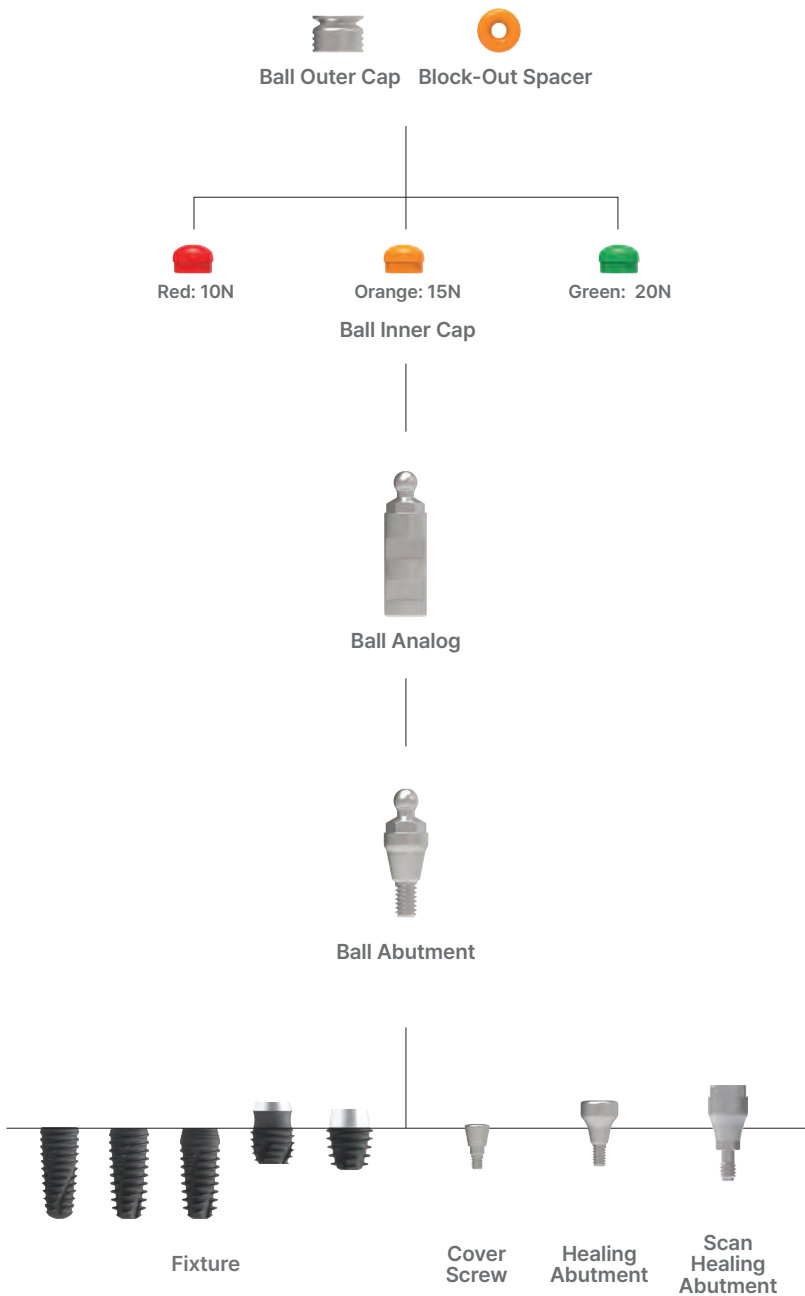
Length	
95.05	
	SONIR002



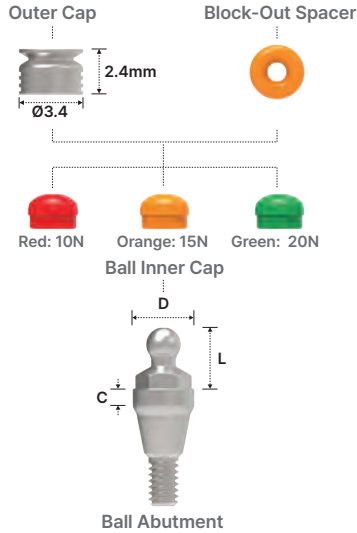
- > Packing unit: 1 Sonator I&R Tool.
- > For installing and removing H / NH-Type Inner Caps and Black Processing Male.

Prosthetic Procedure VII

- Component Selection Guide for Ball Abutment



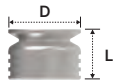
Ball Abutment



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

- > Packing unit: 1 Ball Abutment + 3 Ball Inner Caps (1 per color) + 1 Outer Cap + 1 Block-Out Spacer.
- > For Implant-Supported Overdenture Prosthesis.
- > 3 types of inner caps provide varying levels of retention.
- > Tightened with Ratchet Ball Driver using Torque Wrench.
- > Tightening torque: 30 N·cm.
- > Direct impression.

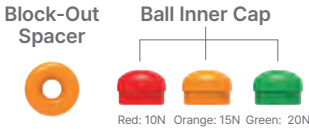
Ball Outer Cap



Diameter	Ø3.4
Length	2.4
	BATC003C

- > Packing unit: 2 Outer Caps.

Ball Inner Cap



Code	BATC003I
------	----------

- > Packing unit: 6 Inner Caps (2 per color) + 2 Block-Out Spacers.
- > Inserted and removed with Ball I&R Tool.

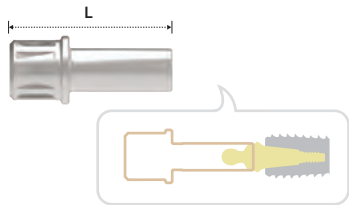
Ball Analog



Diameter	Ø4.0
Length	4
	SBAL400

- > Packing unit: 4 Ball Lab Analogs.
- > Replication of the abutment shape in the working cast.

Ratchet Ball Driver



Type	Ratchet
Length	19
	*KRB19L

- > Packing unit: 1 Ratchet Ball Driver.
- > For installing and removing Ball Abutment using Torque Wrench.

*Optional Product

Ball I&R Tool



Length	100
	KBIR01

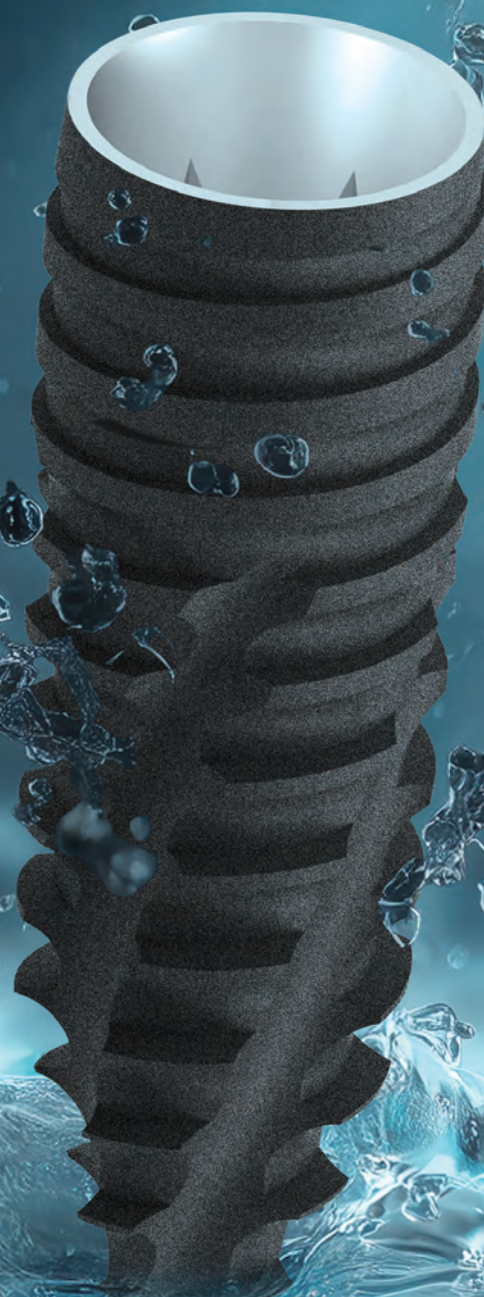
- > Packing unit: 1 Ball I&R Tool.
- > For installing and removing Ball Inner Caps.

SUB-N.
HEXAGON
SYSTEM



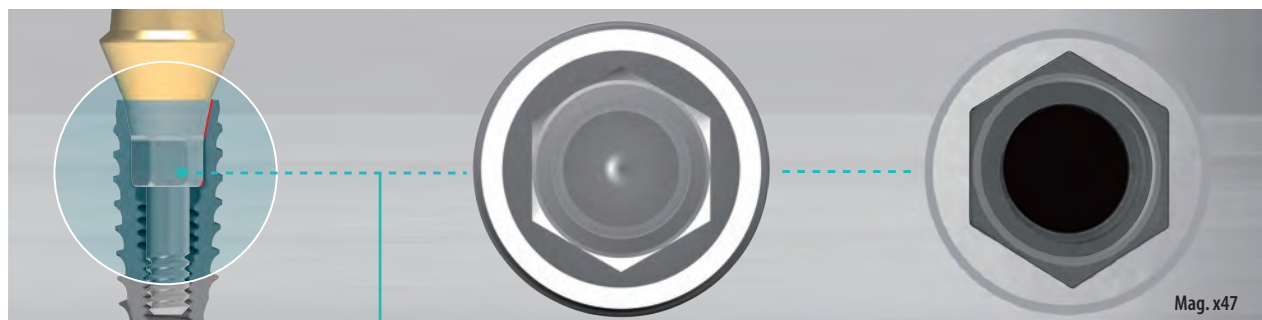
INNO Implant System®

INNO Narrow



INNO Narrow

• Design Concept Overview



• Tapered Internal Hex Connection with Dual Contact

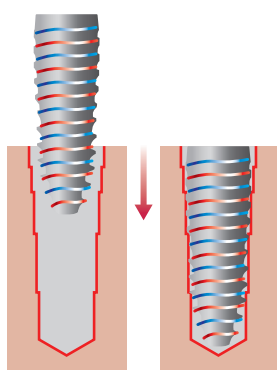
- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Wide and Deep Upper Threads

- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Double Tapered Threads

- > Deliver excellent primary stability in poor bone conditions.
- > Allow over half-depth insertion with just 2 to 4 turns.
- > Ensure wedge-effect stability, even with minimal rotation.



Geometry Matched Fixture and Drill

- > Reduces placement time with ≥ 5 mm initial depth and efficient engagement.



Platform Neck

- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Open Threads

- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

4 Spiral Cutting Edges

- > Improve self-tapping efficiency with sharp contours.
- > Allow smoother insertion with higher initial stability.
- > Accommodates bone chips effectively.

Core Apex

- > Allows for soft placement without excessive pressure.
- > Ideal for narrow ridges such as the anterior region and maxillary lateral incisor sites.
- > Enhances drilling guidance and improves primary stability, especially in extraction sockets.

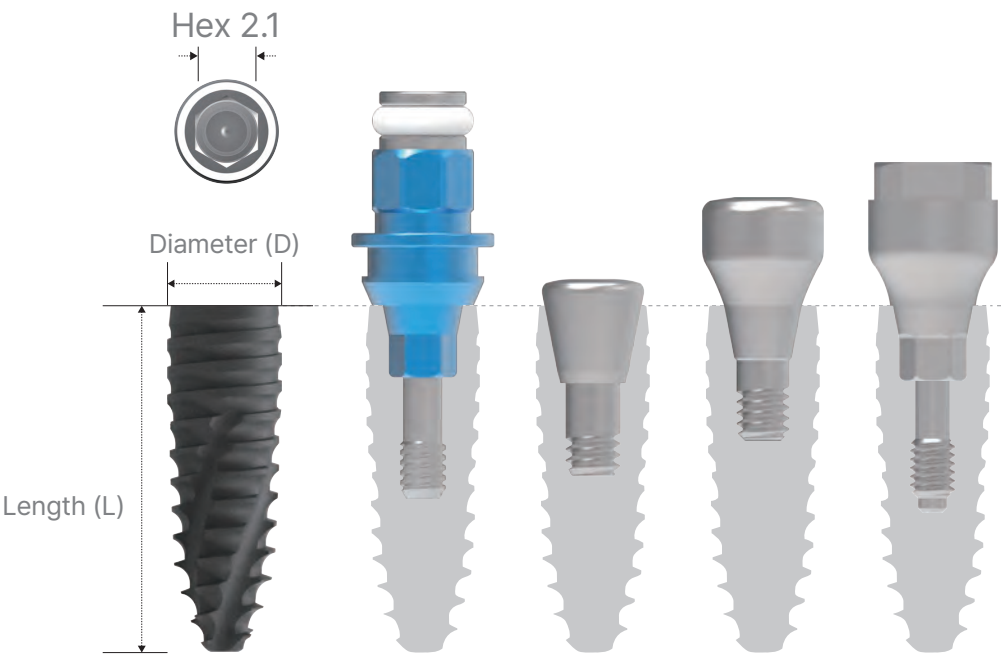


INNO Narrow

• Fixture Specifications



- > Type: Submerged Narrow.
- > Surface Treatment: HydroX7.
- > Connection: Morse-Tapered Internal Hexagon (11° Taper, Hex 2.5).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



Fixture Code Structure

S	R	31	10	N	S	M
Type	Body	Diameter	Length	Connection	Surface	Mount
Submerged	Reduced-Profile	Ø3.1	10mm	Narrow	SLA-integrated	No-Mount

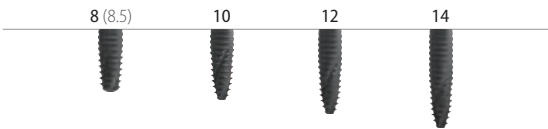
SR3110NSM

S	R	31	10	N	S	
Type	Body	Diameter	Length	Connection	Surface	Mount
Submerged	Reduced-Profile	Ø3.1	10mm	Narrow	SLA-integrated	Pre-Mount

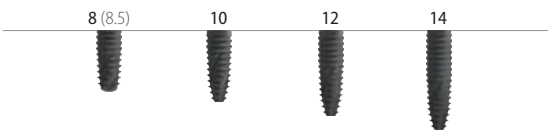
SR3110NS

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

Diameter (Actual Size)	Ø3.1 (Ø3.3)
Length (Actual Size)	
8 (8.5)	SR3108NSM
10	SR3110NSM
12	SR3112NSM
14	SR3114NSM

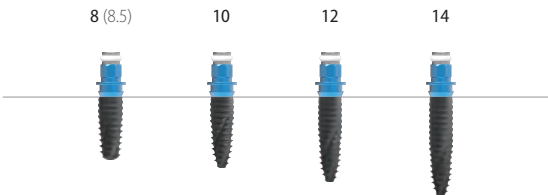


Diameter (Actual Size)	Ø3.3 (Ø3.5)
Length (Actual Size)	
8 (8.5)	SR3308NSM
10	SR3310NSM
12	SR3312NSM
14	SR3314NSM

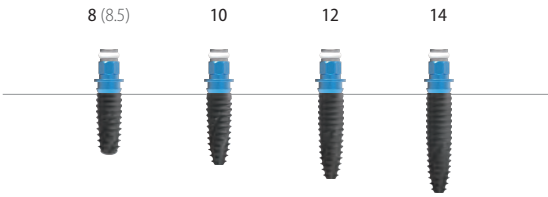


Pre-Mount > Packing unit: 1 Fixture + 1 Mount + 1 Cover Screw.

Diameter (Actual Size)	Ø3.1 (Ø3.3)
Length (Actual Size)	
8 (8.5)	SR3108NS
10	SR3110NS
12	SR3112NS
14	SR3114NS



Diameter (Actual Size)	Ø3.3 (Ø3.5)
Length (Actual Size)	
8 (8.5)	SR3308NS
10	SR3310NS
12	SR3312NS
14	SR3314NS





INNO Narrow Implant (Sub-N.)

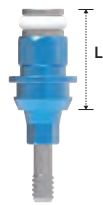
• System Flow

Fixture		Abutment
 Hex 2.1 INNO Narrow	Prosthetic Procedure I	 Cemented Abutment  Angulated Abutment  Temporary Abutment
	Prosthetic Procedure II	 Multi S Abutment  Multi A Abutment  Multi Meta G ULCA Cylinder  Multi Plastic UCLA Cylinder  Multi Titanium Cylinder
	Prosthetic Procedure III	 Straight Abutment

* For digital prosthetics, refer to page 253.

Impression	
Fixture-Level Impression	 Replica  Pick-up Impression Coping  Transfer Post
Abutment-Level Impression	 Multi Protection Cap  Multi Pick-up Impression Coping  Multi Transfer Post  Multi Lab Analog
	Direct Impression

Fixture Mount



Length	5.4
RSM001	

- > Packing unit: 1 Mount + 1 Mount Screw.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

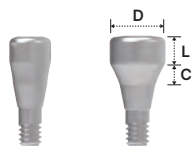
Cover Screw



Diameter Length	Ø2.84	Ø3.23	Ø3.62
1.7	RCS000		
2.7		RCS001	
3.7			RCS002

- > Packing unit: 1 Cover Screw.
- > Used to seal the conical interface of the fixture.
- > Longer Cover Screws for deeper fixture placement.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 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 Healing Abutment.
- > For gingival remodeling during soft tissue healing.
- > Selected based on gingival height and abutment type.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

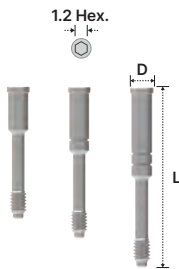
Scan Healing Abutment



Diameter	Ø4.5		
Length Cuff	3	4	5
2	SH455N		
3		SH457N	
4			SH459N

- > Packing unit: 1 Scan Healing Abutment + 1 Scan Healing Abutment Screw.
- > For remodeling gingival contour during soft tissue healing.
- > For intra-oral scanner.
- > Connected with Scan Healing Abutment Screw.
- > Select the abutment according to gingival height and abutment type.
- > Use the Scan Healing Holder (Ø4.5: SHC45).
- > Tightened with Hex Driver.
- > Tightening torque: 10 N·cm.

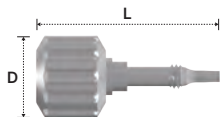
Scan Healing Abutment Screw



Length Diameter	12.3	14.3	16.3
2.15	SHS50N	SHS70N	SHS90N

- > SHS50N: SH455N.
- > SHS70N: SH457N.
- > SHS90N: SH459N.
- > Tightened with Hex Driver and Torque Wrench.

Scan Healing Driver

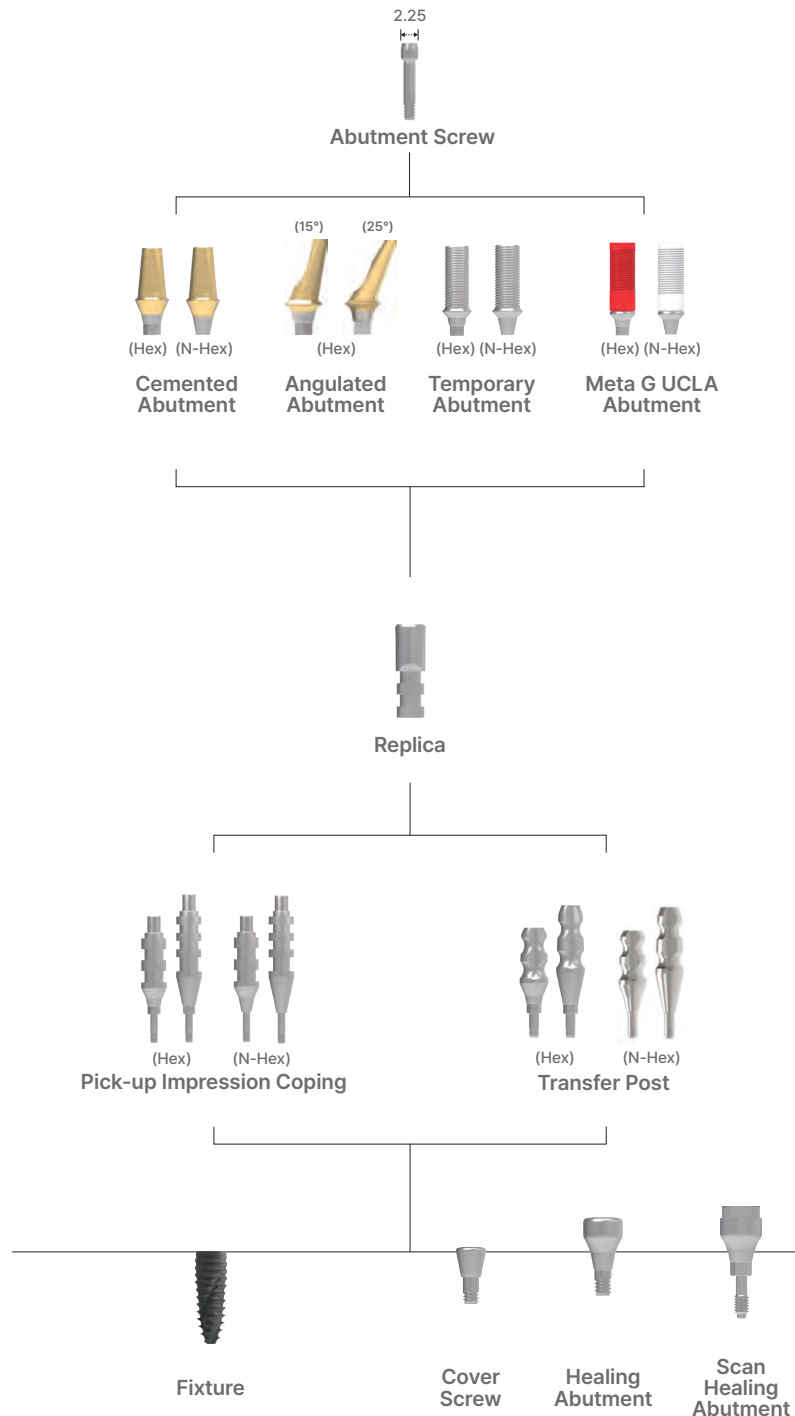


Length Diameter	Ø7.82
17.1	SHCD

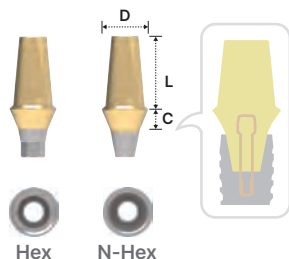
- > Packing unit: 1 Scan Healing Holder + 1 Scan Healing Driver.
- > To position Scan Healing Abutment.

Prosthetic Procedure I

- Components Selection Guide for Cemented and UCLA Abutments



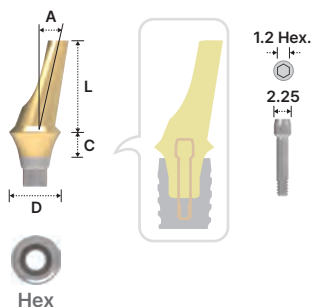
Cemented Abutment



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 / Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Gold color for more translucent restoration.
- > Connected with Abutment Screw (SSHR100N).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

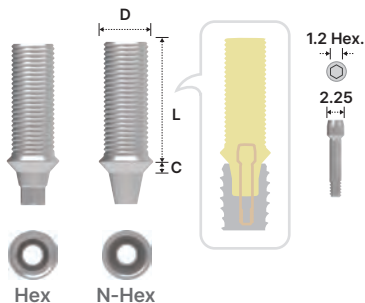
Angulated Abutment



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 Angulated Abutment + 1 Abutment Screw.
- > For Screw-Cement / Cement Retained Prosthesis.
- > Solution for the anterior esthetic zone.
- > Gold color for more translucent restoration.
- > Connected with Abutment Screw (SSHR100N).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

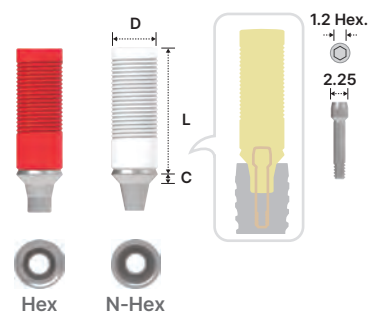
Temporary Abutment



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

- > Packing unit: 1 Temporary Abutment + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > For provisional restoration.
- > Connected with Abutment Screw (SSHR100N).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.
- > Fixture-level impression.

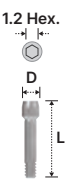
Meta G UCLA Abutment



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

- > Packing unit: 1 Meta G UCLA Abutment + 1 Abutment Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Modifiable to angulated, customized, and telescopic abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with Abutment Screw (SSHR100N).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N·cm.
- > Fixture-level impression.

Abutment Screw



Diameter Length	2.25
10.2	SSHR100N

- > Packing unit: 1 Abutment Screw.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

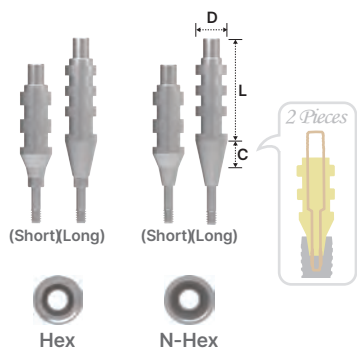
Replica



Diameter Length	Ø4.0
12.1	SRHR001N

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

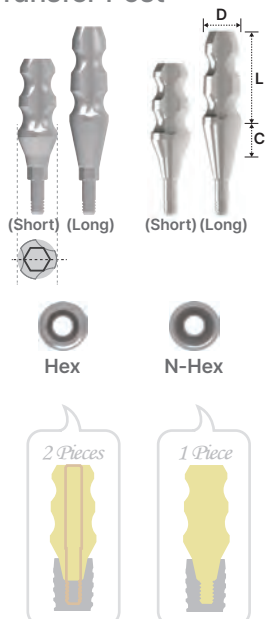
Pick-up Impression Coping



Type	Hex	N-Hex
<i>Diameter</i> <i>Length / Cuff</i>	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 Guide Pin (SIS001SN / SIS001LN).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 12~15 N·cm.
- > Fixture-level impression.

Transfer Post

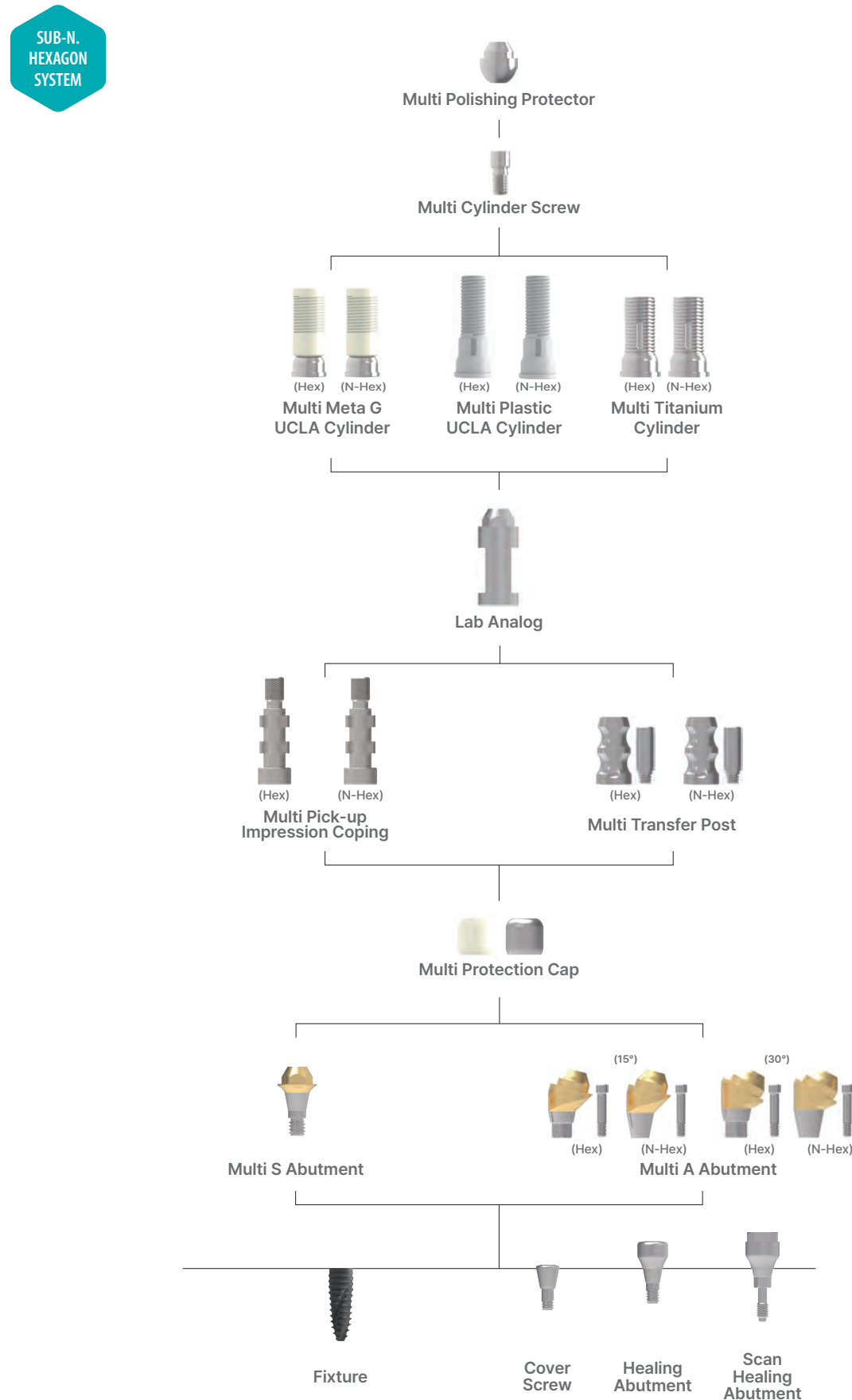


Type	Hex	N-Hex
<i>Diameter</i> <i>Length / Cuff</i>	Ø4.5	Ø4.5
9(Short) / 2	STH45SN	STN45SN
11(Long) / 4	STH45LN	STN45LN

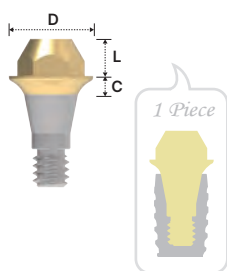
- > Packing unit: Hex - 1 Transfer Post + 1 Guide Pin, N-Hex - 1 Transfer Post (1 piece).
- > For closed tray impression.
- > Connected with Guide Pin (STH001SN / STH001LN).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 12~15 N·cm.
- > Fixture-level impression.

Prosthetic Procedure II

• Component Selection Guide for Multi Abutments



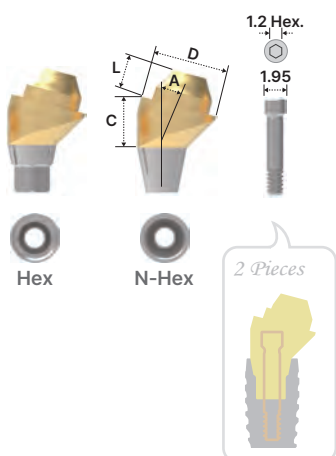
Multi S Abutment



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

- > Packing unit: 1 Multi S Abutment (integrated with screw and abutment).
- > For Screw Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Use Multi S Holder for a more stable position.
- > Tightened with Machine / Ratchet Multi S Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

Multi A Abutment

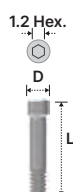


Type	Hex	
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)
Length Cuff	2	2
2	★ SMAH45152N	
3	● SMAH45153N	★ SMAH45303N
4	● SMAH45154N	● SMAH45304N

Type	N-Hex	
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)
Length Cuff	2	2
2	★ SMAN45152N	
3	● SMAN45153N	★ SMAN45303N
4	● SMAN45154N	● SMAN45304N

- > Packing unit: 1 Multi A Abutment + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Use Multi A Holder for a more stable position.
- > Connected with Abutment Screw (SSHR200N: ★ / SSHR300N: ●).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

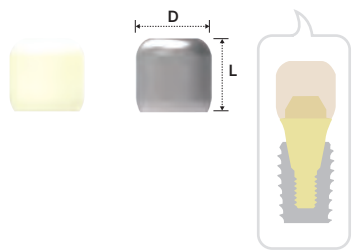
Abutment Screw



Length Diameter	8.7	9.3
Ø1.95	★ SSHR200N	● SSHR300N

- > Packing unit: 1 Abutment Screw.
- > Used with Multi A Abutment.
- > Choose by abutment dimensions.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

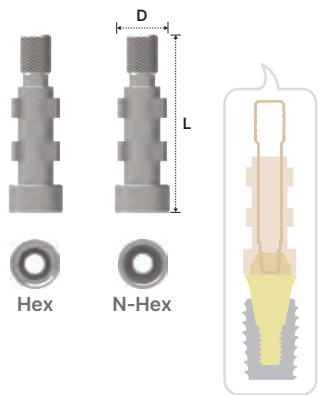
Multi Protection Cap



Material	Normal		Metal	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter / Length	Ø5.2	Ø6.2	Ø5.2	Ø6.2
5	2SMPC45	2SMPC55	2SMPC45M	2SMPC55M

- > Packing unit: 1 Multi Protection Cap.
- > Protection from cheek and tongue for the gingival healing period.
- > Alternative usage for the sub-structure of the temporary prosthesis.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N·cm.

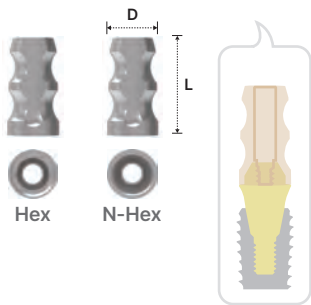
Multi Pick-up Impression Coping



Type	Hex	N-Hex
Multi S & A Abutment Diameter	Ø4.5	Ø4.5
Diameter / Length	Ø4.65	Ø4.65
16	2SMIH45	2SMIN45

- > Packing unit: 1 Multi Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with Guide Pin (2SMGP012).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N·cm.
- > Abutment-level impression.

Multi Transfer Post



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

- > Packing unit: 1 Multi Transfer Post + 1 Guide Pin.
- > For closed tray impression.
- > Connected with Guide Pin (2SMTHS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N·cm.
- > Abutment-level impression.

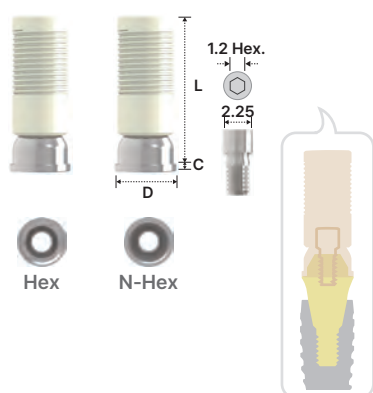
Multi Lab Analog



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

- > Packing unit: 1 Multi Lab Analog.
- > Replication of the abutment shape in the working cast.
- > Choose by abutment dimensions.

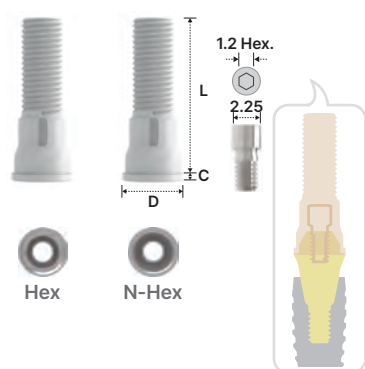
Multi Meta G UCLA Cylinder



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

- > Packing unit: 1 Meta G UCLA Cylinder + 1 Multi Cylinder Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Modifiable to various types of abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.

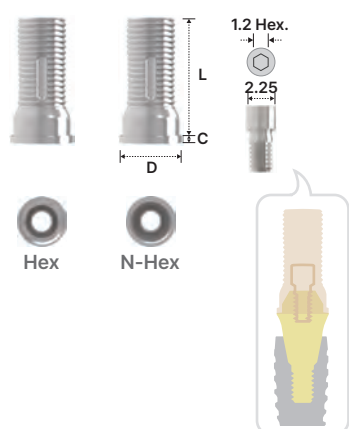
Multi Plastic UCLA Cylinder



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

- > Packing unit: 1 Plastic UCLA Cylinder + 1 Multi Cylinder Screw.
- > Intended for the same use as Meta G UCLA Abutment, but with lower connection accuracy during lab procedures.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: Finger light force during wax pattern fabrication (20 N-cm after casting).

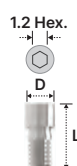
Multi Titanium Cylinder



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

- > Packing unit: 1 Multi Titanium Cylinder + 1 Multi Cylinder Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.

Multi Cylinder Screw



Diameter Length	Ø2.25
5	2SMCS100

- > Packing unit: 1 Multi Cylinder Screw.
- > Used with Multi Meta G UCLA, Plastic UCLA, and Titanium Cylinder.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

Multi Polishing Protector



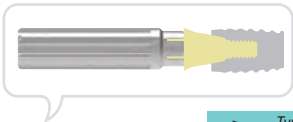
Type	Hex
Multi S & A Abutment Diameter	Ø4.5
Diameter Length	Ø4.5
2	2SMPP45

- > Packing unit: 1 Multi Polishing Protector.
- > For prosthetic margin protection during polishing.

Multi Holder



S Holder



Type Length	Hand
20	KMHS01

- > Packing unit: 1 Multi S Holder.
- > For more stable positioning of Multi S Abutment.



A Holder

Type Length	Hand
32	KMHA01

- > Packing unit: 1 Multi A Holder.
- > For more stable positioning of Multi A Abutment.



- ① Connect Multi A Holder to Multi A Abutment with Abutment Screw in place. Align the hole directions of Multi A Abutment and Multi A Holder.



- ② Hold the handle of Multi A Holder and bend it according to the fixture position in the oral cavity.



- ③ Connect the assembled body to the fixture.



- ④ Tighten Multi Abutment using Machine / Ratchet Hex Driver using Torque Wrench.

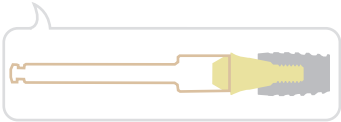
Abutment Carrier



Diameter Length	Ø1.76
20.5	2SMAC001

- > Packing unit: 1 Abutment Carrier.
- > For more stable positioning of Multi A Abutment.

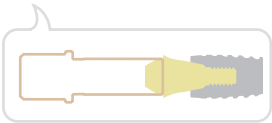
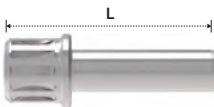
Machine Multi S Driver



Length	Type	Machine
27.5		KMMSD21L

- > Packing unit: Machine 1 Multi S Driver.
- > For installing and removing Multi S Abutment using a machine.

Ratchet Multi S Driver

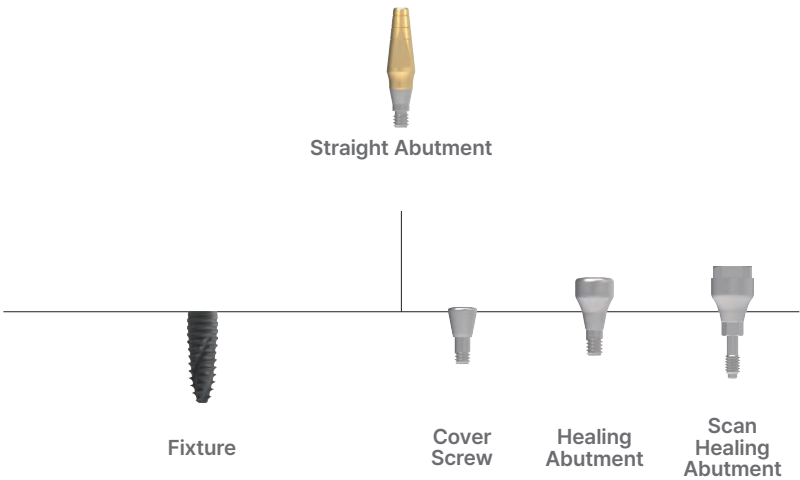


Length	Type	Ratchet
22		KRMSD15L

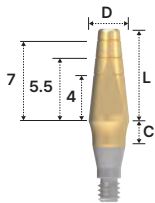
- > Packing unit: 1 Ratchet Multi S Driver.
- > For installing and removing Multi S Abutment using Torque Wrench.

Prosthetic Procedure III

• Component Selection Guide for Straight Abutment



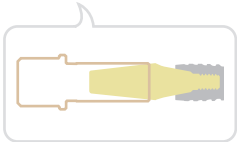
Straight Abutment



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

> Packing unit: 1 Straight Abutment.
> For Cement Retained Prosthesis.
> Integrated with screw and abutment.
> Tightened with the Shoulder Driver.
> Tightening torque force: 20~25N.cm.
> Direct impression.

Shoulder Ratchet Driver



Diameter Height	Ø4.5
19	KRR19L

> Packing unit: 1 Shoulder Ratchet Driver
> To install and remove the Straight Abutment with the Torque Wrench.



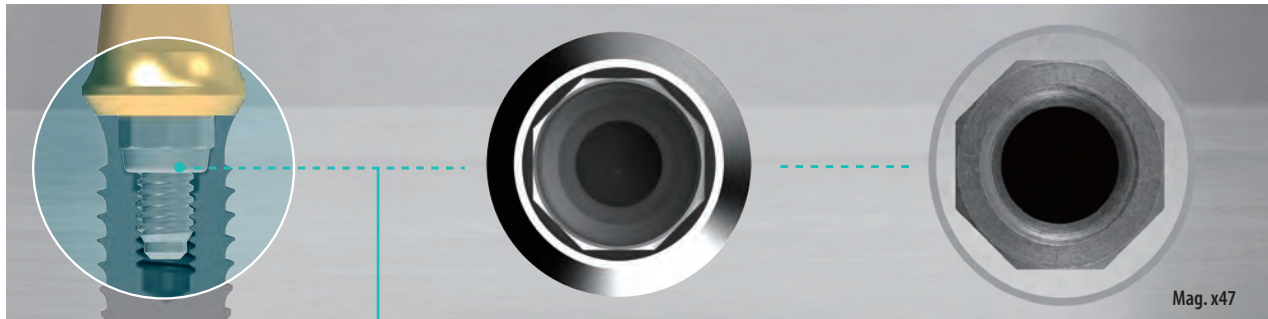
INNO Implant System®

INNO Internal



INNO Internal

• Design Concept Overview



• Tapered Internal Oct Connection with Dual Contact

- > Provides optimal cold welding between the fixture and abutment.
- > Prevents abutment micro-sinking.
- > Reduces micromovement and evenly distributes stress.

Integrated Platform

- > Allows prosthetic connection without damaging the crestal bone.
- > Simplifies prosthesis connection, scanning, and impression taking.
- > Ensures consistent prosthetic seating by maintaining a stable and unified connection level.

Smooth Concave Collar

- > Minimizes crestal bone loss by positioning the connection above bone level and utilizing soft tissue cushioning.
- > Features a self-cleansing design that supports peri-implant hygiene.

Wide and Deep Upper Threads

- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Double Tapered Threads

- > Deliver excellent primary stability in poor bone conditions.
- > Allow over half-depth insertion with just 2 to 4 turns.
- > Ensure wedge-effect stability, even with minimal rotation.

Platform Neck

- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Open Threads

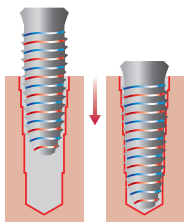
- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

4 Spiral Cutting Edges

- > Improve self-tapping efficiency with sharp contours.
- > Allow smoother insertion with higher initial stability.
- > Accommodates bone chips effectively.

Convex Apex with Sharp Cutting Edges

- > Protects the Schneiderian membrane during sinus procedures.
- > Enhance stability in fresh extraction sockets.



Geometry Matched Fixture and Drill

- > Reduces placement time with ≥ 5 mm initial depth and efficient engagement.



INNO Internal

• Fixture Specifications



- > Type: Internal.
- > Surface Treatment: HydroX7.
- > Connection: Tapered Internal Octagon (8° Taper, Octa 3.1).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



Fixture Code Structure

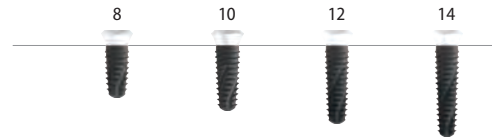
I Type Internal	P Profile Height Cuff 1.8	T Body Taper	40 Diameter Ø 4.0	10 Length 10mm	S Surface SLA-integrated	M Mount No- M ount	IPT4010SM
I Type Internal	 Profile Height Cuff 2.4	T Body Taper	40 Diameter Ø 4.0	10 Length 10mm	S Surface Treatment SLA	M Mount No- M ount	IT4010SM

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

* Diameter (Actual Size)	Ø3.5 (Ø3.7)
Length	

7	-
8	IPT3508SM
10	IPT3510SM
12	IPT3512SM
14	IPT3514SM

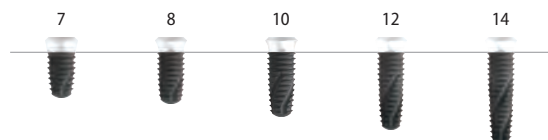
* Platform: Ø4.8



* Diameter (Actual Size)	Ø4.0 (Ø4.2)
Length	

7	IPT4007SM
8	IPT4008SM
10	IPT4010SM
12	IPT4012SM
14	IPT4014SM

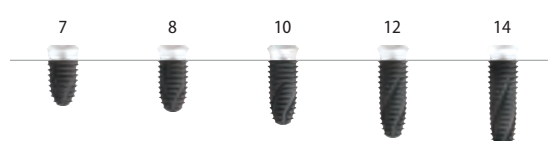
* Platform: Ø4.8



* Diameter (Actual Size)	Ø4.5 (Ø4.6)
Length	

7	IPT4507SM
8	IPT4508SM
10	IPT4510SM
12	IPT4512SM
14	IPT4514SM

* Platform: Ø4.8



* Diameter (Actual Size)	Ø5.0 (Ø5.1)
Length	

7	IPT5007SM
8	IPT5008SM
10	IPT5010SM
12	IPT5012SM
14	IPT5014SM

* Platform: Ø5.9



* Diameter (Actual Size)	Ø6.0 *(Ø5.9)
Length (Actual Size)	

7	*IPT6007SM
8 (7.5)	IPT6008SM
10 (9.5)	IPT6010SM
12 (11.5)	IPT6012SM
14	-

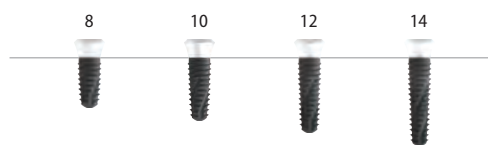
* Platform: Ø5.9



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

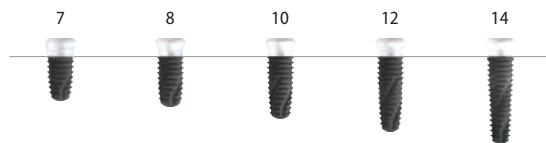
* Diameter
(Actual Size) **Ø3.5 (Ø3.7)**
Length

7	-
8	IT3508SM
10	IT3510SM
12	IT3512SM
14	IT3514SM



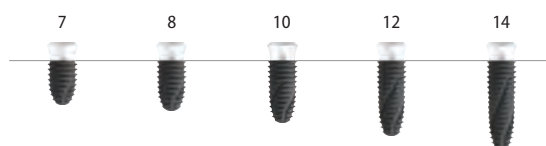
* Diameter
(Actual Size) **Ø4.0 (Ø4.2)**
Length

7	IT4007SM
8	IT4008SM
10	IT4010SM
12	IT4012SM
14	IT4014SM



* Diameter
(Actual Size) **Ø4.5 (Ø4.6)**
Length

7	IT4507SM
8	IT4508SM
10	IT4510SM
12	IT4512SM
14	IT4514SM



* Diameter
(Actual Size) **Ø5.0 (Ø5.1)**
Length

7	IT5007SM
8	IT5008SM
10	IT5010SM
12	IT5012SM
14	IT5014SM



* Diameter
(Actual Size) **Ø6.0 *(Ø5.9)**
Length
(Actual Size)

7	*IT6007SM
8 (7.5)	IT6008SM
10 (9.5)	IT6010SM
12 (11.5)	IT6012SM
14	-





INNO Internal Implant (Int.)

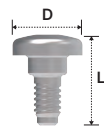
• System Flow

Fixture		Abutment
Octa 3.1 INNO Internal Cuff 1.8 Octa 3.1 INNO Internal Cuff 2.4	Prosthetic Procedure I	Cemented Extension Abutment Angulated Abutment Meta G UCLA Abutment
	Prosthetic Procedure II	Solid Abutment
	Prosthetic Procedure III	Shoulder Abutment
	Prosthetic Procedure IV	Ball Abutment

* For digital prosthetics, refer to page 258.

Impression	
Fixture-Level Impression	 Replica  Pick-up Impression Coping  Transfer Post
Abutment-Level Impression	 Solid-Shoulder Protection Cap  Solid-Shoulder Impression Cap  Solid Positioning Cylinder  Solid Lab Analog  Solid Plastic Coping
	 Solid-Shoulder Protection Cap  Solid-Shoulder Impression Cap  Shoulder Positioning Cylinder  Shoulder Lab Analog
	 Ball Analog

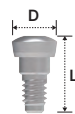
Cover Screw



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

- > Packing unit: 1 Cover Screw.
- > Used to seal the conical interface of the fixture.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

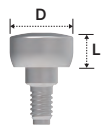
Headless Screw



Diameter Length	Ø3.5
6	ICVR001

- > Packing unit: 1 Headless Screw.
- > Used to seal the conical interface of the fixture.
- > For narrow mesiodistal distance.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

Healing Abutment



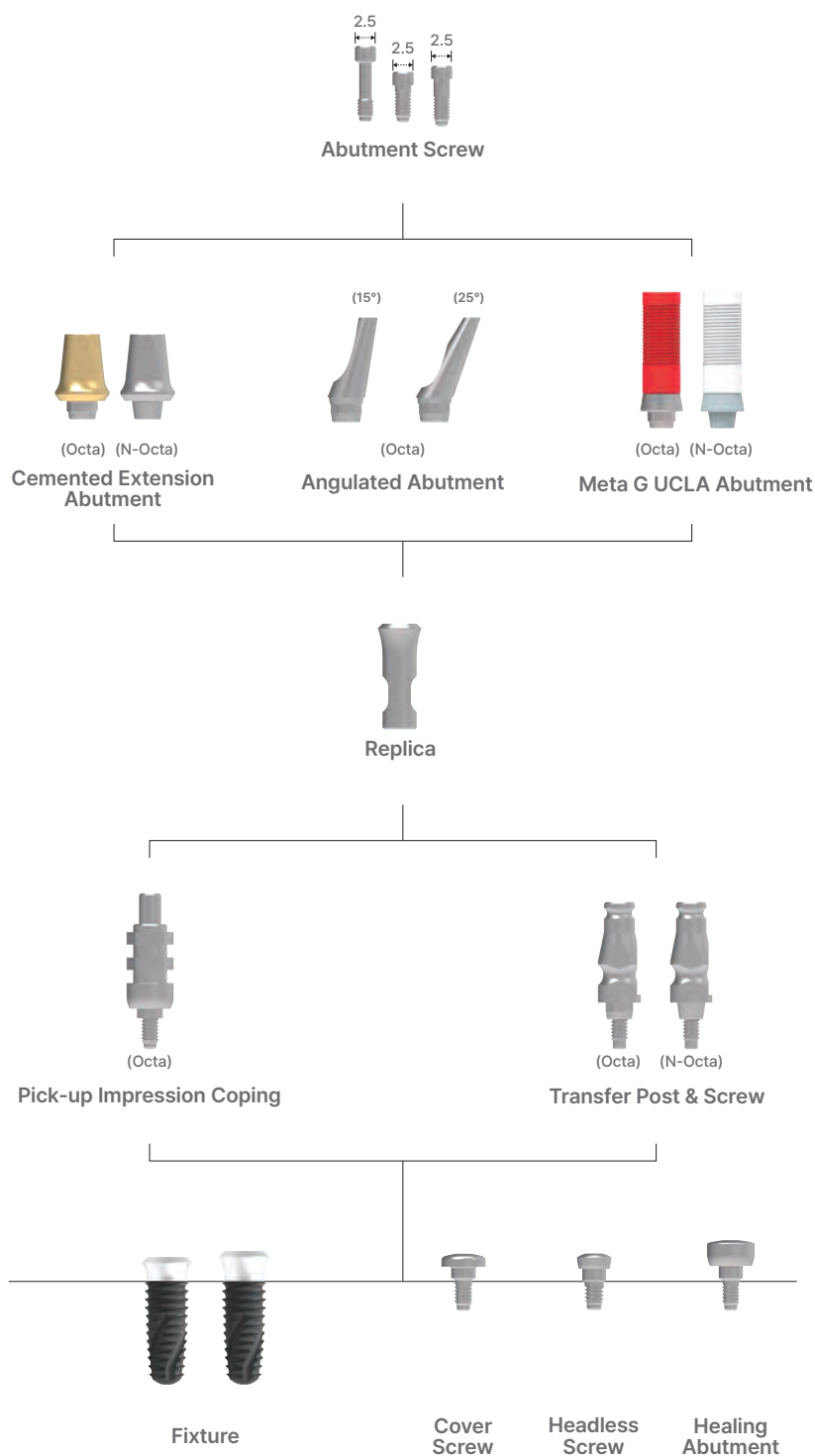
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter Length	Ø5.5	Ø6.6
2	IHCR020	IHCW020
3	IHCR030	IHCW030
4.5	IHCR045	IHCW045

- > Packing unit: 1 Healing Abutment.
- > For gingival remodeling during soft tissue healing.
- > Selected based on gingival height and abutment type.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

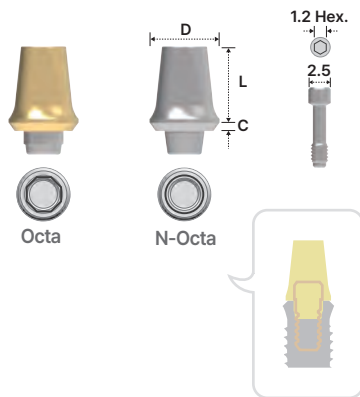
Prosthetic Procedure I

- Components Selection Guide for Cemented and UCLA Abutments

INT.
OCTAGON
SYSTEM



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

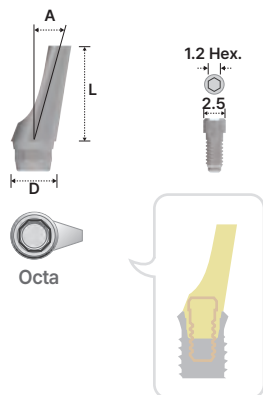
0.5	IECR406	IECW506		
1		IECR416		IECW516
2		IECR426		IECW526
3		IECR436		IECW536

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 Screw-Cement / Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Connected with Abutment Screw (ISHR110).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

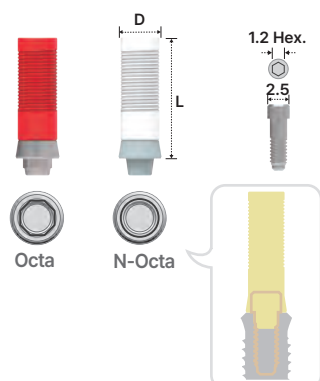
Angulated Abutment



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	IAAR158A	IAAR258A

- > Packing unit: 1 Angulated Abutment + 1 Abutment Screw.
- > For Screw-Cement / Cement Retained Prosthesis.
- > Solution for the anterior esthetic zone.
- > Connected with Abutment Screw (ISHR100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

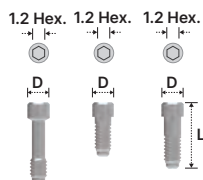
Meta G UCLA Abutment



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	IGOR400N	IGOW500N	IGNR400N	IGNW500N

- > Packing unit: 1 Meta G UCLA Abutment + 1 Abutment Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Modifiable to angulated, customized, and telescopic abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with Abutment Screw (ISHR120).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

Abutment Screw



<i>Diameter</i> <i>Length</i>	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 UCLA Abutment.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

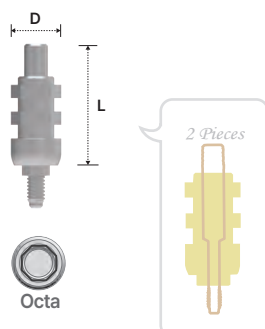
Replica



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
<i>Diameter</i> <i>Length</i>	Ø4.8	Ø5.9
12	IROR001	IROW001

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

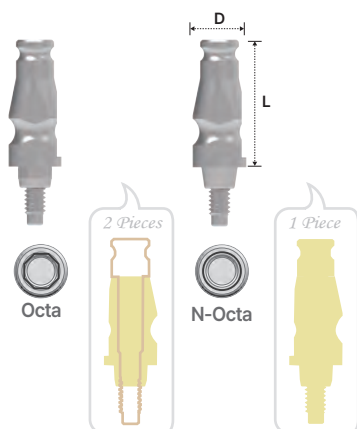
Pick-up Impression Coping



Type	Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
<i>Diameter</i> <i>Length</i>	Ø5.5	Ø6.6
13.7	IIR001	IIO001

- > Packing unit: 1 Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with Guide Pin (IIR001S).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N·cm.
- > Fixture-level impression.

Transfer Post

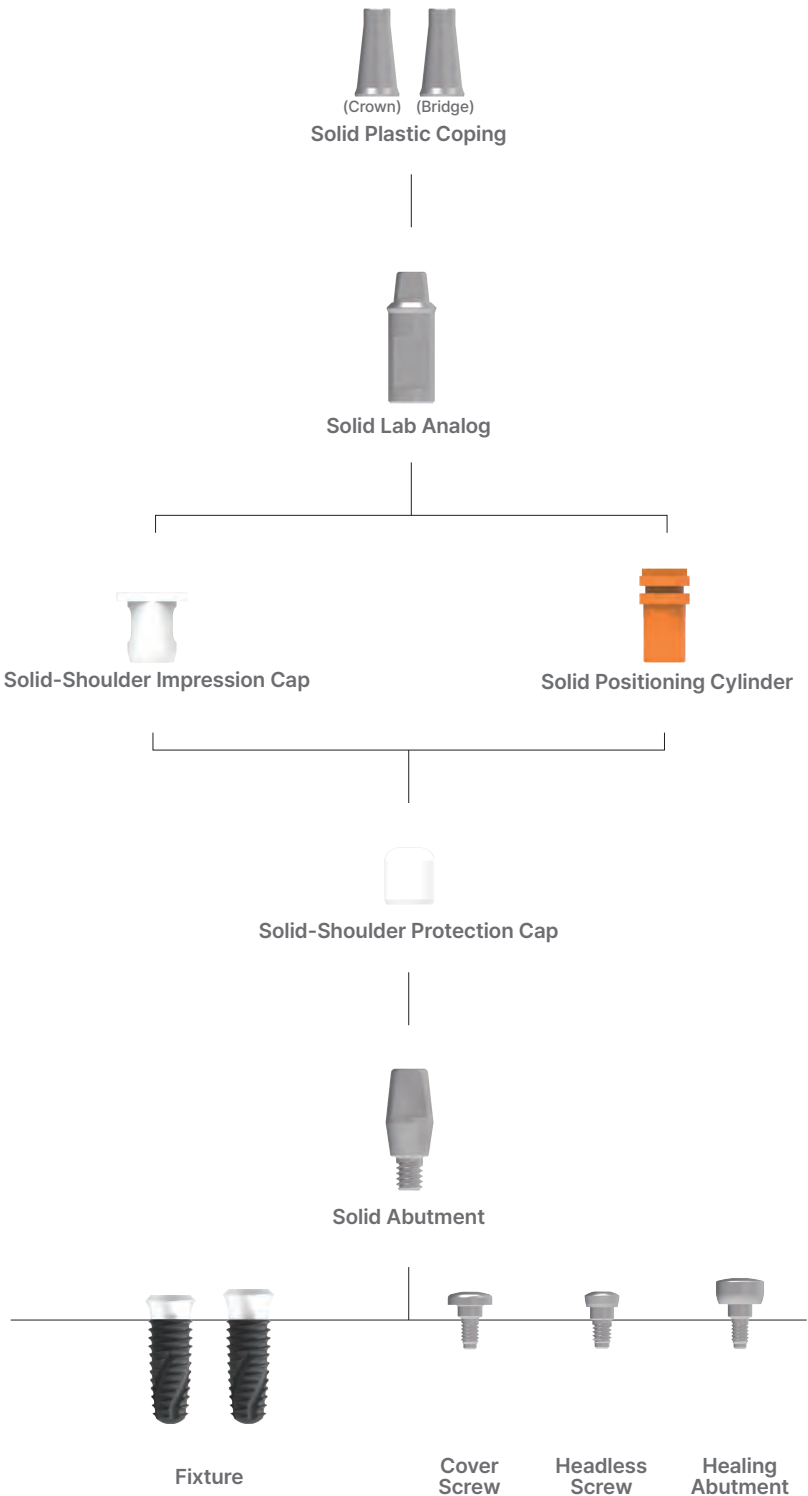


Type	Octa		N-Octa	
Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
<i>Diameter</i> <i>Length</i>	Ø4.85	Ø5.95	Ø4.85	Ø5.95
10.07	ITOR400	ITOW500	ITNR400	ITNW500

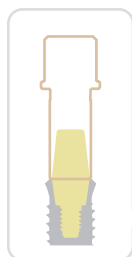
- > Packing unit: Octa - 1 Transfer Post and 1 Guide Pin, N-Octa - 1 Transfer Post (1 piece).
- > For closed tray impression.
- > Connected with Guide Pin (ITOR400S / ITOW500S).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N·cm.
- > Fixture-level impression.

Prosthetic Procedure II

- Components Selection Guide for Solid Abutment



Solid Abutment



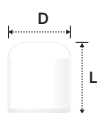
Platform [Fixture Dia.]	Ø4.8 & Ø5.9 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø6.0]			
Diameter	Ø3.5			
Length	3	4	5.5	7
	IASR030	IASR040	IASR055	IASR070

- > Packing unit: 1 Solid Abutment (integrated with screw and abutment) + 1 Solid-Shoulder Protection Cap.
- > For Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Tightened with Ratchet Shoulder Driver using Torque Wrench.
- > Tightening torque: 30 N·cm.
- > Abutment-level impression: Impression Cap for Platform Ø4.8 fixtures / Direct Impression for Platform Ø5.9 fixtures.



Shoulder Ø4.5 **KRR19L**

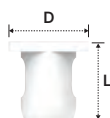
Solid-Shoulder Protection Cap



Solid Abutment Diameter	Ø3.5
Diameter / Length	Ø5.4
5.2	IASR130
6.2	IASR140
7.7	IASR155
9.2	IASR170

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

Solid-Shoulder Impression Cap



Solid Abutment Diameter	Ø3.5
Diameter / Length	8
8	IICR001

- > Packing unit: 1 Solid-Shoulder Impression Cap.
- > For closed tray impression.
- > Used with Solid Positioning Cylinder.
- > Confirm locking of the abutment by rotating it in both clockwise and counterclockwise directions.
- > Abutment-level impression.

Solid Positioning Cylinder



Solid Abutment Diameter	Ø3.5	
Diameter	Ø5.3	
Height	10.2	IPCR001

- > Packing unit: 1 Solid Positioning Cylinder.
- > For closed tray impression.
- > Inner cutting surface for anti-rotation.
- > Inserted into the Solid-Shoulder Impression Cap.
- > Abutment-level impression.

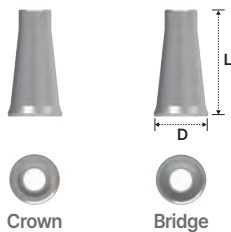
Solid Lab Analog



Solid Abutment Diameter	Ø3.5			
Diameter	Ø4.8			
Length	3	4	5.5	7
	ILSR030	ILSR040	ILSR055	ILSR070

- > Packing unit: 1 Solid Lab Analog.
- > Replication of the abutment shape in the working cast.
- > Choose by abutment dimensions.

Solid Plastic Coping

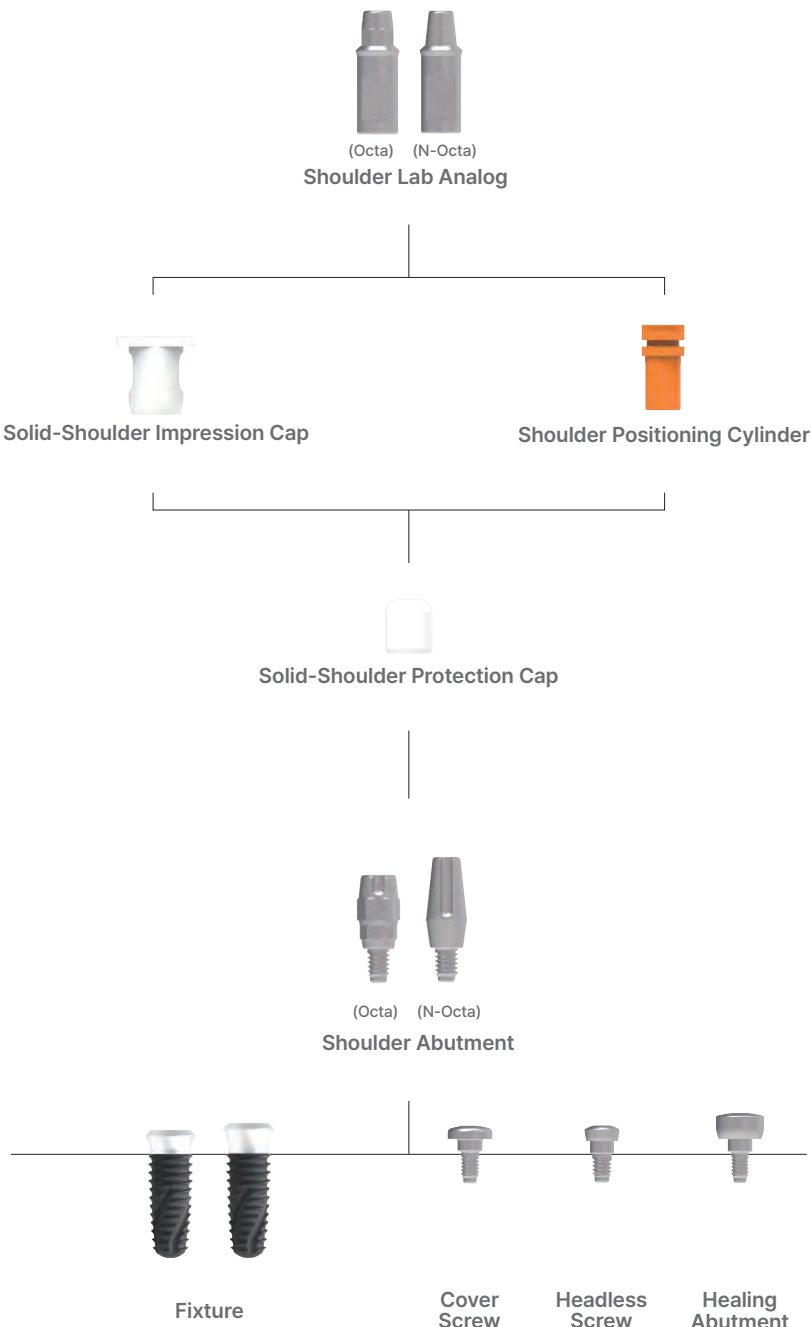


Type	Crown	Bridge
Solid Abutment Diameter	Ø3.5	Ø3.5
Diameter	Ø5.0	Ø5.0
Length	10	IPCB001
	IPCC001	

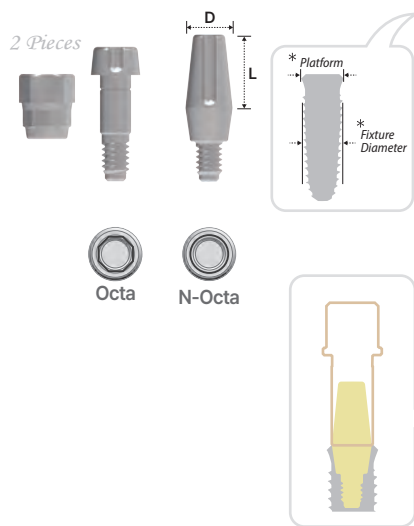
- > Packing unit: 1 Solid Plastic Coping.
- > Intended for burnout and casting into the metal framework.
- > Choose by abutment dimensions

Prosthetic Procedure III

• Component Selection Guide for Shoulder Abutment



Shoulder 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	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 Solid-Shoulder Protection Cap.
- > For Cement Retained Prosthesis.
- > Dual anti-rotation design with single crown for screw loosening prevention.
- > Tightened with Ratchet Shoulder Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.



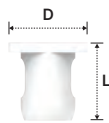
Solid-Shoulder Protection Cap



Shoulder Abutment Diameter	Ø3.5	Ø4.5
Diameter	Ø5.4	Ø6.5
Length	6.2	IASR140
	7.7	IASR155
	9.2	IASR170

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

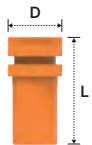
Solid-Shoulder Impression Cap



Shoulder Abutment Diameter	Ø3.5	Ø4.5
Diameter	8	9
Length	8	IICR001
		IICW001

- > Packing unit: 1 Solid-Shoulder Impression Cap.
- > For closed tray impression.
- > Used with Shoulder Positioning Cylinder.
- > Confirm locking of the abutment by rotating it in both clockwise and counterclockwise directions.
- > Abutment-level impression.

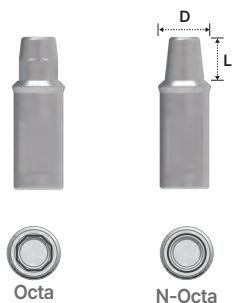
Shoulder Positioning Cylinder



Shoulder Abutment Diameter	Ø3.5	Ø4.5
Diameter	5.3	6.4
Length	10.7	SAPR001
		SAPW001

- > Packing unit: 1 Shoulder Positioning Cylinder.
- > For closed tray impression.
- > Inner cutting surface for anti-rotation.
- > Inserted into the Solid-Shoulder Impression Cap.
- > Abutment-level impression.

Shoulder Lab Analog



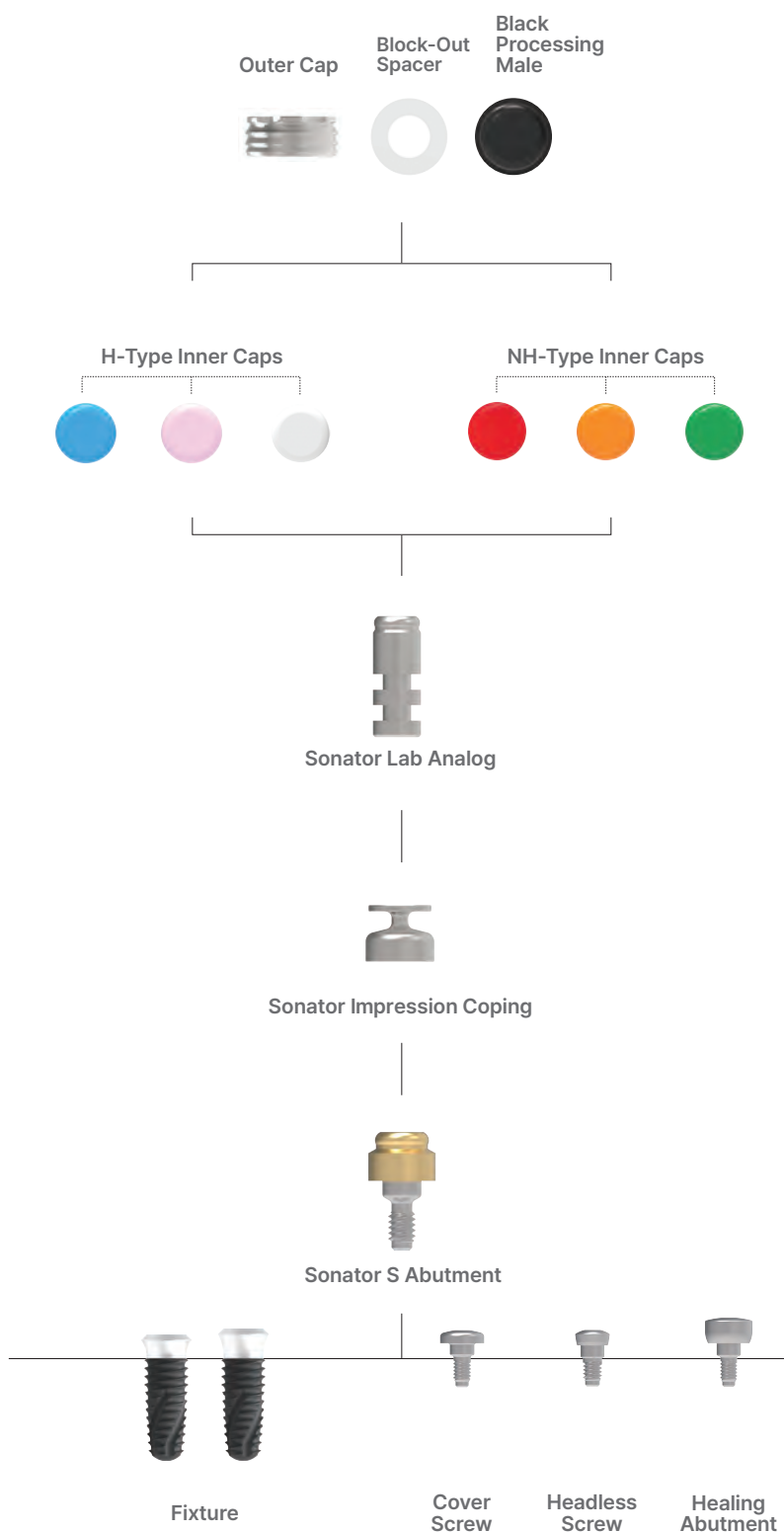
Type	Octa		N-Octa	
Shoulder Abutment Diameter	Ø3.5	Ø4.5	Ø3.5	Ø4.5
Diameter	Ø4.8	Ø5.9	Ø4.8	Ø5.9
Length	4	SLCR040	SLCW040	SLBR040
	5.5	SLCR055	SLCW055	SLBR055
	7	SLCR070	SLCW070	SLBR070

- > Packing unit: 1 Shoulder Lab Analog.
- > Replication of the abutment shape in the working cast.
- > Choose by abutment dimensions.

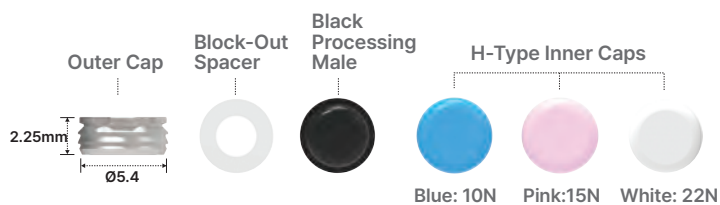
Prosthetic Procedure IV

• Component Selection Guide for Sonator S&A Abutment

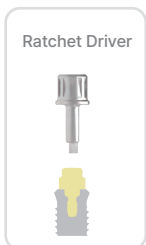
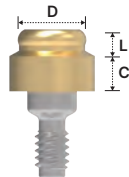
INT.
OCTAGON
SYSTEM



Sonator S Abutment



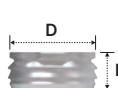
Carrier



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

- > Packing unit: 1 Sonator S Abutment + 1 Carrier + 3 H-Type Inner Caps + 1 Outer Cap + 1 Block-Out Spacer + 1 Black Processing Male.
- > For Implant-Supported Overdenture Prosthesis.
- > Stable even with limited vertical space.
- > 6 types of inner caps provide varying levels of retention (both H-Type and NH-Type inner caps are compatible with Sonator S Abutment).
- > Path compensation of up to 20° with two implants.
- > Carrier: Used for abutment delivery.
- > Tightened with Ratchet Sonator S Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.

Outer Cap



Black Processing Male



Diameter Length	Ø5.4
2.25	SONOC01

- > Packing unit: 2 Outer Caps and 2 Black Processing Males.
- > Black Processing Male: Inserted and removed with Sonator I&R Tool.

H-Type Inner Cap

Block-Out Spacer



Inner Cap



Blue:
Retention Force
About 10N

Pink:
Retention Force
About 15N

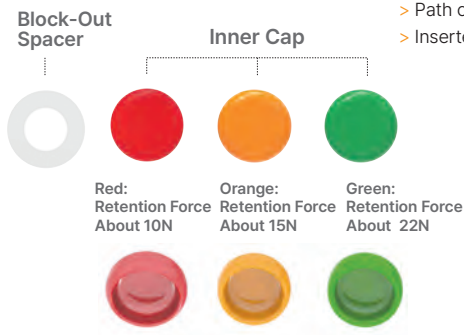
White:
Retention Force
About 22N



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

- > Packing unit: 3 Inner Caps (1 Blue, 1 Pink, and 1 White) + 3 Block-Out Spacers.
- > Path compensation of up to 20° with two implants.
- > Inserted and removed with Sonator I&R Tool.

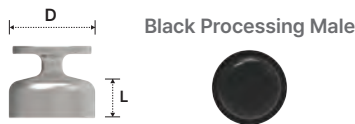
NH-Type Inner Cap



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

- > Packing unit: 3 Inner Caps (1 Red, 1 Orange, and 1 Green) + 3 Block-Out Spacers.
- > Path compensation of up to 40° with two implants.
- > Inserted and removed with Sonator I&R Tool.

Sonator Impression Coping



Diameter Length	Ø4.8
3	SONIP04

- > Packing unit: 4 Sonator Impression Copings.
- > For closed tray impression.
- > Used over Sonator S Abutment after placing Block-Out Spacer.
- > Abutment-level impression.

Sonator Lab Analog

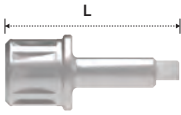


Diameter Length	Ø4
1.4	SONLA04

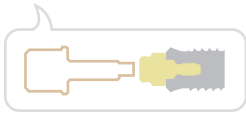
- > Packing unit: 4 Sonator Lab Analogs.
- > Replication of the abutment shape in the working cast.

Ratchet Sonator S Driver

Type	Ratchet
Length	SONRD19L
18.4	



A photograph of the Ratchet Sonator S Driver, a small metal tool with a hexagonal head and a long, thin shaft. A dimension line labeled 'L' indicates the length of the shaft.



A cross-sectional diagram of the Ratchet Sonator S Driver, showing the internal components and the ratchet mechanism at the end of the shaft.

> Packing unit: 1 Ratchet Sonator S Driver.

> For installing and removing Sonator S Abutment using Torque Wrench.

Sonator I&R Tool

Length	95.05
	SONIR002



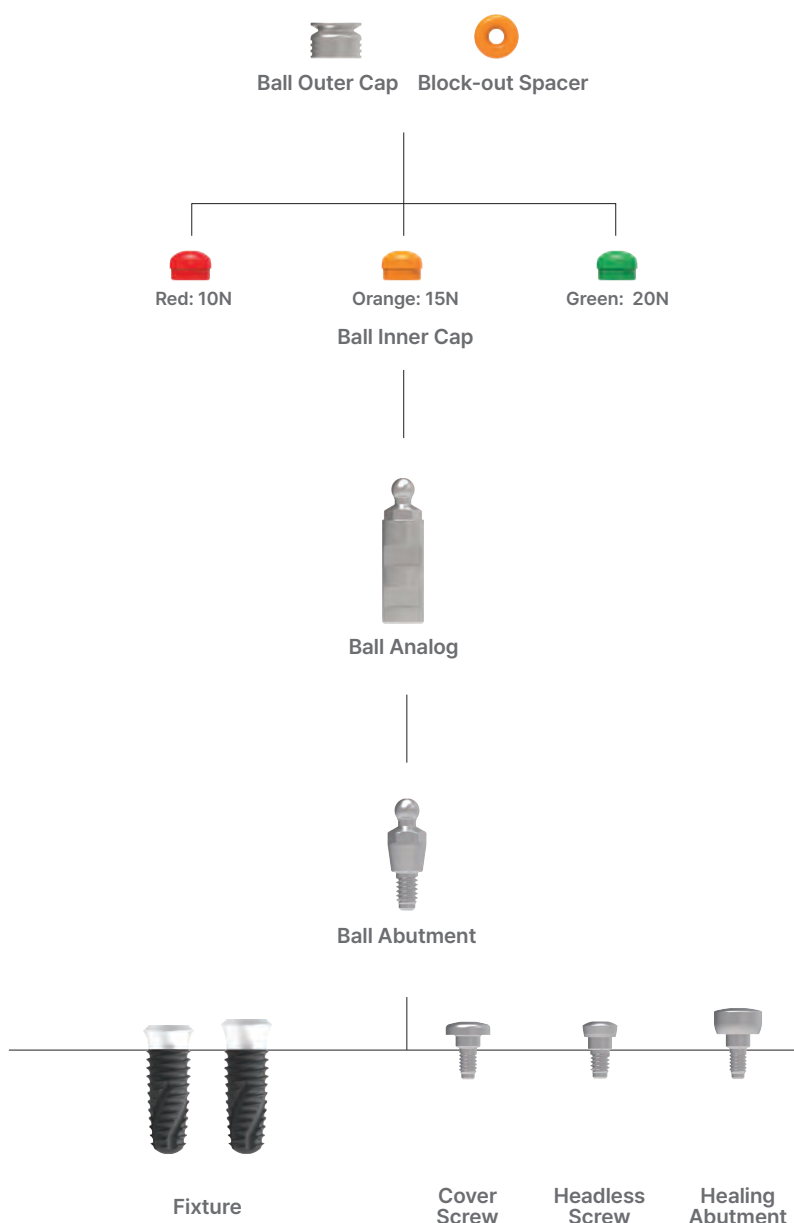
A photograph of the Sonator I&R Tool, a long, black, cylindrical tool with a silver-colored handle and a silver-colored tip. A dimension line labeled 'L' indicates the length of the tool. The tool is shown in two orientations: 'For Removal' and 'For Insertion'.

- > Packing unit: 1 Sonator 1&R Tool.

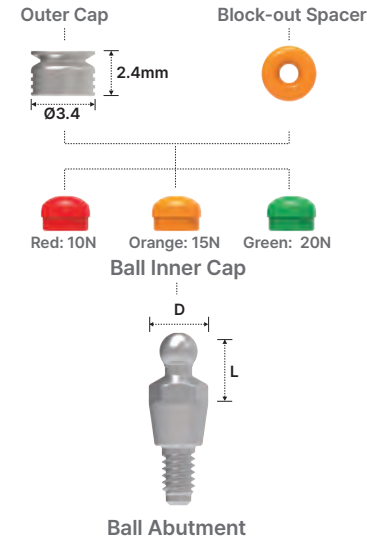
> For installing and removing H-Type / NH-Type Inner Caps and Black Processing Male.

Prosthetic Procedure V

• Component Selection Guide for Ball Abutment



Ball Abutment



Diameter Length	Ø3.5
4	IBAT404R

- > Packing unit: 1 Ball Abutment + 3 Ball Inner Caps (1 per color) + 1 Outer Cap + 1 Block-Out Spacer.
- > For Implant-Supported Overdenture Prosthesis.
- > 3 types of inner caps provide varying levels of retention.
- > Tightened with Ratchet Ball Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Direct impression.

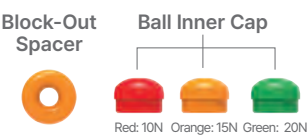
Ball Outer Cap



Diameter Length	Ø3.4
2.4	BATC003C

- > Packing unit: 2 Outer Caps.

Ball Inner Cap



Code	BATC003I
------	----------

- > Packing unit: 6 Inner Caps (2 per color) + 2 Block-Out Spacers.
- > Inserted and removed with Ball I&R Tool.

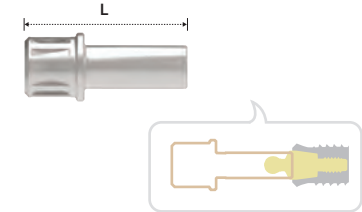
Ball Lab Analog



Diameter Length	Ø4.0
4	SBAL400

- > Packing unit: 4 Ball Lab Analogs.
- > Replication of the abutment shape in the working cast.

Ratchet Ball Driver

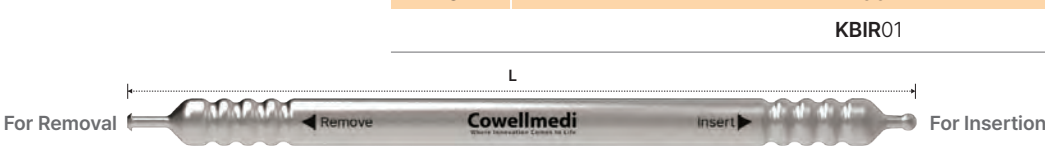


Type Length	Ratchet
19	*KRB19L

- > Packing unit: 1 Ratchet Ball Driver.
- > For installing and removing Ball Abutment using Torque Wrench.

*Optional Product

Ball I&R Tool



Length	100
	KBIR01

- > Packing unit: 1 Ball I&R Tool.
- > For installing and removing Ball Inner Caps.

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EXT.
HEXAGON
SYSTEM



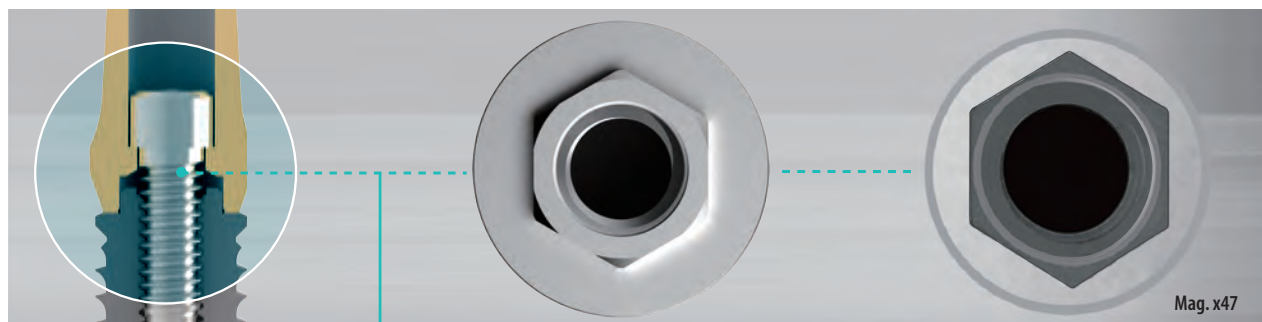
INNO Implant System®

INNO External



INNO External

• Design Concept Overview



• External Connection with Dual Contact

- > Provides enhanced mechanical stability between the fixture and abutment through dual contact support.
- > Maintains stable abutment positioning over time.
- > Ensures mechanical stability and reliable load transfer through flat-to-flat connection.

Wide and Deep Upper Threads

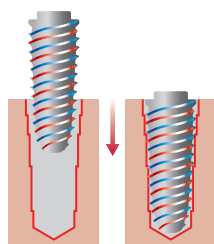
- > Offers excellent visibility, enabling easy direction setting and connection within the oral cavity.
- > Allows convenient maintenance and repair, providing advantages for long-term management.
- > Provides strong resistance to vertical loading for posterior and bridge prosthetics.

Wide and Deep Upper Threads

- > Prevent the compressive necrosis of the cortical bone.
- > Minimize the need for countersink drilling.
- > Enhance mechanical strength by reinforcing thickness.

Double Tapered Threads

- > Deliver excellent primary stability in poor bone conditions.
- > Allow over half-depth insertion with just 2 to 4 turns.
- > Ensure wedge-effect stability, even with minimal rotation.



Geometry Matched Fixture and Drill

- > Reduces placement time with ≥ 5 mm initial depth and efficient engagement.

Platform Neck

- > Supports periosteum integration at the bone-implant interface.
- > Minimizes the micro gap to reduce microleakage and prevent inflammation.

Open Threads

- > Enable deeper placement without additional drilling.
- > Reduces the risk of bone heating.
- > Allow for easy adjustment of insertion depth without interference from bone substitute.

4 Spiral Cutting Edges

- > Improve self-tapping efficiency with sharp contours.
- > Allow smoother insertion with higher initial stability.
- > Accommodates bone chips effectively.

Convex Apex with Sharp Cutting Edges

- > Protects the Schneiderian membrane during sinus procedures.
- > Enhance stability in fresh extraction sockets.



INNO External

• Fixture Specifications



- > Type: External.
- > Surface Treatment: HydroX7.
- > Connection: External Octagon (8° Taper, Octa 3.1).
- > Material: Unalloyed Titanium Gr4 (ASTM F67).



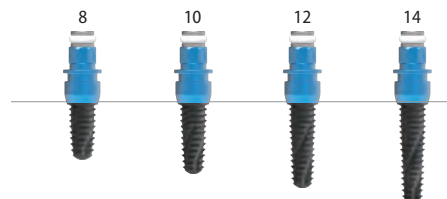
INNO Fixture Code

E	T	40	10	S	
Type External	Body Taper	Diameter Ø4.0	Length 10mm	Surface SLA-integrated	Mount Pre-Mount

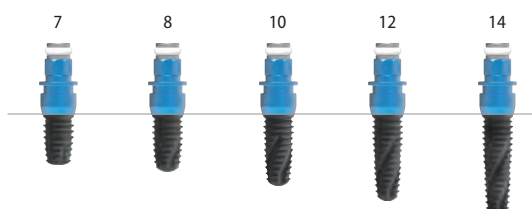
ET4010S

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

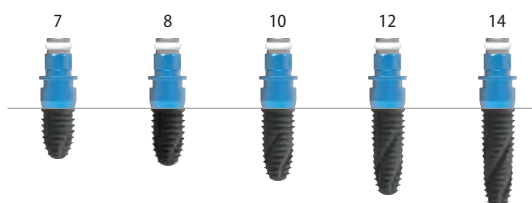
* Diameter (Actual Size)	Ø3.5 (Ø3.7)
Length	
7	-
8	ET3508S
10	ET3510S
12	ET3512S
14	ET3514S



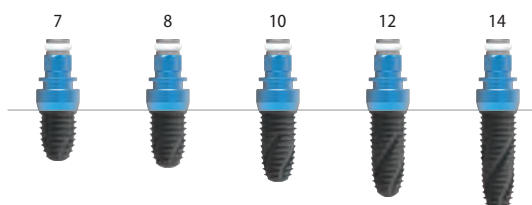
* Diameter (Actual Size)	Ø4.0 (Ø4.2)
Length	
7	ET4007S
8	ET4008S
10	ET4010S
12	ET4012S
14	ET4014S



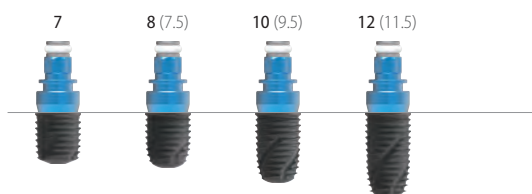
* Diameter (Actual Size)	Ø4.5 (Ø4.6)
Length	
7	ET4507S
8	ET4508S
10	ET4510S
12	ET4512S
14	ET4514S



* Diameter (Actual Size)	Ø5.0 (Ø5.1)
Length	
7	ET5007S
8	ET5008S
10	ET5010S
12	ET5012S
14	ET5014S



* Diameter (Actual Size)	Ø6.0
Length (Actual Size)	
7	ET6007S
8 (7.5)	ET6008S
10 (9.5)	ET6010S
12 (11.5)	ET6012S
14	-





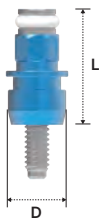
INNO External Implant (Ext.)

• System Flow

Fixture		Abutment
Hex: 2.7 / 3.4  Platform Ø4.1 / 5.1  INNO External	Prosthetic Procedure I	 Cemented Abutment  Angulated Abutment  Temporary Abutment  Meta G UCLA Abutment  Plastic UCLA Abutment
	Prosthetic Procedure II	 Shoulder Abutment
	Prosthetic Procedure III	 Ball Abutment

Impression	
Fixture-Level Impression	 Replica  Pick-up Squared Impression Coping  Transfer Post
Abutment-Level Impression	 Solid-Shoulder Protection Cap  Solid-Shoulder Impression Cap  Shoulder Positioning Cylinder  Shoulder Lab Analog
	 Ball Lab Analog

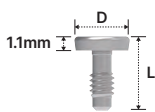
Fixture Mount



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 Length	Ø4.6	Ø5.5
7.2	MER001	MEW002

- > Packing unit: 1 Mount + 1 Mount Screw.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

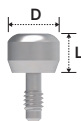
Cover Screw



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 Length	Ø4.3	Ø5.4
5.8	VNR001	VNW001

- > Packing unit: 1 Cover Screw.
- > Used to seal the conical interface of the fixture.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

Healing Abutment

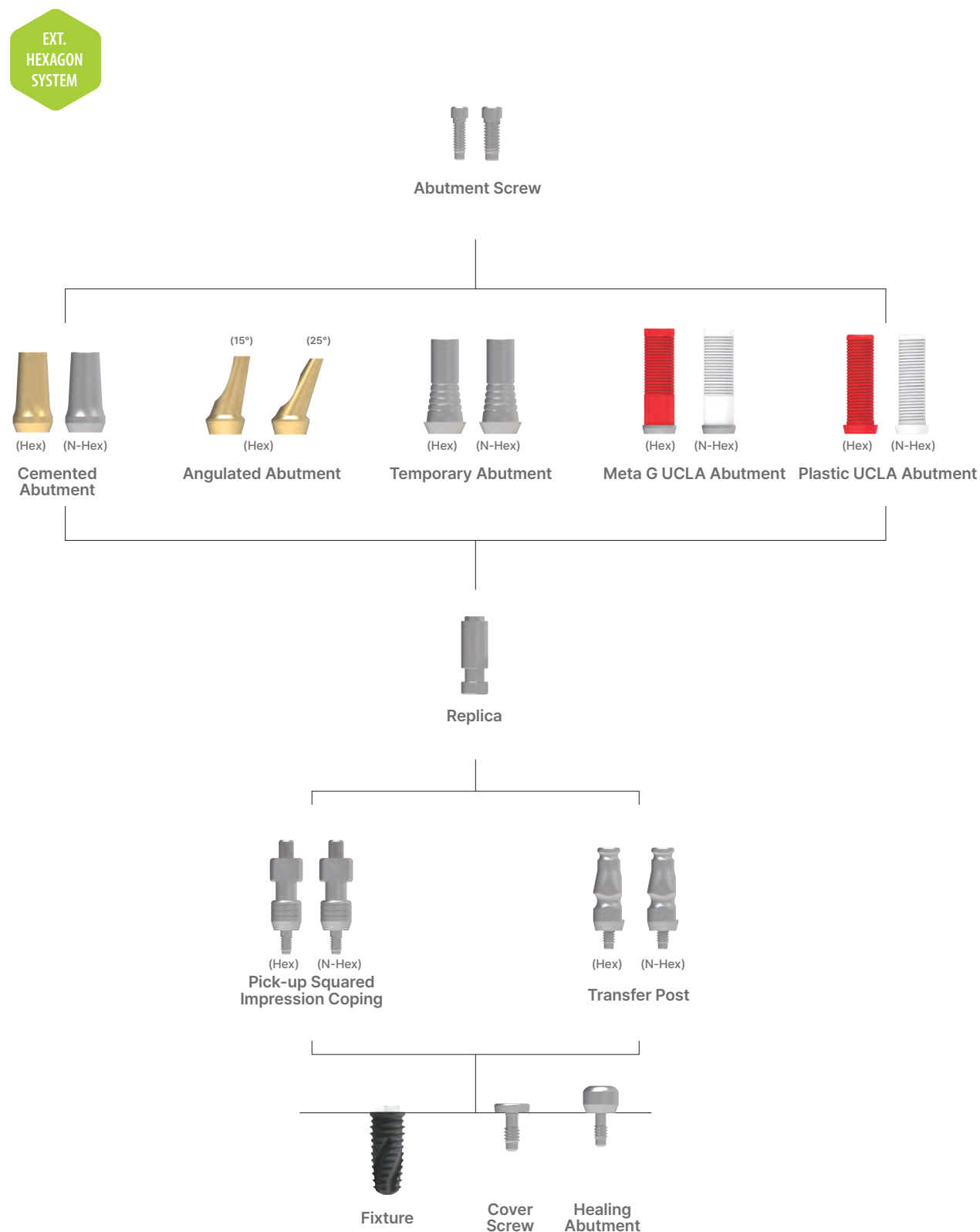


Hex	Hex 2.7	Hex 3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter Length	Ø4.95	Ø5.95
2.8	HNR502	HNW602
3.8	HNR503	HNW603
4.8	HNR504	HNW604
5.8	HNR505	HNW605
6.8	HNR506	HNW606
7.8	HNR507	HNW607

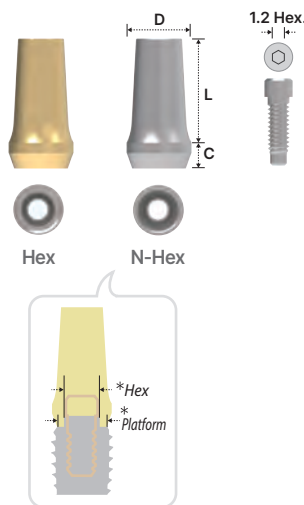
- > Packing unit: 1 Healing Abutment.
- > For gingival remodeling during soft tissue healing.
- > Selected based on gingival height and abutment type.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10 N-cm.

Prosthetic Procedure I

• Components Selection Guide for Cemented and UCLA Abutments



Cemented Abutment

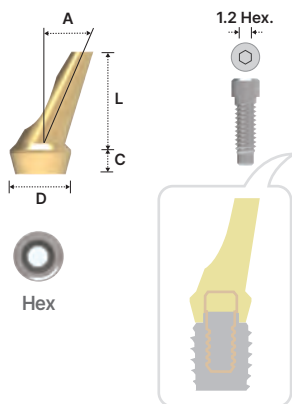


Type	Hex 2.7		Hex 3.4	
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]		Ø5.1 [Ø5.0 / Ø6.0]	
Diameter	Ø4.95		Ø5.95	
Length Cuff	6	8	6	8
1	CHR516	CHR518	CHW616	CHW618
2	CHR526	CHR528	CHW626	CHW628
3	CHR536	CHR538	CHW636	CHW638
4	CHR546	CHR548	CHW646	CHW648

Type	N-Hex			
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]		Ø5.1 [Ø5.0 / Ø6.0]	
Diameter	Ø4.95		Ø5.95	
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 Cemented Abutment + 1 Abutment Screw.
- > For Screw-Cement / Cement Retained Prosthesis.
- > Cutting surface for anti-rotation of the prosthesis.
- > Connected with Abutment Screw (SHR100 / SHW100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

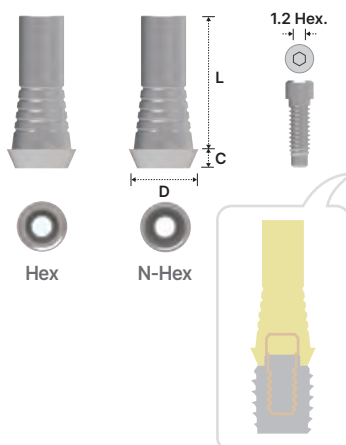
Angulated Abutment



Type	Hex 2.7	Hex 3.4	Hex 2.7	Hex 3.4
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 Angulated Abutment + 1 Abutment Screw.
- > For Screw-Cement / Cement Retained Prosthesis.
- > Solution for the anterior esthetic zone.
- > Gold color for more translucent restoration.
- > Connected with Abutment Screw (SHR100 / SHW100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

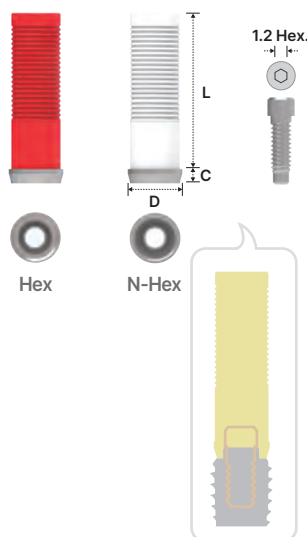
Temporary Abutment



Type	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 Temporary Abutment + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > For provisional restoration.
- > Connected with Abutment Screw (SHR100 / SHW100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 20 N-cm.
- > Fixture-level impression.

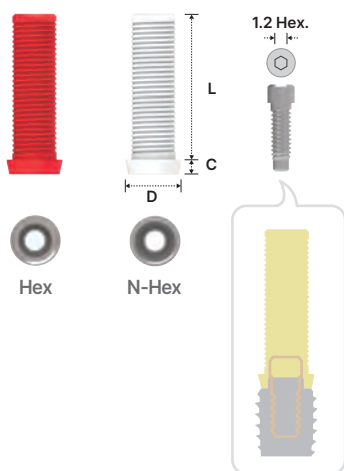
Meta G UCLA Abutment



Type	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 Meta G UCLA Abutment + 1 Abutment Screw.
- > For Screw / Screw-Cement / Cement Retained Prosthesis.
- > Modifiable to angulated, customized, and telescopic abutments.
- > CCM alloy core for precise connection.
- > Cast with non-precious metal or gold alloy.
- > Connected with Abutment Screw (SHR100 / SHW100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Fixture-level impression.

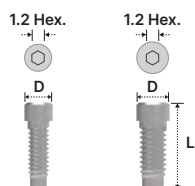
Plastic UCLA Abutment



Type	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 Plastic UCLA Abutment + 1 Abutment Screw.
- > Intended for the same use as Meta G UCLA Abutment, but with lower connection accuracy during lab procedures.
- > PMMA material.
- > Connected with Abutment Screw (SHR100 / SHW100).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: Finger light force during wax pattern fabrication (30 N-cm after casting).
- > Fixture-level impression.

Abutment Screw



Type	Hex 2.7	Hex 3.4
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter Length	Ø2.5	Ø2.95
8	SHR100	SHW100

- > Packing unit: 1 Abutment Screw.
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.

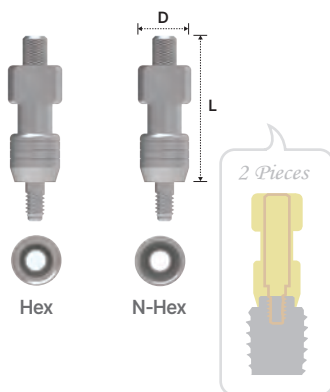
Replica



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

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

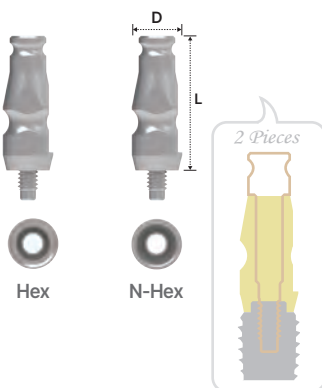
Pick-up Squared Impression Coping



Type	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 Length	Ø5.0	Ø5.8	Ø5.0	Ø5.8
17	IHR500	IHW600	INR500	INW600

- > Packing unit: 1 Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with Guide Pin (UHR115 / UHW115).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N-cm.
- > Fixture-level impression.

Transfer Post



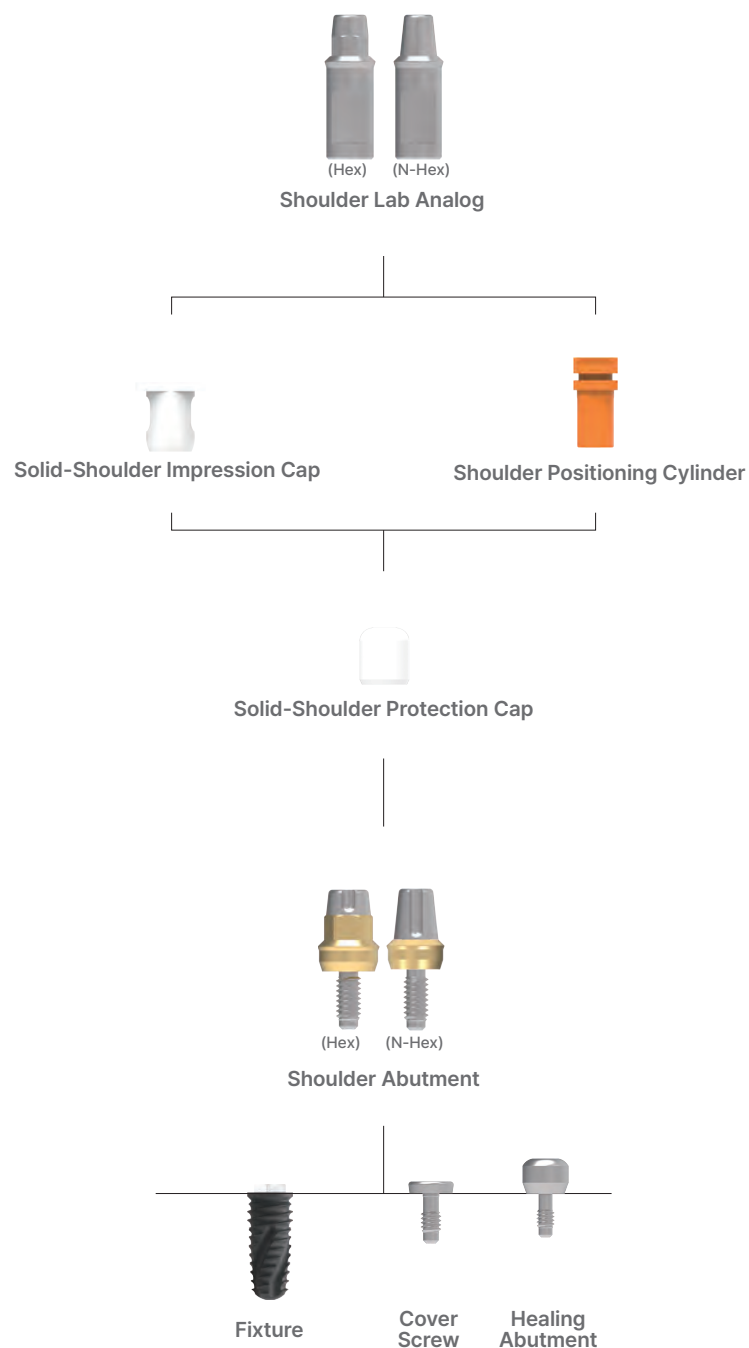
Type	Hex 2.7	Hex 3.4	N-Hex	N-Hex
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.1 [Ø5.0 / Ø6.0]
Diameter Length	Ø4.8	Ø5.8	Ø4.8	Ø5.8
16	IHR510	IHW610	INR510	INW610

- > Packing unit: 1 Transfer Post and 1 Guide Pin.
- > For closed tray impression.
- > Connected with Guide Pin (IHR510S / IHW610S).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 15 N-cm.
- > Fixture-level impression.

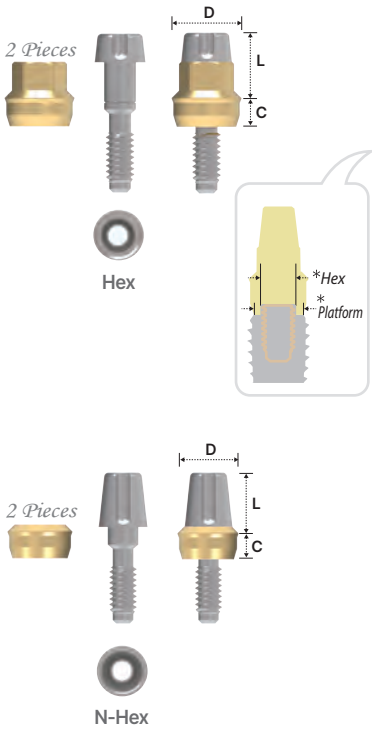
Prosthetic Procedure II

- Component Selection Guide for Shoulder Abutment

EXT.
HEXAGON
SYSTEM



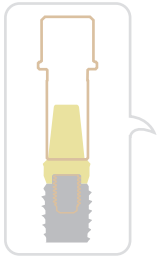
Shoulder Abutment



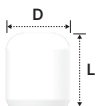
Type	Hex 2.7			Hex 3.4		
Platform [Fixture Dia.]	Ø4.1 [Ø3.5 / Ø4.0 / Ø4.5]			Ø5.1 [Ø5.0 / Ø6.0]		
Diameter	Ø4.8			Ø5.9		
Length Cuff	4	5.5	7	4	5.5	7
1	SAC414	SAC415	SAC417	SAC514	SAC515	SAC517
2	SAC424	SAC425	SAC427	SAC524	SAC525	SAC527
3	SAC434	SAC435	SAC437	SAC534	SAC535	SAC537
4	SAC444	SAC445	SAC447	SAC544	SAC545	SAC547

Type	N-Hex			N-Hex		
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 Shoulder Abutment + 1 Solid-Shoulder Protection Cap.
- > For Cement Retained Prosthesis.
- > Dual anti-rotation design with single crown for screw loosening prevention.
- > Tightened with Ratchet Shoulder Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Abutment-level impression.



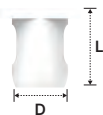
Solid-Shoulder Protection Cap



Shoulder Abutment Diameter	Ø4.8	Ø5.9
Diameter Length	Ø5.4	Ø6.5
6.2	IASR140	IASW140
7.7	IASR155	IASW155
9.2	IASR170	IASW170

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

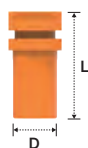
Solid-Shoulder Impression Cap



Shoulder Abutment Diameter	Ø4.8	Ø5.9
Diameter / Length	5.65	6.75
8	IICR001	IICW001

- > Packing unit: 1 Solid-Shoulder Impression Cap.
- > For closed tray impression.
- > Used with Shoulder Positioning Cylinder.
- > Confirm locking of the abutment by rotating it in both clockwise and counterclockwise directions.
- > Abutment-level impression.

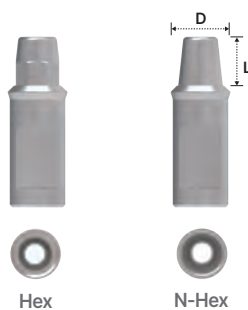
Shoulder Positioning Cylinder



Shoulder Abutment Diameter	Ø4.8	Ø5.9
Diameter / Length	Ø5.3	Ø6.4
10.7	SAPR001	SAPW001

- > Packing unit: 1 Shoulder Positioning Cylinder.
- > For closed tray impression.
- > Inner cutting surface for anti-rotation.
- > Inserted into the Solid-Shoulder Impression Cap.
- > Abutment-level impression.

Shoulder Lab Analog

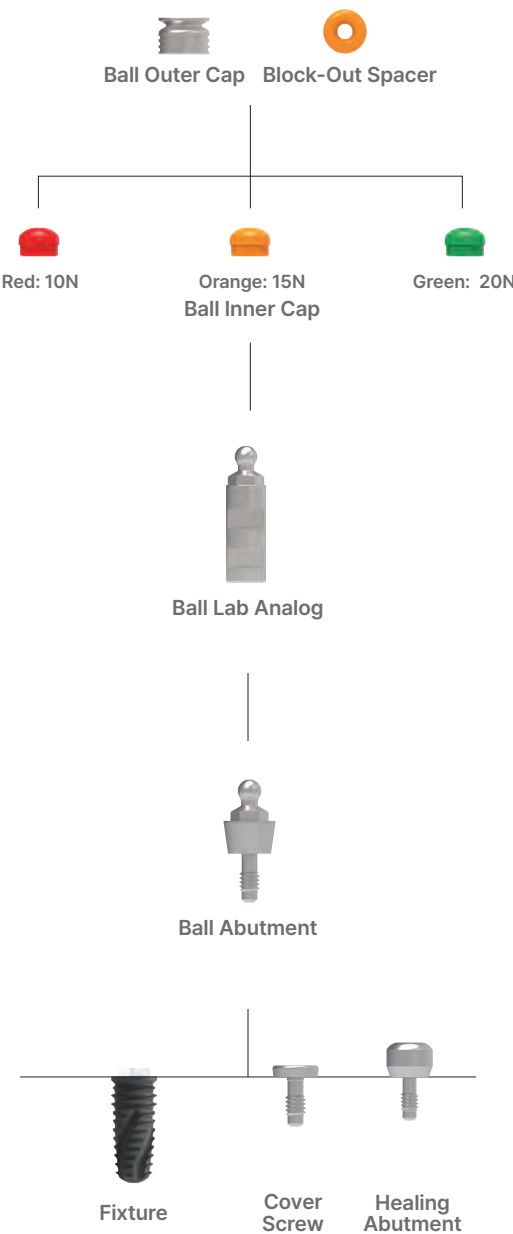


Type	Hex		N-Hex	
Shoulder Abutment Diameter	Ø4.8	Ø5.9	Ø4.8	Ø5.9
Diameter / Length	Ø4.8	Ø5.9	Ø4.8	Ø5.9
4	SLCR040	SLCW040	SLBR040	SLBW040
5.5	SLCR055	SLCW055	SLBR055	SLBW055
7	SLCR070	SLCW070	SLBR070	SLBW070

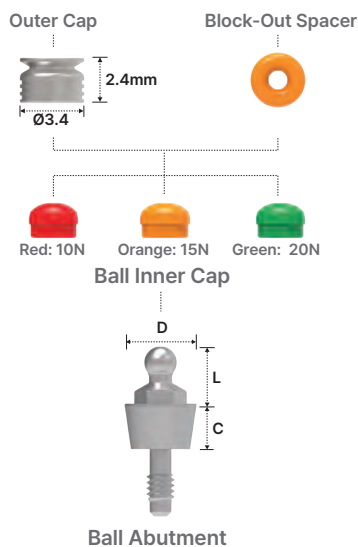
- > Packing unit: 1 Shoulder Lab Analog.
- > Replication of the abutment shape in the working cast.
- > Choose by abutment dimensions.

Prosthetic Procedure III

- Component Selection Guide for Ball Abutment



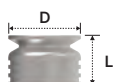
Ball Abutment



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 Ball Inner Caps (1 per color) + 1 Outer Cap + 1 Block-Out Spacer.
- > For Implant-Supported Overdenture Prosthesis.
- > 3 types of inner caps provide varying levels of retention.
- > Tightened with Ratchet Ball Driver using Torque Wrench.
- > Tightening torque: 30 N-cm.
- > Direct impression.

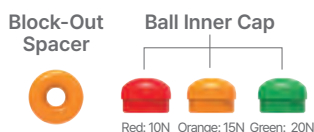
Ball Outer Cap



Diameter Length	Ø3.4
2.4	BATC003C

- > Packing unit: 2 Outer Caps.

Ball Inner Cap



Code	BATC003I
------	----------

- > Packing unit: 6 Inner Caps (2 per color) + 2 Block-Out Spacers.
- > Inserted and removed with Ball I&R Tool.

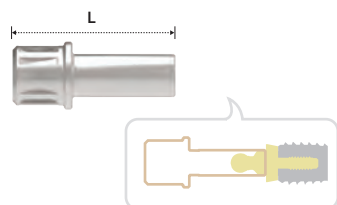
Ball Lab Analog



Diameter Length	Ø4.0
4	SBAL400

- > Packing unit: 4 Ball Lab Analogs.
- > Replication of the abutment shape in the working cast.

Ratchet Ball Driver



Type Length	Ratchet
19	*KRB19L

- > Packing unit: 1 Ratchet Ball Driver.
- > For installing and removing Ball Abutment using Torque Wrench.

*Optional Product

Ball I&R Tool

Length	100
	KBIR01

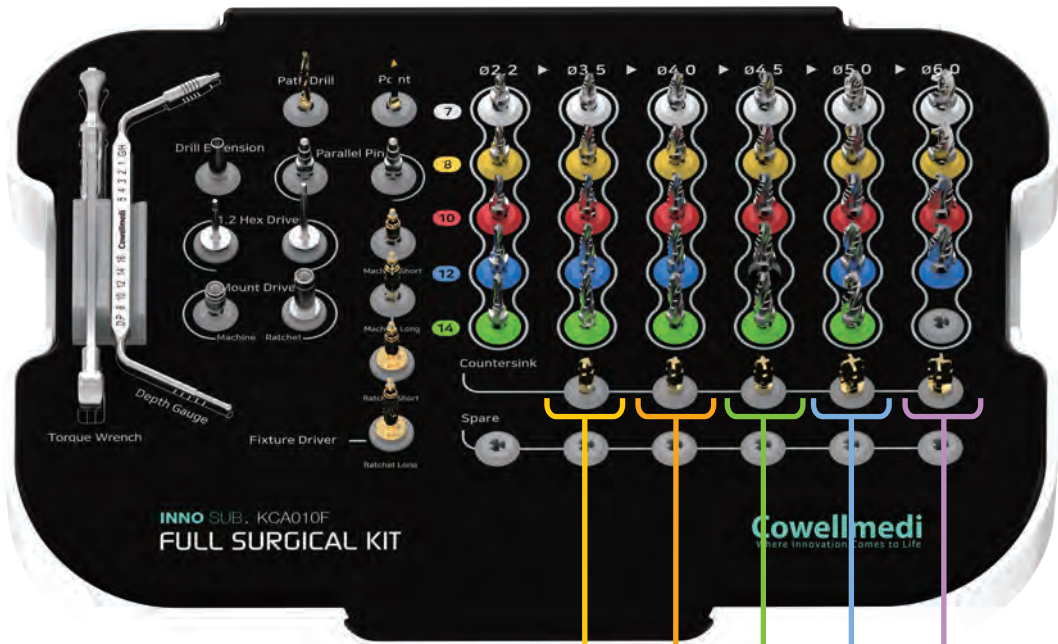


- > Packing unit: 1 Ball I&R Tool.
- > For installing and removing Ball Inner Caps.

INNO Sub. Full Surgical Kit [KCA010F]



- > For INNO Submerged, INNO X, and INNO V (Sub.).
- > All components are for Sub. / Int. / Ext., except for Fixture Drivers and Depth Gauge used for Sub. only.



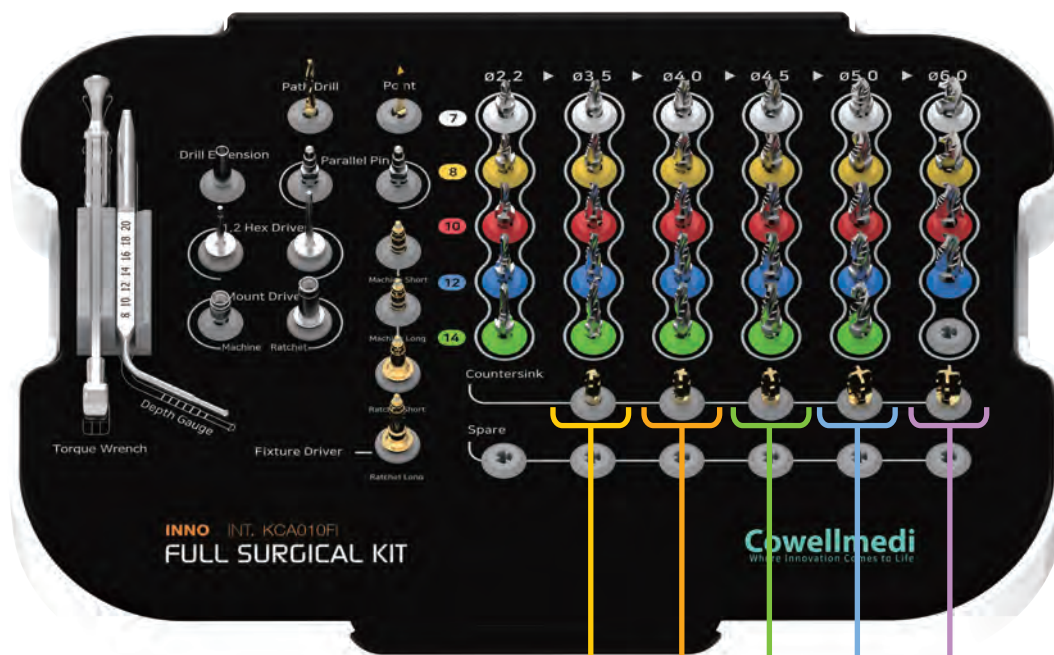
 Path Drill 2KTD18	 Point Drill KPD01S	 Ø2.2 X 7 KPSD2207	 Ø3.5 X 7 2KTD3707	 Ø4.0 X 7 2KTD4007	 Ø4.5 X 7 2KTD4507	 Ø5.0 X 7 2KTD5007	 Ø6.0 X 7 2KTD6007	
 Parallel Pin KPP002	 Parallel Pin KPP002	 Ø2.2 X 8 KPSD2208	 Ø3.5 X 8 2KTD3708	 Ø4.0 X 8 2KTD4008	 Ø4.5 X 8 2KTD4508	 Ø5.0 X 8 2KTD5008	 Ø6.0 X 8 2KTD6008	
 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 2KMMS01S	 R. Fixture Driver. L 2KHDS01L	 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 2KMMS01L	 R. Fixture Driver. XL 2KHDS01X	 Drill Extension KDE002	 Ø3.5 Countersink 4KCS35	 Ø4.0 Countersink 4KCS40	 Ø4.5 Countersink 4KCS45	 Ø5.0 Countersink 4KCS50	 Ø6.0 Countersink 4KCS60	
 Torque Wrench KTW001	 Depth Gauge KDG004		 Path Gauge KFPG01R		*  Common for Sub. / Int. / Ext. Only for the specific type.  An exclusive tool by type.			

* Common for Sub. / Int. / Ext. Only for the specific type.
 An exclusive tool by type.

INNO Int. Full Surgical Kit [KCA010FI]

INT.
OCTAGON
SYSTEM

- > For INNO Internal (Int.).
- > All components are for Sub. / Int. / Ext., except for Fixture Drivers used for Int. only.



Int. Fixture Driver							

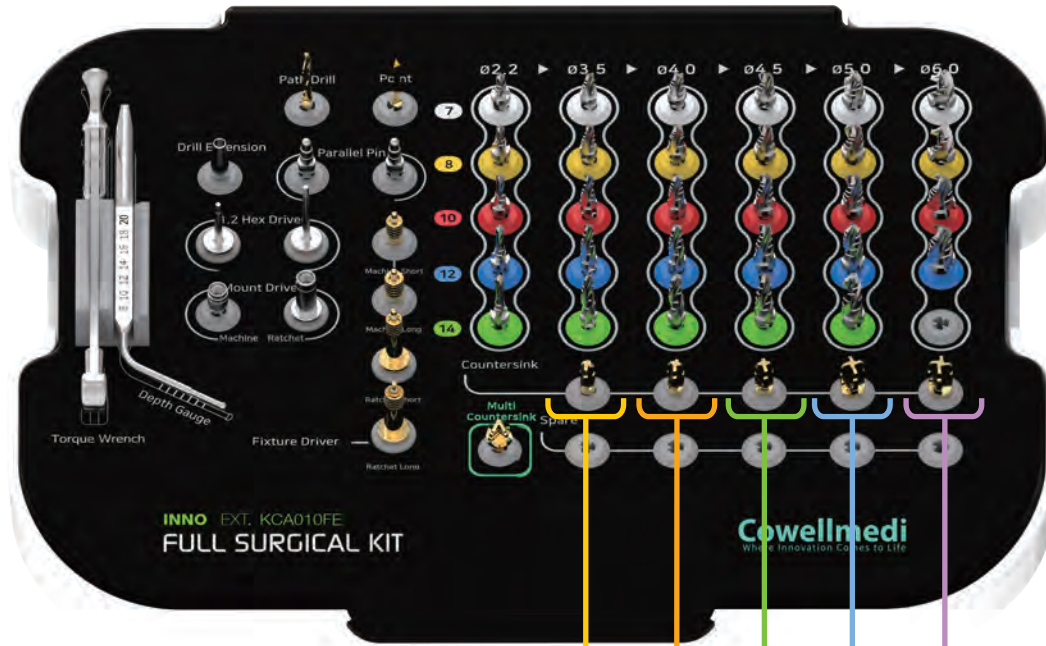
* Common for Sub. / Int. / Ext. Only for the specific type.

An exclusive tool by type.

INNO Ext. Full Surgical Kit [KCA010FE]

EXT.
HEXAGON
SYSTEM

- > For INNO External (Ext.).
- > All components are for Sub. / Int. / Ext., except for Fixture Drivers and Multi Countersink used for Ext. only.



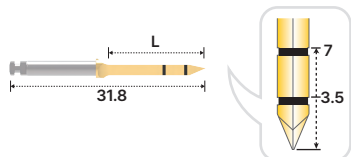
		Ø2.2 ▶ Ø3.5 ▶ Ø4.0 ▶ Ø4.5 ▶ Ø5.0 ▶ Ø6.0					
Path Drill 2KTD18	Point Drill KPD01S	Ø2.2 X 7 KPSD2207	Ø3.5 X 7 2KTD3707	Ø4.0 X 7 2KTD4007	Ø4.5 X 7 2KTD4507	Ø5.0 X 7 2KTD5007	Ø6.0 X 7 2KTD6007
Parallel Pin KPP002	Parallel Pin KPP002	Ø2.2 X 8 KPSD2208	Ø3.5 X 8 2KTD3708	Ø4.0 X 8 2KTD4008	Ø4.5 X 8 2KTD4508	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
Ext. Fixture Driver		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. S KMME02S	R. Fixture Driver. L KHDE02L	Drill Extension KDE002	Ø3.5 Countersink 4KCS35	Ø4.0 Countersink 4KCS40	Ø4.5 Countersink 4KCS45	Ø5.0 Countersink 4KCS50	Ø6.0 Countersink 4KCS60
Multi Countersink 4KCS01	Torque Wrench KTW001	Depth Gauge KDG001		Path Gauge KFPG01R		* Common for Sub. / Int. / Ext. Only for the specific type. An exclusive tool by type.	

01



Drill / Surgical Tool

Point Drill



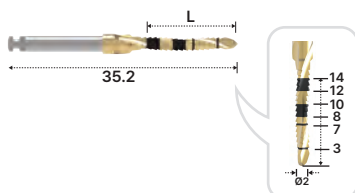
Length

15

KPD01S

- > Primarily used to mark the implant recipient site and determine spacing.
- > Features a uniquely pointed tip, making it ideal for initiating the osteotomy through the hard cortical plate.

Path Drill



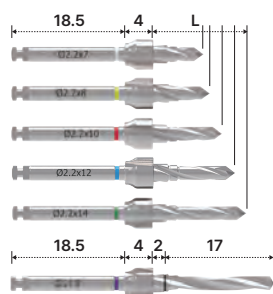
Length

15

2KPD01S

- > Used in cases requiring path modification.
- > Provides excellent cutting force without slipping on slanted bone.
- > Allows easy drilling in extraction sockets without deviation.

Initial Drill



Length

8

9

11

13

15

17&19

KPSD2207 KPSD2208 KPSD2210 KPSD2212 KPSD2214 *KPSD2218

- > All-in-one drill used after Point drill or Path drill.
- > Features a multi-step design that gradually widens from Ø2.2 to Ø2.8 and Ø3.3 mm.
- > Different color bands by drill length.

*Optional product



Length band

□ 7mm Fixture

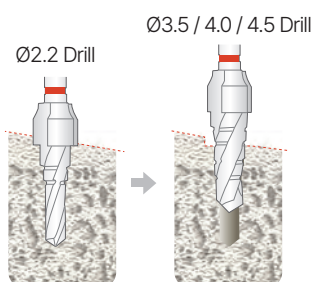
■ 8mm Fixture

■ 10mm Fixture

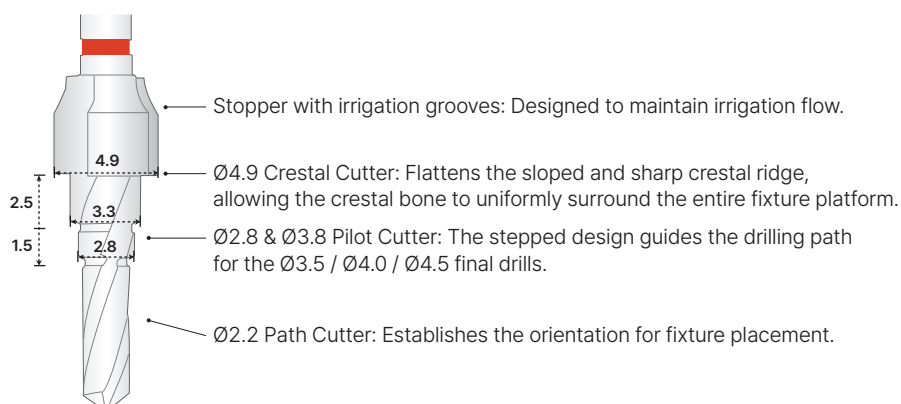
■ 12mm Fixture

■ 14mm Fixture

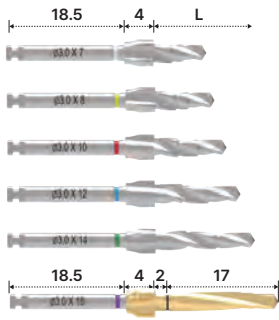
■ 16&18mm Fixture



Initial Drill guides the pathway for Final Drills. Final Drill is inserted halfway into the hole created by Initial Drill without additional drilling.



Final Drill

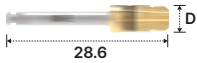


Fixture Dia. Length	Ø3.0	Ø3.5	Ø4.0	Ø4.5
8	*2KTD3007	2KTD3707	2KTD4007	2KTD4507
9	*2KTD3008	2KTD3708	2KTD4008	2KTD4508
11	*2KTD3010	2KTD3710	2KTD4010	2KTD4510
13	*2KTD3012	2KTD3712	2KTD4012	2KTD4512
15	*2KTD3014	2KTD3714	2KTD4014	2KTD4514
17&19	*2KTD3018	*2KTD3718	*2KTD4018	*2KTD4518
Fixture Dia. Length	Ø5.0	Ø5.5	Ø6.0	
8	2KTD5007	*2KTD5507	2KTD6007	
9	2KTD5008	*2KTD5508	2KTD6008	
11	2KTD5010	*2KTD5510	2KTD6010	
13	2KTD5012	*2KTD5512	2KTD6012	
15	2KTD5014	*2KTD5514		
17&19				

- > Final Drills for fixtures with diameters of Ø3.5, Ø4.0, Ø4.5, Ø5.0, Ø5.5 and Ø6.0.
- > Final Drills for fixtures with lengths of 7, 8, 10, 12, 14, 16, and 18 mm.
- > Different color bands by drill length.

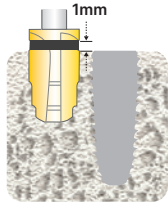
*Optional product

Countersink

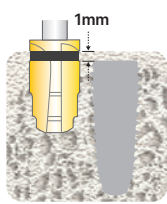


Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
Diameter	Ø3.7	Ø4.2	Ø4.6	Ø5.1	Ø6.0
	4KCS35	4KCS40	4KCS45	4KCS50	4KCS60

- > Used to prevent compressive necrosis of dense cortical bone by reducing insertion torque.
(Ø4.0 fixture: 80 N-cm → 45 N-cm / Ø5.0 fixture: 150 N-cm → 45 N-cm)
- > In bone quality 1, excessive compressive force during fixture placement may lead to osseointegration failure and bone loss.

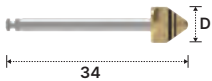


The lower edge of the depth marking precisely indicates the level of the fixture platform.



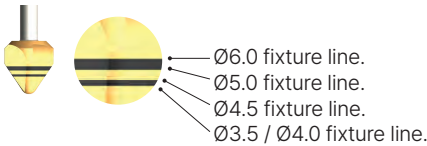
The upper edge of the depth marking indicates a level 1 mm above the fixture platform.

Multi Countersink

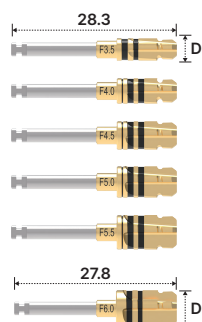


Diameter	Ø6.5
	4KCS01

- > Only for External.
- > Drill according to laser markings for each fixture diameter.



INNO X Countersink

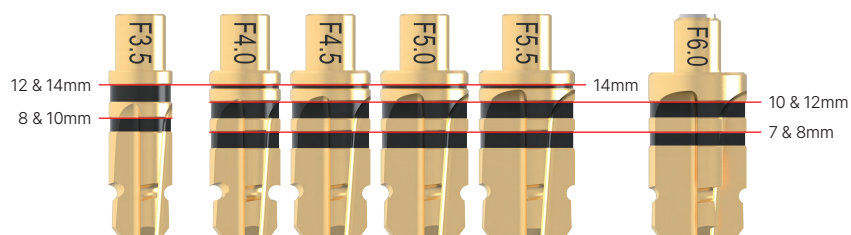


Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5	Ø6.0
Diameter	Ø3.8	Ø4.3	Ø4.8	Ø5.3	Ø5.8	Ø6.0
	*4KCS35X	*4KCS40X	*4KCS45X	*4KCS50X	*4KCS55X	*4KCS60X

- > Used to prevent compressive necrosis of dense cortical bone by reducing insertion torque.
(Ø4.0 fixture: 80 N·cm → 45 N·cm / Ø5.0 fixture: 150 N·cm → 45 N·cm)
- > In bone quality 1, excessive compressive force during fixture placement may lead to osseointegration failure and bone loss.

*Optional product

*D1 Bone



*D2 Bone



Tap Drill

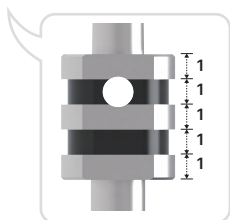
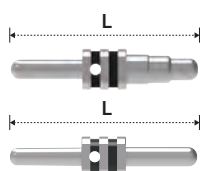


Fixture Dia.	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø6.0
	*3KMTD35A	*3KMTD40A	*3KMTD45A	*3KMTD50A	*3KMTD60A

- > Optionally used in hard bone of D1 or higher.

*Optional product

Parallel Pin

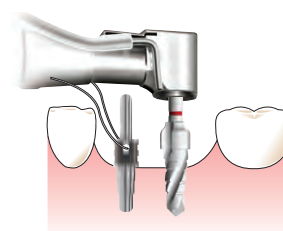
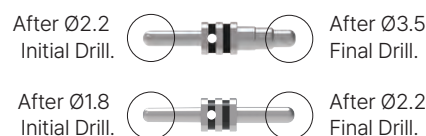


Marking lines for checking gingival height (1–5 mm). Each line represents 1 mm for accurate soft tissue level.

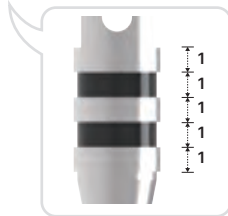
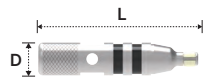
Length	21
	KPP002
	*KPP002P

- > Insert after the Ø2.2 or Ø3.5 drill to check the drilling path.
- > To prevent losing Parallel Pin in the patient's mouth, be sure to tie dental floss through the hole in Parallel Pin.

*Optional product



Path Gauge



Diameter	Ø3.5
Length	17
	*KFPG01R

- > Path verification and gingival height measurement after implant placement.

*Optional product

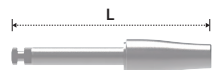
Marking lines for checking gingival height (1–5 mm). Each line represents 1 mm for accurate soft tissue level.



*** Connection identified by the marking on the top of the product.**

- R - INNO Submerged
- N - INNO Narrow

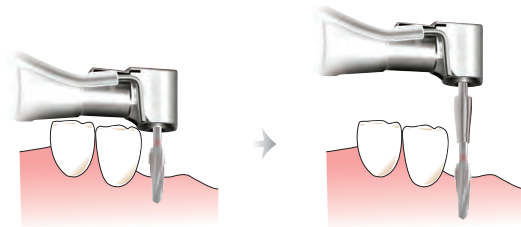
Drill Extension



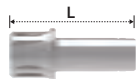
Rotate the drill after insertion until it clicks to confirm full engagement.

Length	27.5
	KDE002

- > Used to extend the drill when operating with a handpiece.
- > Do not exceed the recommended torque.



Mount Driver



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

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

- > Used for the installation of Pre-Mount type fixtures.
- > Machine Drivers are used with contra-angle handpieces, while Ratchet Drivers are used with Torque Wrench.

*Optional product

Hex Driver



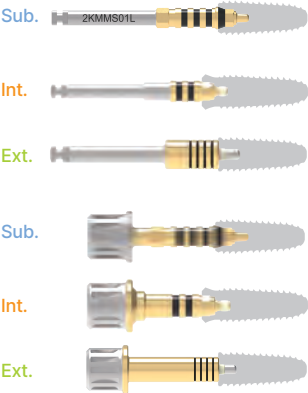
Type	Machine	
Length	Hex 0.9	Hex 1.2
22(Short)	*KMD09S	*KMD12S
28(Long)	*KMD09L	*KMD12L

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

- > Used to install or remove components such as Cover Screw, Healing Abutment, and Abutment Screw.
- > Machine Drivers are used with contra-angle handpieces, while Ratchet Drivers are used with Torque Wrench.

*Optional product

Fixture Driver

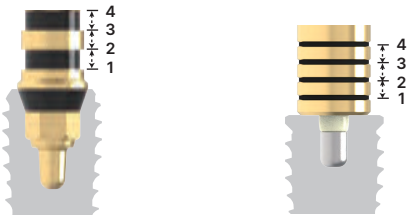


Type		Machine			
Length	System	Sub.	Int.	Ext. (Hex 2.7)	Ext. (Hex 3.4)
28.1 / 26.3 / 26.4 (Short)		2KMMS01S	KMMI01S	KMME01S	KMME02S
33.3 / 30.5 / 31.4 (Long)		2KMMS01L	KMMI01L	*KMME01L	
40.3 / 35.5 / 36.4 (X-Long)		*2KMMS01X	*KMMI01X	*KMME01X	

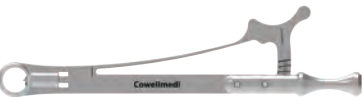
Type		Ratchet			
Length	System	Sub.	Int.	Ext. (Hex 2.7)	Ext. (Hex 3.4)
20.7 / 19.5 / 19.9 (Short)		*2KHDS01S	KHDI01S	*KHDE01S	
25.7 / 24.5 / 24.9 (Long)		2KHDS01L	KHDI01L	KHDE01L	KHDE02L
30.7 / 29.5 / 29.9 (X-Long)		2KHDS01X	*KHDI01X	*KHDE01X	

- > Used for the installation of No-Mount type fixtures.
- > Machine Drivers are used with contra-angle handpieces, while Ratchet Drivers are used with Torque Wrench.

*Optional product



Torque Wrench



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

- > Used to control torque during fixture and abutment placement.
- > Torque levels of 10, 25, 30, and 35 N-cm can be controlled by pulling the elastic bar.
- > Maximum torque of 120 N-cm can be applied by pulling the rigid main bar.



Depth Gauge



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

- > Used to measure drilling depth with the scale rod.
- > The flat end on the opposite side measures the 5 mm spacing between adjacent fixtures.



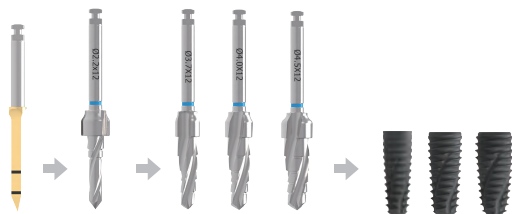
Code	KDG004
------	--------

- > One side of Depth Gauge measures the drilling depth, while the other side measures the gingival height from the top of the fixture.

* Only for Sub.

02 Drilling Sequence

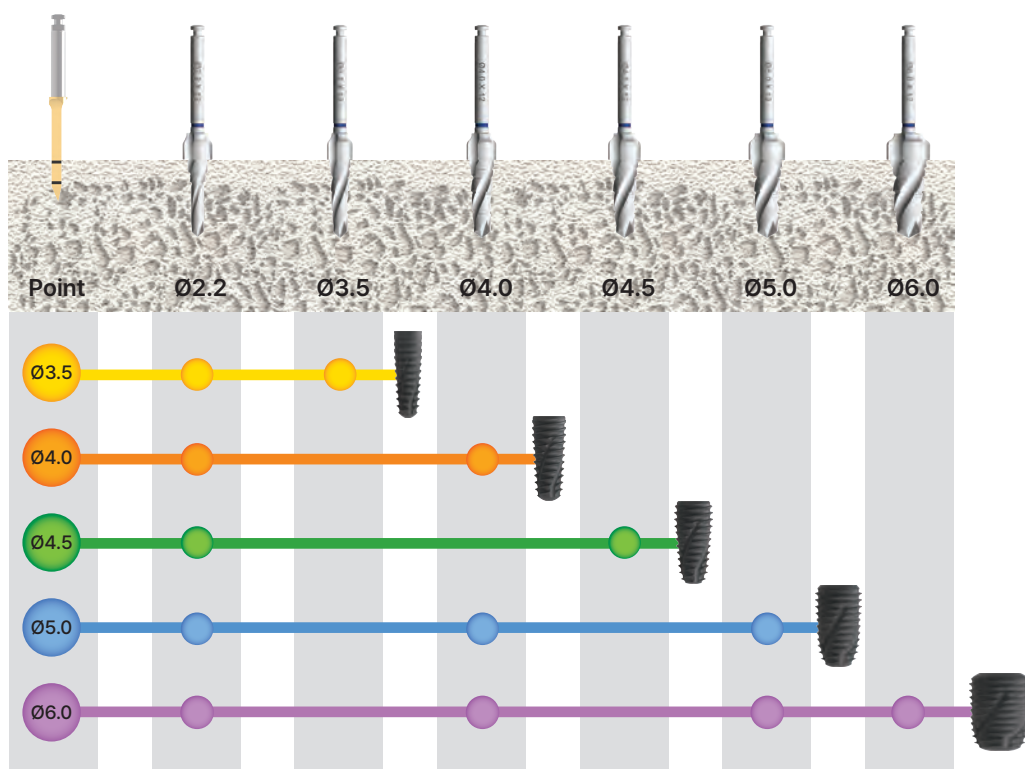
> Minimal drilling sequence using Point Drill, Initial Drill, and Final Drills for Ø3.5, Ø4.0, and Ø4.5 fixtures.



> Length markings.

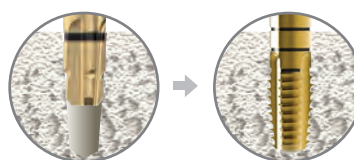


Actual drill length: Fixture + 1 mm.



- > Ø3.5 fixture: Ø1.8 Point Drill > Ø2.2 Initial Drill > Ø3.5 Final Drill.
- > Ø4.0 fixture: Ø1.8 Point Drill > Ø2.2 Initial Drill > Ø4.0 Final Drill.
- > Ø4.5 fixture: Ø1.8 Point Drill > Ø2.2 Initial Drill > Ø4.5 Final Drill.
- > Ø5.0 fixture: Ø1.8 Point Drill > Ø2.2 Initial Drill > Ø4.0 Final Drill > Ø5.0 Final Drill.
- > Ø6.0 fixture: Ø1.8 Point Drill > Ø2.2 Initial Drill > Ø4.0 Final Drill > Ø5.0 Final Drill > Ø6.0 Final Drill.

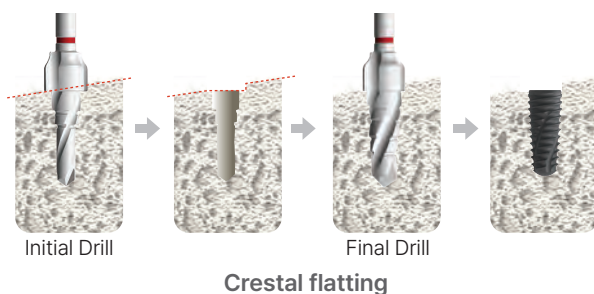
- * Countersink and Tap Drill should be used in hard bone quality.
- * D1 / D2 Bone: Final Drill > Countersink / Tap Drill > Fixture placement.
- * D4 Bone: One-step narrower Final Drill > Fixture placement.



*Optional product

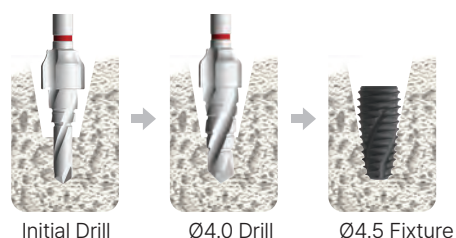
※ Sloped edentulous ridge next to an adjacent tooth

- > Use the crestal cutter of Initial Drill and Final Drill.
- > A drill longer than the fixture length may also be used.



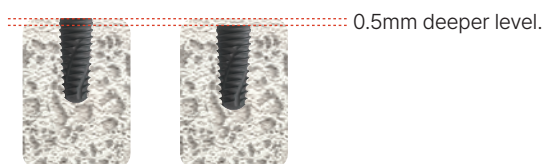
※ Wide extraction socket

- > Place in cancellous bone.
- > Use one-step narrower diameter drill.



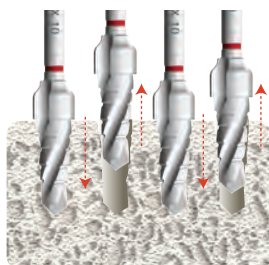
※ Torque force control

- > 0.5mm deeper placement increases the initial torque force of the 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

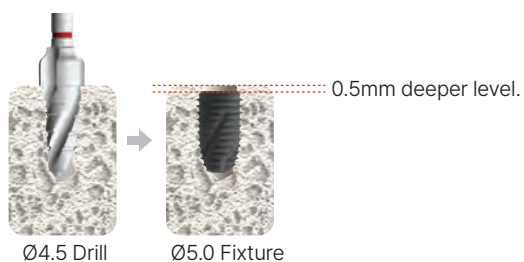
- > The pumping action during drilling helps remove bone chips from the osteotomy site.
- > In dense bone, effective debridement reduces insertion torque.



Pumping action while final drilling			
Density	D1	D2	D3
Non-Debridement	34.1	29	19.6
Debridement	30	25	15.5

※ In maxillary tuberosity with bone quality 4

- > Avoid pumping action during drilling.
- > Place the fixture 0.5 mm deeper than the planned depth.
- > Select a fixture wider than the final drill diameter.

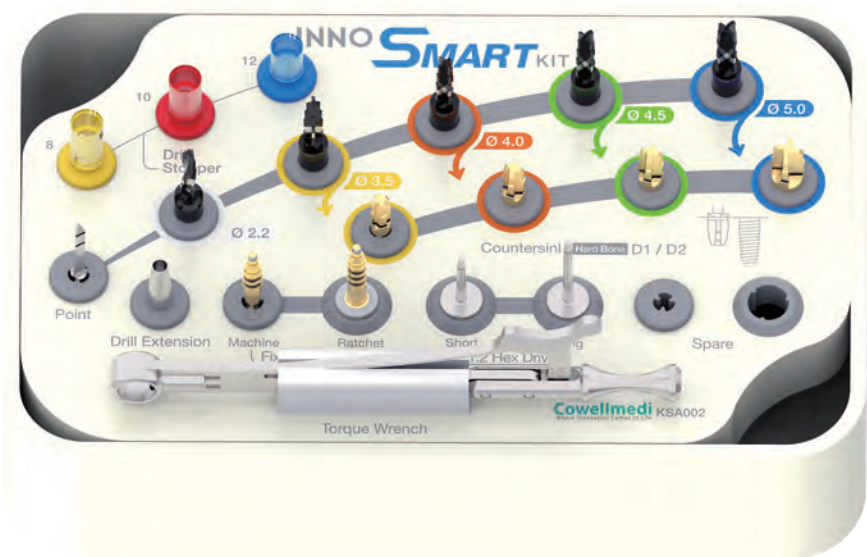


Level	Crestal level		0.5mm Deeper Level	
Debridement	with	without	with	without
Ø4.5 Fixture	4.4	10.2	-	12.9
Ø5.0 Fixture	11.6	19.9	14.1	24.5

INNO Smart Surgical Kit [KSA002]



- > For INNO Submerged, INNO X, and INNO V (Sub.).
- > Used for fixtures with diameters of Ø3.5, Ø4.0, Ø4.5, and Ø5.0, and lengths of 8, 10, 12, and 14 mm.
- > A simple surgical kit primarily used with drills and stoppers.



Point Drill

Point Drill
KPD01S

Initial Drill

Initial Drill
2KTD22

Final Drill

Ø3.5 Final Drill
2KTD35

Ø4.0 Final Drill
2KTD40

Ø4.5 Final Drill
2KTD45

Ø5.0 Final Drill
2KTD50

Stopper

8 Drill Stopper
KSDS08S

10 Drill Stopper
KSDS10S

12 Drill Stopper
KSDS12S

Countersink

Ø3.5 Countersink
4KCS35

Ø4.0 Countersink
4KCS40

Ø4.5 Countersink
4KCS45

Ø5.0 Countersink
4KCS50

Drill Extension Fixture Driver

Drill Extension
KDE002

M. Fixture Driver L
2KMMS01L

R. Fixture Driver L
2KHDS01L

Hex Driver

1.2 Hex Driver L
KHD1221

1.2 Hex Driver XL
KHD1227

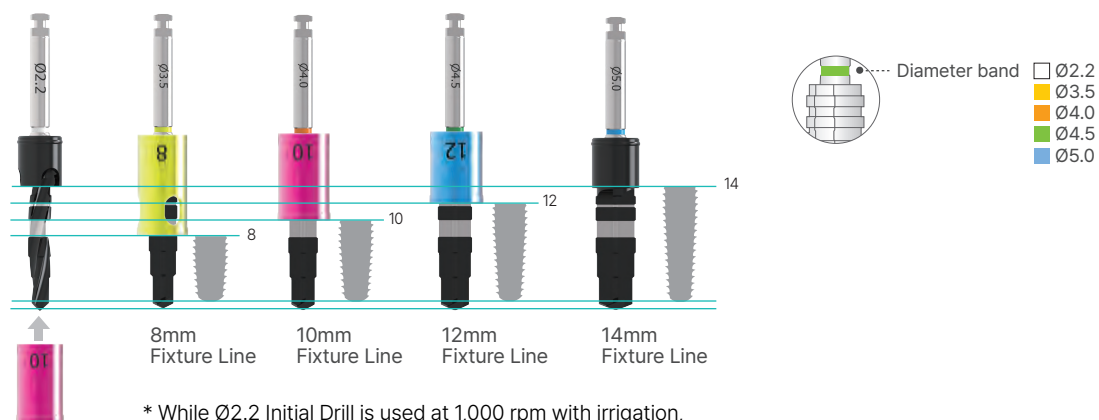
Torque Wrench

KTW001

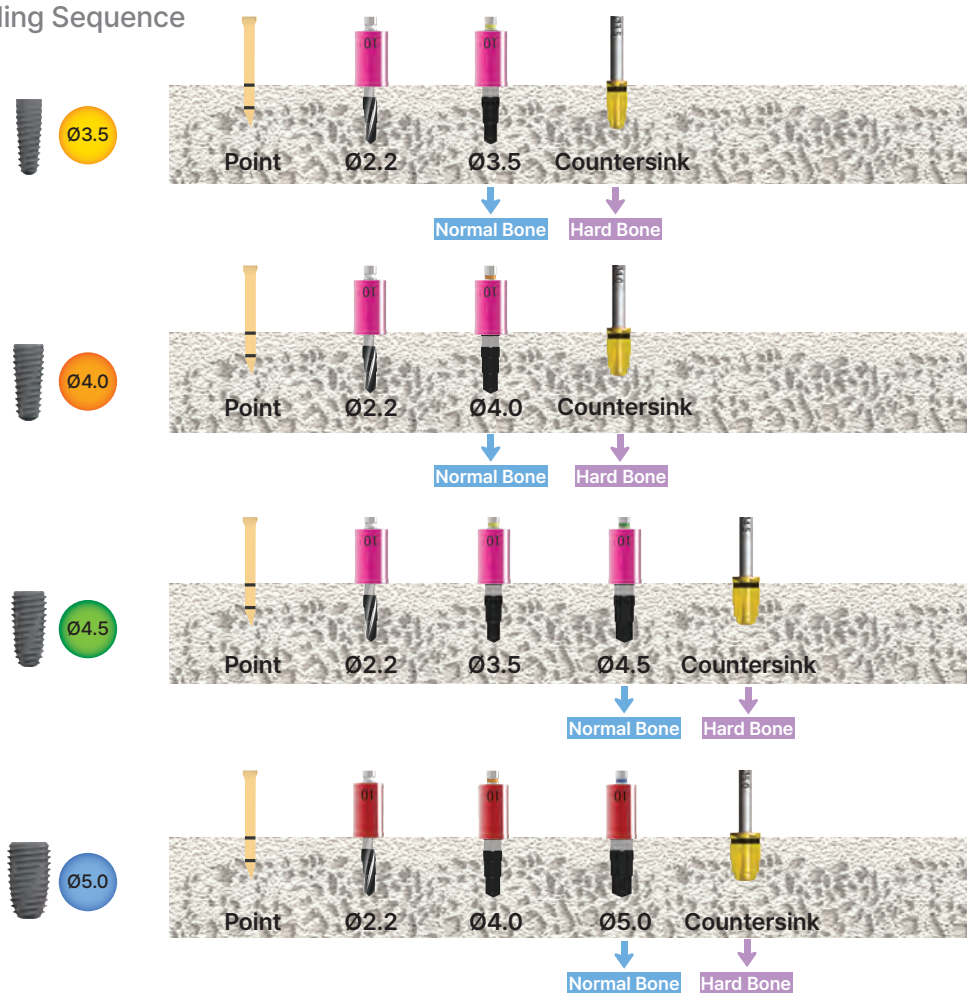
* For Pre-Mount type fixtures, use Mount Drivers (Optional Products).

Length Marking & Stopper

Actual drill length: Fixture + 1 mm.



Drilling Sequence



INNO Short Surgical Kit [KSI001]



- > For INNO Short (Sub.).
- > A simple surgical kit primarily used with drills and stoppers.



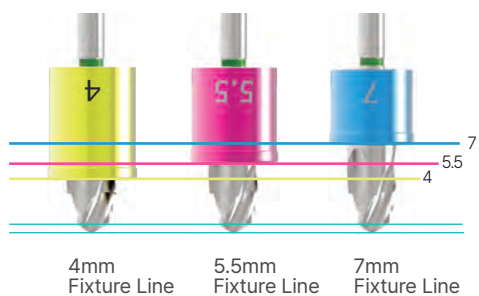
Point Drill	Initial Drill	Final Drill				
Point Drill KPD01S	Ø2.0 Step Drill KSSD2004	Ø4.0 Step Drill KSSD4004	Ø4.5 Step Drill KSSD4504	Ø5.0 Step Drill KSSD5004	Ø5.5 Step Drill KSSD5504	Ø6.0 Step Drill KSSD6004

Stopper	Countersink						
4mm Drill Stopper SIDS04	5.5mm Drill Stopper SIDS05	7mm Drill Stopper SIDS07	Ø4.0 Countersink 4KCS40S	Ø4.5 Countersink 4KCS45S	Ø5.0 Countersink 4KCS50S	Ø5.5 Countersink 4KCS55S	Ø6.0 Countersink 4KCS60S

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

Length Marking & Stopper

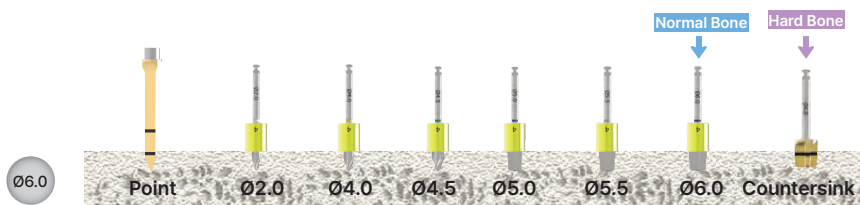
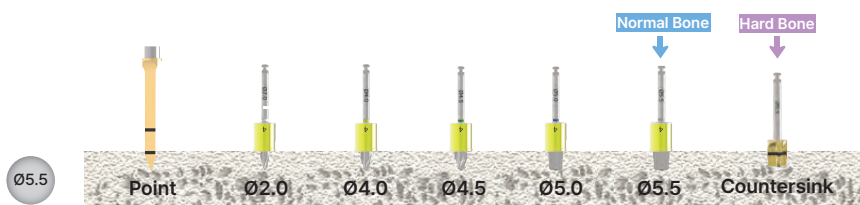
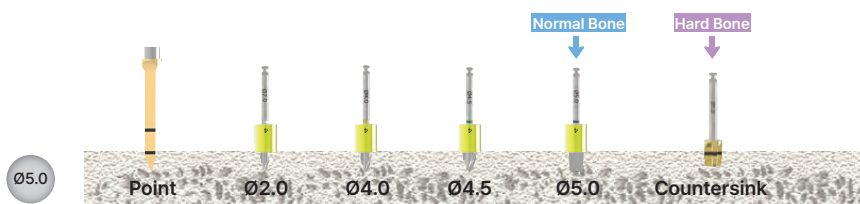
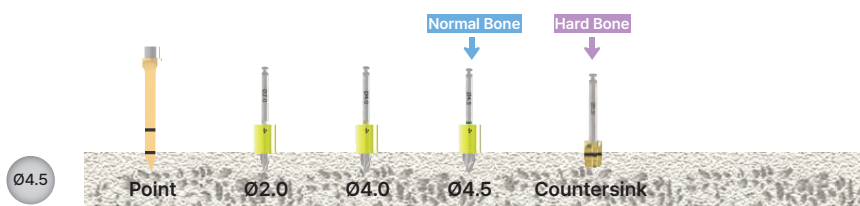
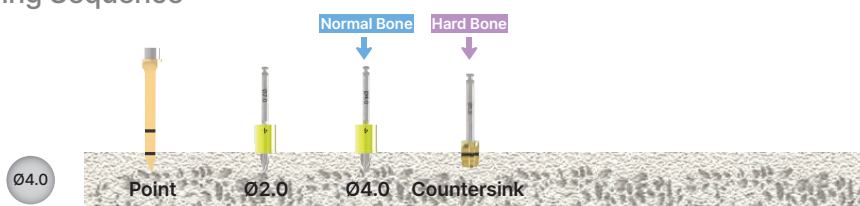
Actual drill length: Fixture + 0.5 mm.



Diameter band

- Ø2.0
- Ø4.0
- Ø4.5
- Ø5.0
- Ø5.5
- Ø6.0

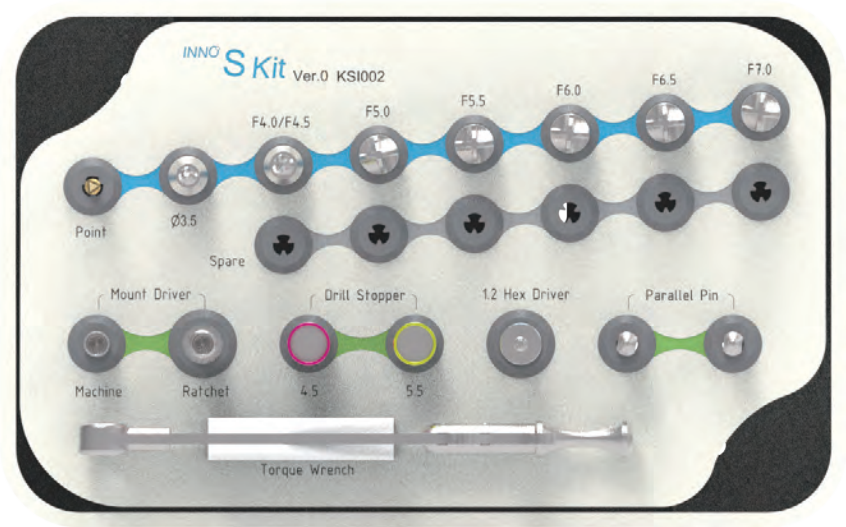
Drilling Sequence



INNO S Surgical Kit [KSI002]



- > For INNO S (Sub.).
- > A simple surgical kit primarily used with drills and stoppers.



Point Drill

Point Drill

KPD01S

Initial Drill

Ø3.5

KISID35

Final Drill

F4.0 / F4.5

KISFD4045

F5.0

KISFD50

F5.5

KISFD55

F6.0

KISFD60

F6.5

KISFD65

F7.0

KISFD70

Stopper

4.5mm Drill Stopper

KISDS45

5.5mm Drill Stopper

KISDS55

Parallel Pin

Parallel Pin

KISPP001

Mount Driver

M. Mount Driver. L

KMMD06L

R. Mount Driver. L

KRMD19L

Hex Driver

1.2 Hex Driver L

KHD1221

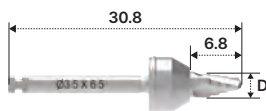
Torque Wrench

KTW001

* Standard Product.

Optional Product.

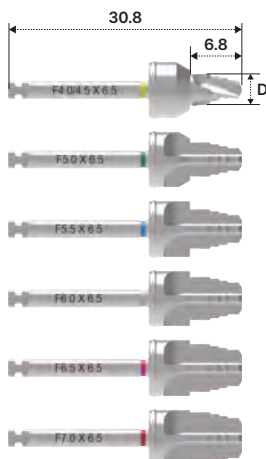
Initial Drill



Diameter	3.5
KISID35	

> Expands the hole formed after using Point Drill to guide Final Drill stably.

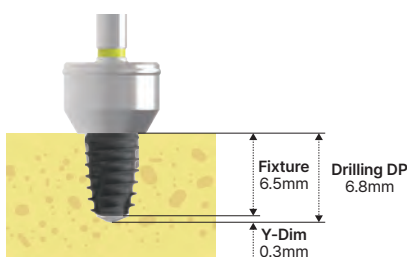
Final Drill



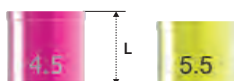
Diameter	Ø4.2	Ø4.6	Ø5.2	Ø5.8	Ø6.3	Ø6.8
	KISFD4045	KISFD50	KISFD55	KISFD60	*KISFD65	*KISFD70

*Optional product.

- > Drill according to drilling sequence for Fixture.
- > Control drilling depth with Stopper based on Fixture depth.
- > In dense bone, use Final Drill with one-step larger diameter for drilling.

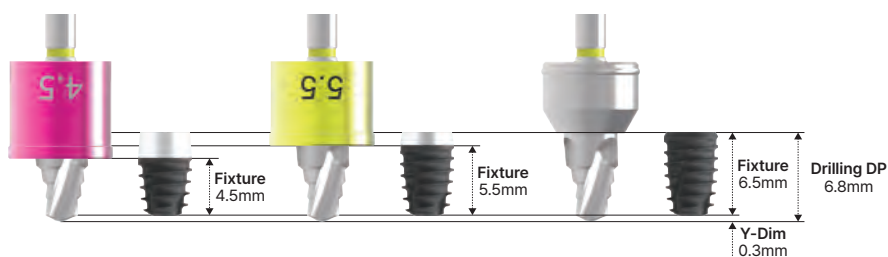


Stopper

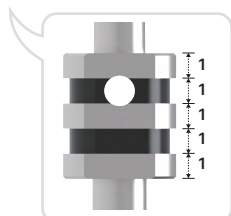
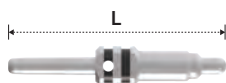


Length	7.5	6.5
	KISDS45	KISDS55

> Used to control the drilling depth.



Parallel Pin



Length	25
	KISPP001

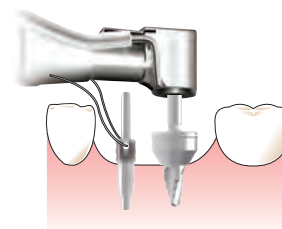
- > Insert after Point or Initial drill to check the drilling path.
- > To prevent losing Parallel Pin in the patient's mouth, be sure to tie dental floss through the hole in Parallel Pin.

Marking lines for checking gingival height (1–5 mm). Each line represents 1 mm for accurate soft tissue level.

After Point Drill



After Initial Drill



INNO Narrow Surgical Kit [KNA001]



- > For INNO Narrow (Sub-N.).
- > A simple surgical kit primarily used with drills and stoppers.



Point Drill



Point Drill
KNPD20

Initial Drill



Ø2.2 Twist Drill
KNSD22L

Final Drill



Ø2.6 Twist Drill
KNSD26L



Ø3.1 Twist Drill
KNSD31L



Ø3.3 Twist Drill
KNSD33L

Depth Gauge



KDG001

Torque Wrench



KTW001

Stopper



8 Drill Stopper
KNDS08



10 Drill Stopper
KNDS10



12 Drill Stopper
KNDS12

Countersink



Ø3.1 Countersink
4KCS31N



Ø3.3 Countersink
4KCS33N

Fixture Driver



Fixture Driver (Ratchet)
KHDS01XN



Fixture Driver (Machine)
KMMS01XN

Parallel Pin



Parallel Pin
KPP003

Path Gauge



Path Gauge
KFPG01N

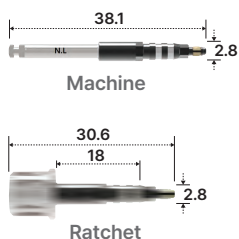
Hex Driver



1.2 Hex Driver L
KHD1221

*  Standard Products.
 Optional Products.

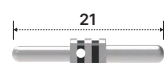
Fixture Driver



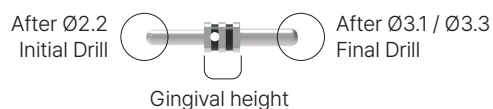
Type	Machine	Ratchet
	KMMS01XN	KHDS01XN

- > Used for the installation of No-Mount type fixtures.
- > Machine Driver is used with contra-angle handpieces, while Ratchet Driver is used with Torque Wrench.
- > For Pre-Mount type fixtures, use Mount Drivers (Optional Products).

Parallel Pin



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



Path Gauge



Diameter	Ø3.1
Length	17
	*KFPG01N

- > Path verification and gingival height measurement after implant placement.

*Optional product



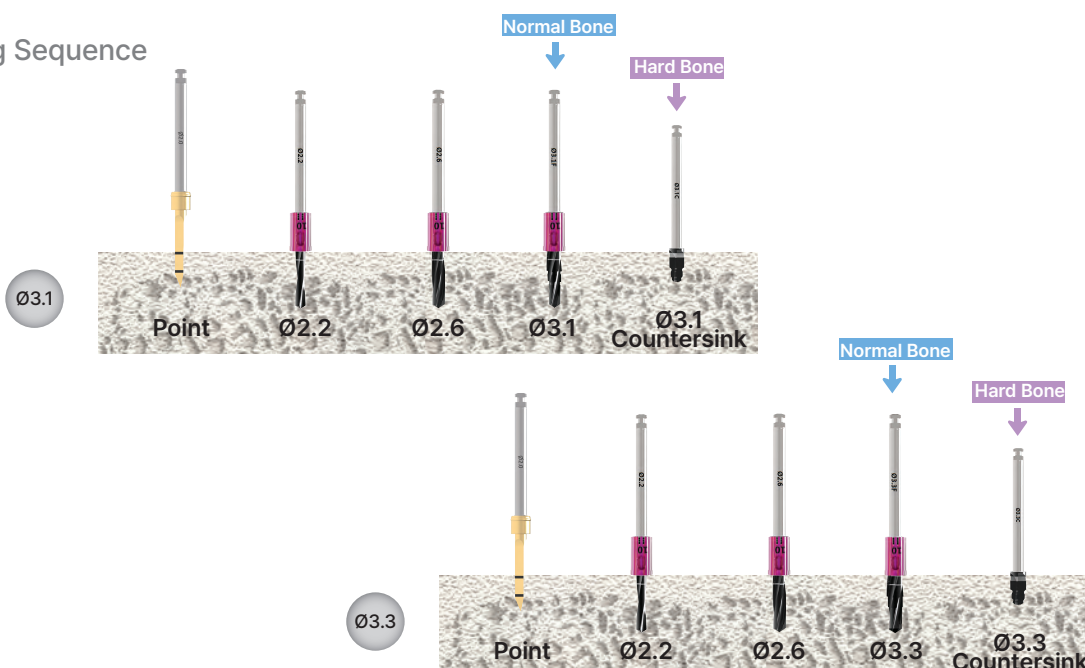
Marking lines for checking gingival height (1-5 mm). Each line represents 1 mm for accurate soft tissue level.



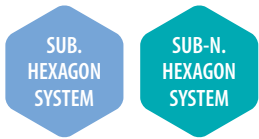
*** Connection identified by the marking on the top of the product.**

- R - INNO Submerged
- N - INNO Narrow

Drilling Sequence



INNO Prosthetic Planning Kit [KIPP001]



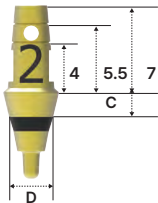
- > For INNO Submerged and Submerged Narrow Implant Systems (Sub. / Sub-N.):
INNO Submerged, INNO X, INNO V, INNO Short, and INNO Narrow.
- > Try-in kit for determining abutment specifications.



Straight Abutment Gauge > Predicting Straight Type Diameter, Cuff, and Length to help select the correct size abutment and crown.

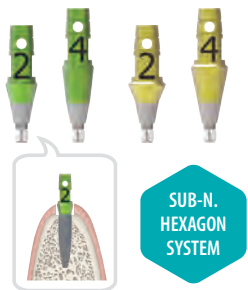


- **Anti-Drop Stopper**
Prevents accidental drop into the oral cavity by tying dental floss through its hole.
- **Cuff Markings**
Marked as Cuff 2 or 4.
- **Cuff Height**
Select Cuff 2 or 4 depending on the case.
- **Diameter**
Color coded by diameter.



Type	Regular		
Diameter	Ø4.5	Ø5.5	Ø6.5
Cuff / Length	7		
2	P2SCH4527	P2SCH5527	P2SCH6527
4	P2SCH4547	P2SCH5547	P2SCH6547

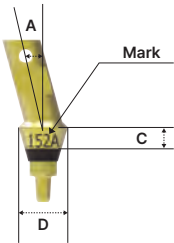
- > Packing unit: 1 Straight Abutment Gauge.
- > For INNO Submerged, INNO X, INNO V, and INNO Short.
- > Try-in gauge for straight-type abutments (Ø4.5 / 5.5 / 6.5).



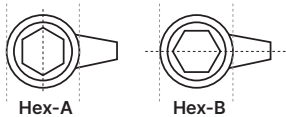
Type	Narrow	
Diameter	Ø3.8	Ø4.5
Cuff / Length	7	
2	PSCH3827N	PSCH4527N
4	PSCH3847N	PSCH4547N

- > Packing unit: 1 Straight Abutment Gauge.
- > For INNO Narrow.
- > Try-in gauge for straight-type abutments (Ø3.8 / 4.5).

Angulated Abutment Gauge



> Helps predict the appropriate diameter, length, and cuff height for angulated-type abutments.



Type	Hex-A	
Diameter(Angle)	Ø4.5(15°)	Ø4.5(25°)
Cuff / Length	8	
2	P2SAH45152A	P2SAH45252A
4	P2SAH45154A	P2SAH45254A

Type	Hex-B	
Diameter(Angle)	Ø4.5(15°)	Ø4.5(25°)
Cuff / Length	8	
2	P2SAH45152B	P2SAH45252B
4	P2SAH45154B	P2SAH45254B

- > Packing unit: 1 Angulated Abutment Gauge.
- > For INNO Submerged, INNO X, INNO V, and INNO Short.
- > Try-in gauge for angulated-type abutments (15°/25°).
- > Select Hex-A or Hex-B depending on the fixture placement direction.



Type	Hex-A			
Diameter(Angle)	Ø3.8(15°)	Ø3.8(25°)	Ø4.5(15°)	Ø4.5(25°)
Cuff / Length	8			
2	PSAH38152NA	PSAH38252NA	PSAH45152NA	PSAH45252NA
4	PSAH38154NA	PSAH38254NA	PSAH45154NA	PSAH45254NA

Type	Hex-B			
Diameter(Angle)	Ø3.8(15°)	Ø3.8(25°)	Ø4.5(15°)	Ø4.5(25°)
Cuff / Length	8			
2	PSAH38152NB	PSAH38252NB	PSAH45152NB	PSAH45252NB
4	PSAH38154NB	PSAH38254NB	PSAH45154NB	PSAH45254NB

- > Packing unit: 1 Angulated Abutment Gauge.
- > For INNO Narrow.
- > Try-in gauge for angulated-type abutments (15°/25°).
- > Select Hex-A or Hex-B depending on the fixture placement direction.

INNO Prosthetic Instrument Kit [KPA004]



> All-in-one kit for prosthetic components of all types of the INNO Implant System® (Sub. / Sub-N. / Int. / Ext.).



Hex Driver

 12mm KHD1212	 17mm KHD1215	 23mm KHD1221	 29mm KHD1227	 39mm KHD1239	 Short KMD12S	 Long KMD12L
Ratchet					Machine	

Torx A Driver

 Short KRBUD15	 Long KRBUD20	 Ratchet KRMSD15L	 Machine KMMSD21L	 Multi S KMHS01	 Multi A KMHA01
Multi Driver & Holder			Holder		

Straight/Solid/Shoulder Driver

 Short KRR12S	 Long KRR19L	 Short KRW12S	 Long KRW19L	 Short KRLRD18	 Long KRLRD28
Regular		Wide		Lock Driver	

Absolute Driver

 Short KRAD4512S	 Long KRAD4519L	 Short KRAD5512S	 Long KRAD5519L	 Short KRAD6512S	 Long KRAD6519L
Ø4.5		Ø5.5		Ø6.5	

Sonator Driver & Tool

 Ratchet Driver SONRD19L	 I&R Tool SONIR002
---	---

Ball Driver & Tool

 Ratchet Driver KRB19L	 I&R Tool KBIR01
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Torque Wrench

 KTW001



MINI PLUS Implant System™

MINI PLUS Cement / Ball

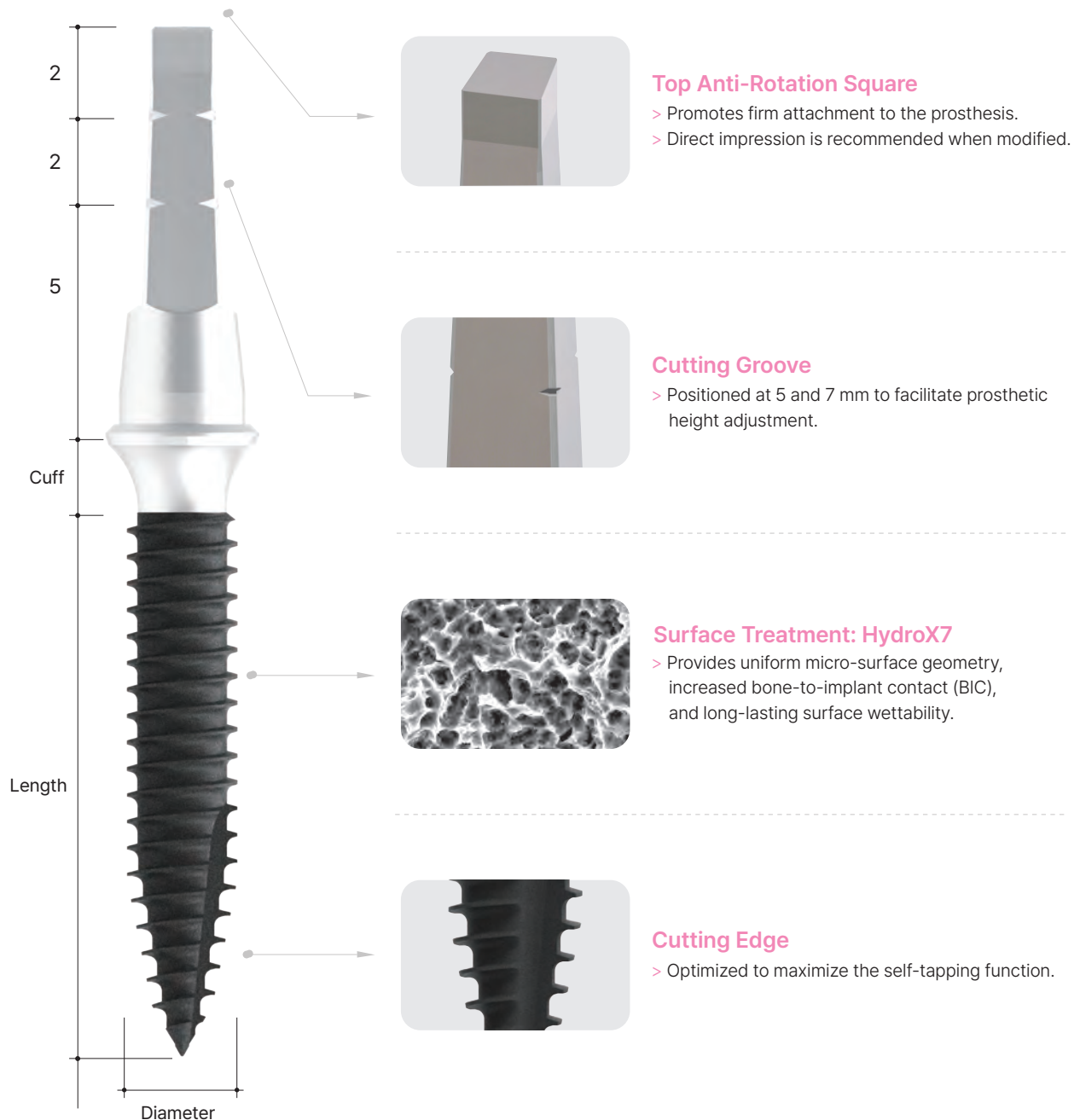


MINI PLUS Cement Type(1C.)

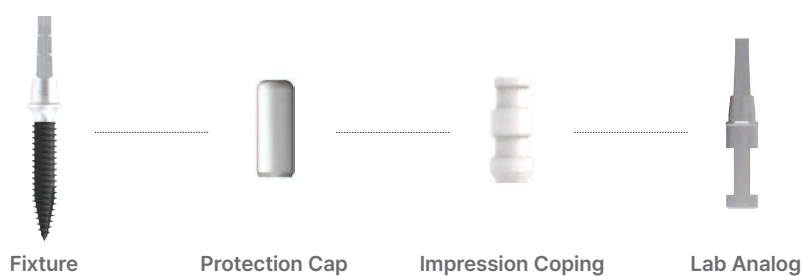
• Cement Type Design Concept Overview



- > Type: 1 Body Cement.
- > Surface Treatment: HydroX7.
- > Material: Unalloyed Titanium Gr4 (ASTM F67).
- > For narrow mandibular anterior spaces and edentulous arches.
- > Suitable for semi-permanent or temporary solutions.



System Flow



Fixture



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

- > Packing unit: 1 Fixture.
- > Abutment (Fixture Post)-level impression.



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

- > Packing unit: 1 Fixture.
- > Abutment (Fixture Post)-level impression.

Impression Coping / Lab Analog



Impression Coping

AMCI001



Lab Analog

AMCL001

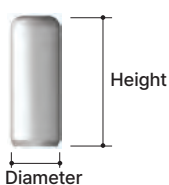
Impression Coping

- > Packing unit: 1 Impression Coping.
- > For closed tray impression.
- > Abutment (Fixture Post)-level impression.
- > Direct impression is recommended when modified.

Lab Analog

- > Packing unit: 1 Lab Analog
- > Replication of the fixture's post shape in the working cast.
- > The same adjustment must be applied when the fixture's post is modified.

Protection Cap



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

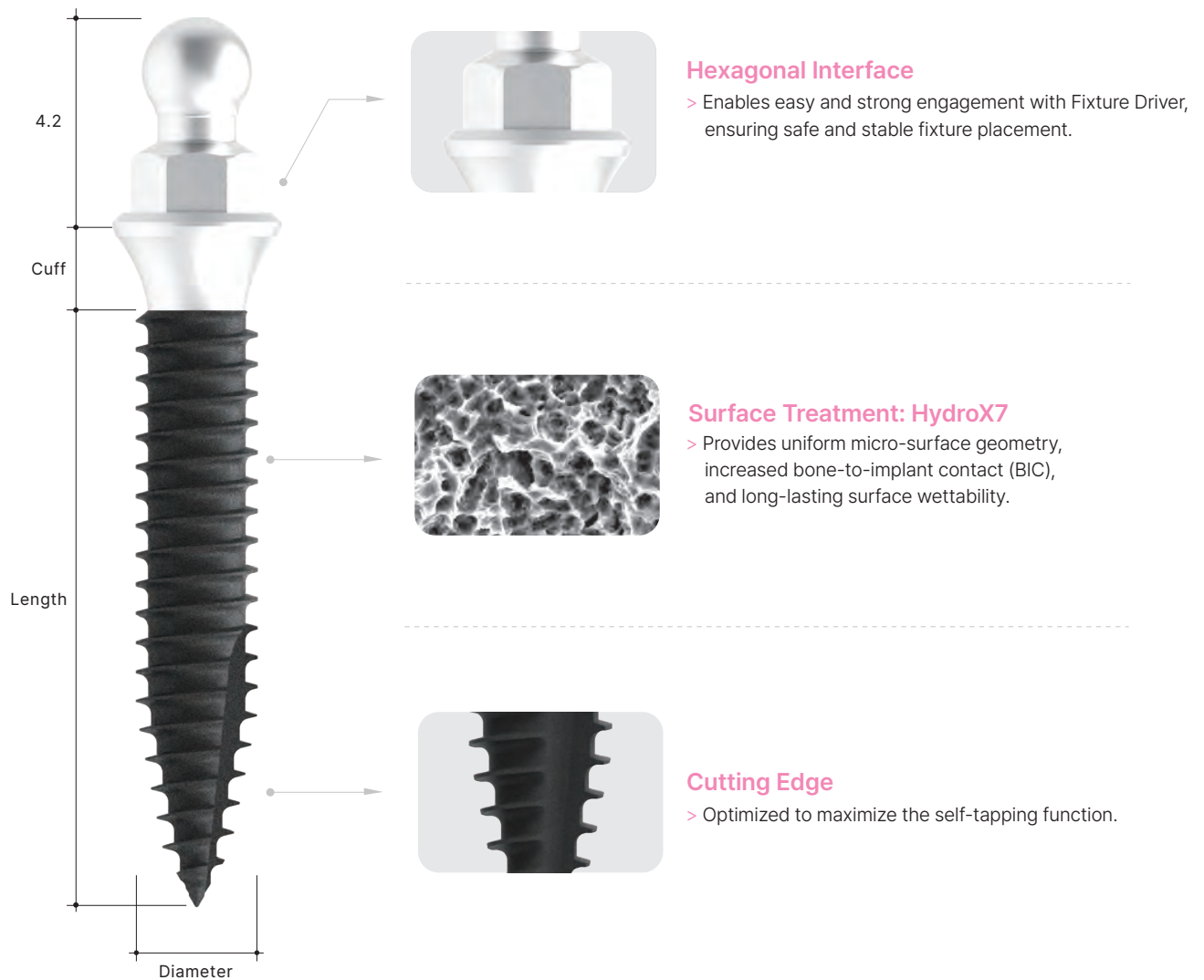
- > Packing unit: 1 Protection Cap.
- > Protection from cheek and tongue for the gingival healing period.

MINI PLUS Ball Type(1B.)

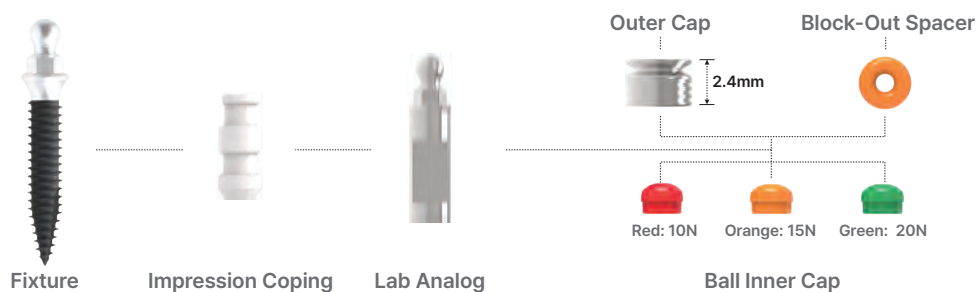
• Ball Type Design Concept Overview



- > Type: 1 Body Ball.
- > Surface Treatment: HydroX7.
- > Material: Unalloyed Titanium Gr4 (ASTM F67).
- > For extremely narrow alveolar ridges requiring basic implant-supported overdenture treatment.
- > Suitable for semi-permanent or temporary solutions.



System Flow



Fixture



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

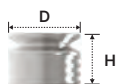
- > Packing unit: 1 Fixture.
- > Abutment (Fixture Post)-level impression.



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

- > Packing unit: 1 Fixture.
- > Abutment (Fixture Post)-level impression.

Ball Outer Cap



Diameter	Ø3.4
Height	
2.4	BATC003C

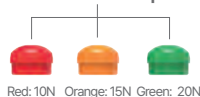
- > Packing unit: 2 Outer Caps.

Ball Inner Cap

Block-Out Spacer



Ball Inner Cap



Code
BATC003I

- > Packing unit: 6 Inner Caps (2 per color) + 2 Block-Out Spacers.
- > Inserted and removed with Ball I&R Tool.

Impression Coping / Lab Analog



Impression Coping

AMBI001



Lab Analog

AMBL001

Impression Coping

- > Packing unit: 1 Impression Coping.
- > For closed tray impression.
- > Abutment (Fixture Post)-level impression.

Lab Analog

- > Packing unit: 1 Lab Analog.
- > Replication of the fixture's post shape in the working cast.

Ball I&R Tool

Length	100
	KBIR01

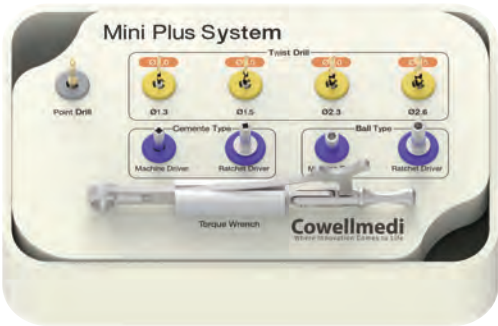


- > Packing unit: 1 Ball I&R Tool.
- > For installing and removing Ball Inner Caps.

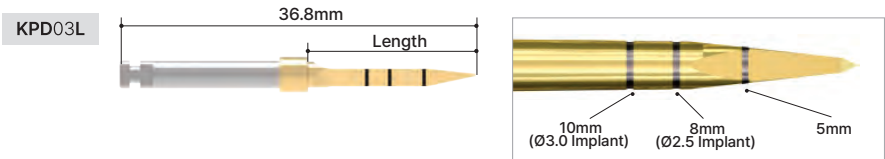
MINI PLUS Surgical Kit [KMA003]



> For both MINI PLUS Cement and Ball Type Systems.



Point Drill

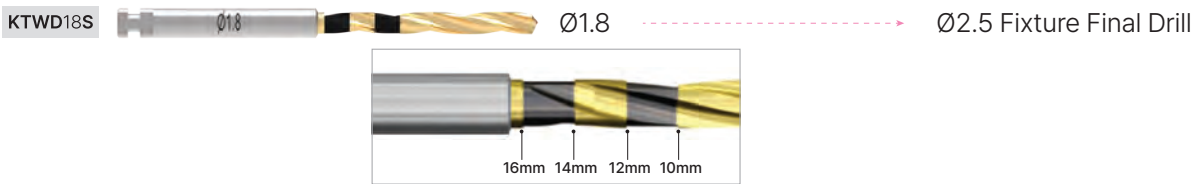


* Facilitates initial drilling by determining the perforation point on the cortical bone.

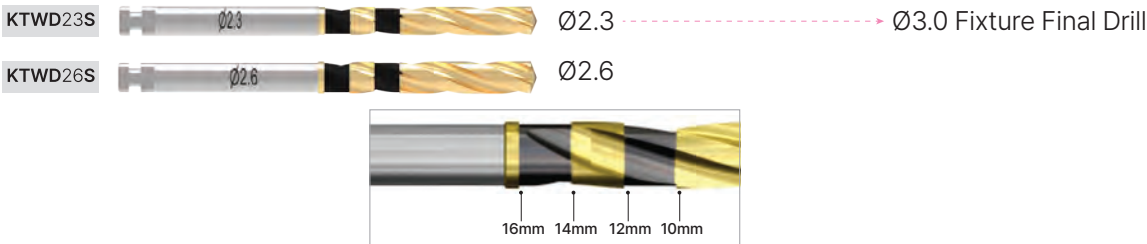
Ø1.3 Twist Drill



Ø1.8 Twist Drill



Ø2.3 / Ø2.6 Twist Drill



Driver

Cement Type



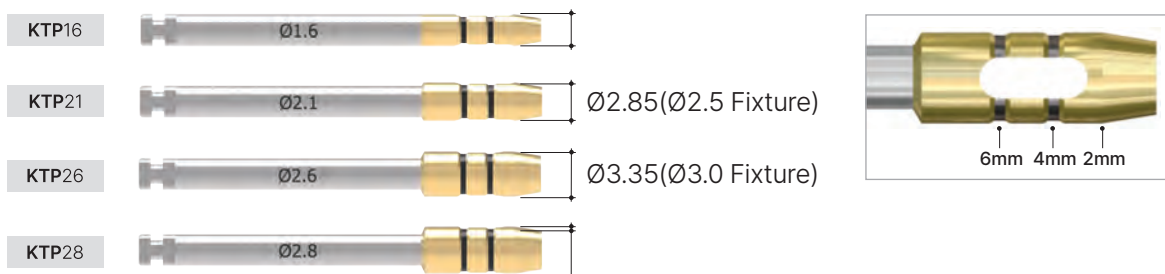
Ball Type



Tissue Punch

*Optional product

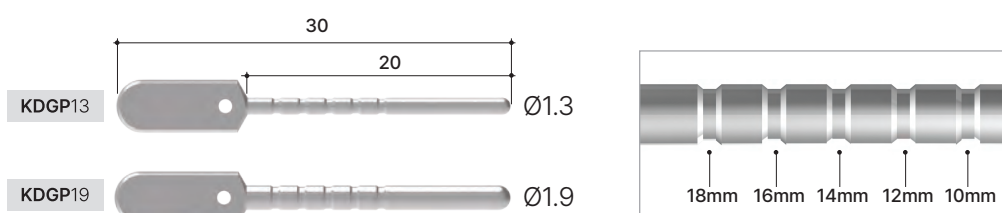
- > Allows easy removal of soft tissue for flapless surgery.
- > 0.3 mm wider than the fixture diameter for more predictable outcomes.



Multi Gauge

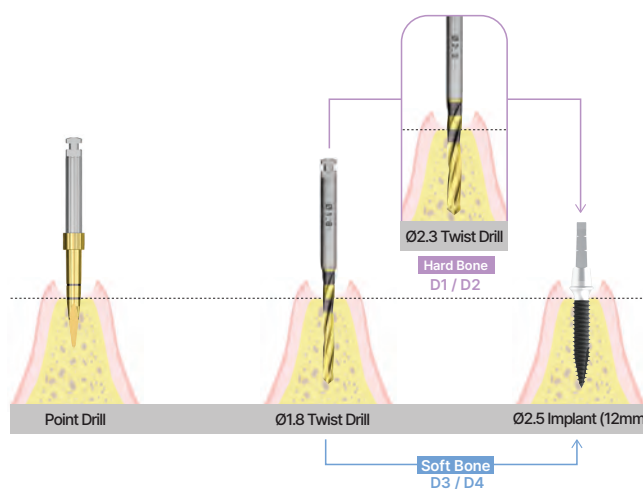
*Optional product

- > Facilitates initial drilling by determining the perforation point on the cortical bone.

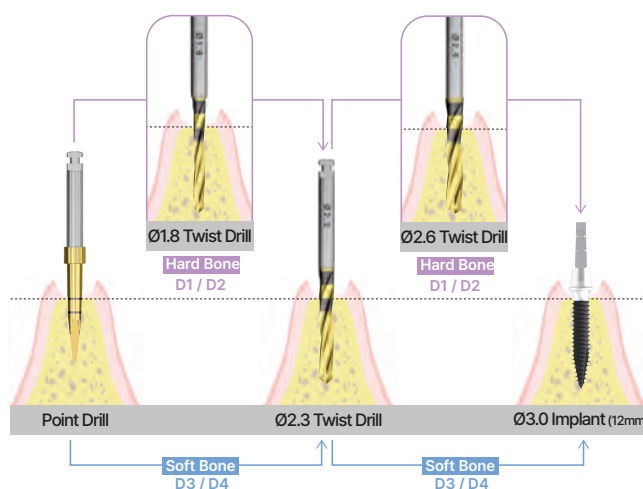


Drilling Sequence

Ø2.5



Ø3.0



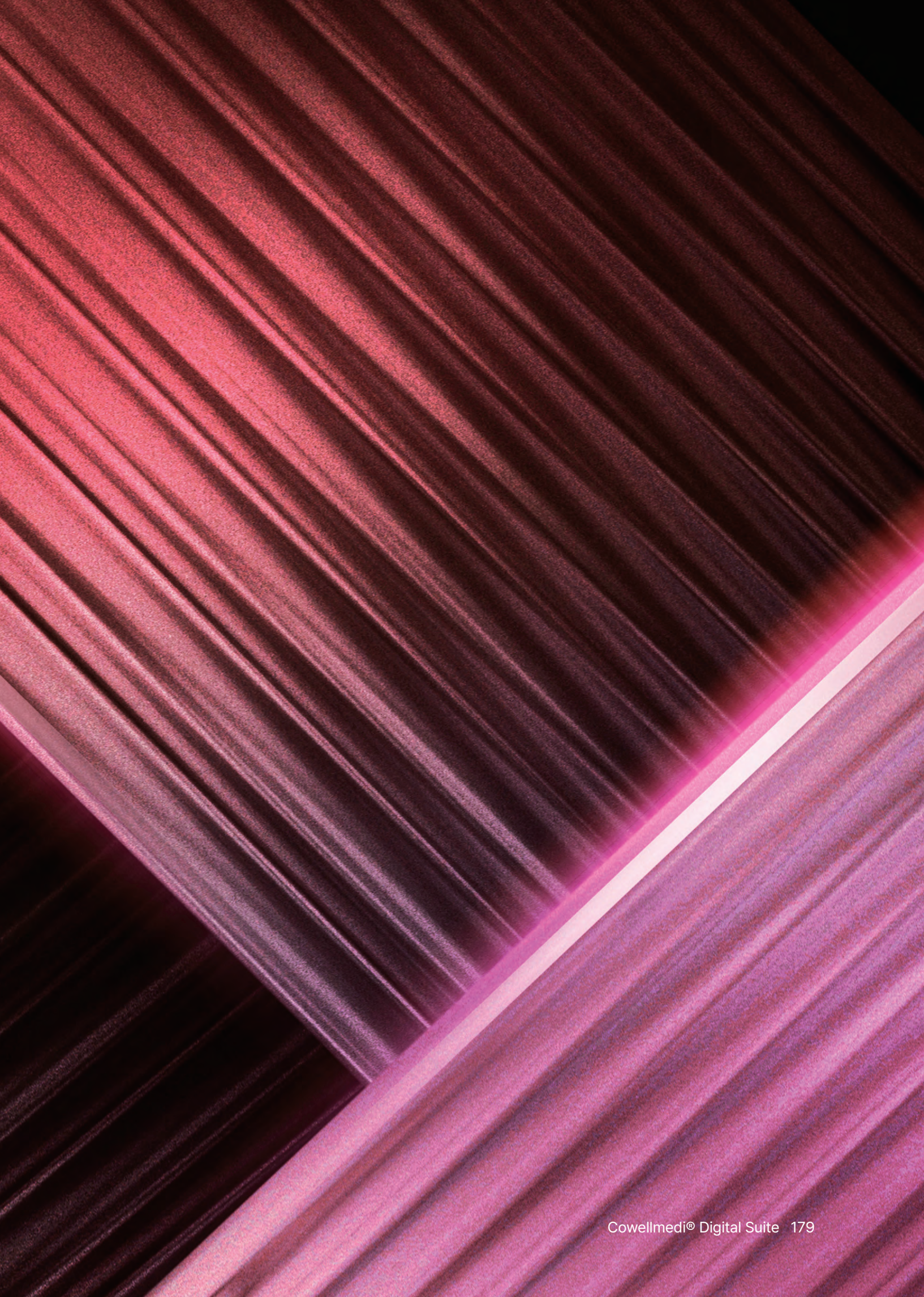
* For bone quality 4, the Mini Plus fixtures should be self-tapped and placed by making proper adjustments in drilling as they have self-tapping characteristics, and their diameter is narrow.



Cowellmedi® Digital Suite

From Insight to Action - All Digital

• INNO PLAN	180
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• Digital Guided Surgery Kits	
Lodestar Plus Kit	190
Lodestar Sinus Kit	206
Lodestar Universal Kit	224
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Hybrid Ti-Base System I	237
Hybrid Ti-Base System II	243
Hybrid Ti-Base System III	249
Hybrid Ti-Base System IV	253
Hybrid Ti-Base System V	258



INNOPLAN

Planned by INNOvation



What is the INNO PLAN?

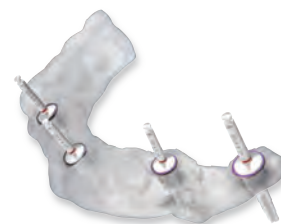
Free software for creating implant planning and surgical guides for Cowellmedi users only

Introduction

Exclusive implant planning and surgical guide production for Cowellmedi users.

Free to Design

Various types of guides can be created, and visualized image data allows for digital implant planning.



Features



Guides



Guide for zygomatics



Bone-Supported Surgical Guide



Tooth-Supported Surgical Guide



Mucosa-Supported Surgical Guide



Stackable guide



Individual Implant Planning

Fixture / Abutment / KIT

Fixture

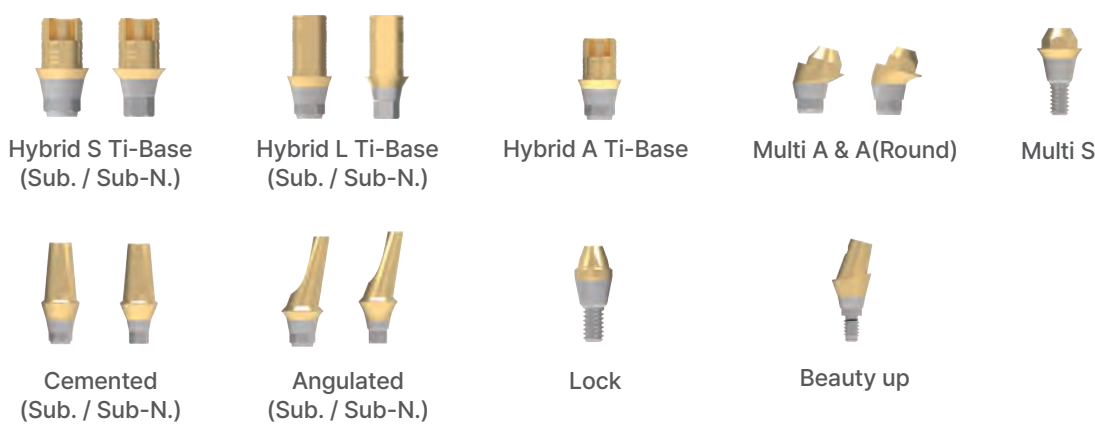
- Submerged type – Planning & Surgical Guide



- Internal & External type – Only Planning



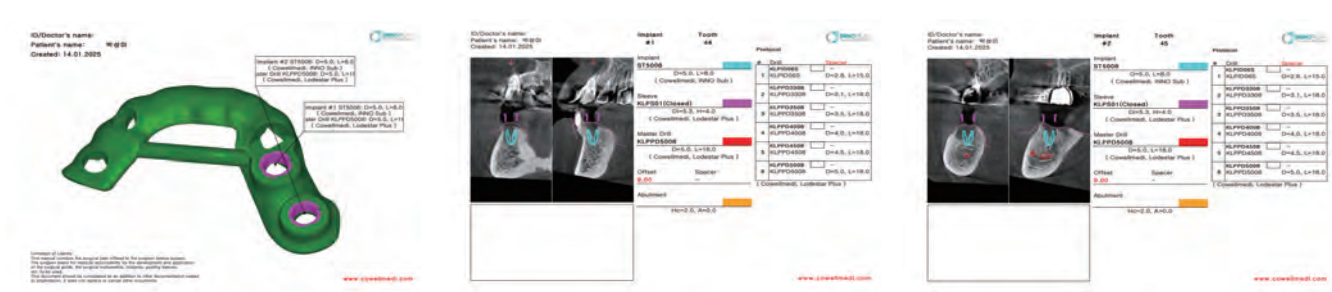
Abutment



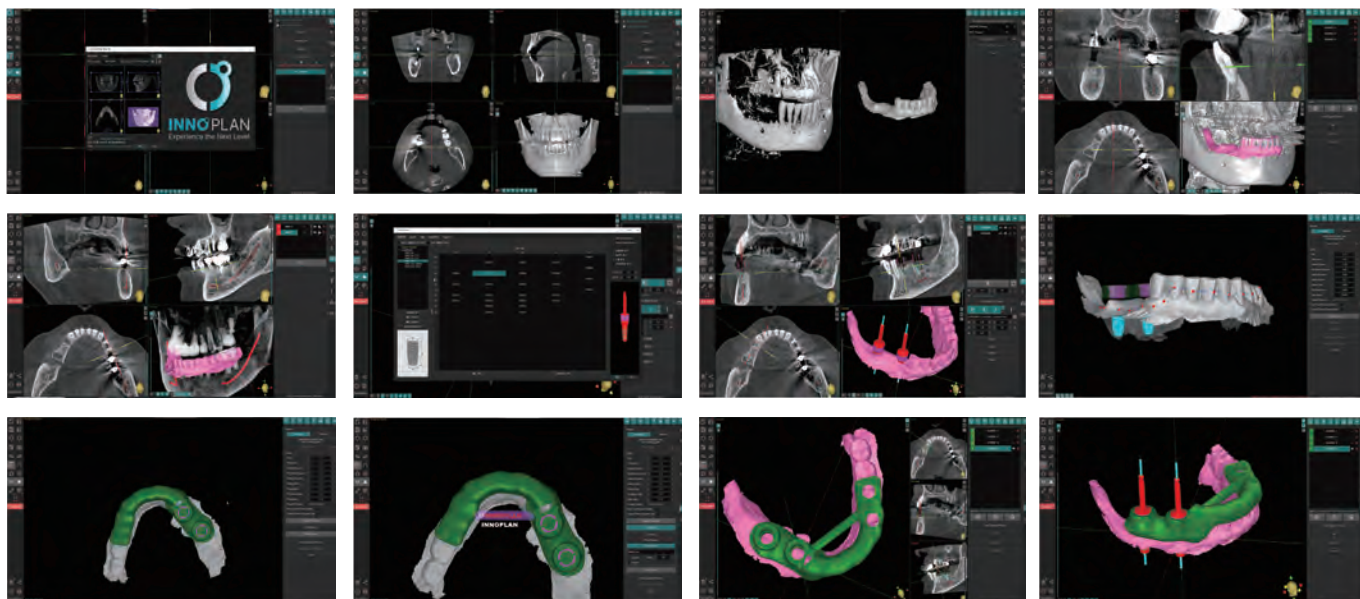
KIT



Surgical Protocol



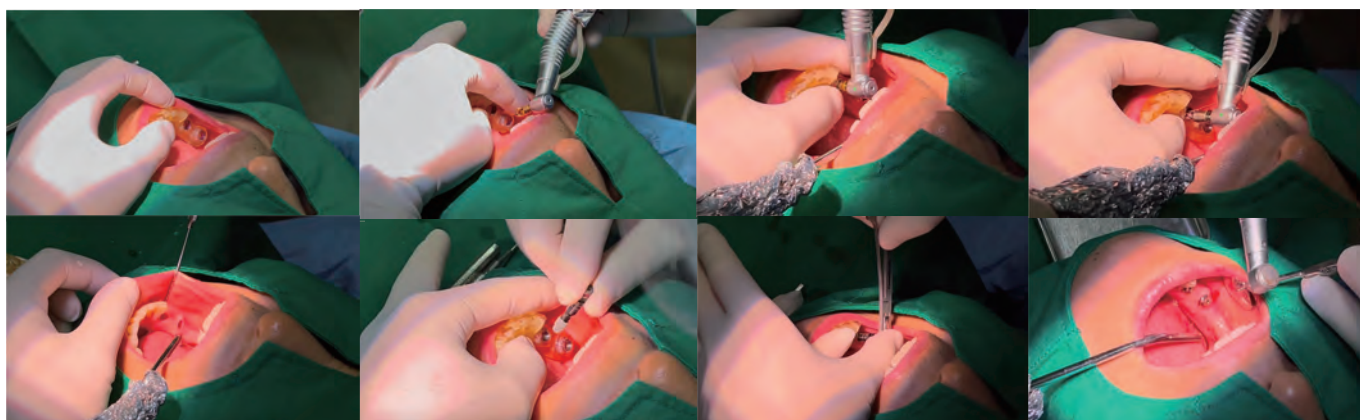
Implant Planning & Guide Design



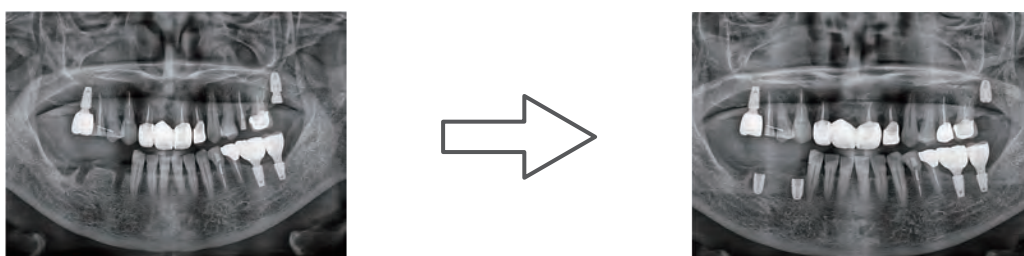
Guide Try-in



Implant Placement



Panorama





*Faster, More Accurate,
Optimized for INNO Implants*



Advanced Scanning Technology

- 16µm High-Precision Scanning Optimized for the INNO Implant Digital Workflow.
- Ultra-lightweight Design at 161.5g for a Comfortable Scanning Experience.
- Fast and Intuitive User Interface.
- Real-tooth Quality with 24-bit Color Rendering.
- 100GB of Free Cloud Storage.



Fast Scanning Performance

Full-arch: under 2 min
Single-arch: under 1 min

01m57s (Device: INNO SCAN / Tip: L)

Duct optimization

Enhanced anti-fogging for improved precision



AI Scan Mode

Automatically removes unnecessary areas during scanning

User-friendly tip

Powder-free
No heating required
LED structured-light imaging



Convenient

Removable & 180° Reversible tip



Durable

Withstand 100 sterilization cycles



Oral-friendly

Improve patient comfort with a smooth, rounded tip design



Two Sizes Tip

L: 16×14mm / S: 12×12mm

New body design

Firm body design with durability
Fresh look with ergonomic design for easier using

Plug & Scan

with only 1 power cable

Software Features



AI Report

Smarter Diagnosis, Better Communication AI Health Report visually presents oral health conditions and treatment plans, streamining doctor-patient communication.



Orthodontic Simulation

AI-powered automatic tooth alignment provides clear orthodontic before-and-after comparisons, helping doctors build patient confidence in treatment plans.

*This feature is only supported by NVIDIA graphics cards.



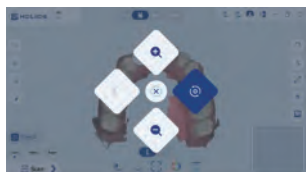
Model Builder

Add bases to 3D models directly within the software, boosting efficiency for orthodontists and making it easier to save and share models.



Cloud Storage

Enjoy 100GB of cloud storage for free, enabling easy order sharing through Cloud.



Air Mouse

Your scanner can also be a mouse to easily manage the software and rotate the 3D models.



Auto/Manual Bite



Enhanced Implant Workflow



Shining Mode



Occlusion Analysis



Undercut Detection



Texture Mapping



Tooth Measurement



Margin Line Drawing



Intraoral Camera



Software Update



Auto AI



Swap Upper and Lower Jaw



Automatic Cuff Detection



3D Viewer



APP List



Bite Refinement Preview

Specification

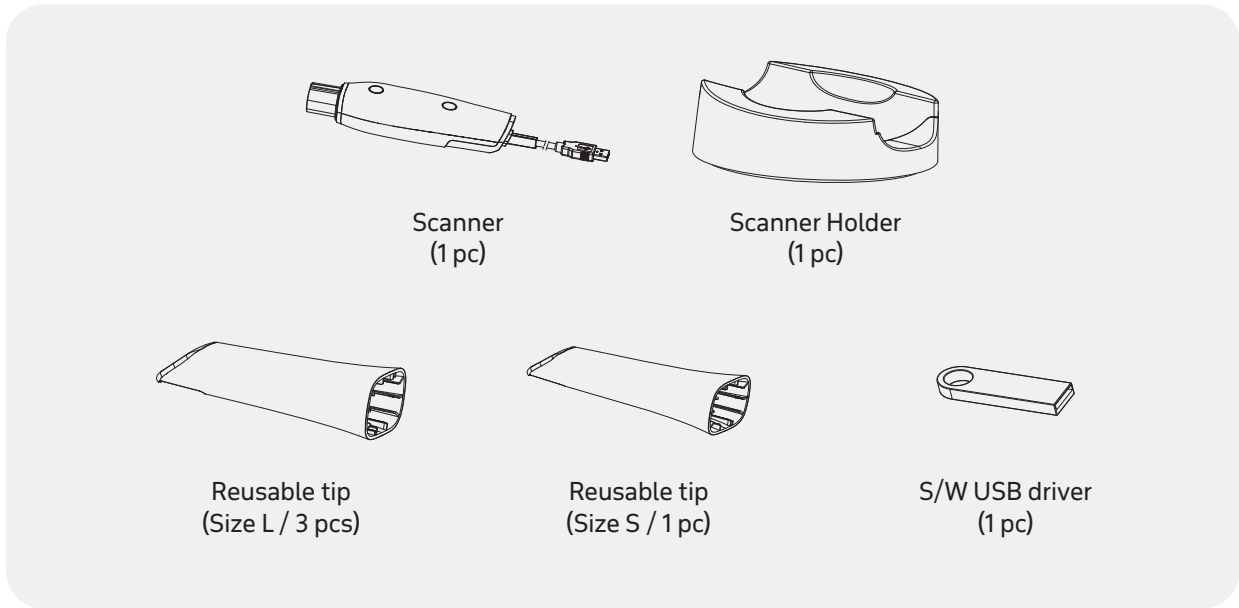
Parameters

Accuracy	Full-arch	16μm
	DOF	20mm
	Scan area	16×14mm(L)*3 / 12×12mm(S)*1
Speed	FPS	30fps
Connectivity	Length	1.8m
	Type	USB 3.0
Calibration	Accuracy calibration	Calibration-free
	Color calibration	Calibration-free
Advanced Mode	Remote control	✓
Data	Output format	STL/PLY/OBJ

Recommended System Requirements

Processor	Intel®Core™ 13th Gen i7-13700 (or equivalent)
Memory	32GB DDR4, frequency 2666 MHz (or better)
Hard Drive	1TB (or more) SSD
Graphics Card	NVIDIA® GeForce RTX™ 3060 (6GB VRAM)
Display	15.6" FHD (1920×1080) (or more)
USB Interface	USB 3.0 or higher, Voltage 4.9V-5.1V, Current 1A
Operation system	Windows 10/11

Package List



Digital Guided Surgery Kits



Lodestar Plus Kit

Exclusive for the INNO Submerged and Submerged Narrow Implant System.



Lodestar Sinus Kit

Safety and Precision in maxillary sinus procedures with the surgical guide template.



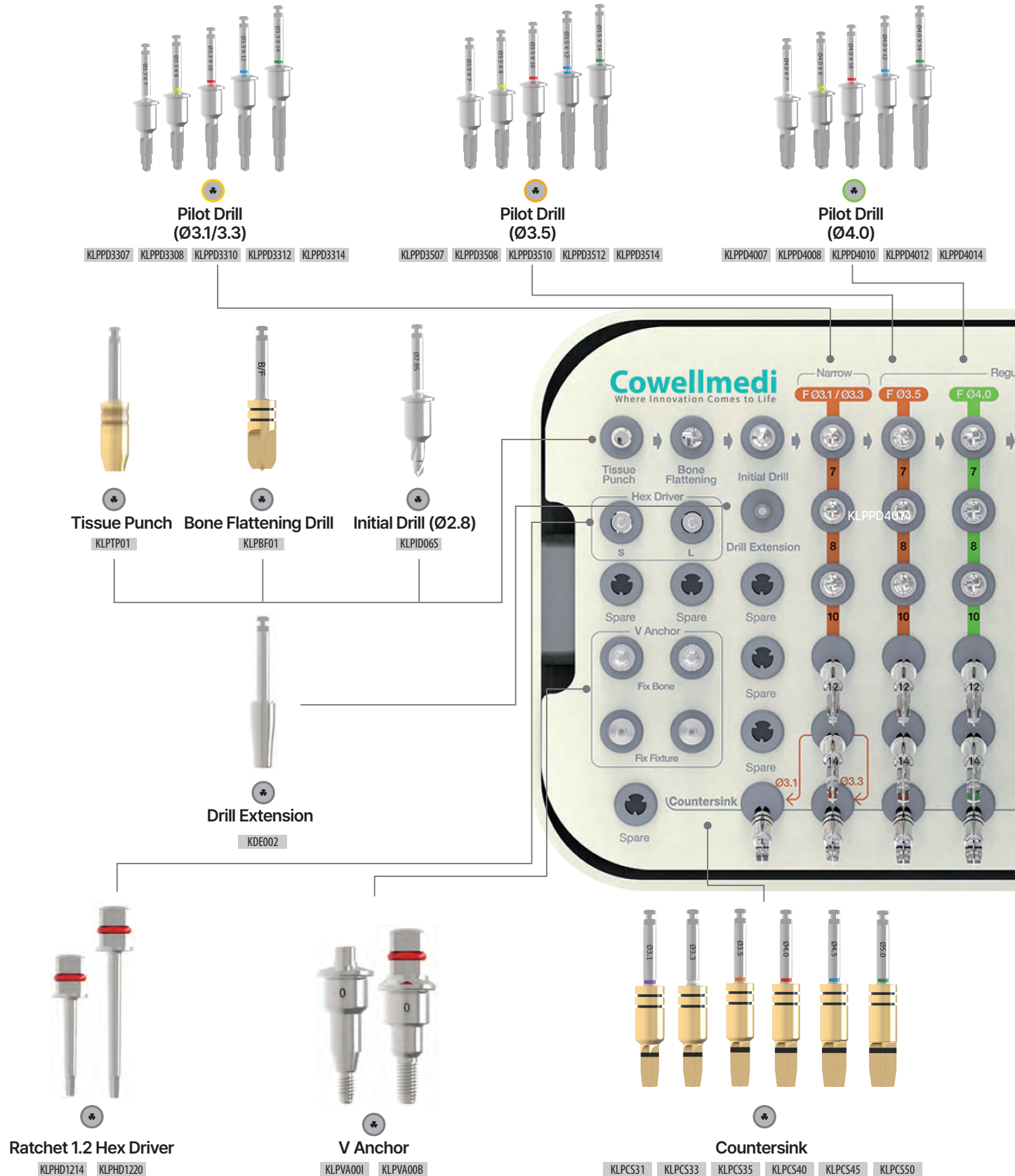
Lodestar Universal Kit

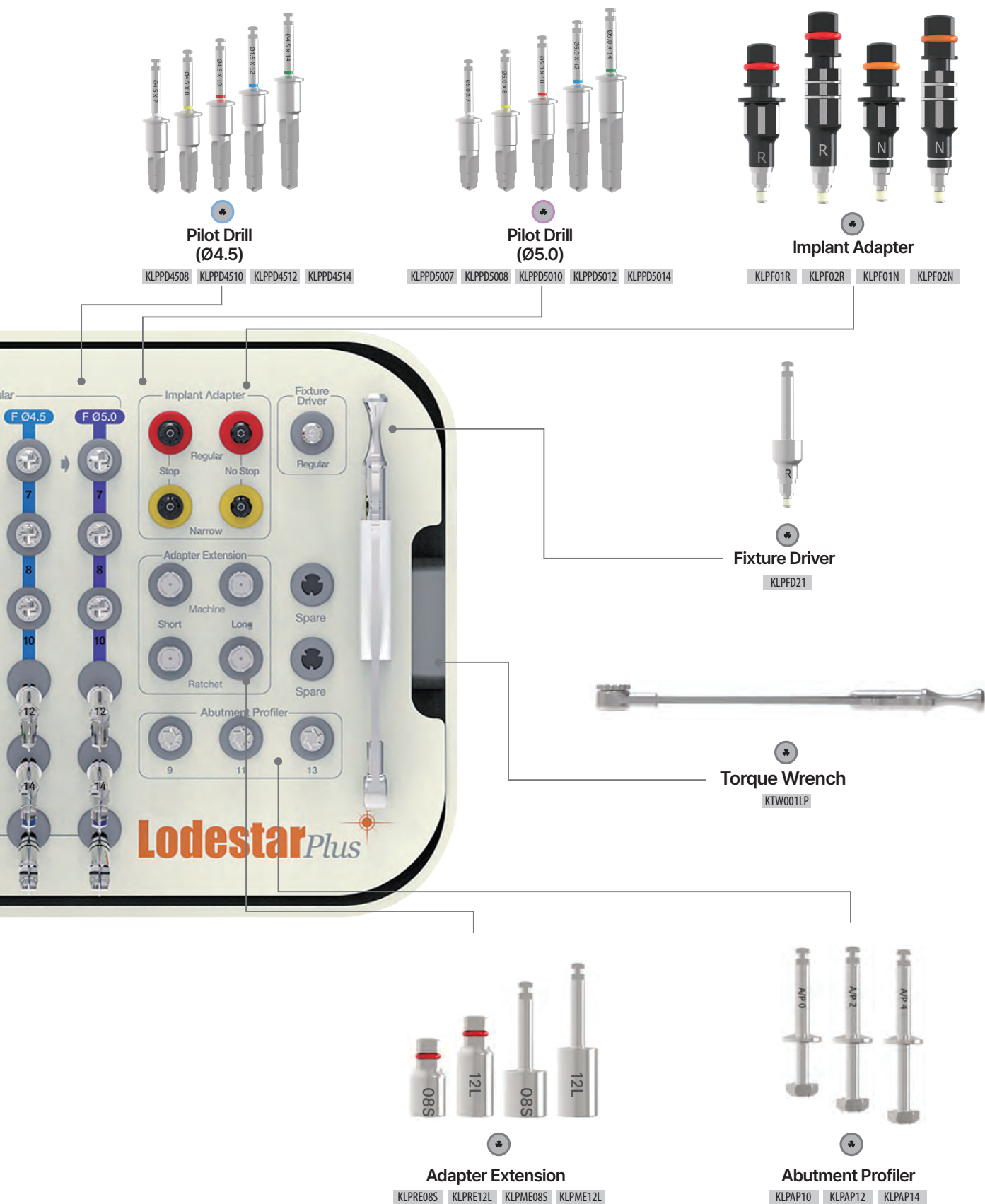
Universal to any Implant System.

Cowellmedi
Where Innovation Comes to Life

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 Cidex OPA, 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 the surgical guide template 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 the marked dental implant is in the surgical report.

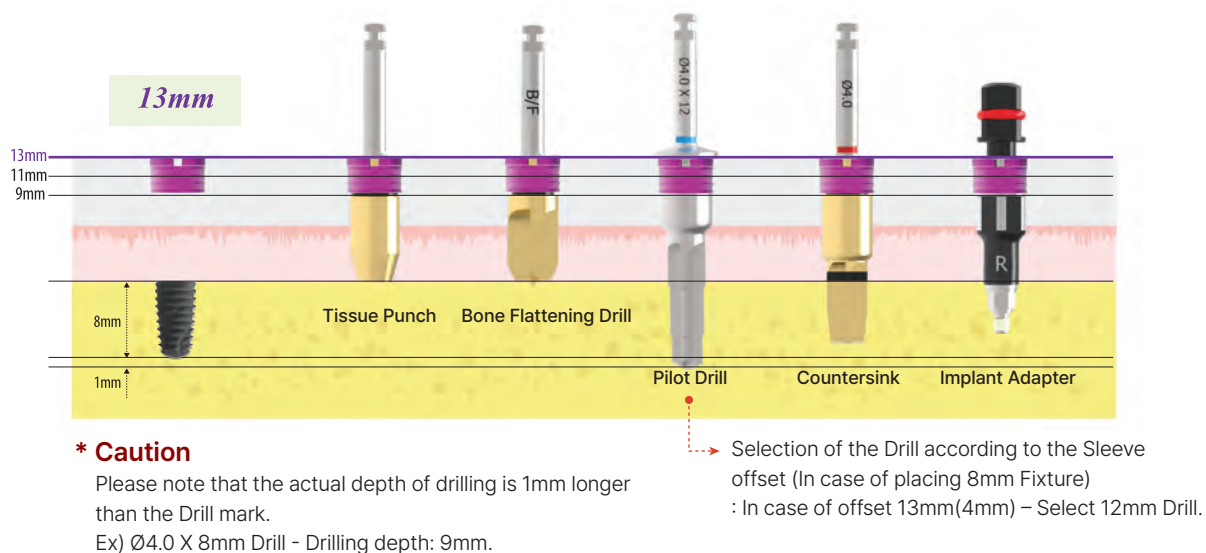
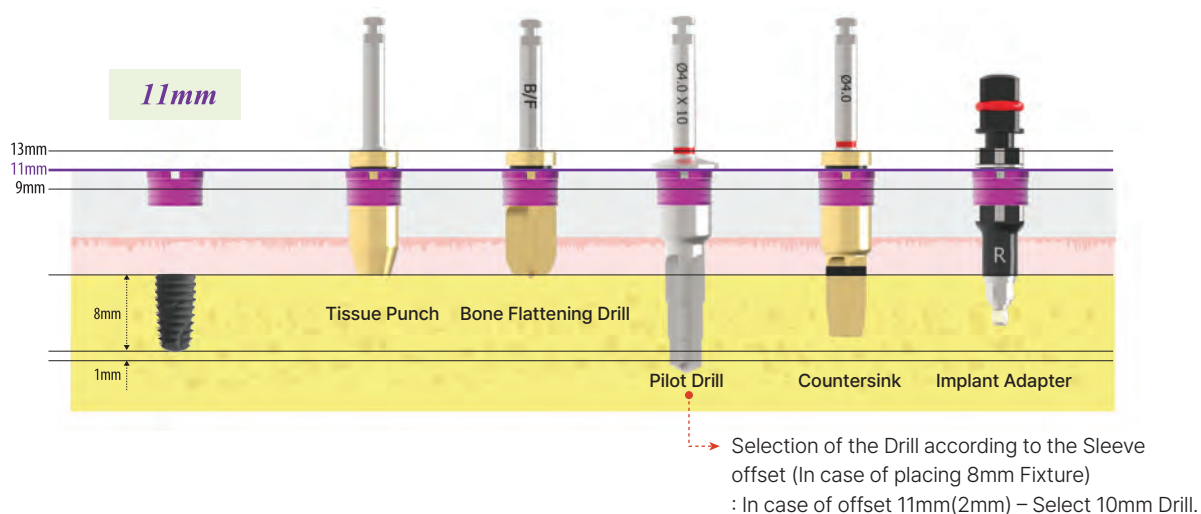
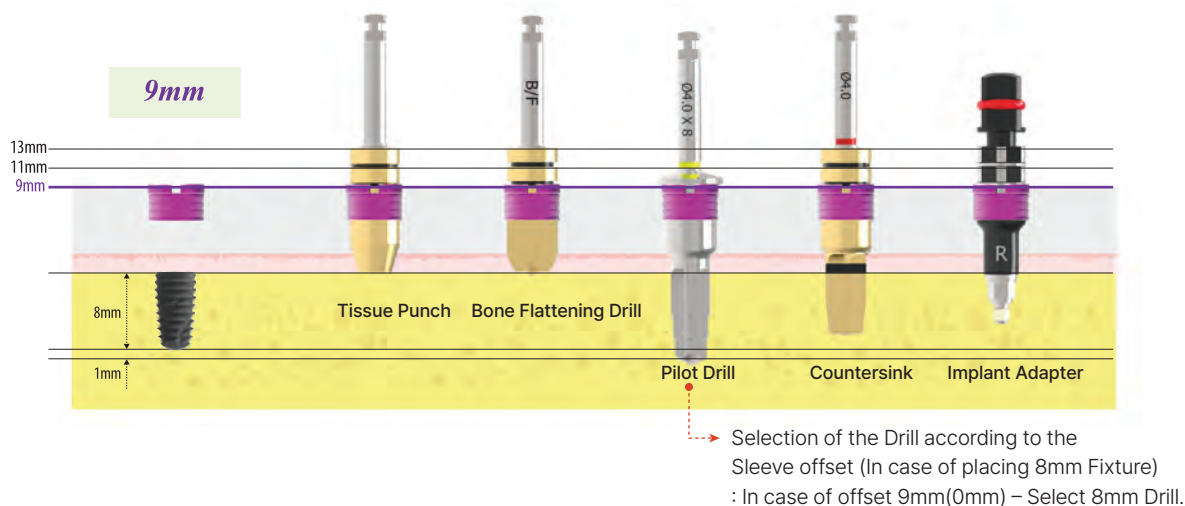


Confirmation of protocol

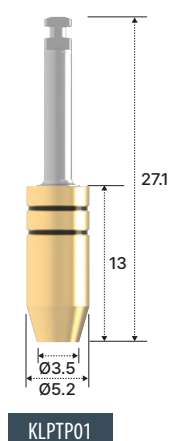
Confirm the surgical report and surgical protocol for sure.

Comprehension and Usage of Offset

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



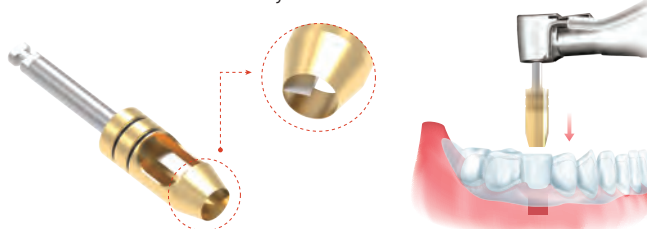
Tissue Punch



- > 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, or fast wound healing effect occurs after the operation due to the small diameter of tissue punch.
- > Able to apply offset (9mm, 11mm, 13mm).
- > 50rpm without irrigation.

Double blade

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



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

Bone Flattening Drill



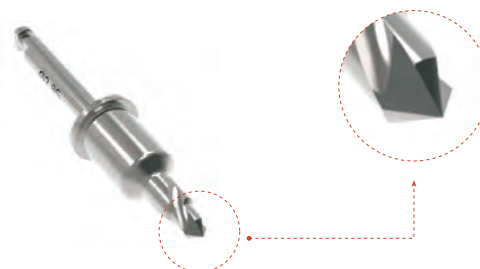
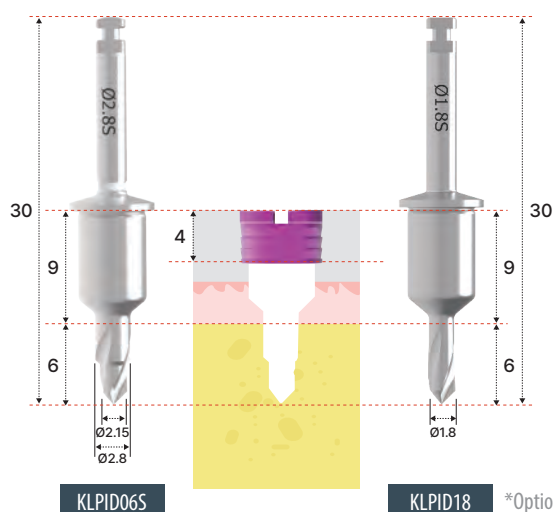
- > Flattens the bone level of the operation site.
- > Inclined bone level may glide the Drill and can not drill as planned.
- > Eliminates the soft tissue after using the Tissue Punch.
- > The point in the middle of the Drill guides the position of the Drill and helps to the drill in an accurate site.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



The point in the middle of the Drill guides the position of the Drill and helps to the drill in an accurate site.

Initial Drill

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



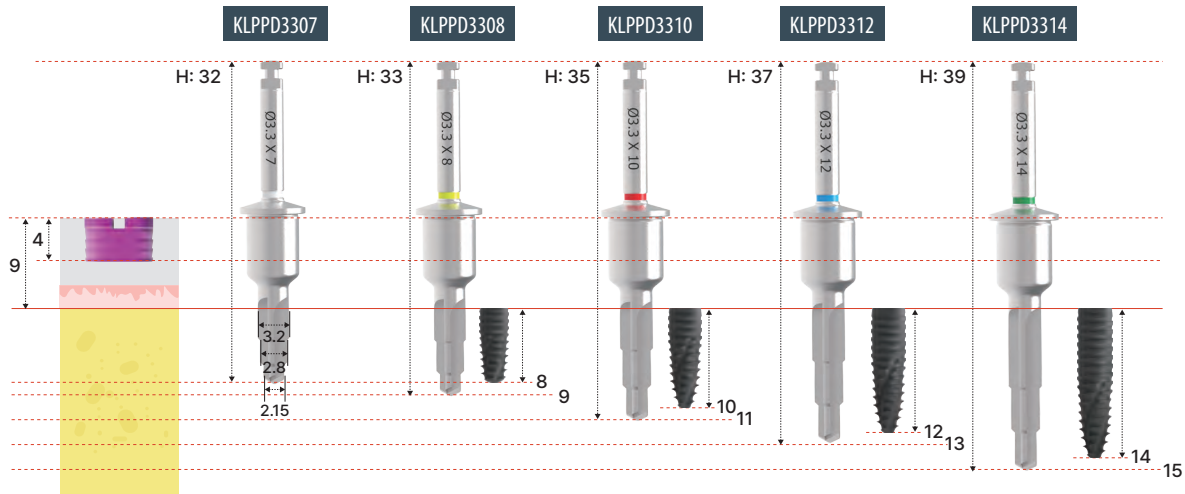
Point

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

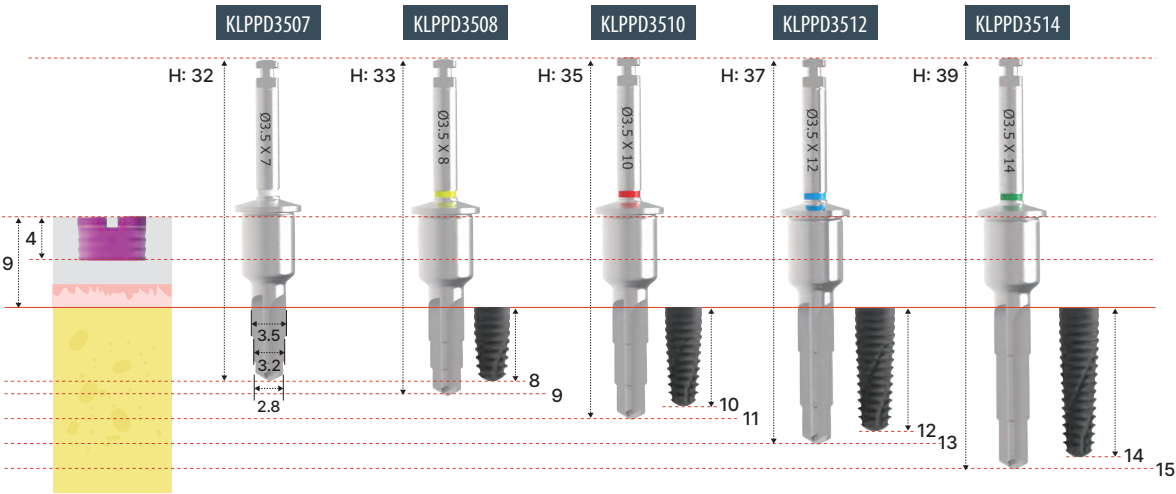
Pilot Drill

> Low speed, 50rpm without irrigation / 50N-cm.

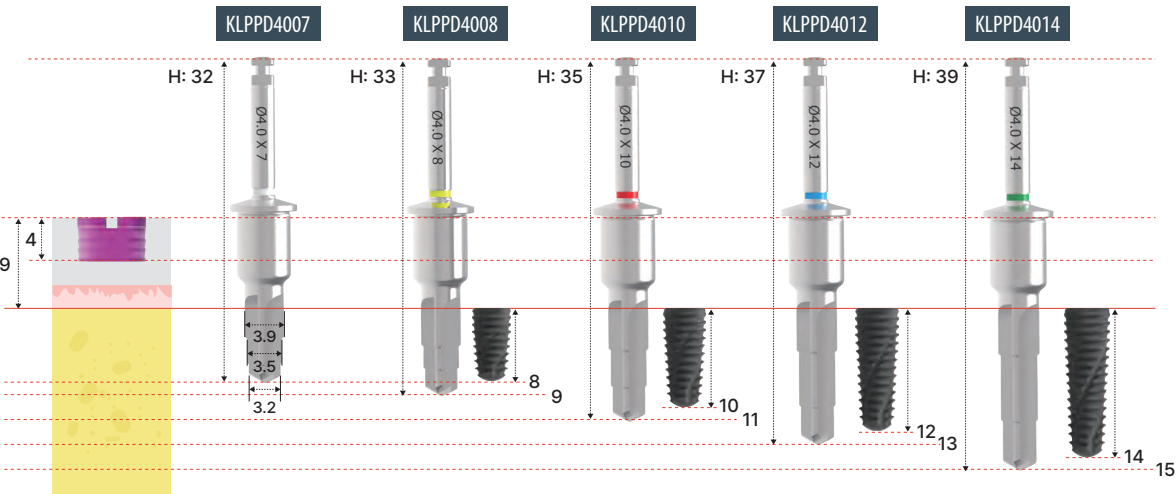
Ø3.1/Ø3.3 Fixture



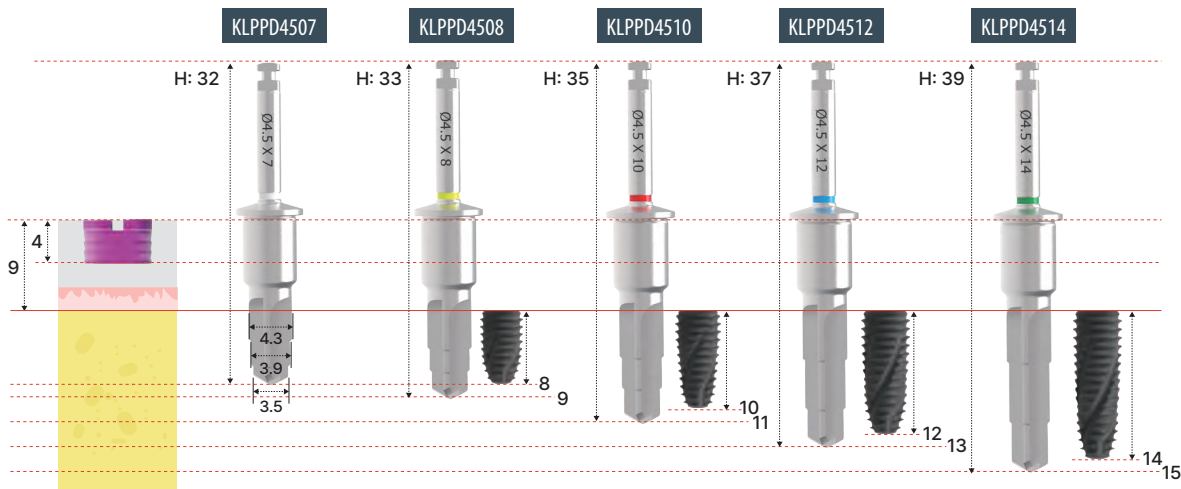
Ø3.5 Fixture



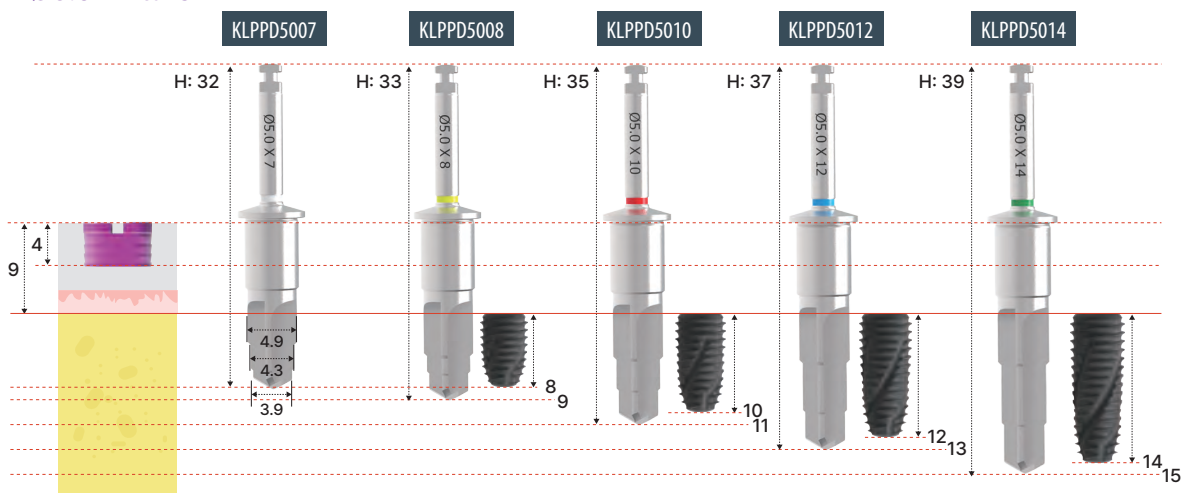
Ø4.0 Fixture



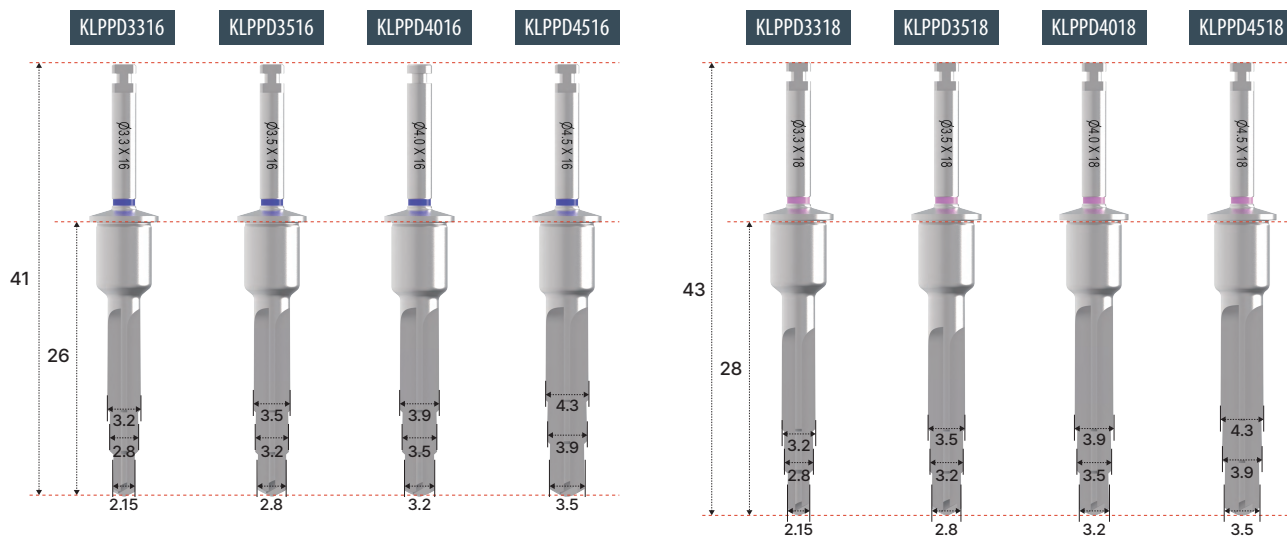
Ø4.5 Fixture



Ø5.0 Fixture

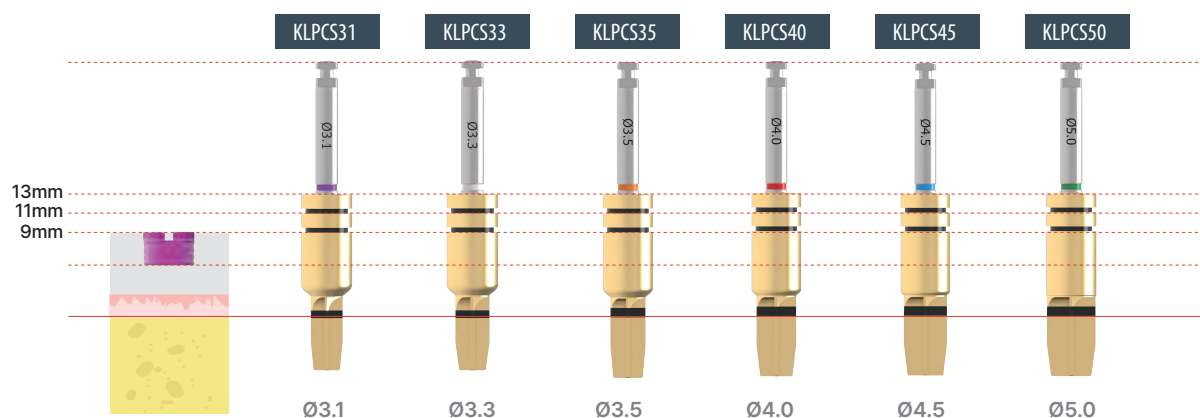


Optional



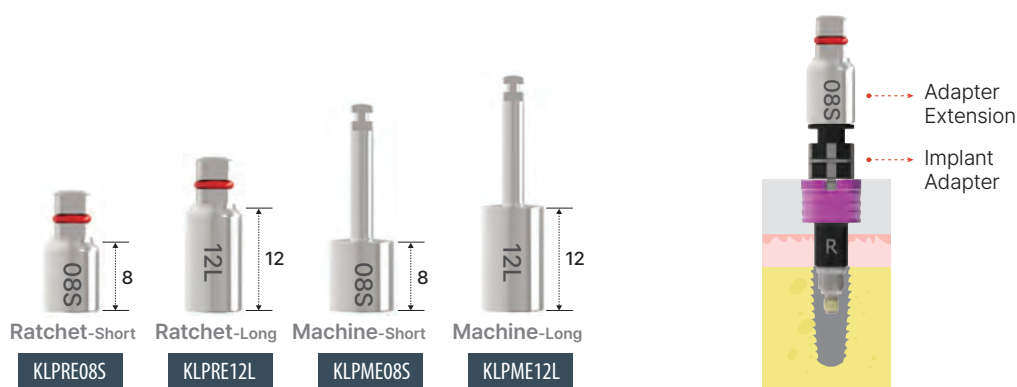
Countersink

- > Expands the cortical bone in D1/D2 bone to prevent excessive implantation of the fixture.
- > Able to apply offset (9mm, 11mm, 13mm).
- > 50rpm 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

- > Moves fixture to the Sleeve to implant safely.
- > Matches the depth of laser marks of the Sleeve offset and the Implant Adapter.
- > When implanting the fixture, the direction of the Implant Adapter and directional identification groove of the Sleeve are matched, and it lines with the hex direction of the 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.

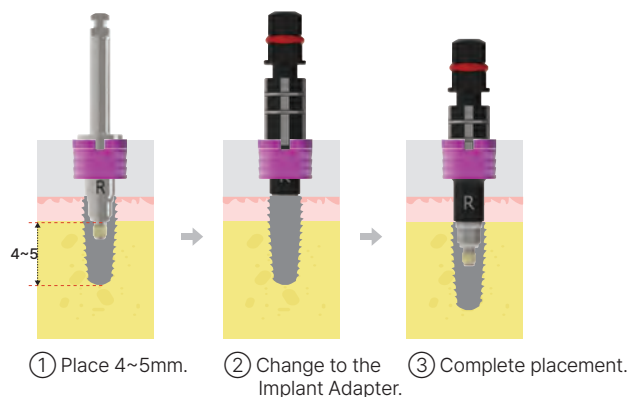


Fixture Driver - Molar



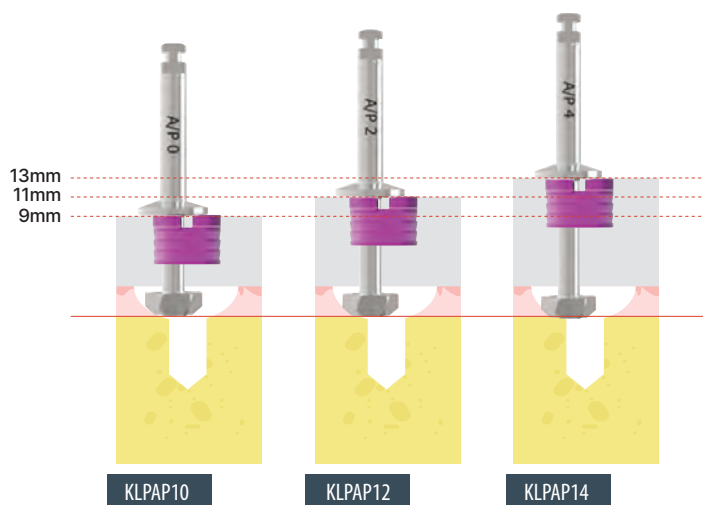
KLPFD21

- > Used in case the Implant Adapter can not be used due to the low occlusal height.
- > After implanting 4~5mm, change to the Implant Adapter to complete the placement.



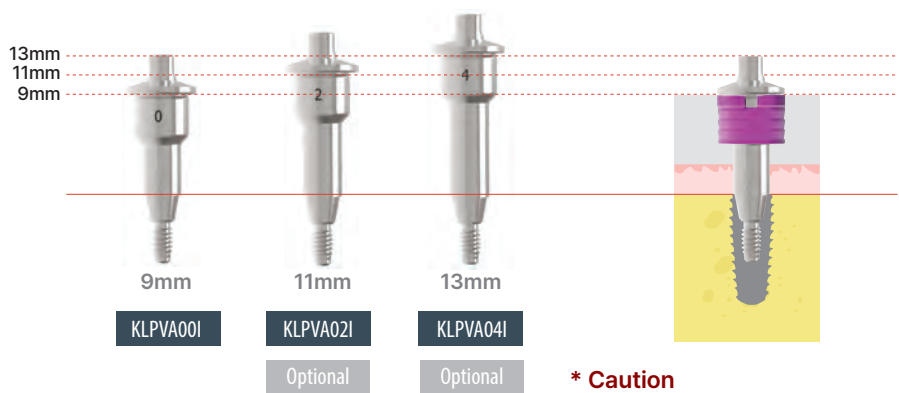
Abutment Profiler

- > Used for the 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, drill higher rpm with irrigation (within 100rpm).



V Anchor - Fix Fixture

> Used with the 1.2 Hex Driver to fix the surgical guide template to the fixture in such cases as edentulous teeth.

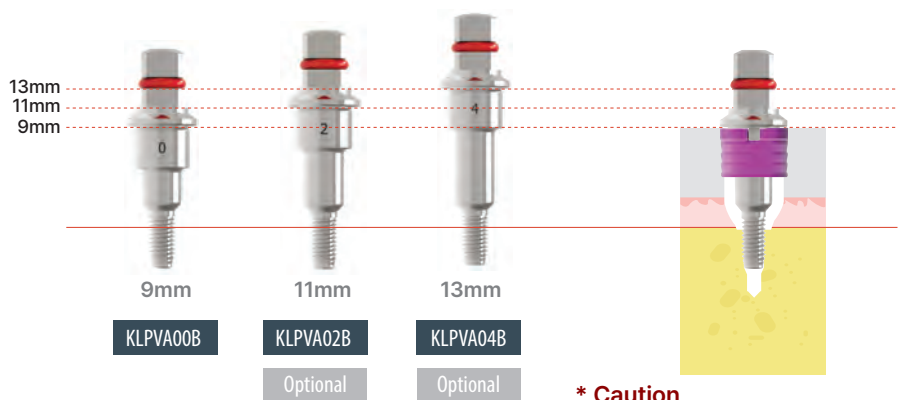


*** Caution**

- > Install by aligning to the Sleeve offset of the placed fixture.
- > The V Anchors for the offset 11 and 13mm in length are extra products.

V Anchor - Fix Bone

> Used with the Torque Wrench to fix the surgical guide template into the hole of the bone created after initial drilling in such cases as edentulous teeth.



*** Caution**

- > Install by aligning to the Sleeve offset of the placed fixture.
- > The V Anchors for the offset 11 and 13mm in length are extra products.

Ratchet 1.2 Hex Driver

> Used to install or remove the Cover Screw, and Healing Abutment.



Torque Wrench(Square)

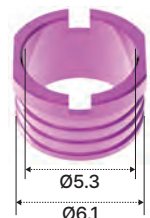
- > Used to control torque force in the fixture and abutment placement.
- > Used with the Implant Adapter, 1.2 Hex Driver, and V Anchor, etc.
- > Torque force 10, 25, 30 & 35N.cm are able to be controlled by pulling the elastic bar.
- > Maximal torque force 120N.cm with pulling the rigid main bar.

KTW001LP



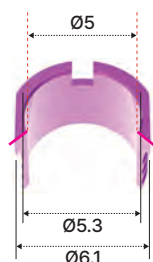
Sleeve

Optional



Closed Sleeve

KLPS01



Open Sleeve

KLPS02

* Packing Unit: 5 Sleeves

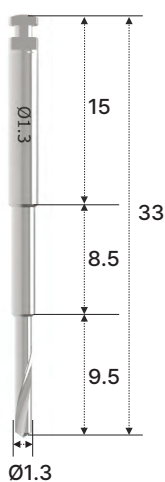
* Packing Unit: 5 Sleeves



Hex-directional identification groove.

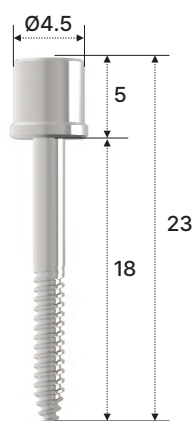
Anchor System

Optional



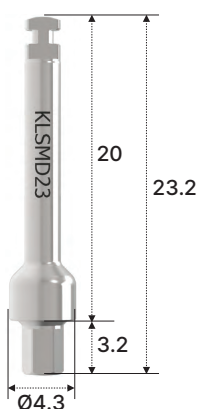
Anchor Drill

KLSAD13



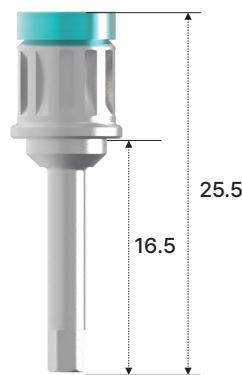
Anchor Screw

KLSAS18



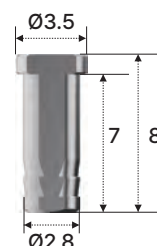
Anchor Driver

KLSMD23



Anchor Driver

KLSRD16



Anchor Sleeve

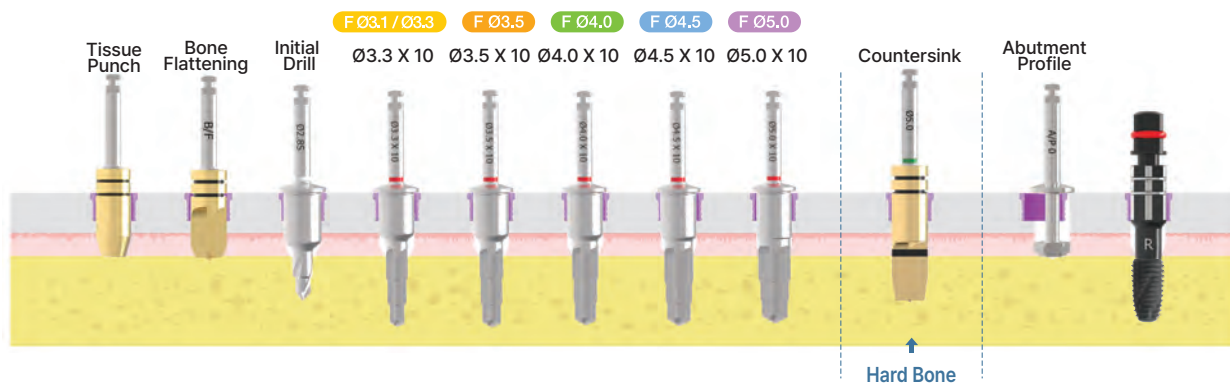
KLSAS01

* Packing Unit: 5 Sleeves

Drilling Sequence

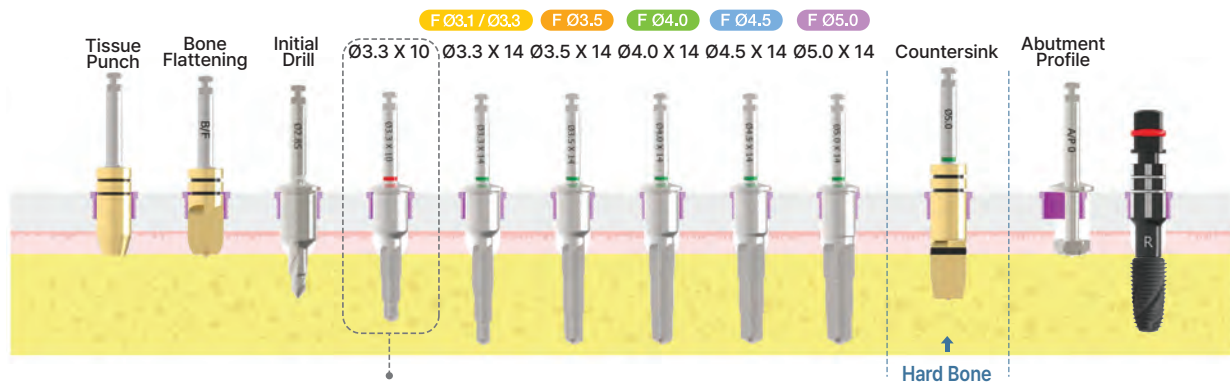
Drilling Sequence (7~10mm)

INNO Sub Fixture Ø5 × 10mm



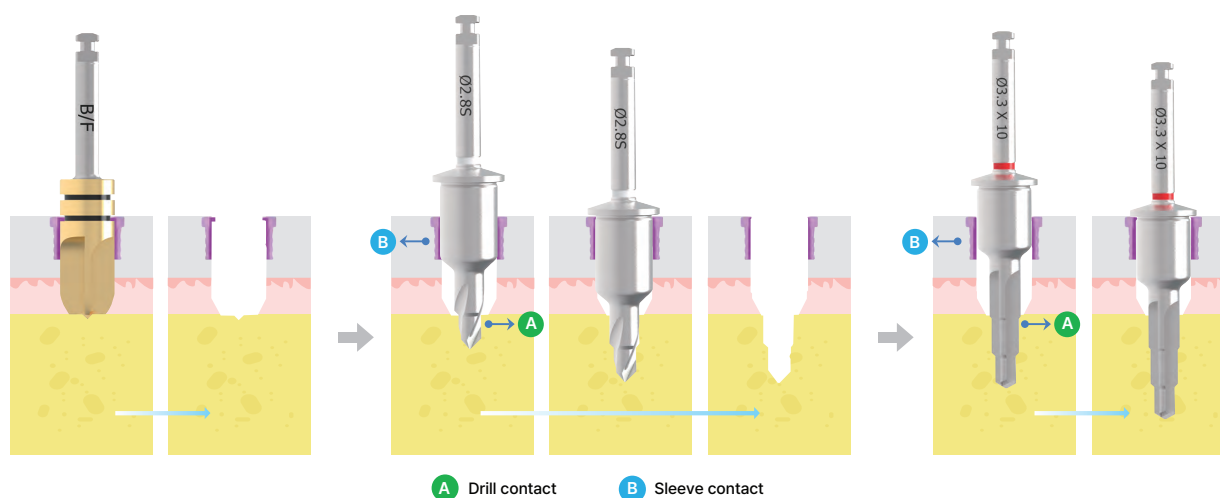
Drilling Sequence (12~14mm)

INNO Sub Fixture Ø5 × 14mm



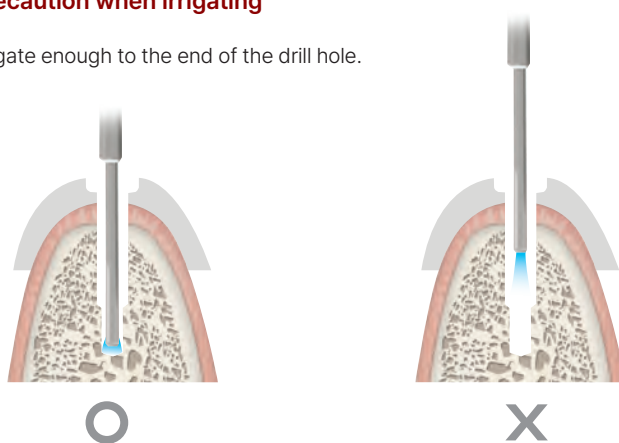
8~10mm drilling should be done in advance for the sleeve contact.

- * Drilling method**
- > Make sure with drilling in the desired direction without a change in the 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.



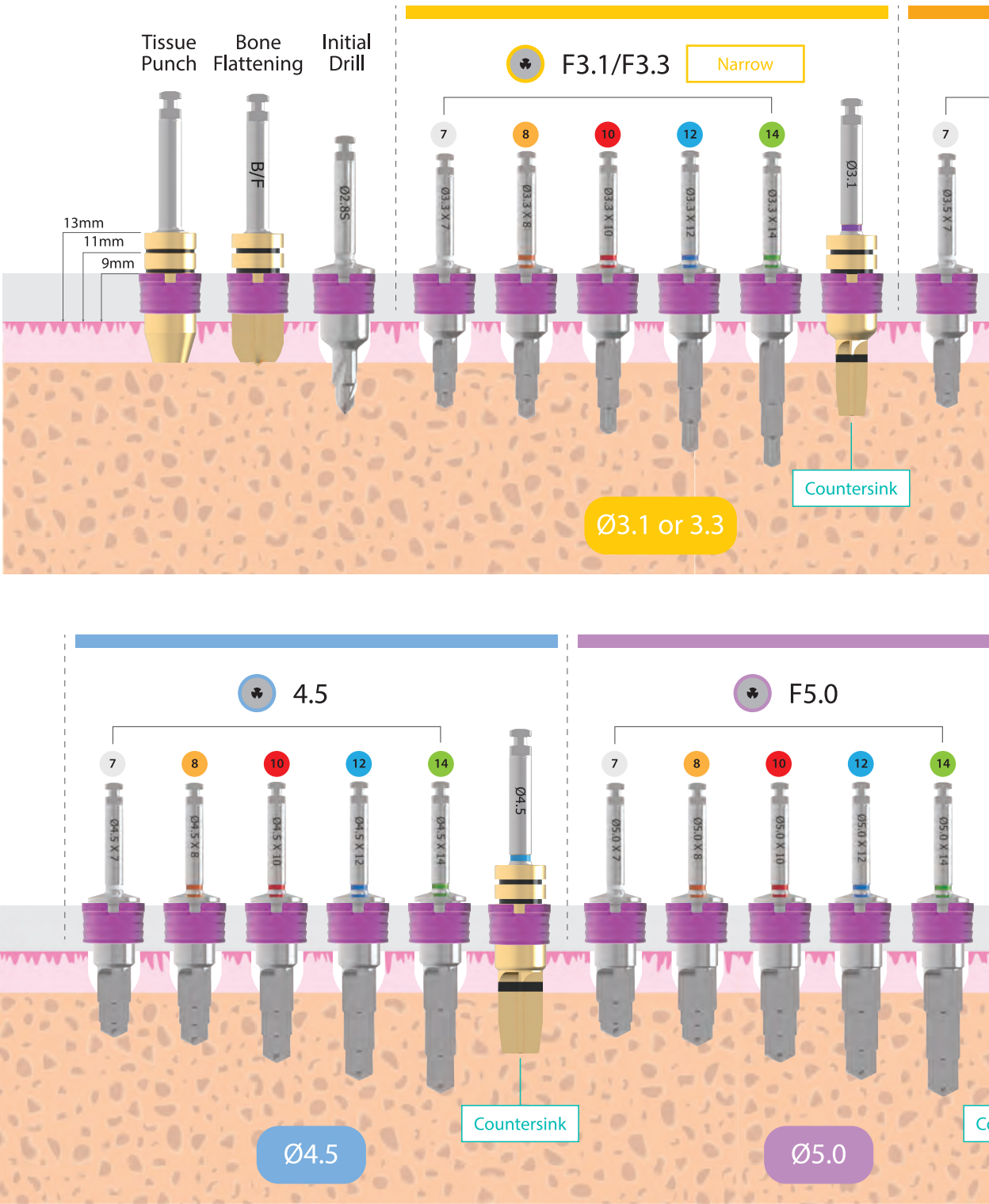
*** Precaution when irrigating**

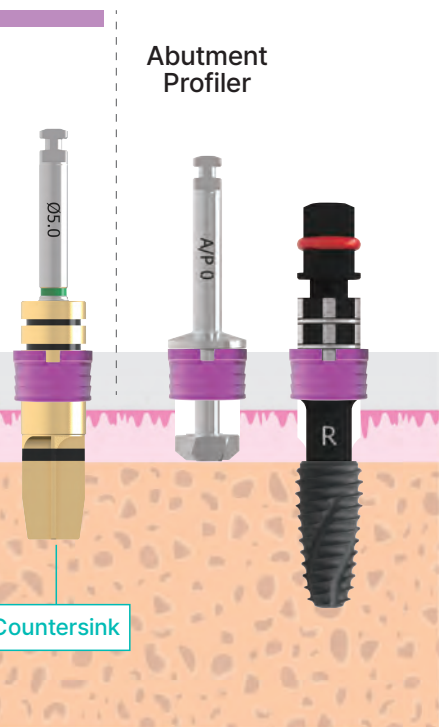
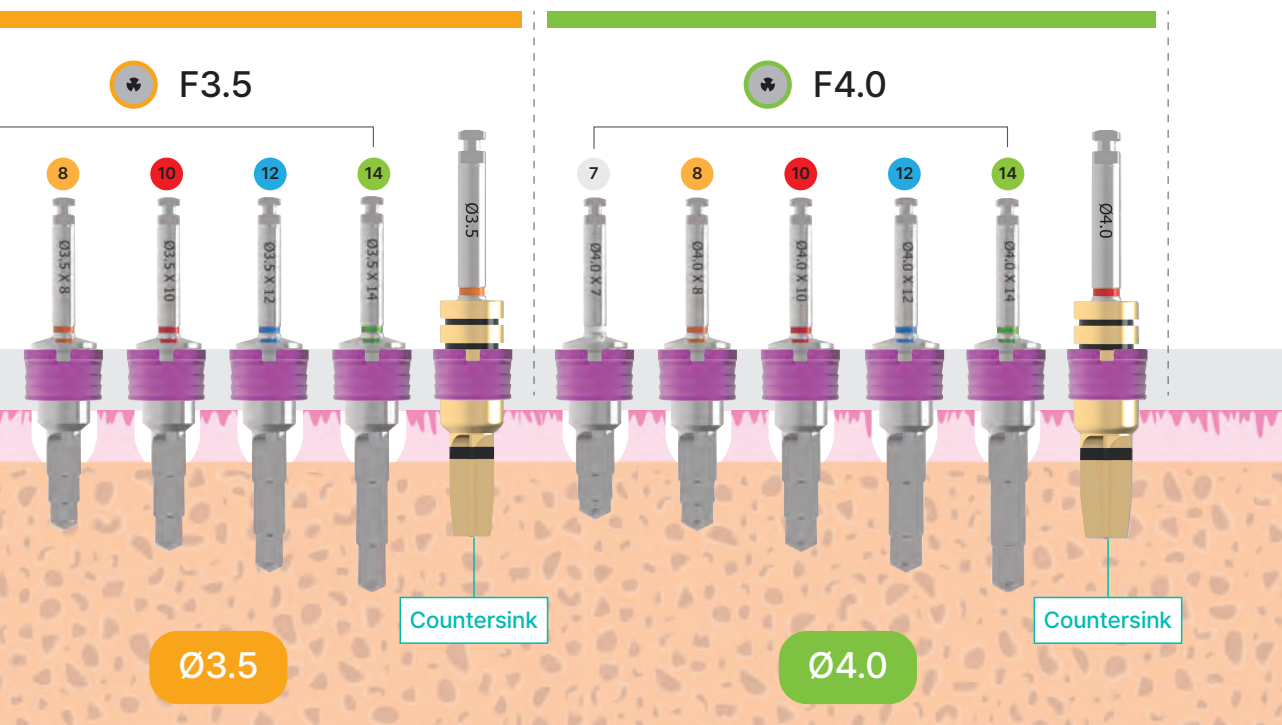
- > Irrigate enough to the end of the drill hole.



Drilling Sequence

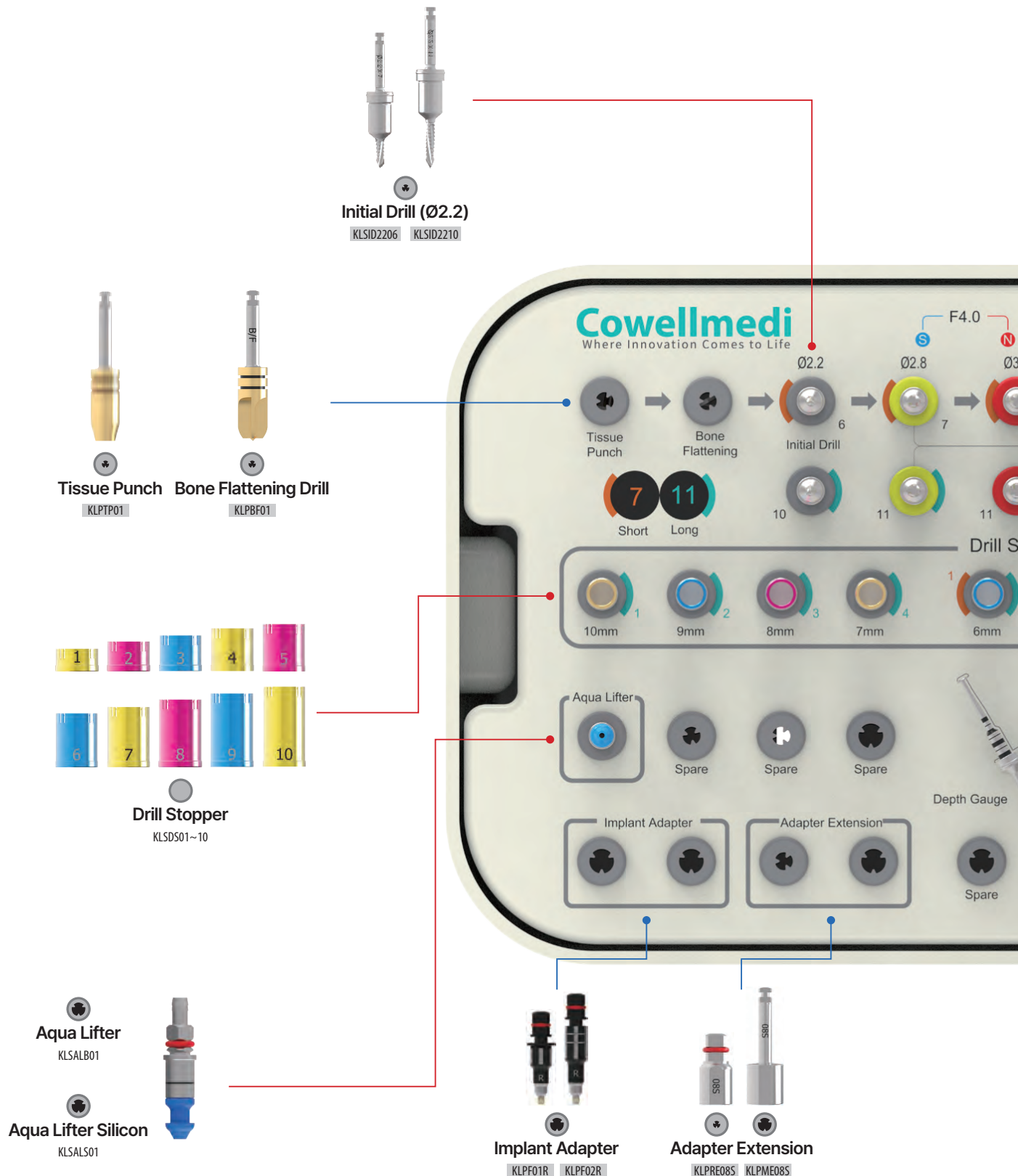
> Total drilling sequence with the Tissue Punches, Bone Flattening Drills, Initial Drills, and Pilot Drills, Abutment Profilers, and Implant Adapters.

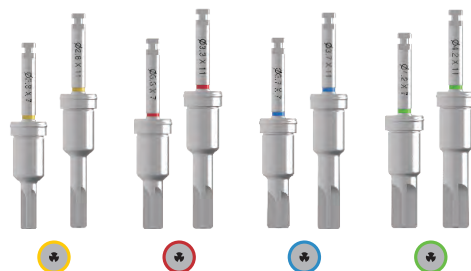




Lodestar Sinus Kit [KLSS001]

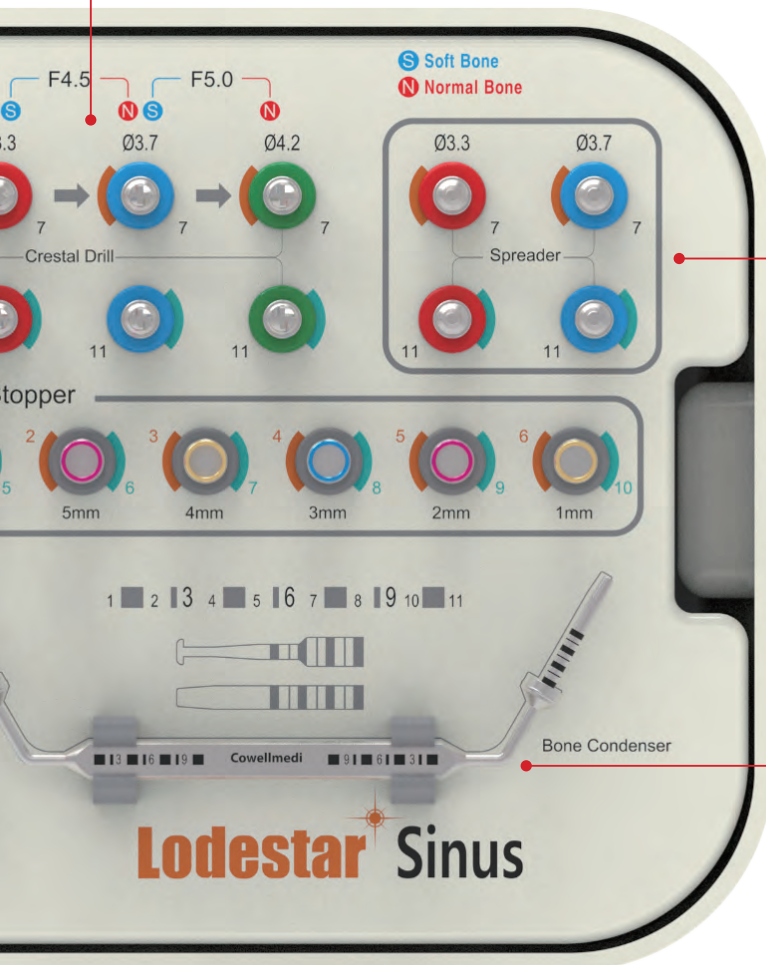
- > Safety and Precision in maxillary sinus procedures with the surgical guide template.
- > Use the same sleeve as in the Lodestar Plus Kit for compatibility with all drills and instruments.





Crestal Drill
(Ø2.8/3.3/3.7/4.2)

KLSCD2807 KLSCD2811 KLSCD3307 KLSCD3311 KLSCD3707 KLSCD3711 KLSCD4207 KLSCD4211



Spreader
(Ø3.3/3.7)

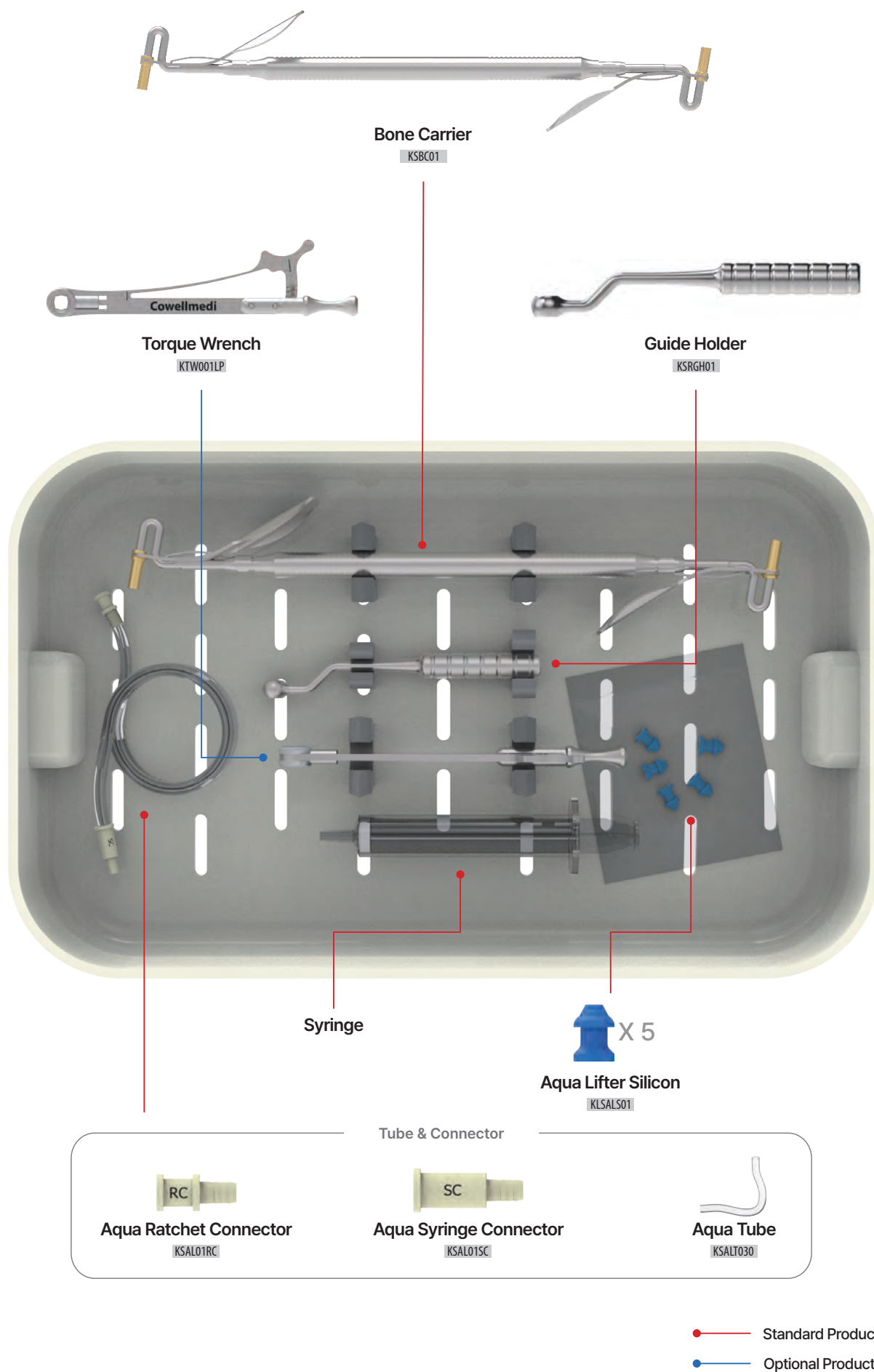
KLSSD3307 KLSSD3311 KLSSD3707 KLSSD3711



MF Controller

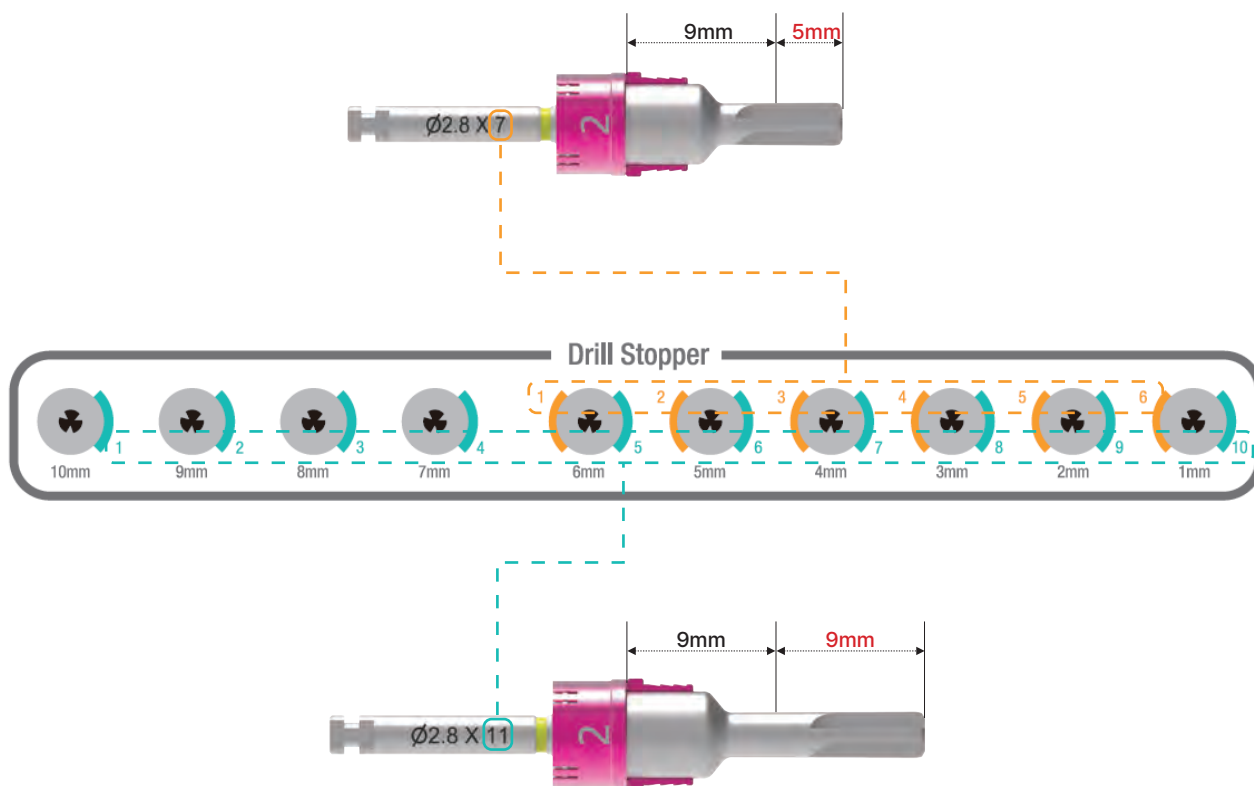
KLSMFC

- Standard Product
- Optional Product



Drill Stopper

- > Use the Drill Stopper Sequentially, depending on the Residual Bone Height.
- > Use stoppers of different colors based on lengths.
- > Indicate the drilling depth when attaching the stopper to the drill: 7mm Drill – Orange, 11mm Drill – Blue.
- > Have a range of sizes from 1mm to 10mm in 1mm steps, allowing you to easily adjust the drill depth for optimal precision.



· H(mm)

Drill Stopper Selection Guide

> Drill - Offset 9mm

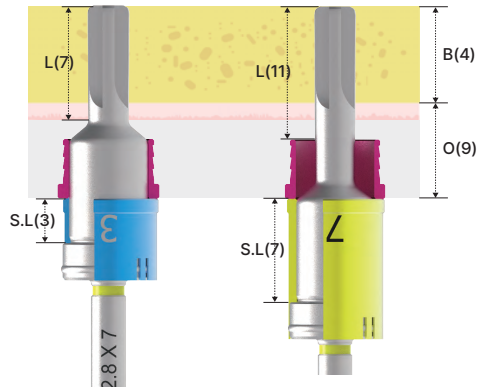
1. Choose an appropriate stopper based on the Residual Bone Height

· Drill Length(L) – Residual Bone Height(B) = Drill Stopper(D.S)

Ex) When the height of the bone is 4mm

· Short Drill: 7(Drill Length) – 4(Residual Bone Height) = 3(Drill Stopper)

· Long Drill: 11(Drill Length) – 4(Residual Bone Height) = 7(Drill Stopper)



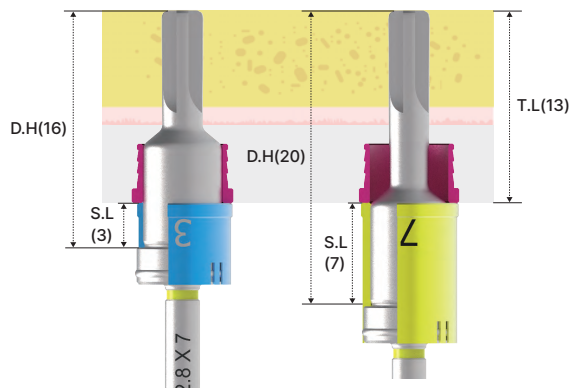
2. Choose an appropriate stopper based on Total length (Surgical Guide Top – Membrane)

· Drill height(D.H) – Total Length(T.L) = Drill Stopper(D.S)

Ex) When the total length is 13mm

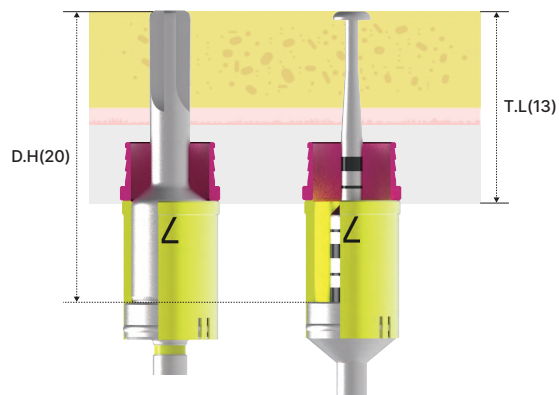
· Short Drill: 16(Drill Height) – 13(Total Length) = 3(Stopper Length)

· Long Drill: 20(Drill Height) – 13(Total Length) = 7(Stopper Length)



3. MF Controller

· Use stopper for a long drill

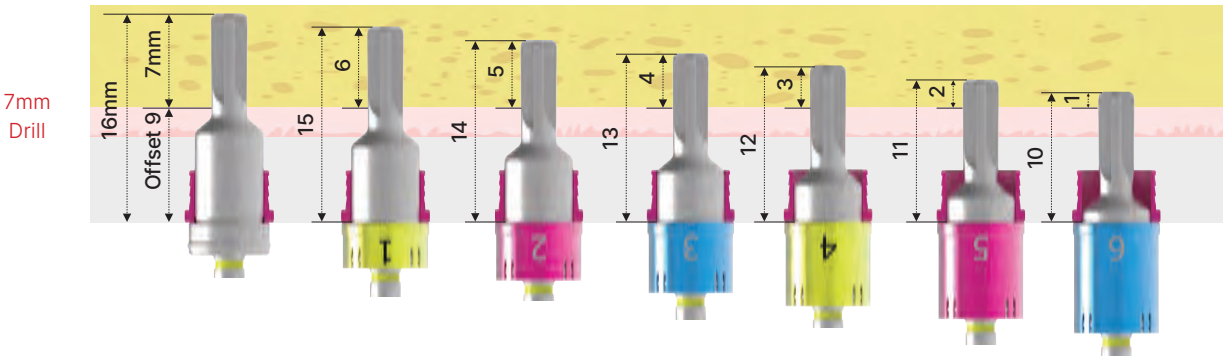


- > S.L: Stopper Length.
- > T.L: Total Length.
- > D.H: Drill Height.
- > B: Residual Bone Height.
- > O: Offset.
- > L: Drill Length.

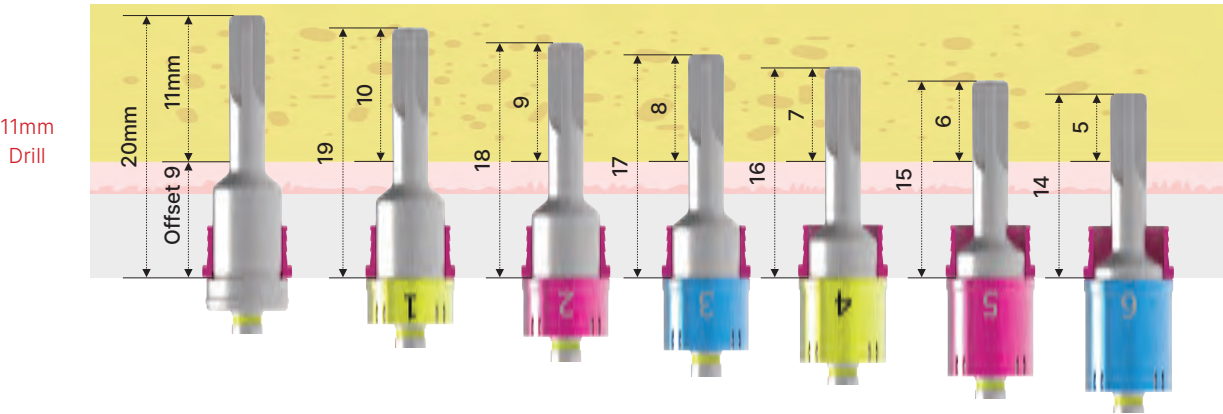
* When dealing with an 11mm offset, choose a stopper 2mm shorter, and if it is 13mm, it is recommended to utilize a stopper 2mm shorter,

The drilling depth is determined by the drill chosen, with variations

> 7mm Drill + Drill Stopper

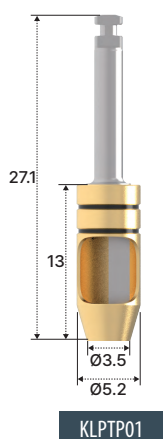


> 11mm Drill + Drill Stopper



Tissue Punch

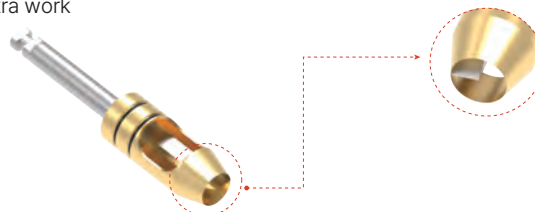
Optional



- > It is utilized for the excision of soft tissue, facilitating the precise incision of gingiva in a circular configuration.
- > Small-diameter punch for postoperative hemostasis, minimal surgical traces, and rapid healing effects of wounds.
- > Offset can be applied (9mm, 11mm, 13mm).
- > 50rpm without irrigation.

Double blade

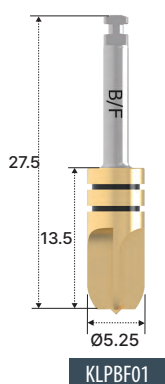
The internal cutting edge of the Tissue Punch cuts the gingiva into small pieces so that those can be removed by suction without extra work



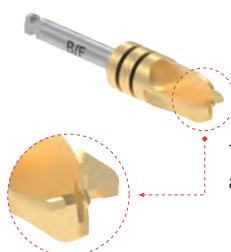
*** Caution** The Tissue Punch must be kept clean. Otherwise, it may cause rust or damage on the blade due to residual gingival pieces or others in the Tissue Punch after the operation (remove the residual gingiva piece by explorer, steam etc.).

Bone Flattening Drill

Optional

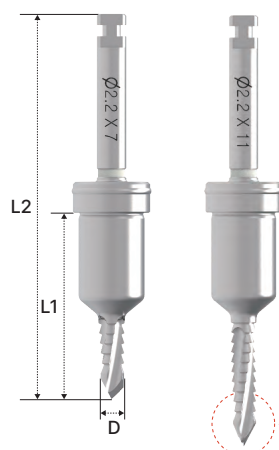


- > Flattens the bone level of the operation site.
- > Inclined bone level may glide the Drill and can not drill as planned.
- > Eliminates the soft tissue after using the Tissue Punch.
- > The point in the middle of the Drill guides the position of the Drill and helps to the drill in an accurate site.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

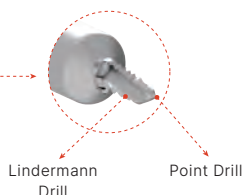


The point in the middle of the Drill guides the position of the Drill and helps to the drill in an accurate site.

Initial Drill



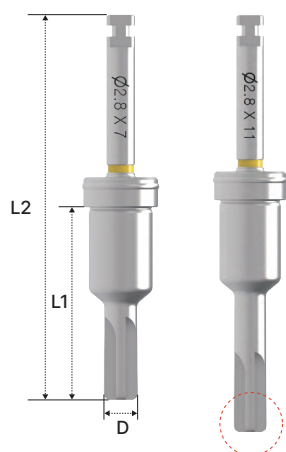
- > Use to make a guide hole before using crestal drill.
- > Are used as the point drill and the Lindermann Drill.
- > It ensures stability in drilling processes, enabling precise control over the drilling direction and preventing any sliding on challenging bone angles during procedures.
- > The drill stoppers are used based on gingiva height for optimal precision.
- > Is shorter than Crestal Drill by 1mm.
- > Should be used at 800~1000 rpm.



Code	D(Ø)	L1(mm)	L2(mm)	Color Band
KLSID2206	2.2	15	31	White
KLSID2210	2.2	19	35	White

* Crestal Drill: L-1mm

Crestal Drill



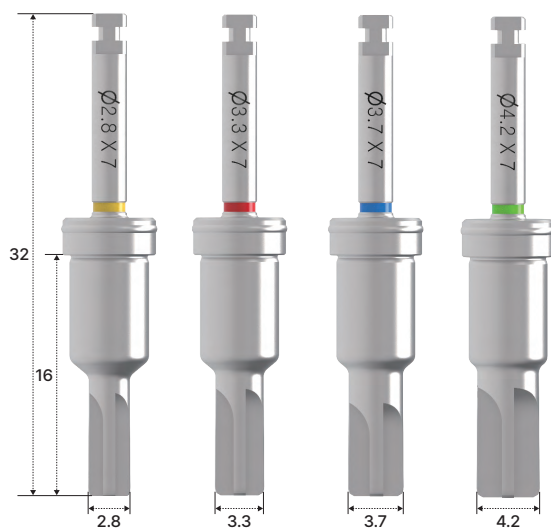
- > Be able to Safely elevate the membrane during maxillary sinus procedures with the rounded design of the drill edge.
- > To ensure safe membrane elevation, securely attach and use the Drill Stopper based on the height of the remaining bone
- > The diameter of Final drill can be chosen based on the bone density
- > When Drilling, autogenous bones would be harvested
- > Should be used at 500 ~ 800 rpm



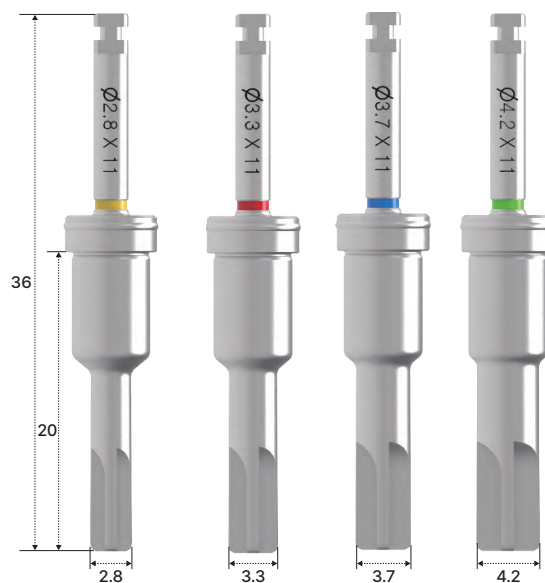
* Flat floor edge minimize damage to membrane

Code	D(Ø)	L1(mm)	L2(mm)	Color Band
KLSCD2807	2.8	16	32	Yellow
KLSCD2811	2.8	20	36	Yellow
KLSCD3307	3.3	16	32	Red
KLSCD3311	3.3	20	36	Red
KLSCD3707	3.7	16	32	Blue
KLSCD3711	3.7	20	36	Blue
KLSCD4207	4.2	16	32	Green
KLSCD4211	4.2	20	36	Green

Crestal Drill - 7mm

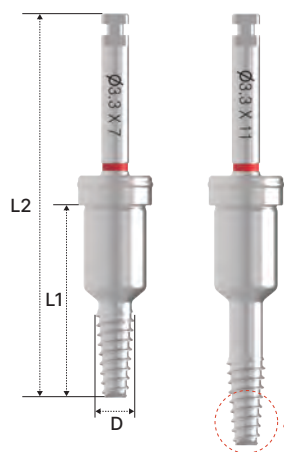


Crestal Drill - 11mm



Yellow	Ø2.8
Red	Ø3.3
Blue	Ø3.7
Green	Ø4.2

Spreader



- > When the remaining bone height is greater than 4mm, it is advisable to use a speed of 20-30 rpm for a gradual perforation of the maxillary sinus
- > Applying a taper design compresses the bone, leading to an initial boost in fixation strength
- > Choose an appropriate stopper based on the remaining bone
- > Should be used at 20-30rpm / 45Ncm



* Be safely elevated the maxillary sinus membrane by slowly trimming with the cutting blade of the front

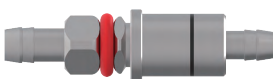
Code	D(Ø)	L1(mm)	L2(mm)	Color Band
KLSD3307	3.3	16	32	Red
KLSD3311	3.3	20	36	Red
KLSD3707	3.7	16	32	Blue
KLSD3711	3.7	20	36	Blue

Aqua membrane Lifter System

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



Aqua Lifter Silicon
KLSALS01



Aqua Lifter
KLSALB01



Aqua Ratchet Connector
KSAL01RC

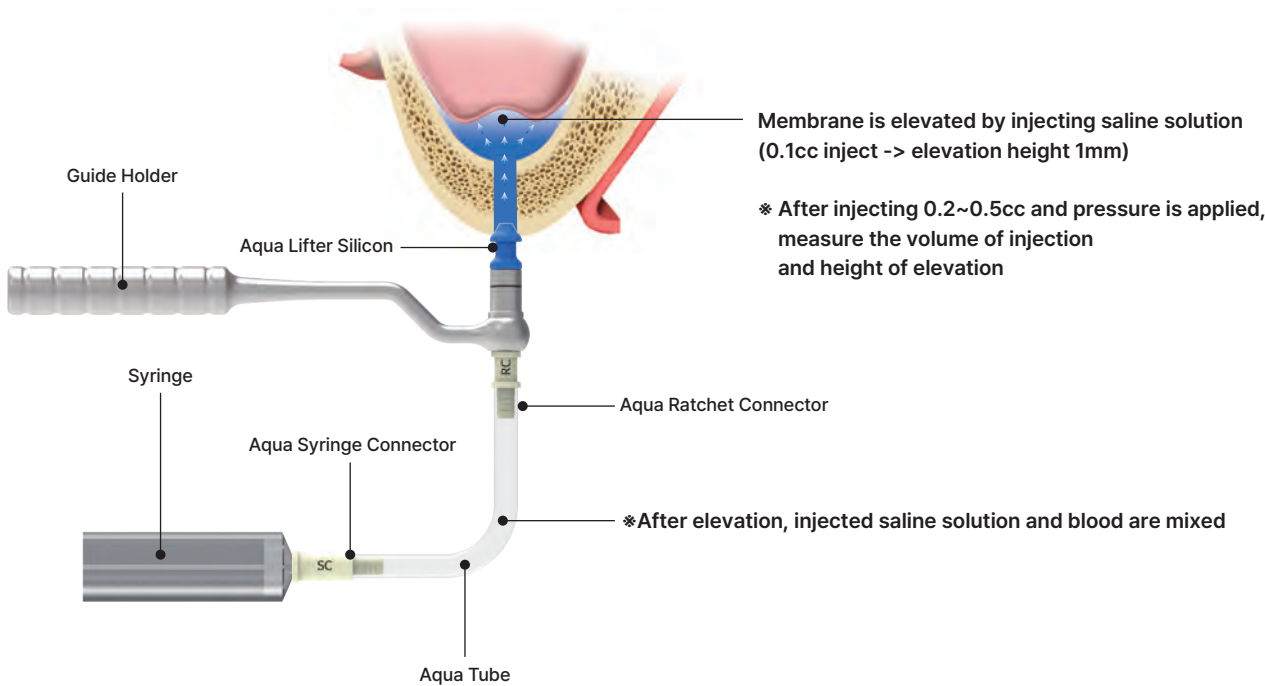


Aqua Syringe Connector
KSAL01SC



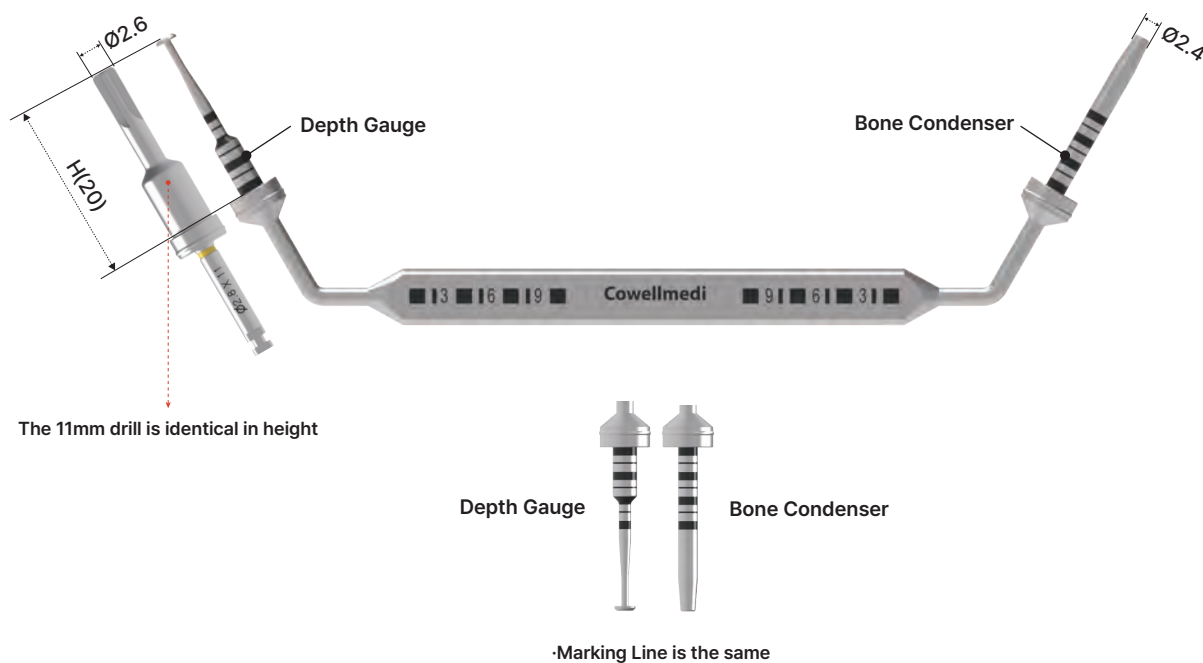
Aqua Tube
KSALT030

*Disposable medical devices

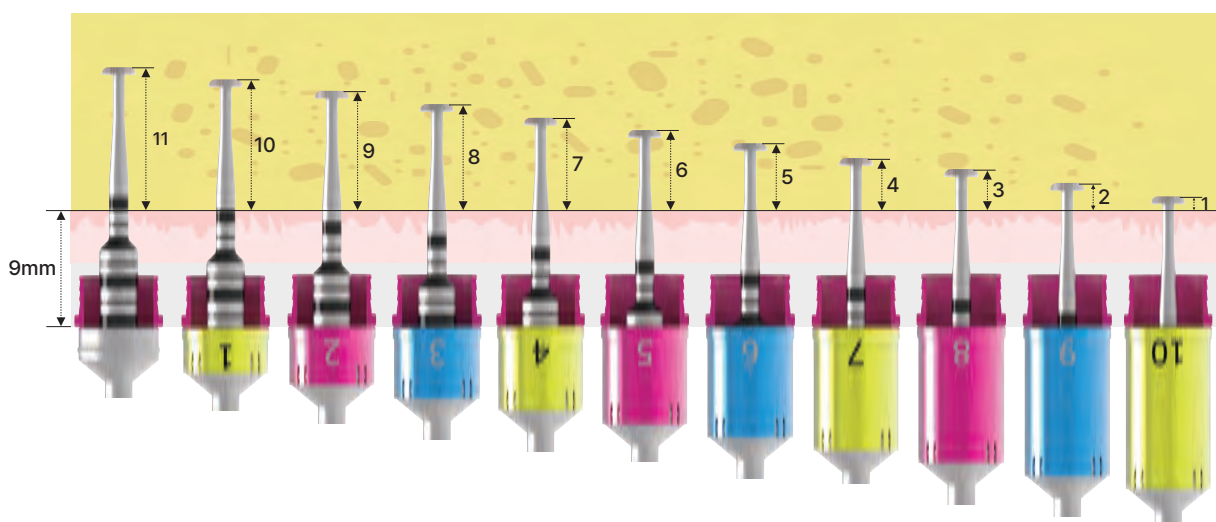


MF Controller

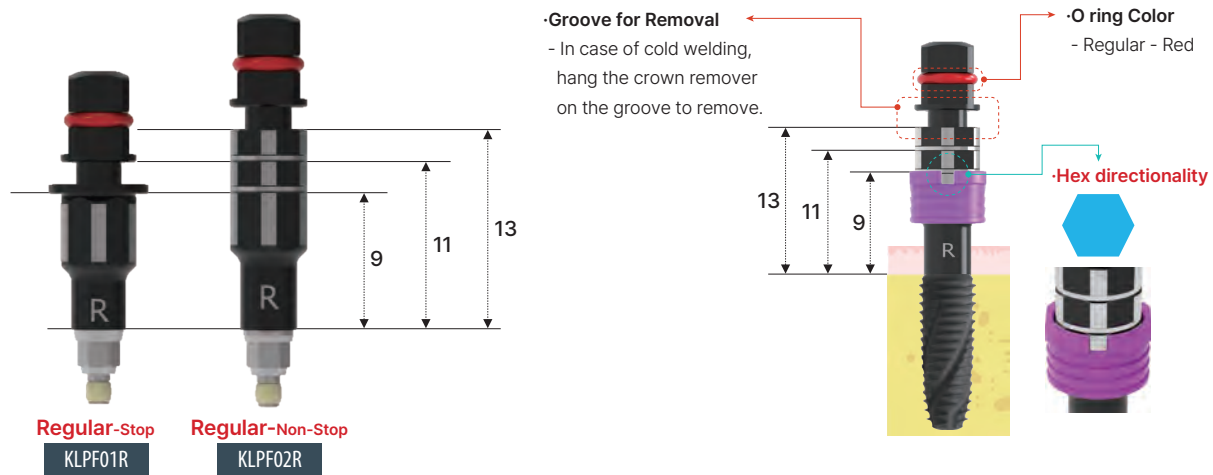
- > Use a single tool interchangeably for depth measurement and bone condensing purposes
- > Use drill stopper for the safe elevation
- > An 11mm drill is congruent in length with its 20mm height, featuring precise 1mm interval marking lines for accurate measurements
- > Depth Gauge: to assess the remaining bone depth and verify the elevation of the membrane
- > Bone Condenser: Insert bone graft materials to inside of maxillary sinus



MF Controller + Stopper

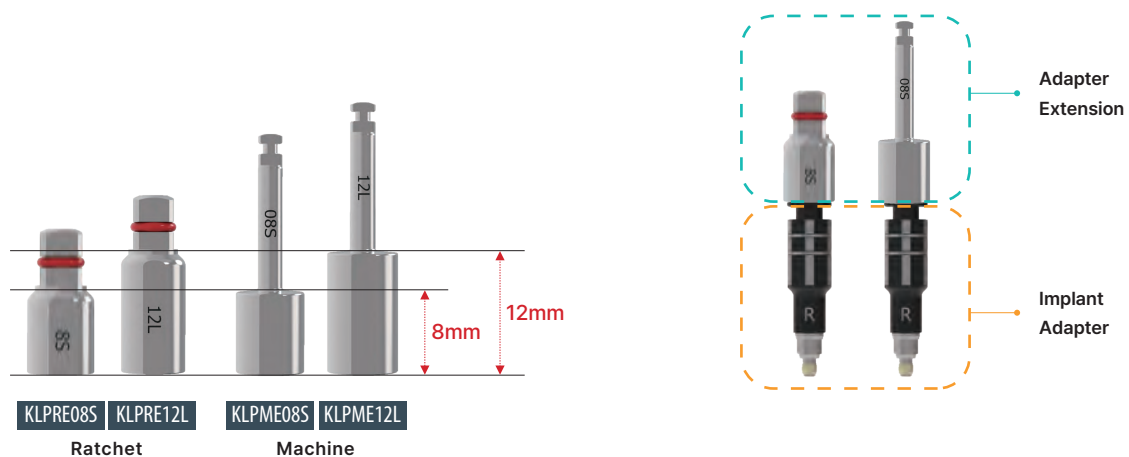


Implant Adapter Optional

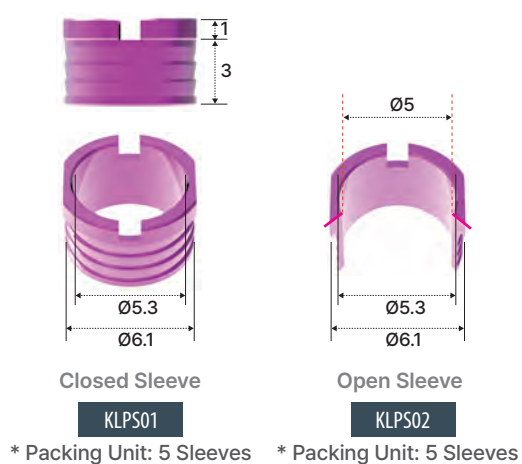


Adapter Extension Optional

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



Sleeve Optional



Bone Carrier

- > Insert bone graft material, using the Bone Carrier



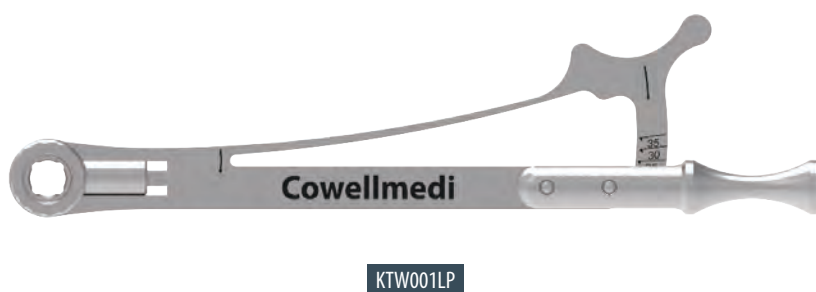
Guide Holder

- > Should be used with an Aqua lifter



Torque Wrench Optional

- > Use during implant placement and should be attached to the implant connector



Drill Protocol

> Residual Bone Height 4mm, Fixture Ø4.0

Bone Quality	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Crestal Drill	Crestal Drill	MF Controller	Crestal Drill	MF Controller	Aqua Lifter	MF Controller	Implant
Soft	▶	▶	▶	Ø2.8 X 7	Ø2.8 X 7	Depth	Ø2.8 X 7	Depth	▶	Condenser	▶
Normal	▶	▶	▶	Ø3.3 X 7	Ø3.3 X 7	Depth	Ø3.3 X 7	Depth	▶	Condenser	▶
Stopper			4	4	3	7	2	6		6	

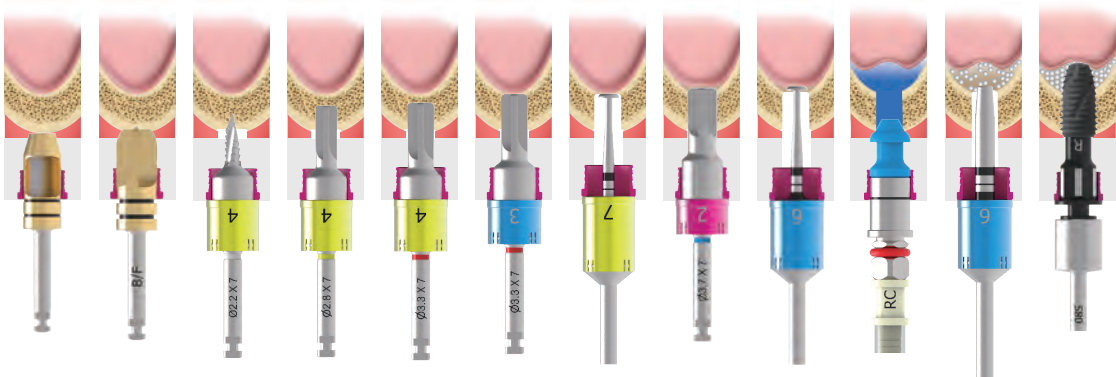
Drill Protocol

> Residual Bone Height 4mm, Fixture Ø4.5

Bone Quality	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Crestal Drill	Crestal Drill	Crestal Drill	MF Controller	Crestal Drill	MF Controller	Aqua Lifter	MF Controller	Implant
Soft	►	►	►	Ø2.8 X 7	Ø3.3 X 7	Ø3.3 X 7	Depth	Ø3.3 X 7	Depth	►	Condenser	►
Normal	►	►	►	Ø3.3 X 7	Ø3.3 X 7	Ø3.3 X 7	Depth	Ø3.3 X 7	Depth	►	Condenser	►
Stopper			4	4	4	3	7	2	6		6	

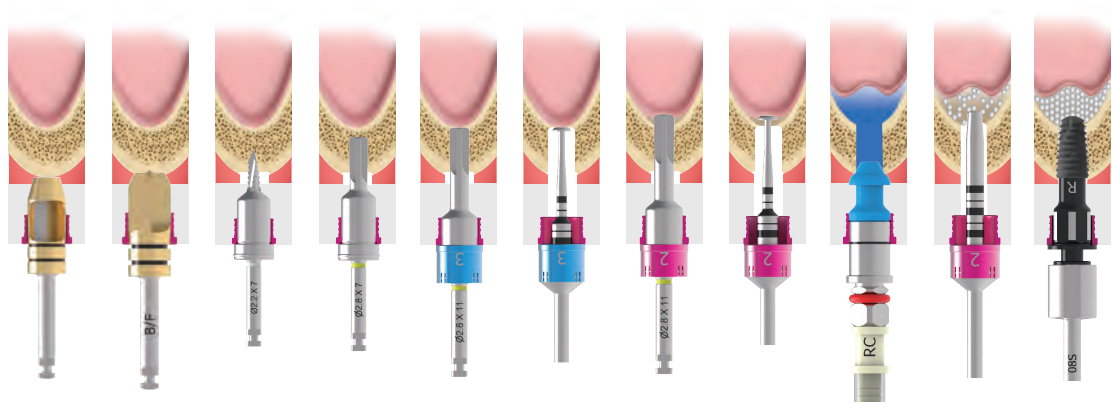
Drill Protocol

> Residual Bone Height 4mm, Fixture Ø5.0

												
Bone Quality	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Crestal Drill	Crestal Drill	Crestal Drill	MF Controller	Crestal Drill	MF Controller	Aqua Lifter	MF Controller	Implant
Soft	▶	▶	▶	Ø2.8 X 7	Ø3.7 X 7	Ø3.7 X 7	Depth	Ø3.7 X 7	Depth	▶	Condenser	▶
Normal	▶	▶	▶	Ø3.3 X 7	Ø4.2 X 7	Ø4.2 X 7	Depth	Ø4.2 X 7	Depth	▶	Condenser	▶
Stopper			4	4	4	3	7	2	6		6	

Drill Protocol

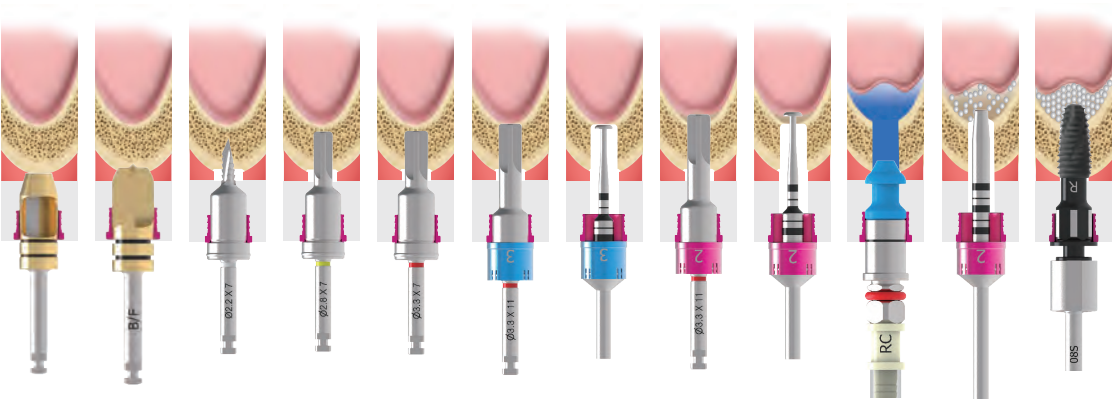
> Residual Bone Height 8mm, Fixture Ø4.0



Bone Quality	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Crestal Drill	Crestal Drill	MF Controller	Crestal Drill	MF Controller	Aqua Lifter	MF Controller	Implant
Soft	▶	▶	▶	Ø2.8 X 7	Ø2.8 X 11	Depth	Ø2.8 X 11	Depth	▶	Condenser	▶
Normal	▶	▶	▶	Ø3.3 X 7	Ø3.3 X 11	Depth	Ø3.3 X 11	Depth	▶	Condenser	▶
Stopper					3	3	2	2		2	

Drill Protocol

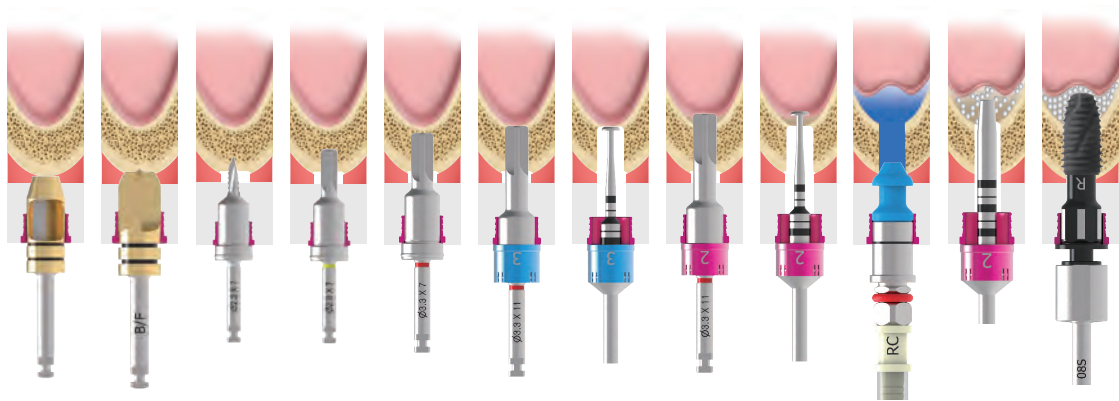
> Residual Bone Height 8mm, Fixture Ø4.5



Bone Quality	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Crestal Drill	Crestal Drill	Crestal Drill	MF Controller	Crestal Drill	MF Controller	Aqua Lifter	MF Controller	Implant
Soft	▶	▶	▶	Ø2.8 X 7	Ø3.3 X 7	Ø3.3 X 11	Depth	Ø3.3 X 11	Depth	▶	Condenser	▶
Normal	▶	▶	▶	Ø3.3 X 7	Ø3.7 X 7	Ø3.7 X 11	Depth	Ø3.7 X 11	Depth	▶	Condenser	▶
Stopper						3	3	2	2		2	

Drill Protocol

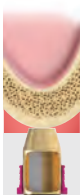
> Residual Bone Height 8mm, Fixture Ø5.0



Bone Quality	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Crestal Drill	Crestal Drill	Crestal Drill	MF Controller	Crestal Drill	MF Controller	Aqua Lifter	MF Controller	Implant
Soft	▶	▶	▶	Ø2.8 X 7	Ø3.7 X 7	Ø3.7 X 11	Depth	Ø3.7 X 11	Depth	▶	Condenser	▶
Normal	▶	▶	▶	Ø3.3 X 7	Ø4.2 X 7	Ø4.2 X 11	Depth	Ø4.2 X 11	Depth	▶	Condenser	▶
Stopper						3	3	2	2		2	

Drill Protocol - Spreader

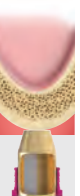
> Residual Bone Height 4mm, Fixture Ø4.0, Ø4.5



	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Spreader	MF Controller	Spreader	MF Controller	Aqua Lifter	MF Controller	Implant
	▶	▶	▶	Ø3.3 X 7	Depth	Ø3.3 X 7	Depth	▶	Condenser	▶
Stopper			4	3	7	2	6		6	

Drill Protocol - Spreader

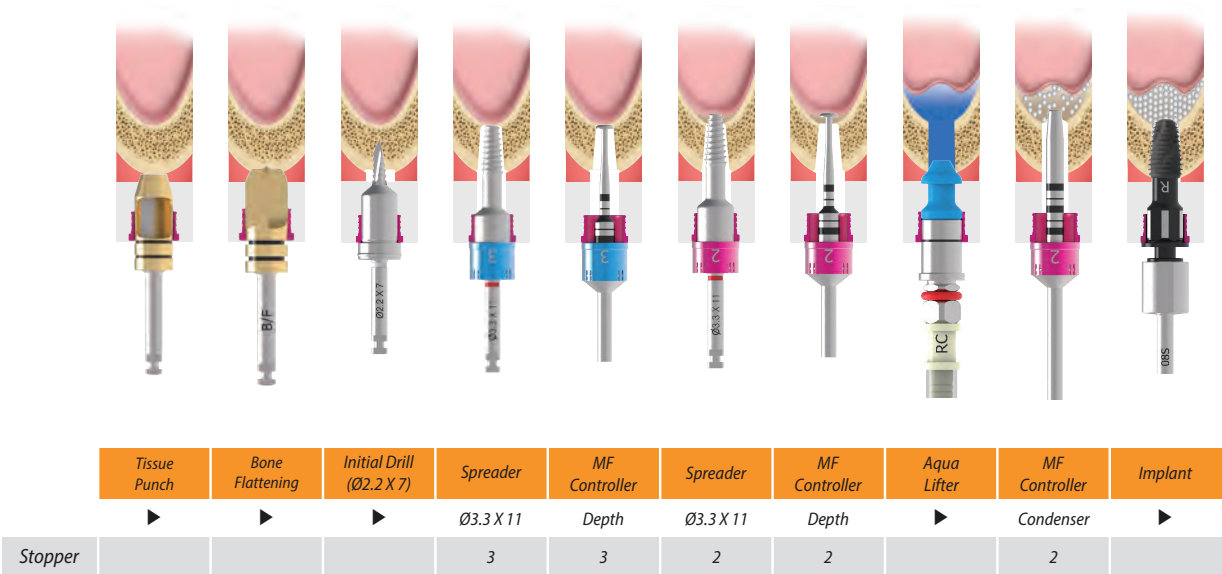
> Residual Bone Height 4mm, Fixture Ø5.0



	Tissue Punch	Bone Flattening	Initial Drill (Ø2.2 X 7)	Spreader	MF Controller	Spreader	MF Controller	Spreader	Aqua Lifter	MF Controller	Implant
	▶	▶	▶	Ø3.3 X 7	Depth	Ø3.3 X 7	Depth	Ø3.7 X 7	▶	Condenser	▶
Stopper			4	3	7	2	6	2		6	

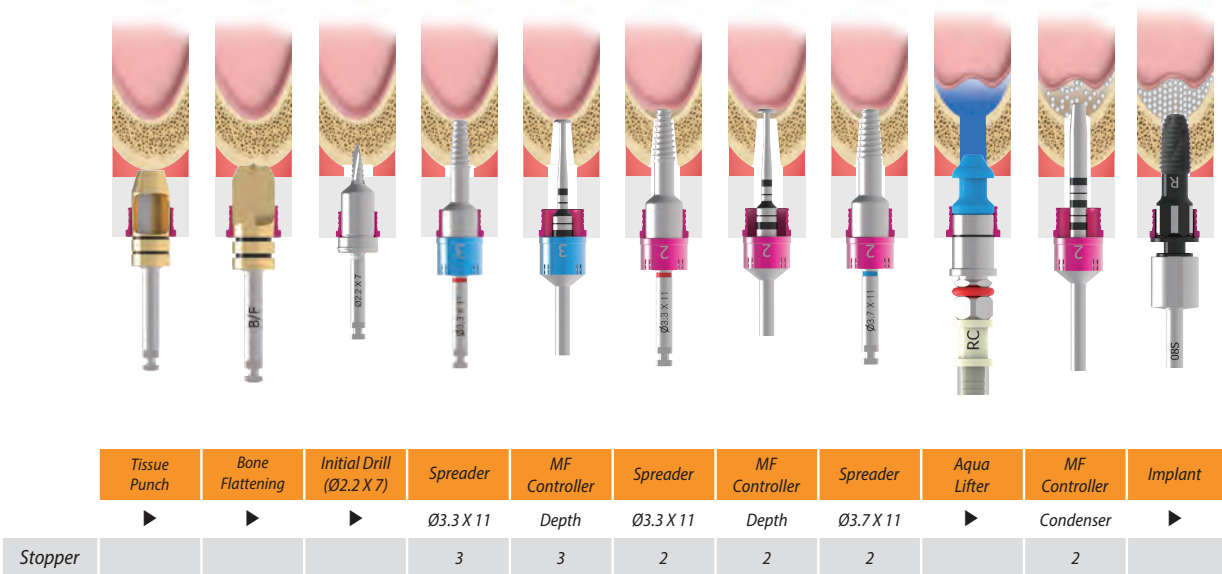
Drill Protocol - Spreader

> Residual Bone Height 8mm, Fixture Ø4.0, Ø4.5



Drill Protocol - Spreader

> Residual Bone Height 8mm, Fixture Ø5.0



Lodestar Universal Kit [KLS001]

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

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



 **Pilot Drill(Ø2.0)**

KLSPD2007 KLSPD2008 KLSPD2010 KLSPD2012 KLSPD2014

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



 **Pilot Drill(Ø2.7)**

KLSPD2707 KLSPD2708 KLSPD2710 KLSPD2712 KLSPD2714

 **Tissue Punch**
KLSTP45

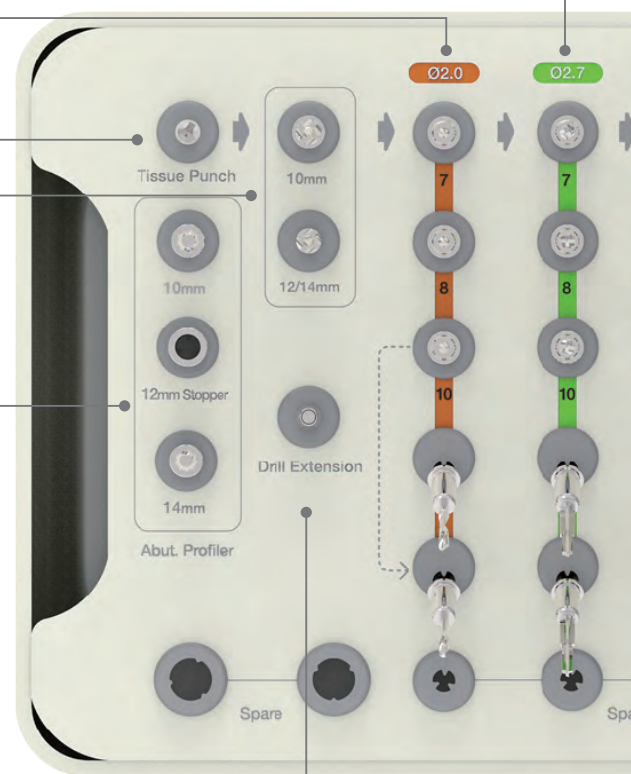


10mm

12,14mm



 **Initial Drill**
KLSID18 KLSID18L



10mm

12mm
Stopper

14mm



 **Abut. Profiler**
KLSPD10 KLSPD12S KLSPD14

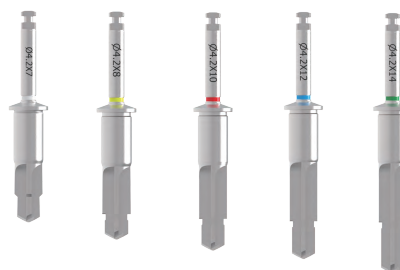
Ø3.4 X 7 Ø3.4 X 8 Ø3.4 X 10 Ø3.4 X 12 Ø3.4 X 14



Pilot Drill(Ø3.4)

KLSPD3407 KLSPD3408 KLSPD3410 KLSPD3412 KLSPD3414

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

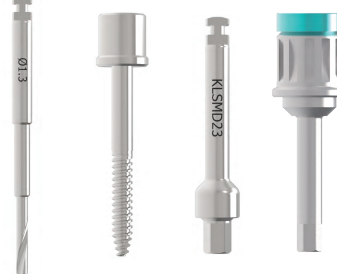


Pilot Drill(Ø4.2)

KLSPD4207 KLSPD4208 KLSPD4210 KLSPD4212 KLSPD4214



Anchor Drill Anchor Screw Anchor Driver



Anchor System

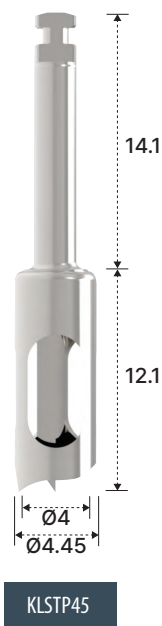
KLSAD13 KLSAS18 KLSMD23 KLSRD16



Drill Extension

KDE002

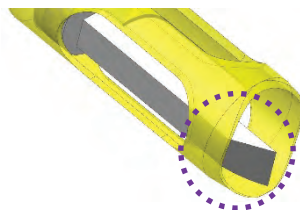
Tissue Punch



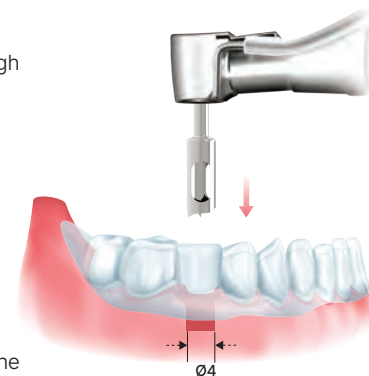
> The gingiva in the position where the implant is to be placed can be incised in a circular shape and can also be used in inclined bones (50rpm without irrigation).



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

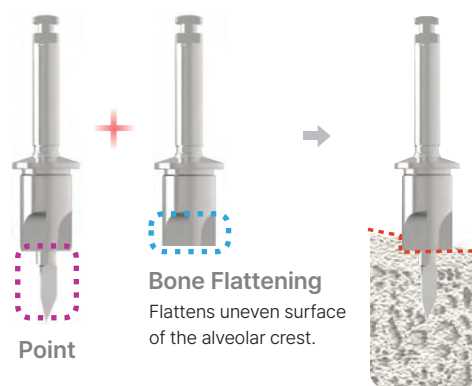
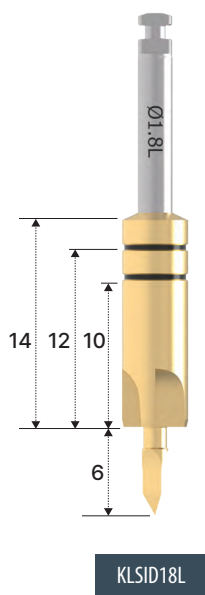
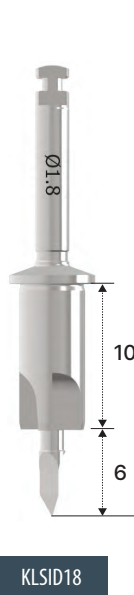


The internal cutting edge of the Tissue Punch cuts the gingiva into small pieces so that those can be removed by suction without extra work.



Initial Drill

> The Drill combined with Bone Flattening Drill and Point Drill which no separate Bone Flattening Drill is required provides a simpler procedure and shorter chair time (1,000rpm with irrigation).

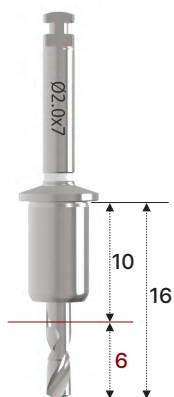


Creates the hole on the bone surface so that the axis of the next step Drill is not moved and it guides the Drill position by preventing slip even at the inclined bone level.

Pilot Drill

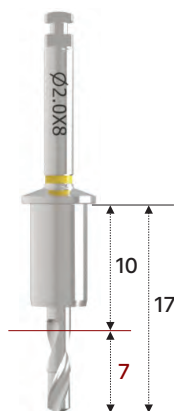
> Ø2.0 / Ø2.7 / Ø3.4 / Ø4.2.

Ø2.0: High Speed - 600rpm



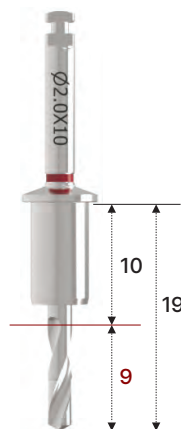
Pilot Drill 16mm(6mm)

KLSPD2007



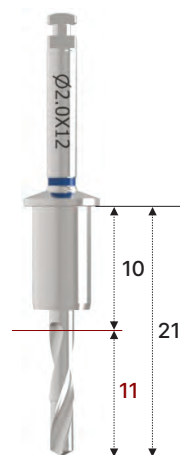
Pilot Drill 17mm(7mm)

KLSPD2008



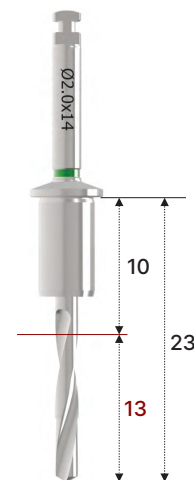
Pilot Drill 19mm(9mm)

KLSPD2010



Pilot Drill 21mm(11mm)

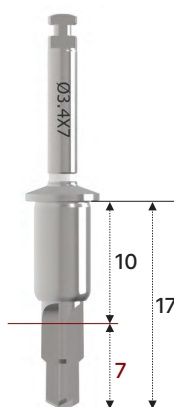
KLSPD2012



Pilot Drill 23mm(13mm)

KLSPD2014

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

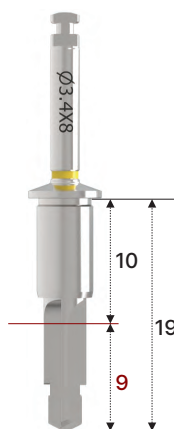


Pilot Drill 17mm(7mm)

KLSPD2707

KLSPD3407

KLSPD4207

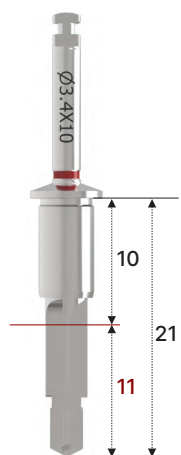


Pilot Drill 19mm(9mm)

KLSPD2708

KLSPD3408

KLSPD4208

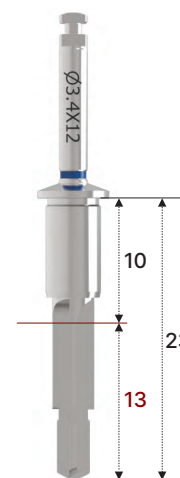


Pilot Drill 21mm(11mm)

KLSPD2710

KLSPD3410

KLSPD4210

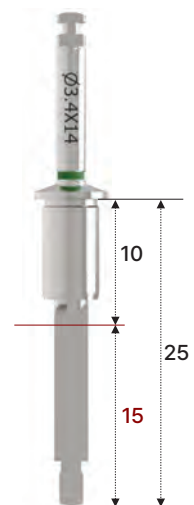


Pilot Drill 23mm(13mm)

KLSPD2712

KLSPD3412

KLSPD4212



Pilot Drill 25mm(15mm)

KLSPD2714

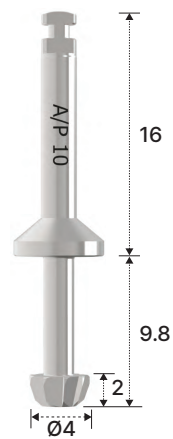
KLSPD3414

KLSPD4214

Abutment Profiler

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

KLSPD10



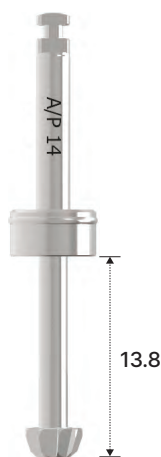
Offset - 10mm

KLSPD14 + KLSPD12S



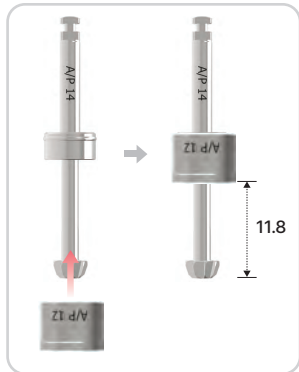
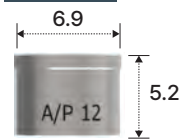
Offset - 12mm

KLSPD14

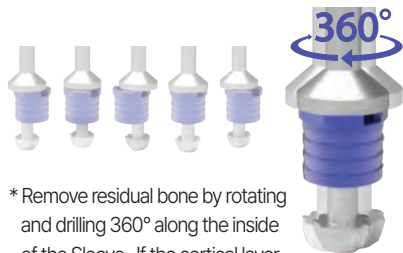
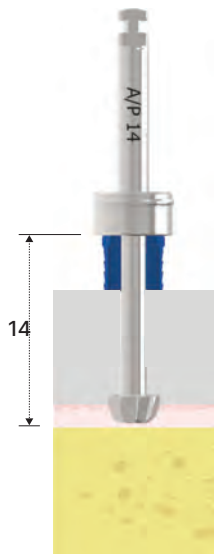
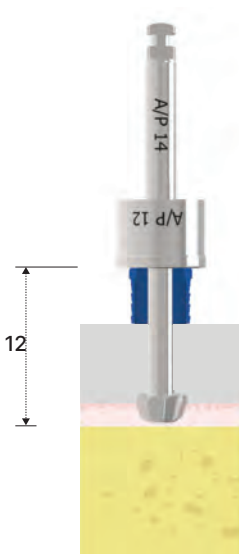
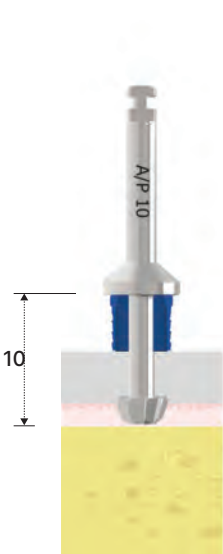


Offset - 14mm

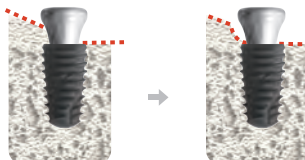
KLSPD12S



* Use as the 12mm Abutment Profiler by installing the Stopper to the 14mm Abutment Profiler.

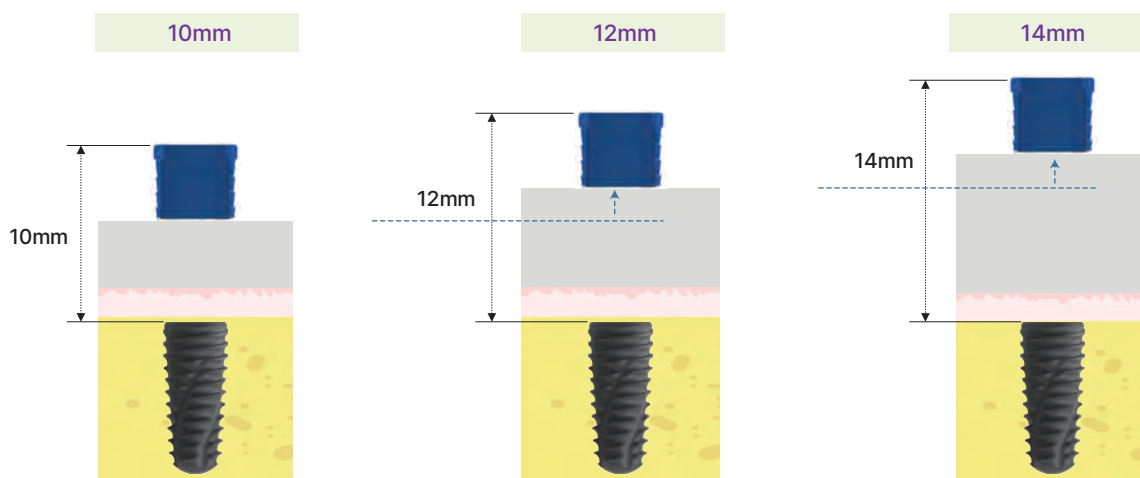


* Remove residual bone by rotating and drilling 360° along the inside of the Sleeve. If the cortical layer is thick, increase the drilling speed in the range of 1,000rpm with irrigation.

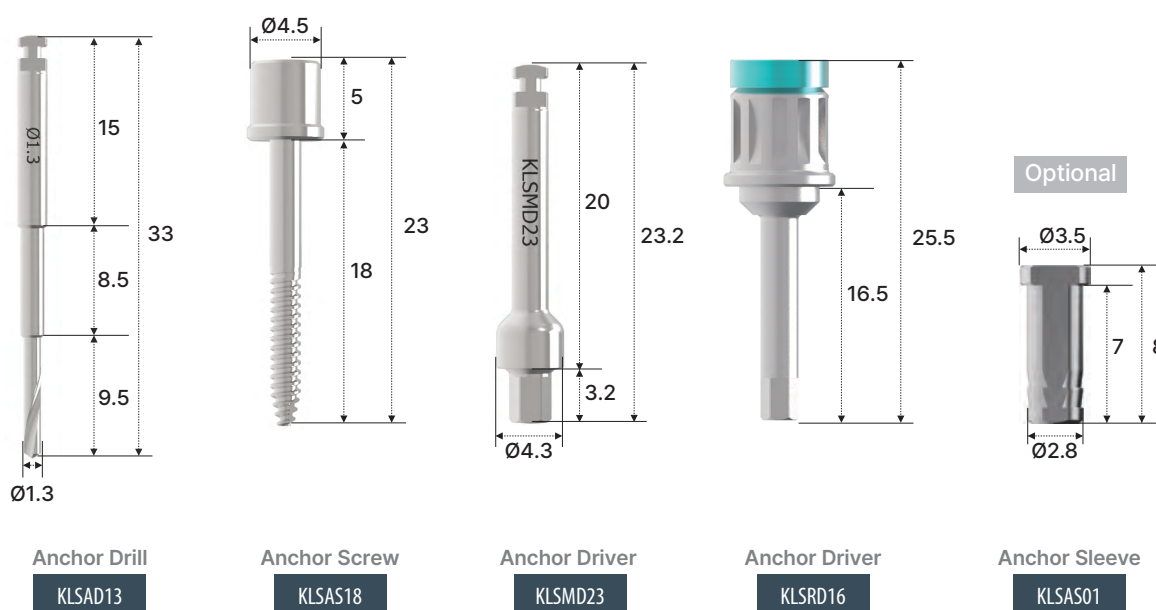


* Comprehension and Usage of Offset

- > The basic length is 10mm from the fixture platform to the top of the Sleeve.
- > In case the 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 the offset value, the less accurate it is, so use 10mm if possible.



Anchor System



* Packing Unit: 5 Sleeves

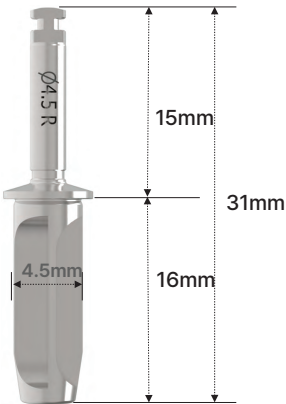
Optional

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

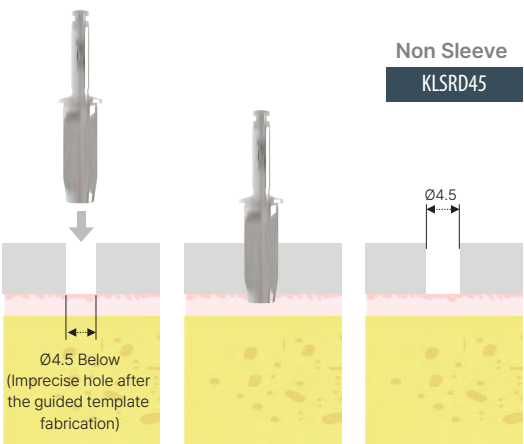
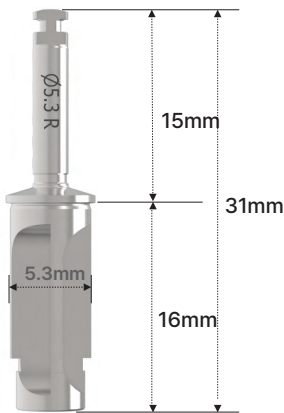
Guide Reamer Optional

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 (800rpm without irrigation).

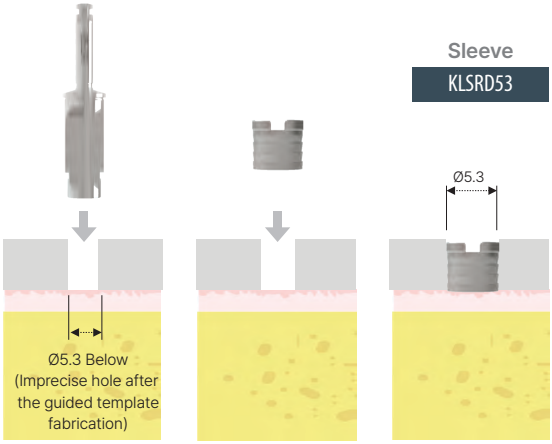
Guide Reamer
(Non-Sleeve)
KLSRD45



Guide Reamer
(Sleeve)
KLSRD53



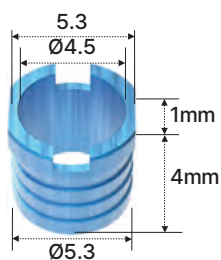
Revises imprecisely formed hole after the guided template fabrication using the 4.5 Guide Reamer to create the hole to be in exact contact with the Drill.



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

Sleeve

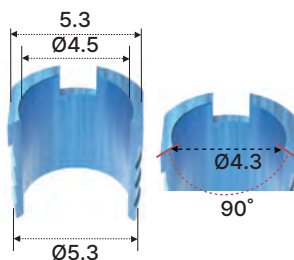
Optional



Closed Sleeve

KLSS01

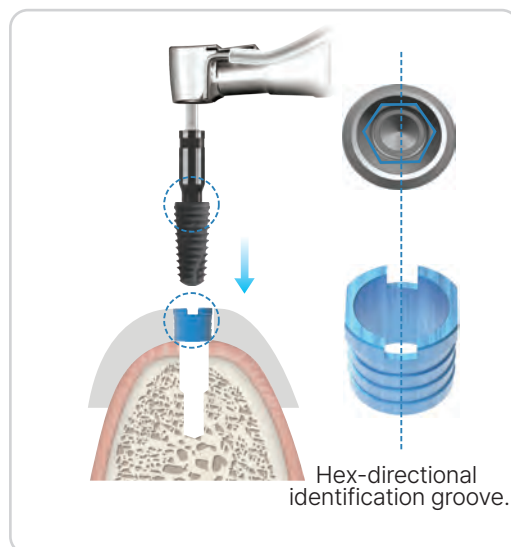
* Packing Unit: 5 Sleeves



Open Sleeve

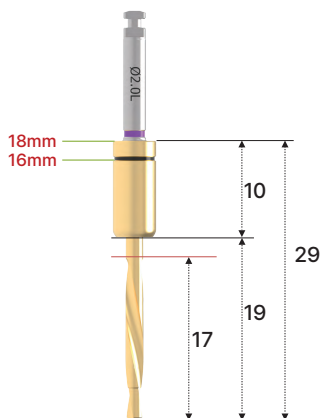
KLSS02

* Packing Unit: 5 Sleeves

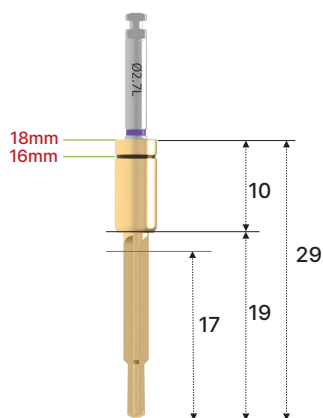


Pilot Drill – 16/18mm

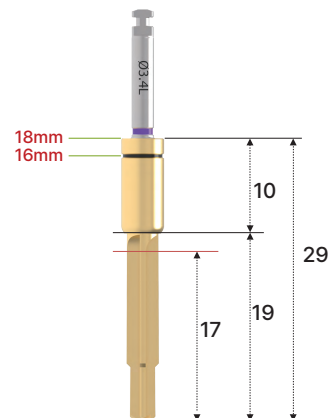
Optional



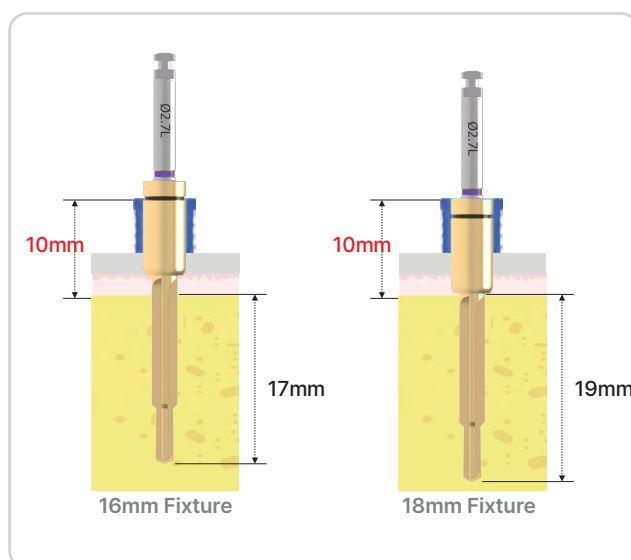
KLSPD2018



KLSPD2718

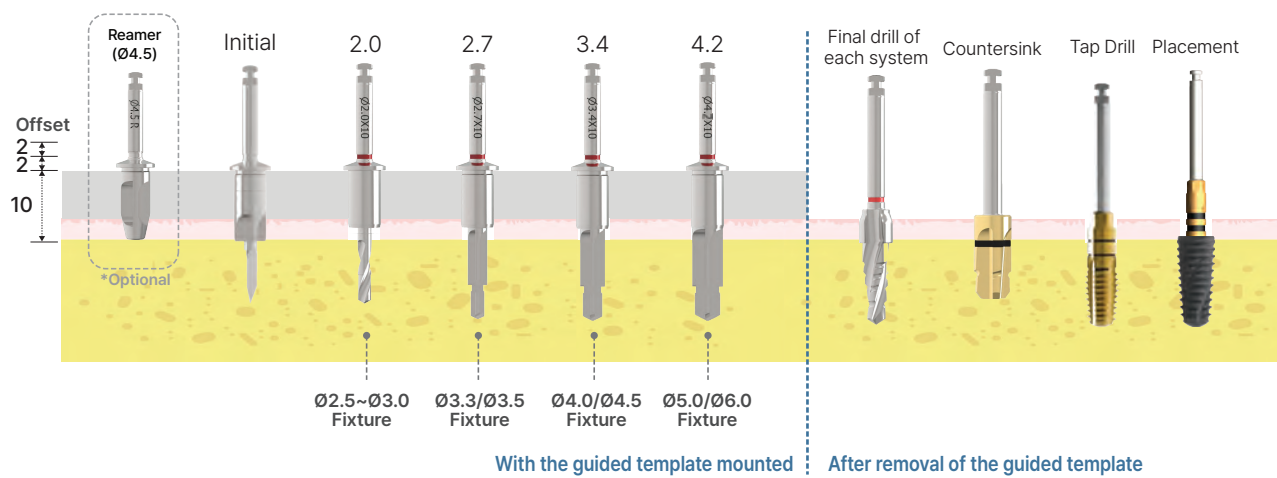


KLSPD3418

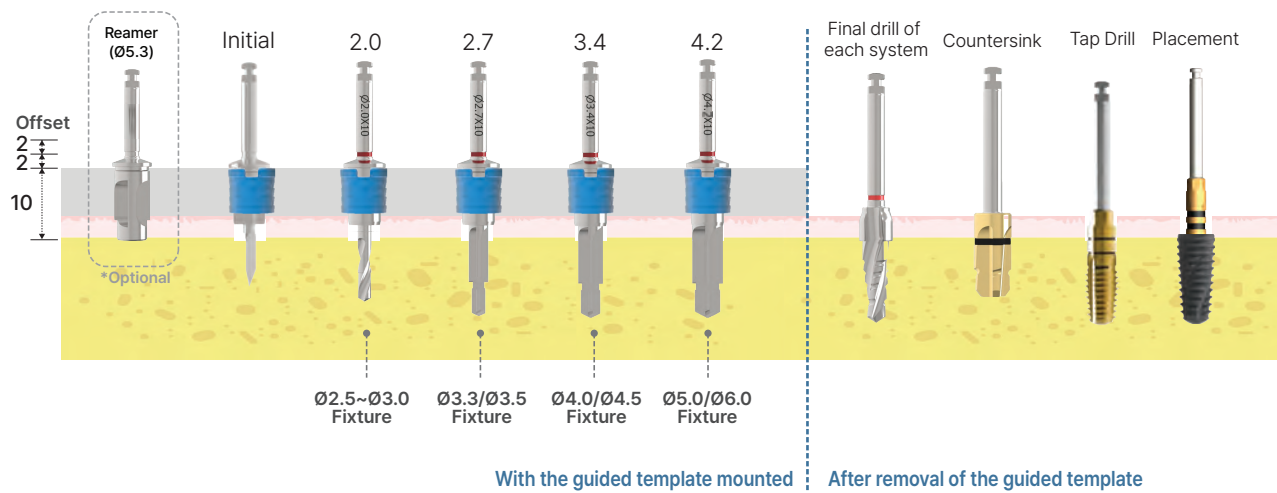


Drilling Sequence

Drilling Sequence (without sleeve)



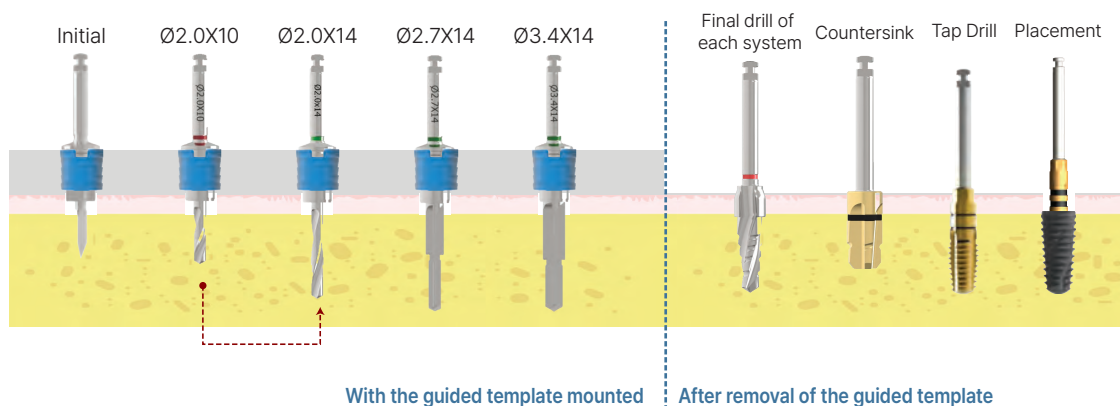
Drilling Sequence (with sleeve)



* Use 10mm Drill prior to 14mm Drill

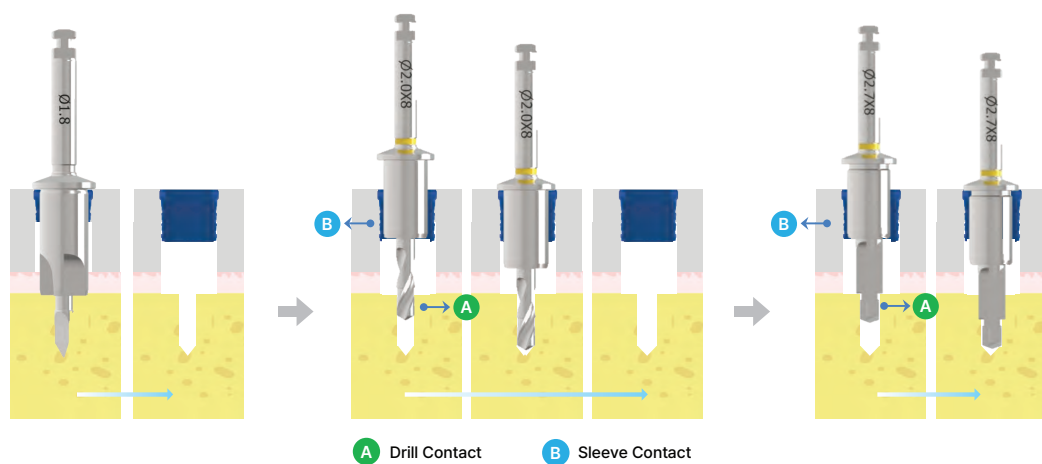
For the use of the 14mm Drill with accurate contact to the Sleeve, use the Ø2.0*10mm Drill before using the 14mm Drill.

e.g.) 3.4 X 14mm Drilling Sequence



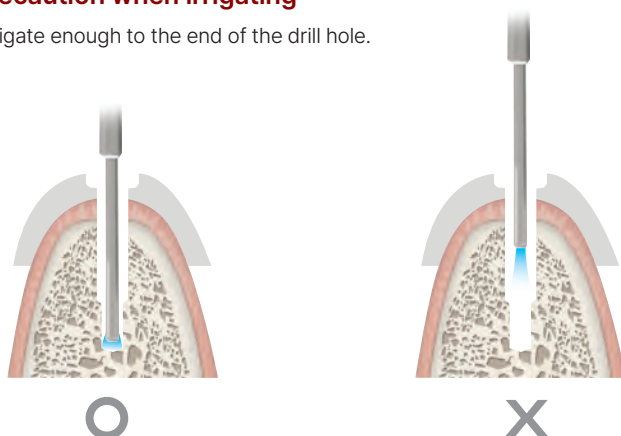
* Drilling method

- > Make sure with drilling in the desired direction without a change in the 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.



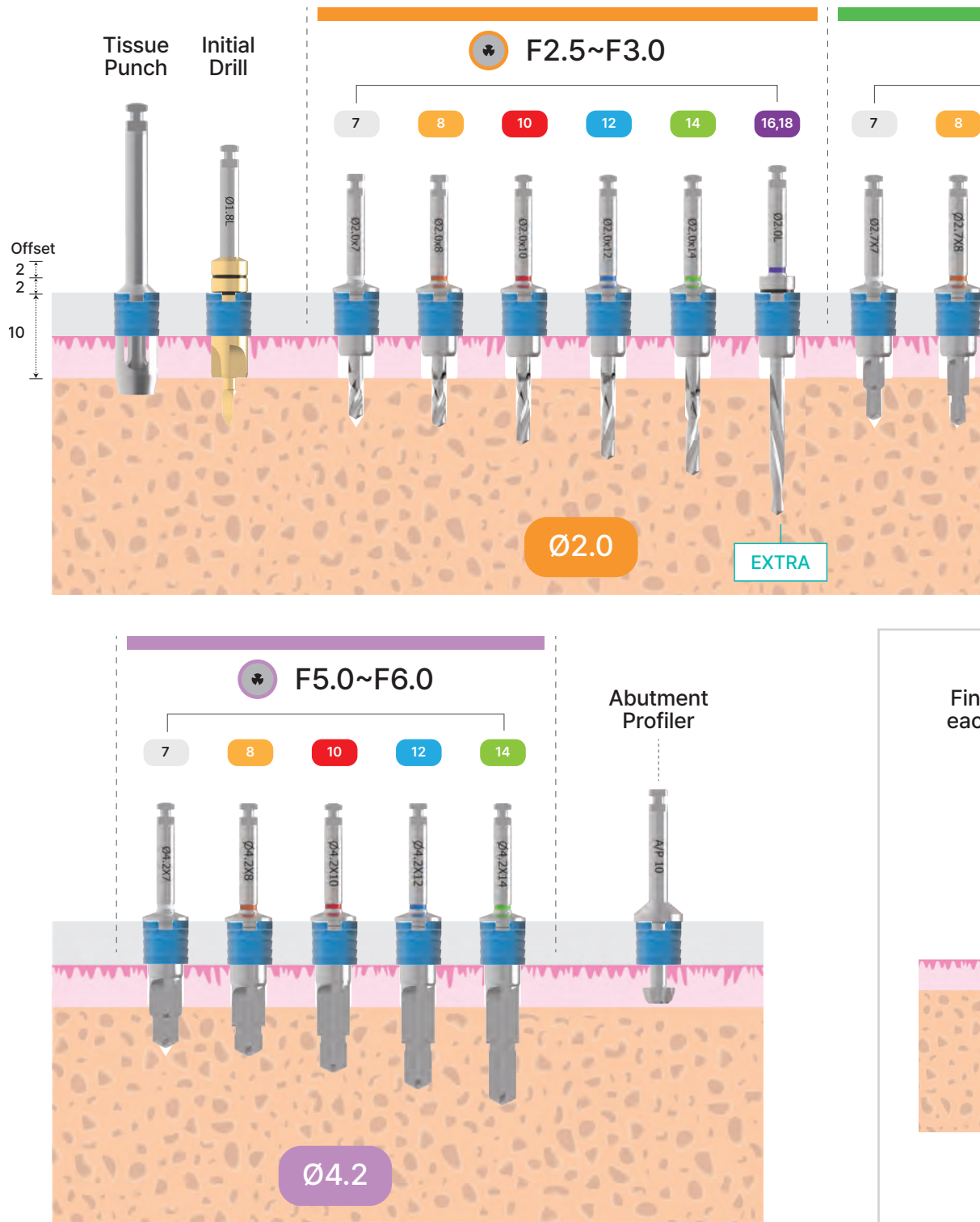
* Precaution when irrigating

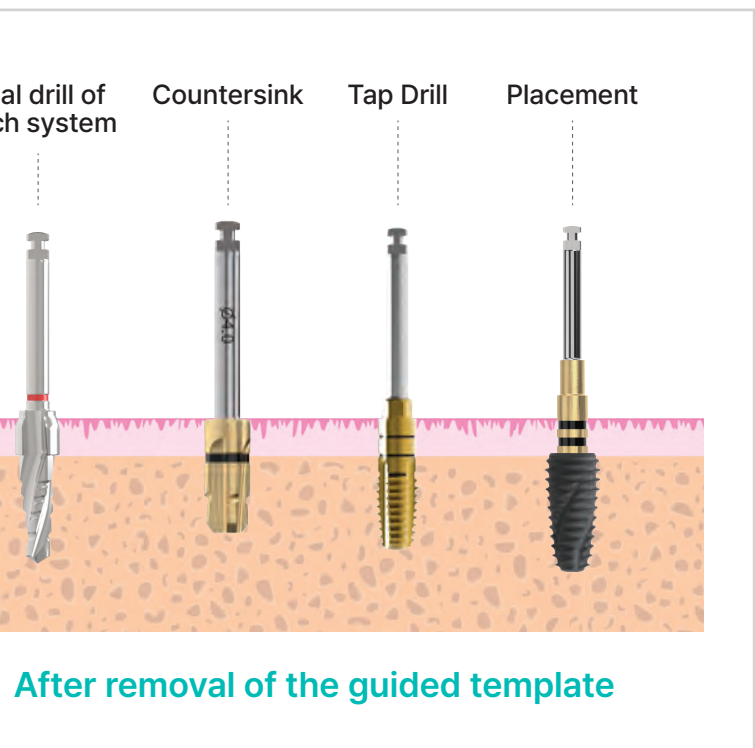
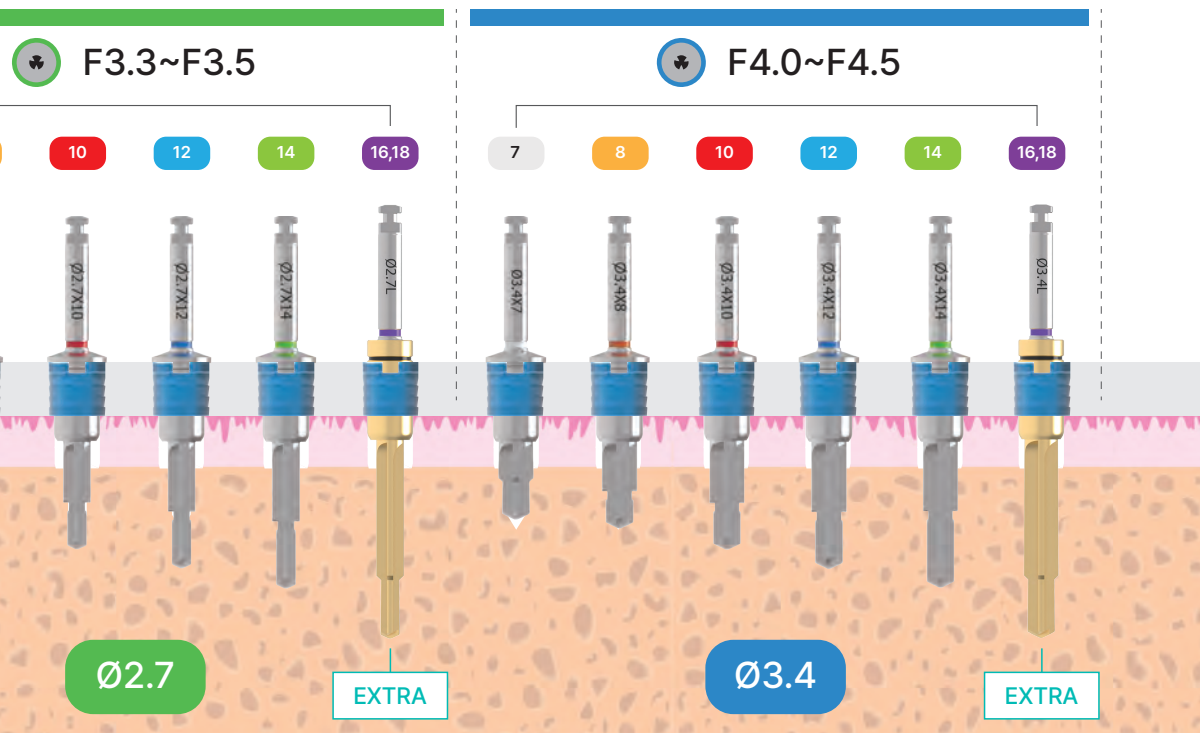
- > Irrigate enough to the end of the drill hole.



Drilling Sequence

> Total drilling sequence with the Tissue Punches, Initial Drills, Pilot Drills, and Abutment Profilers.





Hybrid Digital Prosthesis

- **Hybrid Ti-Base System**

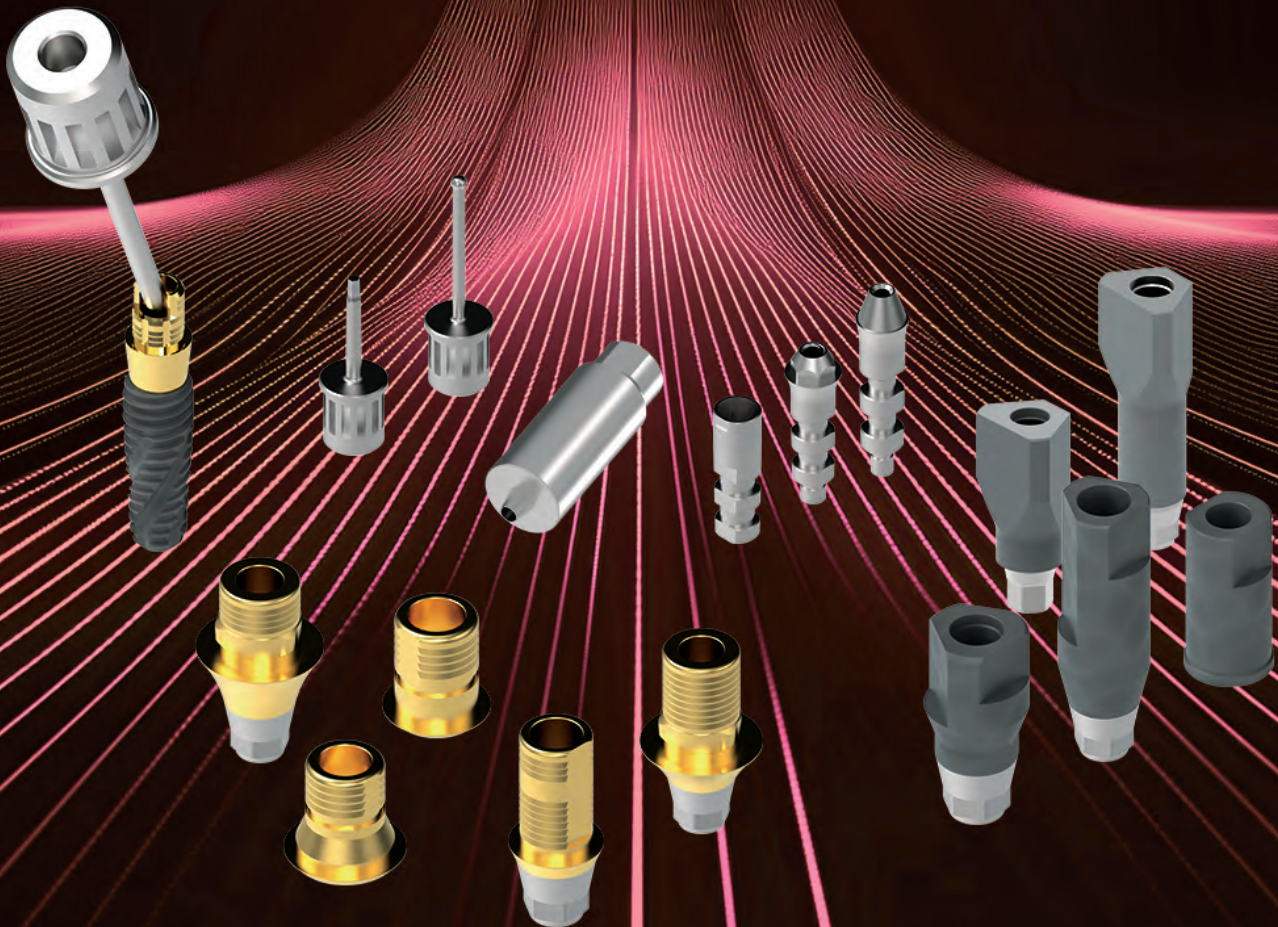
Sub. Hybrid Ti-Base System

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



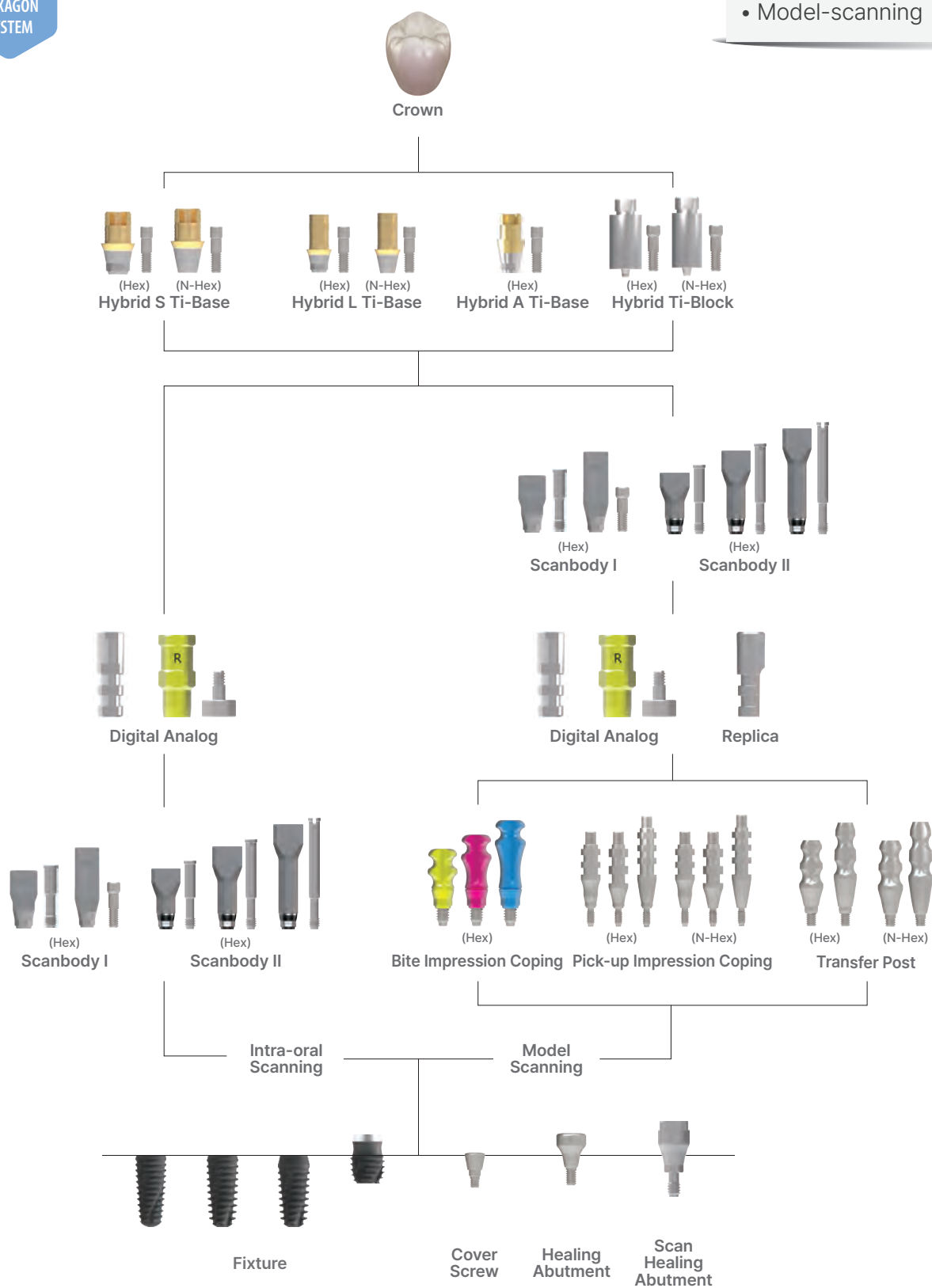
Hybrid Ti-Base I

Components Selection Guide for Sub. Hybrid Ti-Base System

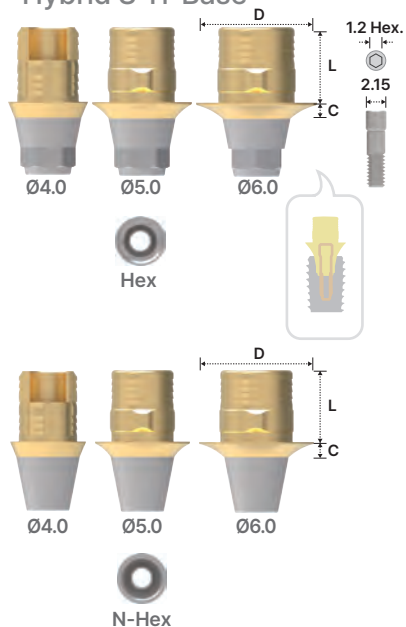
- For Submerged Implant System (Sub.): INNO Submerged, INNO X, INNO V, and INNO Short.

SUB.
HEXAGON
SYSTEM

- Intra-oral scanning
- Model-scanning



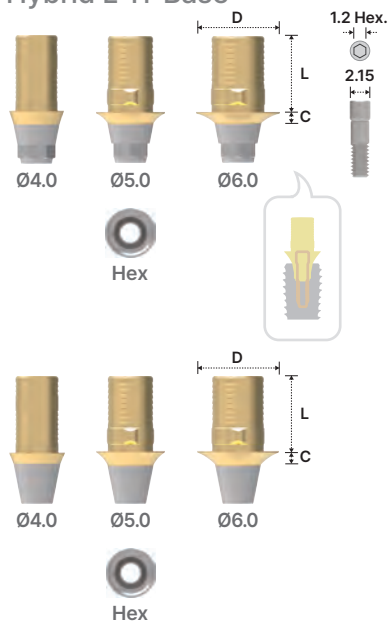
Hybrid S Ti-Base



Type	Hex			N-Hex		
Diameter	Ø4.0	Ø5.0	Ø6.0	Ø4.0	Ø5.0	Ø6.0
Length Cuff	3.75	3.75	3.75	3.75	3.75	3.75
0.8	2SLH404	2SLH504	2SLH604	2SLN404	2SLN504	2SLN604
2	2SLH424	2SLH524	2SLH624	2SLN424	2SLN524	2SLN624
3	2SLH434	2SLH534	2SLH634	2SLN434	2SLN534	2SLN634
4	2SLH444	2SLH544	2SLH644	2SLN444	2SLN544	2SLN644
5	2SLH454	2SLH554	2SLH654	2SLN454	2SLN554	2SLN654

- > Packing unit: 1 Hybrid S Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the 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 the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Abutment Screw (2SSHR200).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

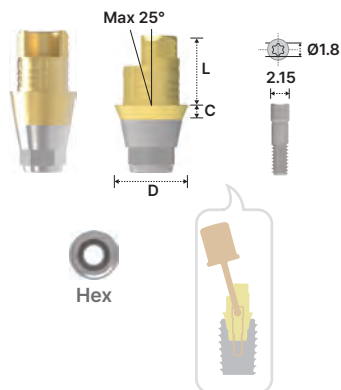
Hybrid L Ti-Base



Type	Hex			N-Hex		
Diameter	Ø4.0	Ø5.0	Ø6.0	Ø4.0	Ø5.0	Ø6.0
Length Cuff	5.5	5.5	5.5	5.5	5.5	5.5
1	2SLH415	2SLH515	2SLH615	2SLN415	2SLN515	2SLN615
2	2SLH425	2SLH525	2SLH625	2SLN425	2SLN525	2SLN625
3	2SLH435	2SLH535	2SLH635	2SLN435	2SLN535	2SLN635
4	2SLH445	2SLH545	2SLH645	2SLN445	2SLN545	2SLN645
5	2SLH455	2SLH555	2SLH655	2SLN455	2SLN555	2SLN655

- > Packing unit: 1 Hybrid L Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the 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 the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Abutment Screw (2SSHR200).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

Hybrid A Ti-Base



Type	Hex	N-Hex
Diameter	Ø4.0	Ø4.0
Length Cuff	3.75	3.75
0.8	2SLH404A	2SLN404A
2	2SLH424A	2SLN424A
3	2SLH434A	2SLN434A
4	2SLH444A	2SLN444A
5	2SLH454A	2SLN454A

- > Packing unit: 1 Hybrid A Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the 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 Stargrip Abutment Screw (2SLAH100, 2SLAH200 & 2SLAH300).
- > Tightened with Torx A Ratchet Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

* Machine / Ratchet Torx A Driver



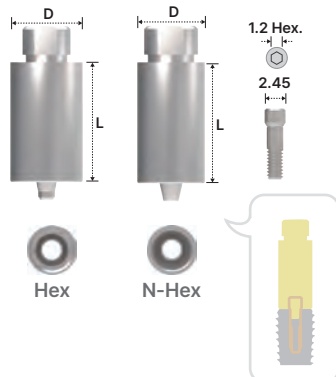
Type	Ratchet
Length	
22	KMATD18S
28	KMATD18L



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

- > Enhanced stability against internal slippage or fracture due to the wide contact area between Ratchet Torx A Driver and dedicated Torx Abutment Screws.
- > Tightening torque: 30 N-cm (Max. 50 N-cm).

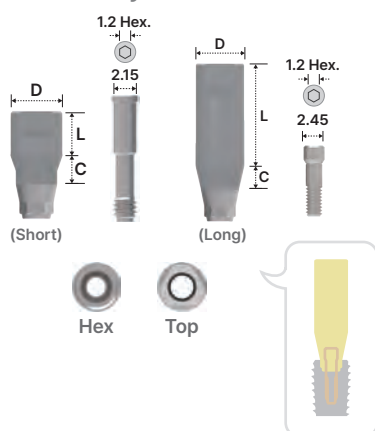
Hybrid Ti-Block



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 Abutment Screw (2SSHR100).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

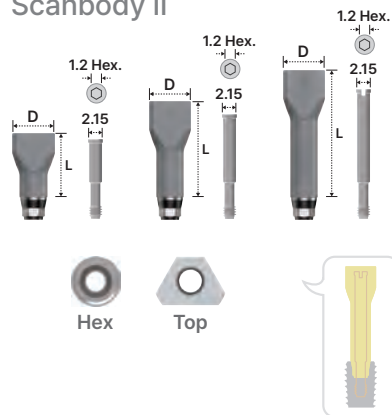
Scanbody I



Type	Hex(Short)	Hex(Long)
Diameter	Ø4.3	Ø4.3
Length Cuff	3.6	9
2.4	2SSB4325	2SSB4329

- > Packing unit: 1 Scanbody + 1 Abutment Screw.
- > For both, model-scanner and intra-oral scanner.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with Abutment Screw (Short: 2SSB4325 / Long: 2SSB4329).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.
- > Fixture-level impression.

Scanbody II



Type	Hex(Short)	Hex(Long)	Hex(X-Long)
Diameter	8	12	16
Length	2SSB5508	2SSB5512	2SSB5516

- > Packing unit: 1 Scanbody + 1 Scanbody II Screw.
- > For both, model-scanner and intra-oral scanner.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with Scanbody II Screw (Short: 2SSB200S / Long: 2SSB200L / X-Long: 2SSB200X).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N·cm.
- > Fixture-level impression.

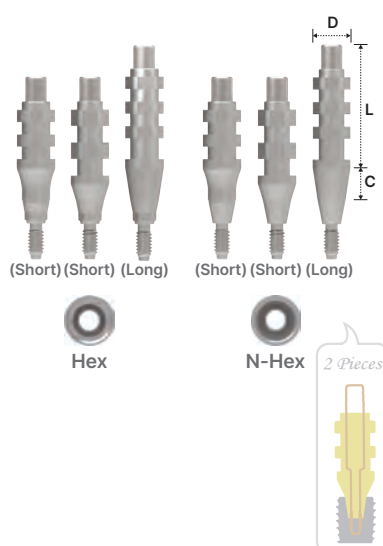
Bite Impression Coping



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 Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N·cm.
- > Fixture-level impression.

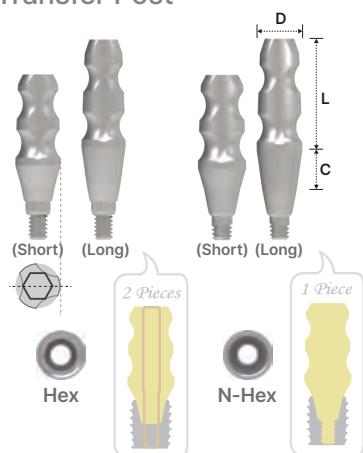
Pick-up Impression Coping



Type	Hex			N-Hex		
Diameter / Length / Cuff	Ø4.6	Ø5.6	Ø6.6	Ø4.6	Ø5.6	Ø6.6
12(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.
- > For open tray impression.
- > Connected with Guide Pin (2SISR001SS / 2SISR001SL).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N·cm.
- > Fixture-level impression.

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 / N-Hex - 1 Transfer Post (Solid Type).
- > For closed tray impression.
- > Connected with Guide Pin (2STH001SS / 2STH001SL).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.
- > Fixture-level impression.

Digital Analog



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

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

<i>Diameter</i> <i>Length</i>	Ø4.0
9	2SDR002

- > Packing unit: 1 Digital Analog + 1 Digital Analog Screw (DAS100).
- > Tightened with Hex Driver and Analog Holder.
- > Analog of fixture for the working cast.
- > Used for 3D printed model (RP).

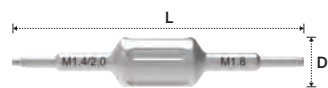
Replica



<i>Diameter</i> <i>Length</i>	Ø4.0
12	2SRHRR001

- > Packing unit: 1 Replica.
- > Analog of fixture for the working cast.

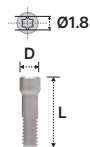
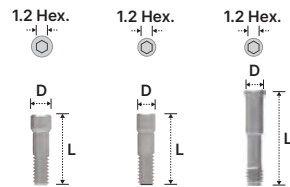
Analog Holder



Diameter Length	Ø7.97
47	KDAH01

- > Packing unit: 1 Analog Holder.
- > Used for tightening Digital Analog.

Abutment Screw



Diameter Length	Ø2.45	Ø2.15	Ø2.15
8.5	2SSHR100	2SSHR200	
11.7			2SSB100S

- > Packing unit: 1 Abutment Screw.
- > 2SSHR100: Hybrid Block and Scanbody (2SSB4329).
- > 2SSHR200: Hybrid S Ti-Base and Hybrid L Ti-Base.
- > 2SSB100S: Scanbody (2SSB4325).
- > Tightened with Hex Driver and Torque Wrench.

Diameter Length	2	3.2	4.2
Ø2.15	2SLAH100	2SLAH200	2SLAH300

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

Hybrid Ti-Base II

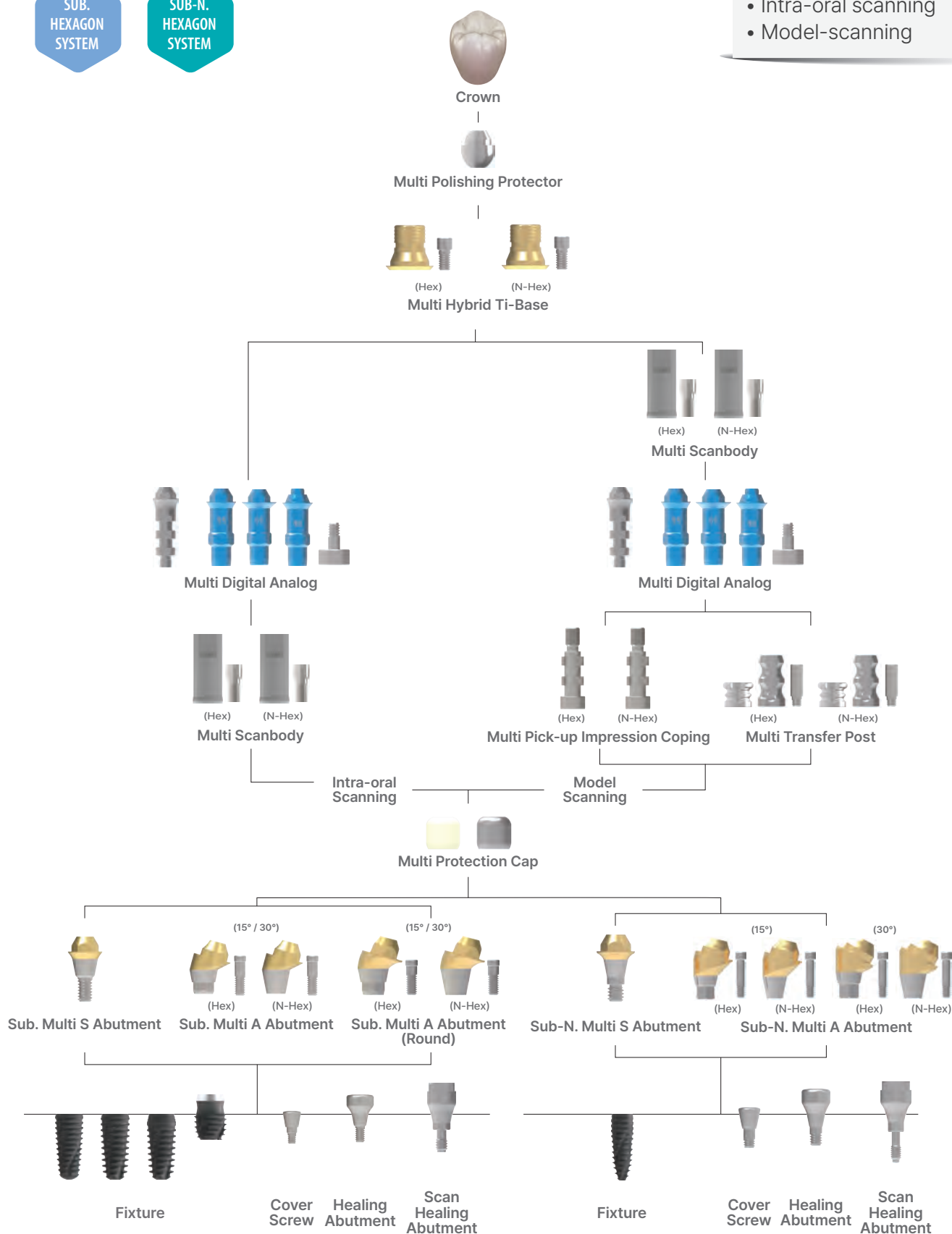
Components Selection Guide for Sub. / Sub-N. Multi Hybrid Ti-Base System

- For Submerged and Submerged Narrow Implant Systems (Sub. / Sub-N.):
INNO Submerged, INNO X, INNO V, INNO Short, and INNO Narrow.

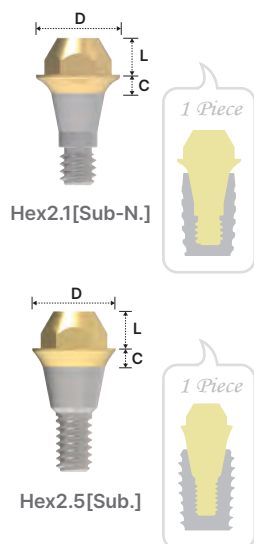
SUB.
HEXAGON
SYSTEM

SUB-N.
HEXAGON
SYSTEM

- Intra-oral scanning
- Model-scanning



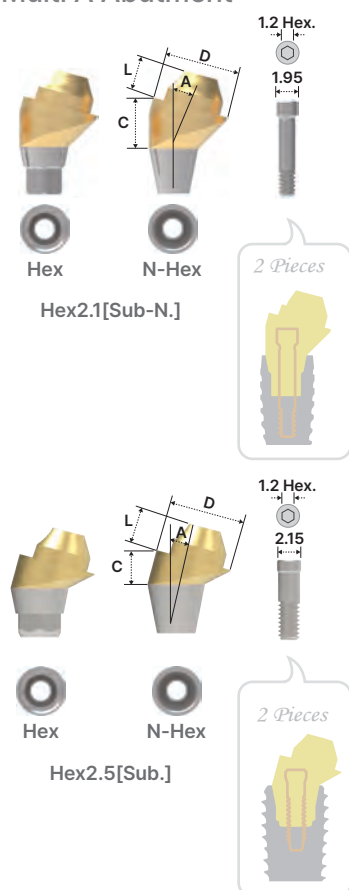
Multi S Abutment



Fixture Connection	Hex 2.1 [Sub-N.]	Hex 2.5 [Sub.]	
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]	Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / 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
6		2SMS456	2SMS556
7		2SMS457	2SMS557
8		2SMS458	2SMS558
9		2SMS459	2SMS559

- > Packing unit: 1 Multi S Abutment.
- > For Screw-Retained Prosthesis.
- > Titanium base for Multi Hybrid Ti-Base.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Integrated with screw and abutment (solid screw).
- > Use S Holder for a more stable position.
- > Tightened with S Machine or S Ratchet Driver and Torque Wrench.
- > Tightening torque: 30N-cm (Sub.) / 20~25N-cm (Sub-N.).
- > Use Multi Scanbody for digital flow.
- > Abutment-level impression.

Multi A Abutment

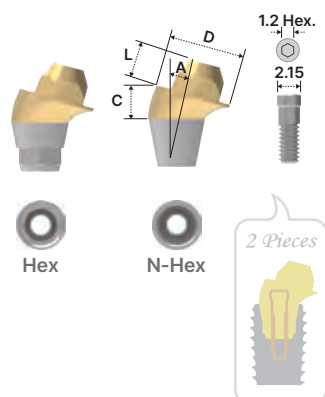


Type	Hex					
Fixture Connection	Hex 2.1 [Sub-N.]		Hex 2.5 [Sub.]			
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]		Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø6.0]		Ø5.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø6.0]	
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Cuff / Length	2	2	2	2	2	2
2	★ SMAH45152N		● 2SMAH45152			
3(*3.5)	● SMAH45153N	★ SMAH45303N	★ 2SMAH45153	● 2SMAH45303	★ 2SMAH55153	★ 2SMAH55303*
4	● SMAH45154N	● SMAH45304N	★ 2SMAH45154	★ 2SMAH45304	★ 2SMAH55154	★ 2SMAH55304
5					★ 2SMAH55155	★ 2SMAH55305

Type	N-Hex					
Fixture Connection	Hex 2.1 [Sub-N.]		Hex 2.5 [Sub.]			
Platform[Fixture Dia.]	Ø4.5 [Ø3.1 / Ø3.3]		Ø4.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / Ø6.0]		Ø5.5 [Ø3.5 / Ø4.0 / Ø4.5 / Ø5.0 / 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	★ SMAN45152N		● 2SMAN45152			
3(*3.5)	● SMAN45153N	★ SMAN45303N	★ 2SMAN45153	● 2SMAN45303	★ 2SMAN55153	★ 2SMAN55303*
4	● SMAN45154N	● SMAN45304N	★ 2SMAN45154	★ 2SMAN45304	★ 2SMAN55154	★ 2SMAN55304
5					★ 2SMAN55155	★ 2SMAN55305

- > Packing unit: 1 Multi A Abutment + 1 Abutment Screw.
- > For Screw-Retained Prosthesis.
- > Titanium base for Multi Hybrid Ti-Base.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Use A Holder for a more stable position.
- > Connected with Abutment Screw (SSHR200N: ★ SSHR300N: ● / 2SSHR300: ★ 2SSHR400: ●).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm (Sub.) / 20~25N-cm (Sub-N.).
- > Use Multi Scanbody for digital flow.
- > Abutment-level impression.

Multi A Abutment(Round)

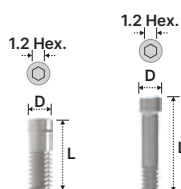


Type	Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Length	2	2	2	2
Cuff	2	2	2	2
2	2SMAH451520R			
2.5	2SMAH451525R			
3	2SMAH451530R	2SMAH453030R	2SMAH551530R	
3.5	2SMAH451535R	2SMAH453035R		2SMAH553030R
4	2SMAH451540R	2SMAH453040R	2SMAH551540R	2SMAH553040R
4.5	2SMAH451545R			
5	2SMAH451550R	2SMAH453050R	2SMAH551550R	2SMAH553050R
6	2SMAH451560R	2SMAH453060R		
7	2SMAH451570R	2SMAH453070R		
8	2SMAH451580R	2SMAH453080R		

Type	N- Hex			
Diameter(Angle)	Ø4.5(15°)	Ø4.5(30°)	Ø5.5(15°)	Ø5.5(30°)
Length	2	2	2	2
Cuff	2	2	2	2
2	2SMAN451520R			
2.5	2SMAN451525R			
3	2SMAN451530R	2SMAN453030R	2SMAN551530R	
3.5	2SMAN451535R	2SMAN453035R		2SMAN553030R
4	2SMAN451540R	2SMAN453040R	2SMAN551540R	2SMAN553040R
4.5	2SMAN451545R			
5	2SMAN451550R	2SMAN453050R	2SMAN551550R	2SMAN553050R
6	2SMAN451560R	2SMAN453060R		
7	2SMAN451570R	2SMAN453070R		
8	2SMAN451580R	2SMAN453080R		

- > Packing unit: 1 Multi A Abutment(Round) + 1 Abutment Screw.
- > For Screw Retained Prosthesis.
- > Titanium base for the cylinders.
- > Gold color for more translucent restoration.
- > Use Multi A Holder for a more stable position.
- > Connected with Abutment Screw (2SSHR400).
- > Tightened with Machine / Ratchet Hex Driver using Torque Wrench.
- > Tightening torque: 30N·cm.
- > Abutment-level impression.
- > Use Scanbody for digital workflow.
- > Library available for various software.
- > For library selection, refer to Cowellmedi® Implant and RP Analog Library Guide.

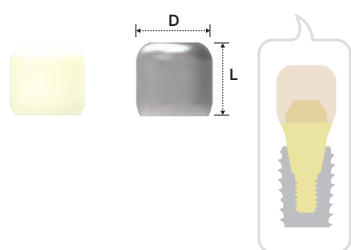
Abutment Screw



Length	8.7	9.3	7.5	6.5
Diameter	1.95	★SSHR200N	●SSHR300N	
2.15			★2SSHR300	●2SSHR400

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

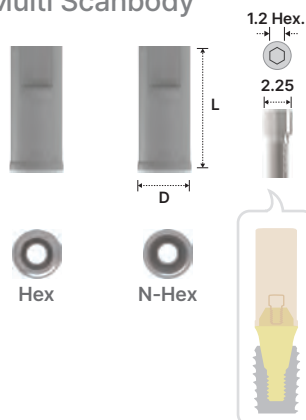
Multi Protection Cap



Material	Plastic		Metal	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter / Length	Ø5.2	Ø6.2	Ø5.2	Ø6.2
5	2SMPC45	2SMPC55	2SMPC45M	2SMPC55M

- > Packing unit: 1 Multi Protection Cap.
- > Protection from cheek and tongue for the gingival healing period.
- > Alternative usage for the sub-structure of the temporary prosthesis.
- > Tightened with Machine / Ratchet Hex Driver.
- > Tightening torque: 10N-cm.

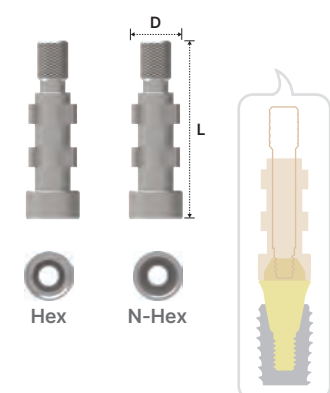
Multi Scanbody



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

- > Packing unit: 1 Multi Scanbody + 1 Multi Cylinder Screw.
- > For both, model-scanner and intra-oral scanner.
- > For Multi Hybrid Ti-Base.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.

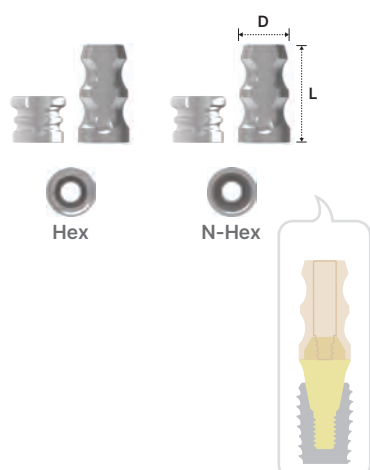
Multi Pick-up Impression Coping



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter / Length	Ø4.65	Ø5.65	Ø4.65	Ø5.65
16	2SMIH45	2SMIH55	2SMIN45	2SMIN55

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

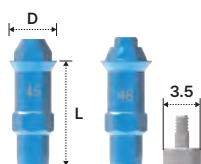
Multi Transfer Post



Type	Hex		N-Hex	
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.5	Ø5.5
Diameter / Length	Ø4.5	Ø5.5	Ø4.5	Ø5.5
5	2SMTH455	2SMTH555	2SMTN455	2SMTN555
8.5	2SMTH45	2SMTH55	2SMTN45	2SMTN55

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

Multi Digital Analog



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

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

Type	Multi I		Multi II
Multi S & A Abutment Diameter	Ø4.5	Ø5.5	Ø4.8
Diameter Length	Ø4.5	Ø5.5	Ø4.8
12	2SMLA45S	2SMLA55S	-
12.2	-	-	2MLA48S

- > Packing unit: 1 Digital Analog + 1 Digital Analog Screw (DAS100).
- > Tightened with Hex Driver and Analog Holder.
- > Analog of fixture for the working cast.
- > Used for 3D printed model (RP).

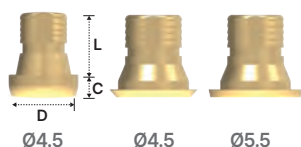
Analog Holder



Diameter Length	Ø7.97
47	KDAH01

- > Packing unit: 1 Analog Holder.
- > Used for tightening Digital Analog.

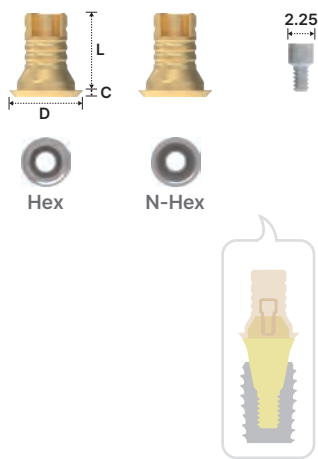
Multi Hybrid Ti-Base



Type	Hex			N-Hex		
Multi S & A Abutment Diameter	Ø4.5	Ø4.5	Ø5.5	Ø4.5	Ø4.5	Ø5.5
Diameter	Ø4.5	Ø4.5	Ø5.5	Ø4.5	Ø4.5	Ø5.6
Length	4.3	4.5	4.5	4.5	4.5	4.5
0.5	2SMHT45H	2SMHT55H		2SMHT45N	2SMHT55N	
1.5	2SMHT40H			2SMHT40N		

- > Packing unit: 1 Multi Hybrid Ti-Base + 1 Multi Cylinder Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface for anti-rotation of the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Multi Cylinder Screw (2SMCS100).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 20N·cm.
- > Use Scanbody for 3D Work.
- > Abutment-level impression.

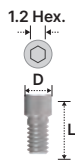
Multi Hybrid A Ti-Base



Type	Hex	N-Hex
Diameter	Ø5.3	Ø5.3
Length	6.1	6.1
Cuff	0.5	2SM2HAT48H
	2SM2HAT48H	2SM2HAT48N

- > Packing unit: 1 Hybrid A Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Tightened with Machine / Ratchet Trox A Driver and Torque Wrench.
- > Tightening torque force: 30 N-cm.
- > Use the Scanbody for digital workflow.
- > Angle Screw Channel Only.

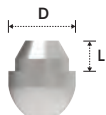
Multi Cylinder Screw



Diameter Length	Ø2.25
5	2SMCS100

- > Packing unit: 1 Multi Cylinder Screw.
- > Connected with Multi Scanbody and Multi Hybrid Ti-Base.
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 20N-cm.

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.
- > For prosthetic margin protection during polishing.

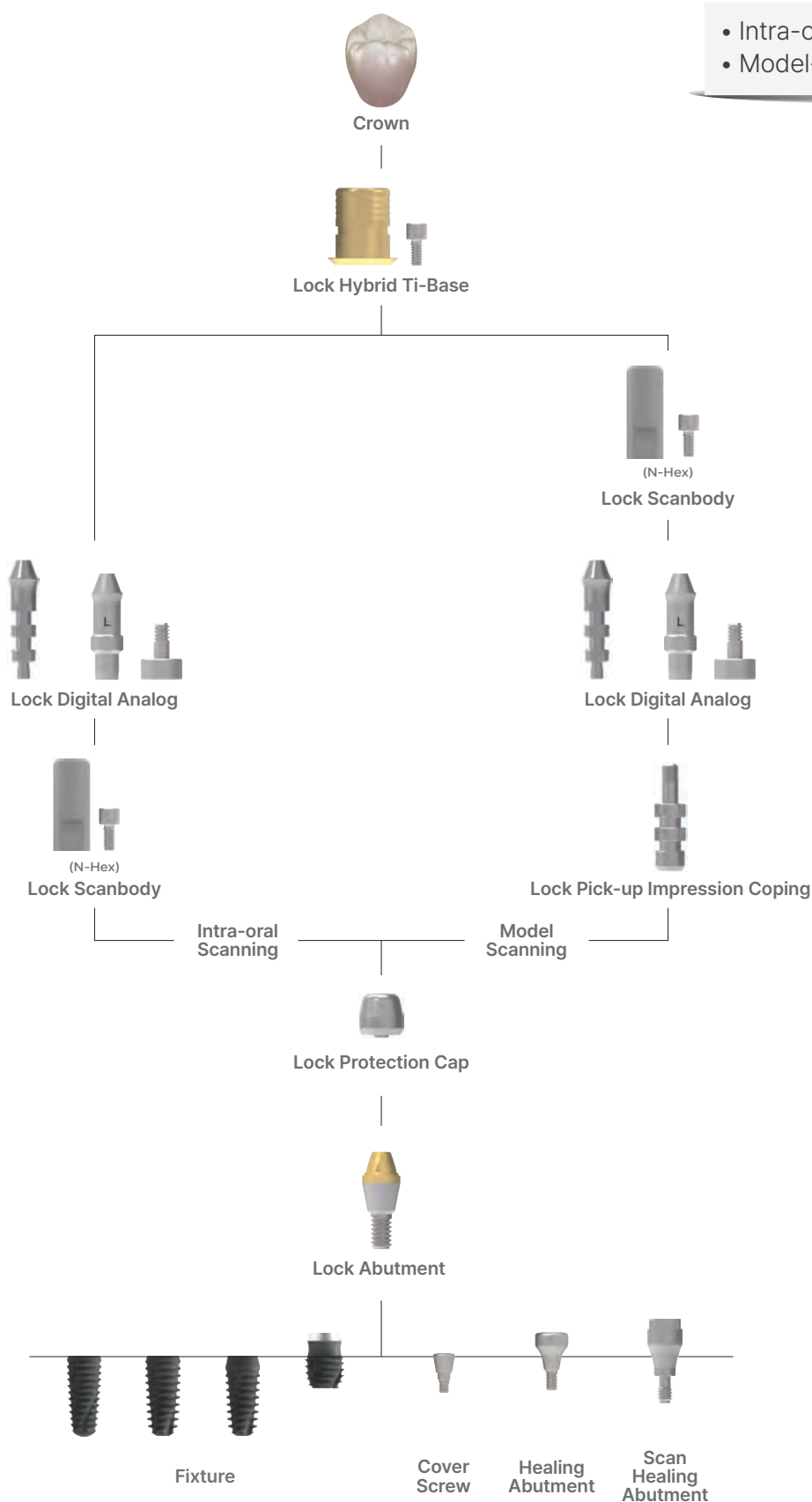
Hybrid Ti-Base III

Components Selection Guide for Sub. Lock Hybrid Ti-Base

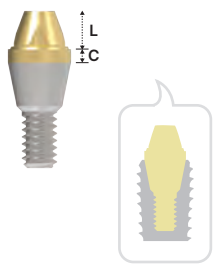
- For Submerged Implant System (Sub.): INNO Submerged, INNO X, INNO V, and INNO Short.

SUB.
HEXAGON
SYSTEM

- Intra-oral scanning
- Model-scanning



Lock Abutment



Length Cuff	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 Lock Ratchet Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Abutment-level impression.

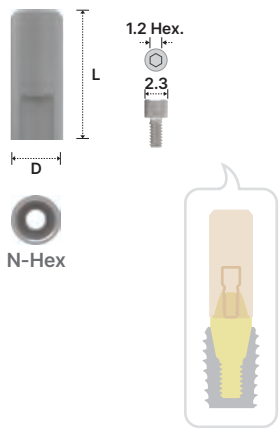
Lock Protection Cap



Lock Abutment Diameter	Ø3.5
Diameter Length	Ø4.3
4	2SLP45

- > Packing unit: 1 Lock Protection Cap.
- > Protection from cheek and tongue for gingival healing period.
- > Prevention of gingival retraction for prosthodontic margin for abutment.
- > Tightened with Hex Driver.
- > Tightening torque: 5~10N-cm.

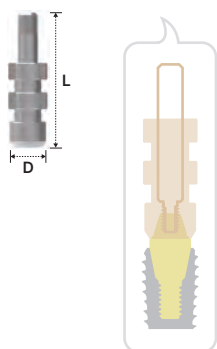
Lock Scanbody



Lock Abutment Diameter	Ø3.5
Diameter Length	Ø4.3
9	2SLB001H

- > Packing unit: 1 Lock Scanbody + 1 Lock Cylinder Screw.
- > For both, model scanner and intra oral scanner.
- > For Lock Hybrid Ti-Base.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with Lock Cylinder Screw (2SLCS200).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.

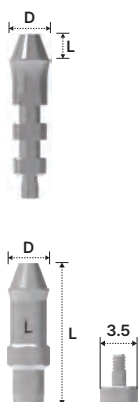
Lock Pick-up Impression Coping



Lock Abutment Diameter	Ø3.5
Diameter	Ø4.3
Length	
16	2SLIH45

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

Lock Digital Analog



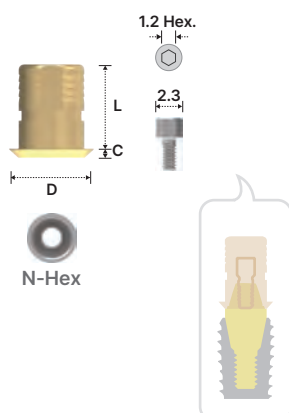
Lock Abutment Diameter	Ø3.5
Diameter	Ø3.5
Length	
2.2	2SLLA35

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

Lock Abutment Diameter	Ø3.5
Diameter	Ø3.5
Length	
12.15	2SLLA35S

- > Packing unit: 1 Lock Digital Analog + 1 Digital Analog Screw (DAS100).
- > Used for both 3D printed model (RP) and stone model.

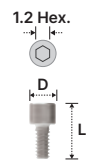
Lock Hybrid Ti-Base



Lock Abutment Diameter	Ø3.5
Diameter	Ø4.5
Length	5
Cuff	
0.5	2SLHT40N

- > Packing unit: 1 Lock Hybrid Ti-Base + 1 Lock Cylinder Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface for anti-rotation of the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Lock Cylinder Screw (2SLCS200).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for 3D Work.
- > Abutment-level impression.

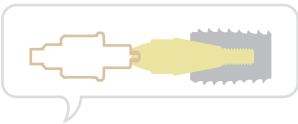
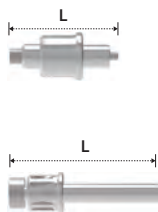
Lock Cylinder Screw



Diameter Length	Ø2.3
4.8	2SLCS200

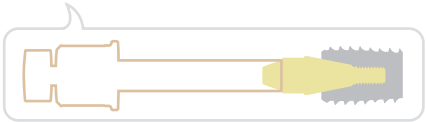
- > Packing unit: 1 Lock Cylinder Screw.
- > Connected with Lock Scanbody and Lock Hybrid Ti-Base.
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.

Lock Ratchet Driver



Type Length	Ratchet
14.15	KRLRD18
28.5	KRLRD28

- > Packing unit: 1 Lock Ratchet Driver.
- > To install and remove Lock Abutment with Torque Wrench.



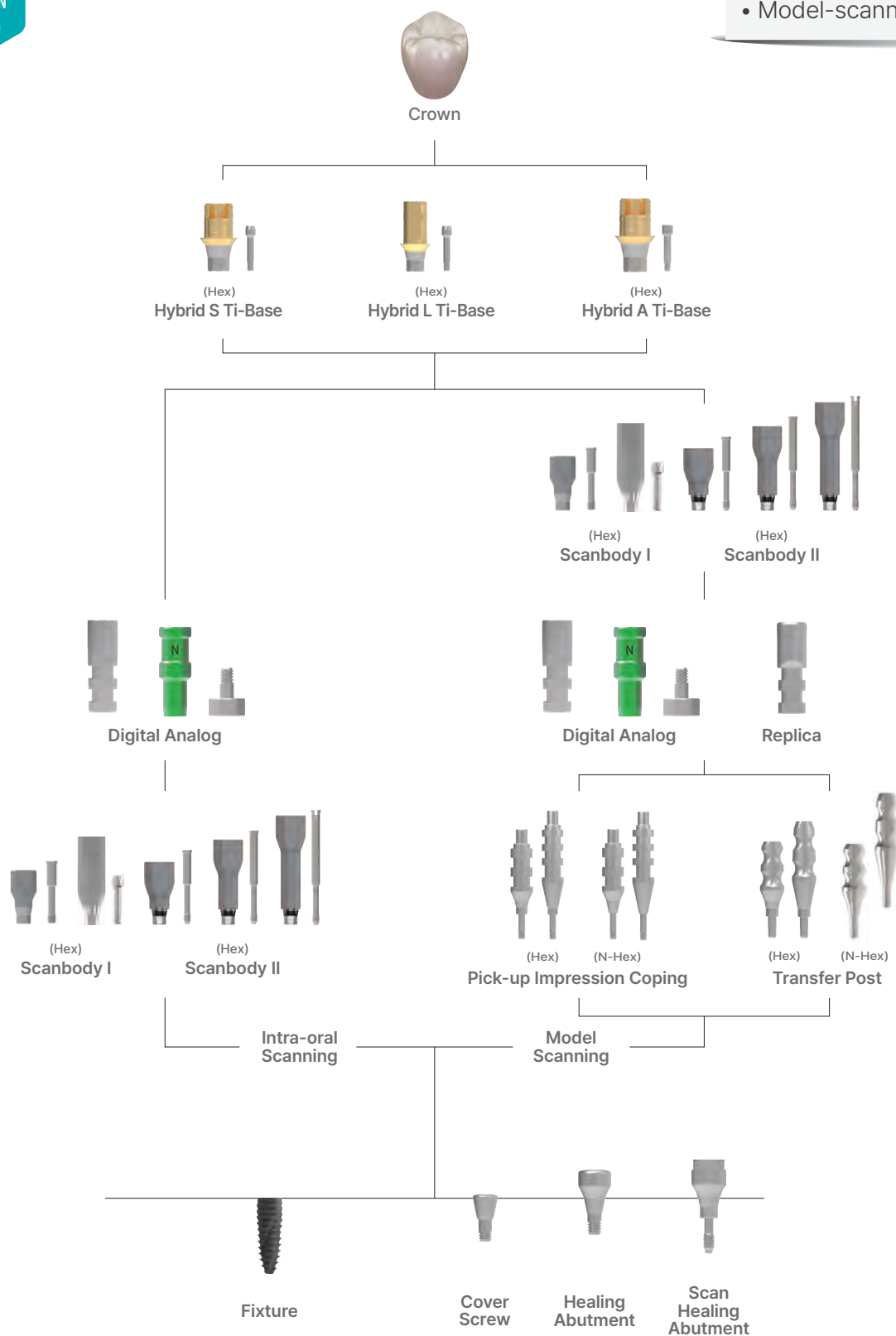
Hybrid Ti-Base IV

Components Selection Guide for Sub-N. Hybrid Ti-Base

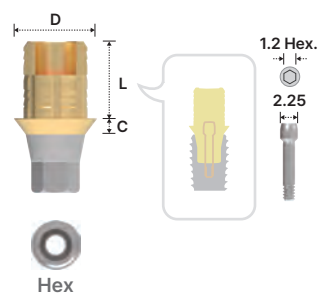
- For Submerged Narrow Implant System (Sub-N.): INNO Narrow.

SUB-N.
HEXAGON
SYSTEM

- Intra-oral scanning
- Model-scanning



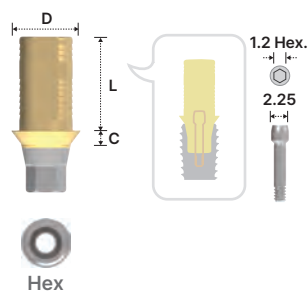
Hybrid S Ti-Base



Type	Hex
Diameter	Ø4.0
LengthCuff	3.75
0.8	SLH404N
2	SLH424N
3	SLH434N
4	SLH444N
5	SLH454N

- > Packing unit: 1 Hybrid S Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the 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 the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Abutment Screw (SSHR100N).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 20~25N·cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

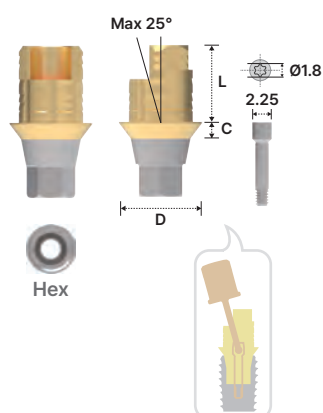
Hybrid L Ti-Base



Type	Hex
Diameter	Ø4.0
LengthCuff	5.5
1	SLH415N
2	SLH425N
3	SLH435N
4	SLH445N
5	SLH455N

- > Packing unit: 1 Hybrid L Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Cutting surface for anti-rotation of the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Abutment Screw (SSHR100N).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 20~25N·cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

Hybrid A Ti-Base



Type	Hex	N-Hex
Diameter	Ø4.0	Ø4.0
Length Cuff	3.75	3.75
0.8	SLH404AN	SLN404AN
2	SLH424AN	SLN424AN
3	SLH434AN	SLN434AN
4	SLH444AN	SLN444AN
5	SLH454AN	SLN454AN

- > Packing unit: 1 Hybrid A Ti-Base + 1 Abutment Screw.
- > For Screw-Cement or Cement Retained Abutment.
- > Titanium base for the strength of CAD/CAM customized abutment or crown.
- > For Fabrication of Angulated Screw Channel up to 25°.
- > Right angled for anti-rotation of the prosthesis.
- > Library available for EXOCAD®, 3Shape® & Others.
- > Connected with Stargrip Abutment Screw (SLAH100N, SLAH200N & SLAH300N).
- > Tightened with Torx A Ratchet Driver and Torque Wrench.
- > Tightening torque: 20~25N-cm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

* Machine / Ratchet Torx A Driver



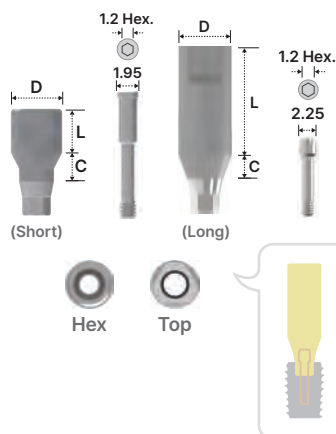
Length	Type	Ratchet
22		KMATD18S
28		KMATD18L



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

- > Enhanced stability against internal slippage or fracture due to the wide contact area between Ratchet Torx A Driver and dedicated Torx Abutment Screws.
- > Tightening torque: 30 N-cm (Max. 50 N-cm).

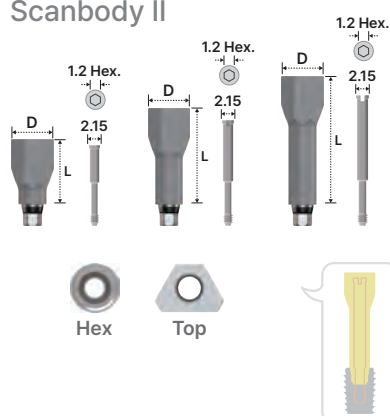
Scanbody I



Type	Hex(Short)	Hex(Long)
Diameter	Ø4.3	Ø4.3
Length Cuff	4	9
2	SSB4325N	SSB4329N

- > Packing unit: 1 Scanbody + 1 Abutment Screw.
- > For both, model-scanner and intra-oral scanner.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with Abutment Screw.
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.
- > Fixture-level impression.

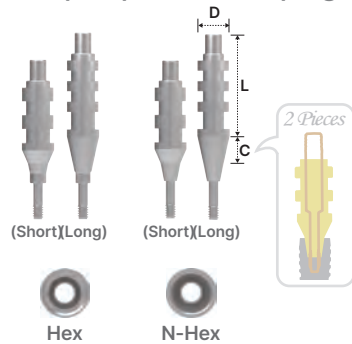
Scanbody II



Type	Hex(Short)	Hex(Long)	Hex(X-Long)
Diameter	8	12	16
Ø5.5	SSB5508N	SSB5512N	SSB5516N

- > Packing unit: 1 Scanbody + 1 Scanbody II Screw.
- > For both, model-scanner and intra-oral scanner.
- > Made of 100% titanium alloy with a special coating applied.
- > No need to spray.
- > Connected with Scanbody II Screw (Short: SSB200SN / Long: SSB200LN / X-Long: SSB200XN).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.
- > Fixture-level impression.

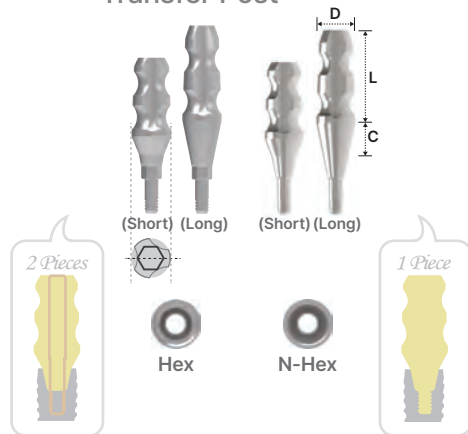
Pick-up Impression Coping



Type	Hex	N-Hex
<i>Diameter</i> <i>Length / Cuff</i>	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 Guide Pin (SIS001SN / SIS001LN).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N·cm.

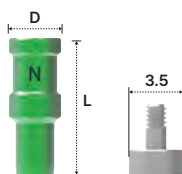
Transfer Post



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

- > Packing unit: Hex - 1 Transfer Post + 1 Guide Pin / N-Hex - 1 Transfer Post (Solid Type).
- > For closed tray impression.
- > Connected with Guide Pin (STH001SN / STH001LN).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N·cm.

Digital Analog



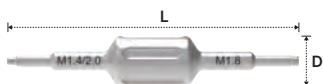
<i>Diameter</i> <i>Length</i>	Ø3.9
12	SDR001N

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

<i>Diameter</i> <i>Length</i>	Ø3.6
10	SDR002N

- > Packing unit: 1 Digital Analog + 1 Digital Analog Screw (DAS100).
- > Tightened with Hex Driver and Analog Holder.
- > Analog of fixture for the working cast.
- > Used for 3D printed model (RP).

Analog Holder



Diameter Length	Ø7.97
47	KDAH01

- > Packing unit: 1 Analog Holder.
- > Used for tightening Digital Analog.

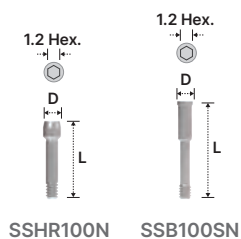
Replica



Diameter Length	Ø4.0
12	SRHRR001N

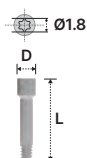
- > Packing unit: 1 Replica.
- > Analog of fixture for the working cast.

Abutment Screw



Diameter Length	Ø2.25	Ø1.95
10.2	SSHR100N	
12.3		SSB100SN

- > Packing unit: 1 Abutment Screw.
- > SSHR100N: Hybrid S Ti-Base, Hybrid L Ti-Base, and Scanbody (SSB4329N).
- > SSB100SN: Scanbody (SSB4325N).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 20~25N·cm.



Diameter Length	10.2	11.4	12.4
Ø2.25	SLAH100N	SLAH200N	SLAH300N

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

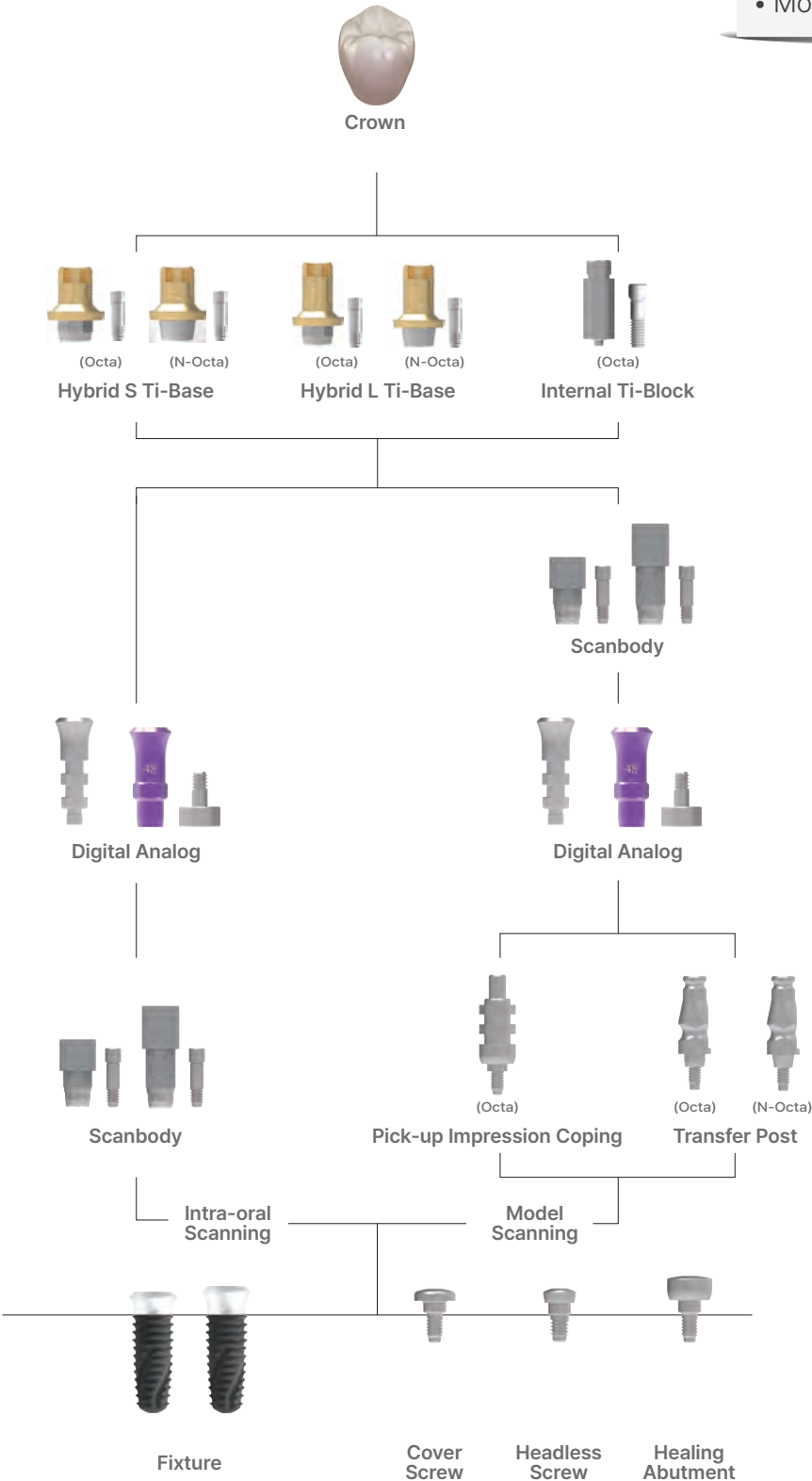
Hybrid Ti-Base V

Components Selection Guide for Int. Hybrid Ti-Base

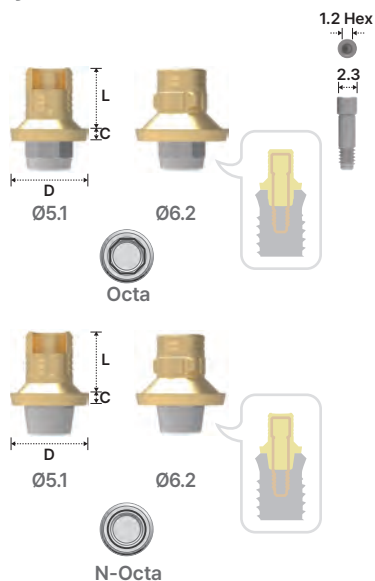
• For Internal Implant System (Int.): INNO Internal.



- Intra-oral scanning
- Model-scanning



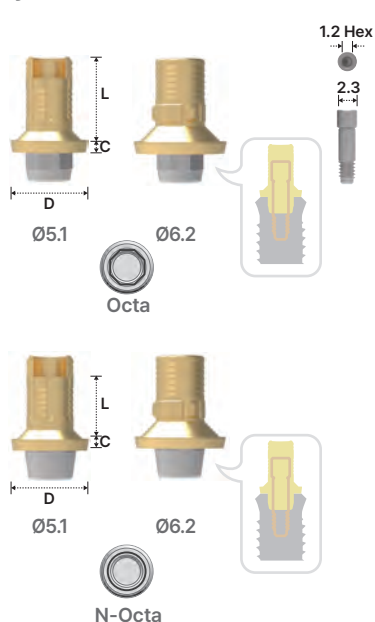
Hybrid S Ti-Base



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.
- > Titanium base for the strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Right angled (Ø5.1) and humped design (Ø6.2) for anti-rotation of prosthesis.
- > Connected with Abutment Screw (ILHS100).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for digital workflow.
- > Fixture-level impression.

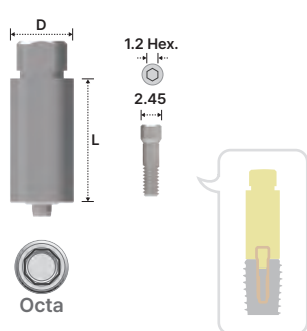
Hybrid L Ti-Base



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.
- > Titanium base for strength of CAD/CAM customized abutment or crown.
- > Gold color for more translucent restoration.
- > Library available for EXOCAD®, 3Shape® & others.
- > Cutting surface (Ø5.1) and humped design (Ø6.2) for anti-rotation of the prosthesis.
- > Connected with Abutment Screw (ILHS100).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30N-cm.
- > Use Scanbody for digital workflow.
- > Fixture-level impression.

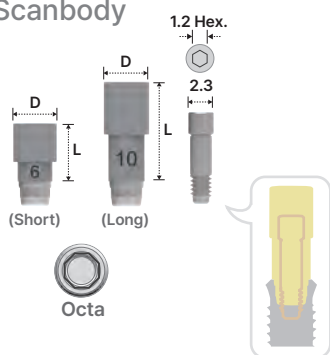
Internal Ti-Block



Type	Octa	
Platform	Ø4.8[Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	10	10
Length	20	20
	CIOR10S	CIOW10S

- > 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®
- > Connected with Abutment Screw (2SSHR100).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 30Ncm.
- > Use Scanbody for 3D Work.
- > Fixture-level impression.

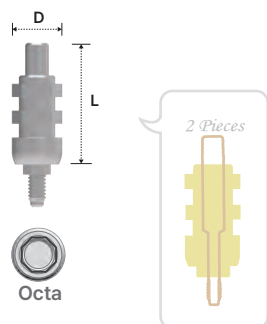
Scanbody



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

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

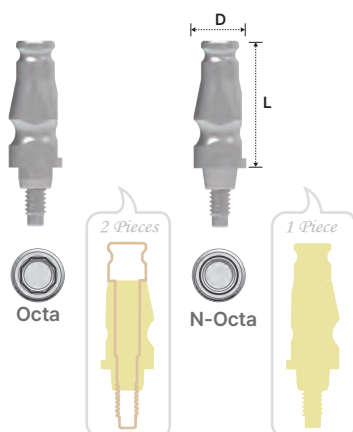
Pick-up Impression Coping



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	13.7
	IIOR001	IHOW001

- > Packing unit: 1 Pick-up Impression Coping + 1 Guide Pin.
- > For open tray impression.
- > Connected with Guide Pin (IIOR001S).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-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	Ø4.85	Ø5.95	Ø4.85	Ø5.95
Length	10.07	10.07	10.07	10.07
	ITOR400	ITOW500	ITNR400	ITNW500

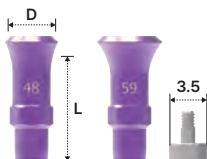
- > Packing unit: Octa - 1 Transfer Post + 1 Guide Pin / N-Octa - 1 Transfer Post (Solid Type).
- > For closed tray impression.
- > Connected with Guide Pin (Regular: ITOR400S / Wide: ITOW500S).
- > Tightened with Hex Driver and Torque Wrench.
- > Tightening torque: 12~15N-cm.

Digital Analog



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

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



Platform [Fixture Dia.]	Ø4.8 [Ø3.5 / Ø4.0 / Ø4.5]	Ø5.9 [Ø5.0 / Ø6.0]
Diameter	Ø4.8	Ø5.9
Length	11.5	IDR59P

- > Packing unit: 1 Digital Analog + 1 Digital Analog Screw (DAS100).
- > Tightened with Hex Driver and Analog Holder.
- > Analog of fixture for the working cast.
- > Used for 3D printed model (RP).

Analog Holder



Diameter	Ø7.97
Length	47

KDAH01

- > Packing unit: 1 Analog Holder.
- > Used for tightening Digital Analog.

Abutment Screw



Diameter	Ø2.3
Length	8.5

ILHS100

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

Cowellmedi® Xpert Instruments

Experts Know What Delivers Results

• Implant Engine	264
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GBR Kit	296
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Volume-Up Guide	322



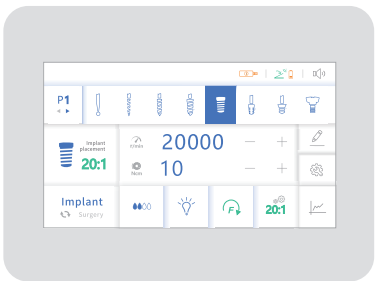
Cowellmedi Implant Engine

Comfort for Your Hands. Confidence for Your Patients.



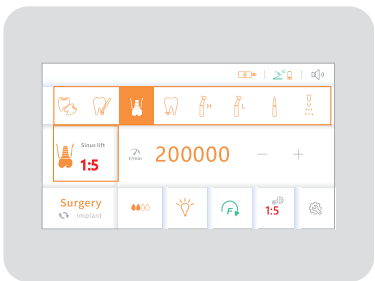
Cowellmedi Implant Engine

> More Comfortable / More Efficient / More Safe.



2 Working modes in 1 machine

> Implant mode



> Surgical mode



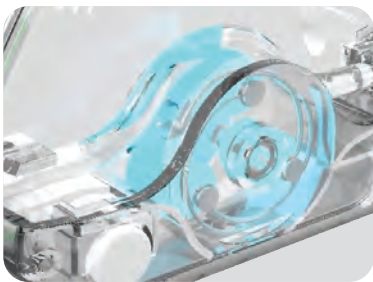
LED Light

- > High-brightness LED light, the maximum illumination of the contra-angle can reach $\geq 7000\text{Lux}$



Clearer Display

- > 7-inch color full touch screen for precise and efficient control.



Silent Water Pump

- > Silent and water proof.
- > Automatic anti-overflow design.



Wireless Foot Pedal

- > Sterile operation, safer and more reliable.
It can be achieved giving the maximum freedom of the handle.



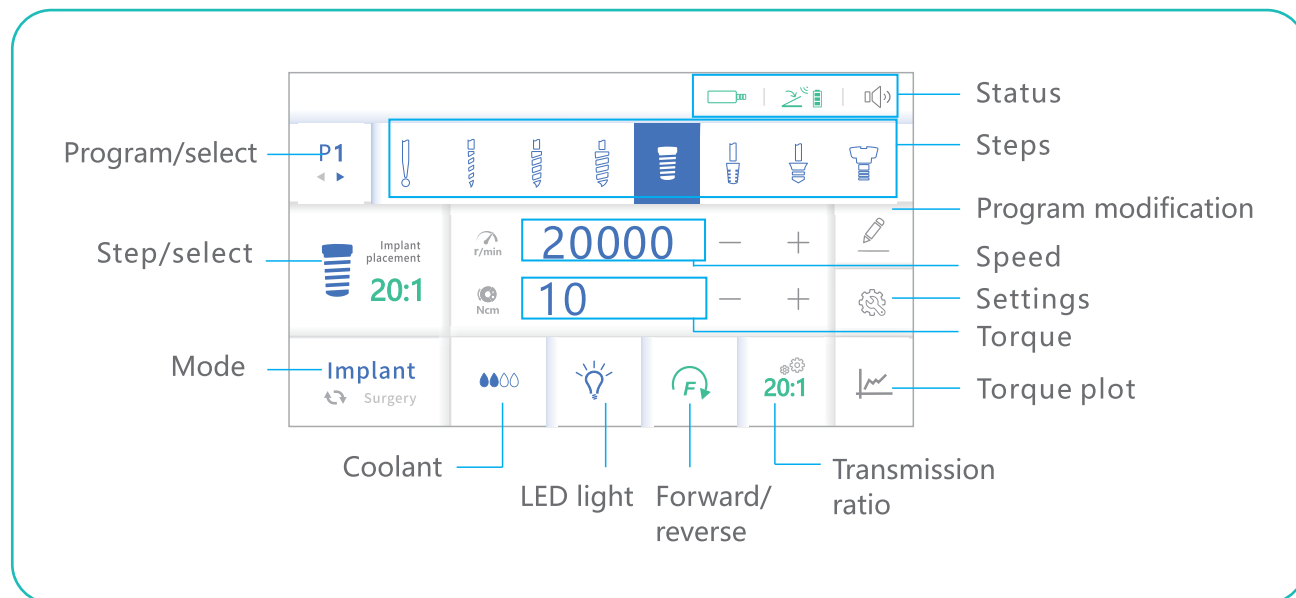
Metal Connector

- > Use metal medical plug for stable connection and long service life.

For Comfortable Implant Surgery

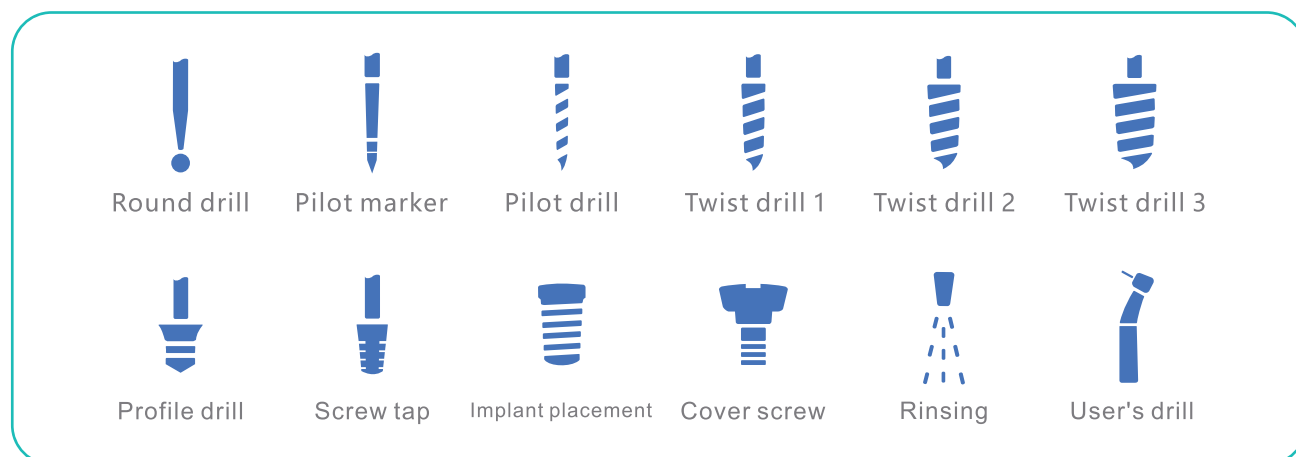
2 Working Mode in 1 Machine, Implant Mode / Surgery Mode

- 5 Memorized Programs.
- It can set 5 programs with different data.



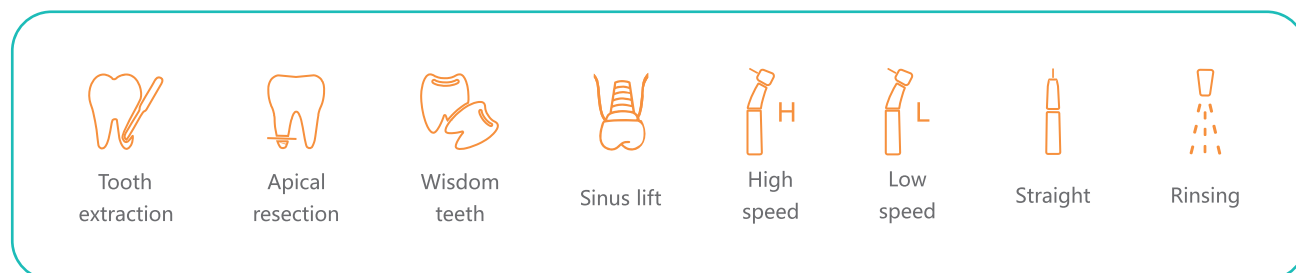
Implant Mode

- 12 Optional steps, Help you create your own planting process.
- Compatible contra-angle : 4:1 / 10:1 / 16:1 / 20:1 / 27:1 / 32:1 / 64:1



Surgery Mode

- 8 Different programs, meet all you need.
- Compatible contra-angle : 1:1 / 1:2 / 1:3 / 1:4.2 / 1:5



For Efficient Surgery Data Management

Implantation Torque Data Store

- Easy to record implantation data for each patient to disk.

Enter The Position of Implant and Patient Information

Implant position

18

17

16

15

14

13

12

11

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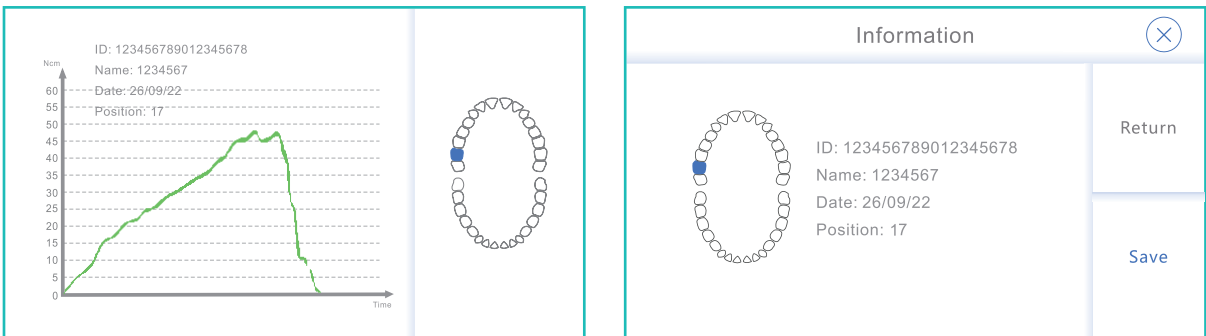
Return

Next

Information input

Next

The Implant Torque Data Displayed During Implant Surgery



*USB Device to upgrade software or store data

For Safe Implant Surgery

Emergency restriction mode

- If there is a line fault, avoid unexpected interruptions during implantation.



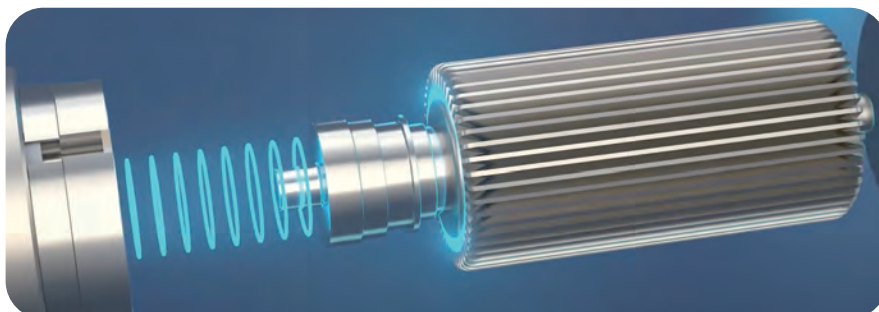
Wireless Pedal

- Wireless pedal allows safe and comfortable handling during surgery.



The 4th generation of brushless motor

- The motor is upgraded and optimized for improved performance and reliable operation.



Specification



Foot Pedal

- Speed Control: Precise Variable
- Functions:
 - Cooling water flow adjustment
 - Program selection
 - Rotation direction change
 - Multi-function control

Motor

- Max Speed: 300–40,000 rpm
- Max Torque: 80 N·cm (20:1)
- Dimensions : 280 X 250 X 120
- LED: 30,000 lux
- Weight: 3.4kg

Handpiece

- Model : CX235C6
- Gear Ratio : 20:1
- Maximum Speed : 2000rpm
- Water cooling : 50m/min at 200kPa
- Spray type : External Spray

Technical Data

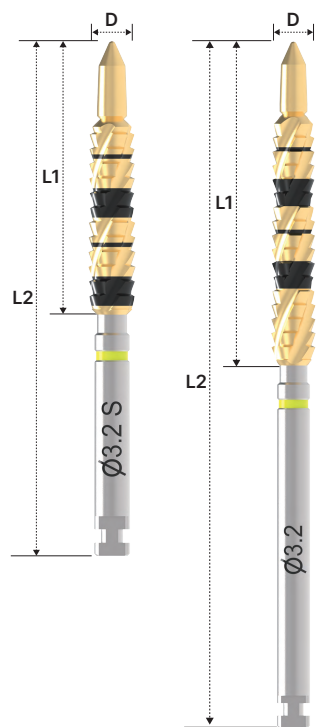
Permissible voltage fluctuation	220 ~ 240V
Range of speed	300 ~ 40,000rpm
Maximum torque(20:1)	80 N·cm
Input Voltage	DC 30V
Frequency	50~60Hz
Maximum Power Consumption	120VA
Kite Source illumination	30,000lux
Dimensions in mm	280 X 250 X 120
Weight in kg	3.4

Pathfinder Kit [KPF001]

- > Prevents the drill from slipping on inclined surfaces, ensuring that the hole is formed in the desired direction.
- > The drill's long shank allows for precise hole formation in the intended position and direction while minimizing interference with adjacent teeth.
- > Removes only the thick cortical bone on the lingual or palatal side, preserving the thin buccal cancellous bone around the implant.
- > The long shank of the drill provides clear visibility of the drilling direction, helping maintain parallelism with adjacent implants.

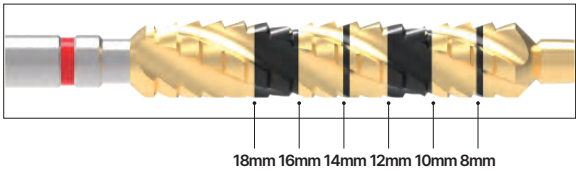
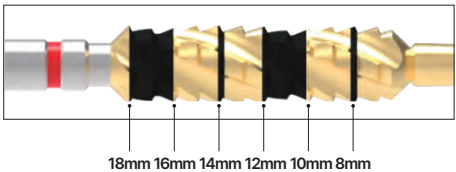


Pathfinder Drill

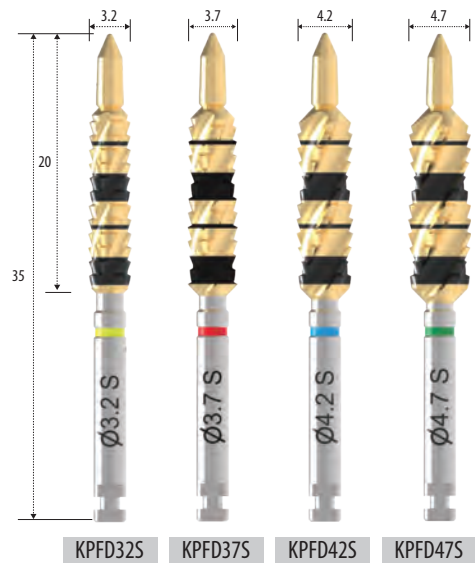


- > By securing the guide part in the initial hole created with the Point Drill, drilling can be performed at the planned position.
- > The lateral cutting edge allows for adjustment of the Drill path in the desired direction.
- > Laser markings for length identification (8, 10, 12, 14, 16, 18mm)
- > Recommended rpm: 1000–1200 RPM.

Code	D(Ø)	L1(mm)	L2(mm)	Color Band
KPFD32S	3.2	20	35	Yellow
KPFD37S	3.7	20	35	Red
KPFD42S	4.2	20	35	Blue
KPFD47S	4.7	20	35	Green
KPFD32L	3.2	25	50	Yellow
KPFD37L	3.7	25	50	Red
KPFD42L	4.2	25	50	Blue
KPFD47L	4.7	25	50	Green

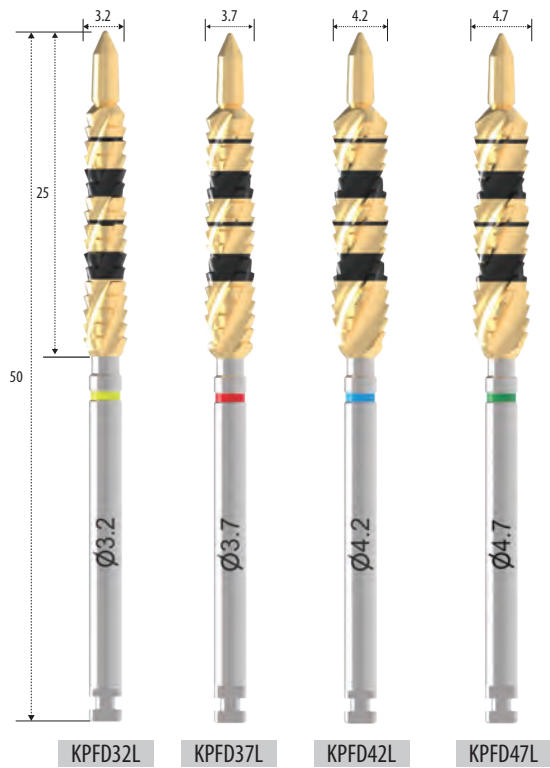


Pathfinder Drill - Short

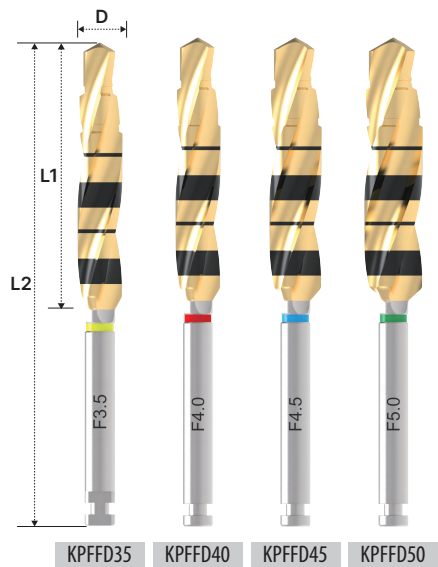


Yellow	Ø3.2
Red	Ø3.7
Blue	Ø4.2
Green	Ø4.7

Pathfinder Drill - Long



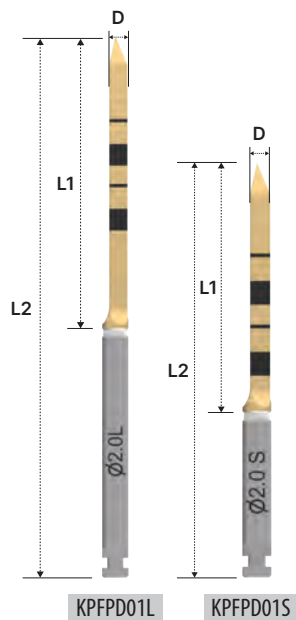
Final Drill



- > By securing the guide part in the initial hole created with the Point Drill, drilling can be performed at the planned position.
- > The lateral cutting edge allows for adjustment of the Drill path in the desired direction.
- > Laser markings for length identification (8, 10, 12, 14, 16, 18mm)
- > Recommended rpm: 1000–1200 RPM.

Code	D(Ø)	L1(mm)	L2(mm)	Color Band
KPFFD35	3.5	21	39	Yellow
KPFFD40	4.0	21	39	Red
KPFFD45	4.5	21	39	Blue
KPFFD50	5.0	21	39	Green

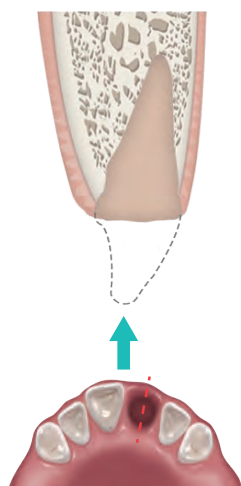
Point Drill



- > Facilitates initial drilling by selecting the perforation position on the Cortical Bone.
- > Recommended rpm: 800–1200 RPM.

Code	D(Ø)	L1(mm)	L2(mm)
KPFPD01L	2.2	25	50
KPFPD01S	2.2	20	35

Instructions for Use - When placing a Ø4.0 x 10mm implant



Extraction Socket
Cross-section



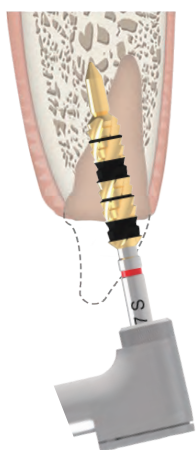
1. Tilt the drill against the lateral wall using the Point Drill.



2. Insert the Ø3.2 Pathfinder Drill into the created drill hole for stabilization



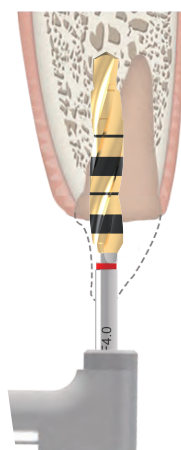
3. Slowly drill while adjusting to the desired implantation direction (1000–1200 rpm)



4. Insert the Ø3.7 Pathfinder Drill and secure it in place



5. Slowly move while drilling in the desired implantation direction (1000–1200 rpm)

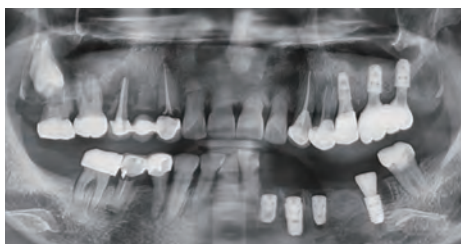


6. Use the Pathfinder Final Drill that matches the implant diameter for final drilling

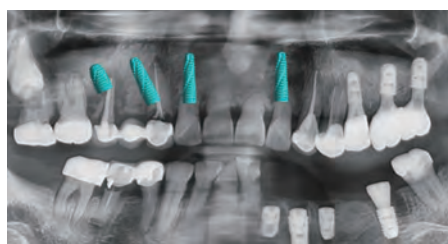


7. Implant placement

Clinical Case - Sloped Anterior Ridge: Immediate Placement using Pathfinder Drill



1. Pre-OP Panorama



2. Treatment Plan
Immediate Placement after Extraction (#12, 13, 15, 22)



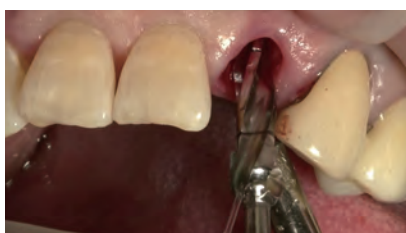
3. Determine implant angulation
using Point Drill
(1000-1200 rpm)



4. Remove dense palatal bone
with Ø3.2 Pathfinder Drill
while preserving thin buccal bone
(1000-1200 rpm)



5. Ø3.7 Pathfinder Drill for osteotomy
enlargement and parallelism
with adjacent implants
(1000-1200 rpm)



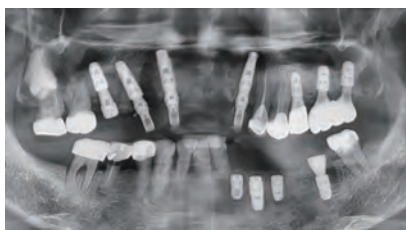
6. Final drilling guided by Pathfinder path
for proper angulation in sloped bone
(Ø4.0 Final Drill)



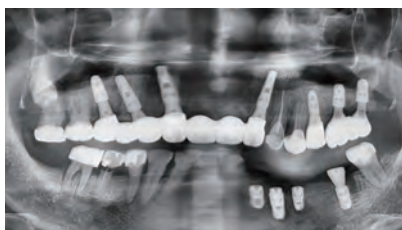
7. Implant placement - INNO Sub.
(Ø4.0 x 14mm)



8. Connect Multi Unit Abutment



9. Post-OP Panorama

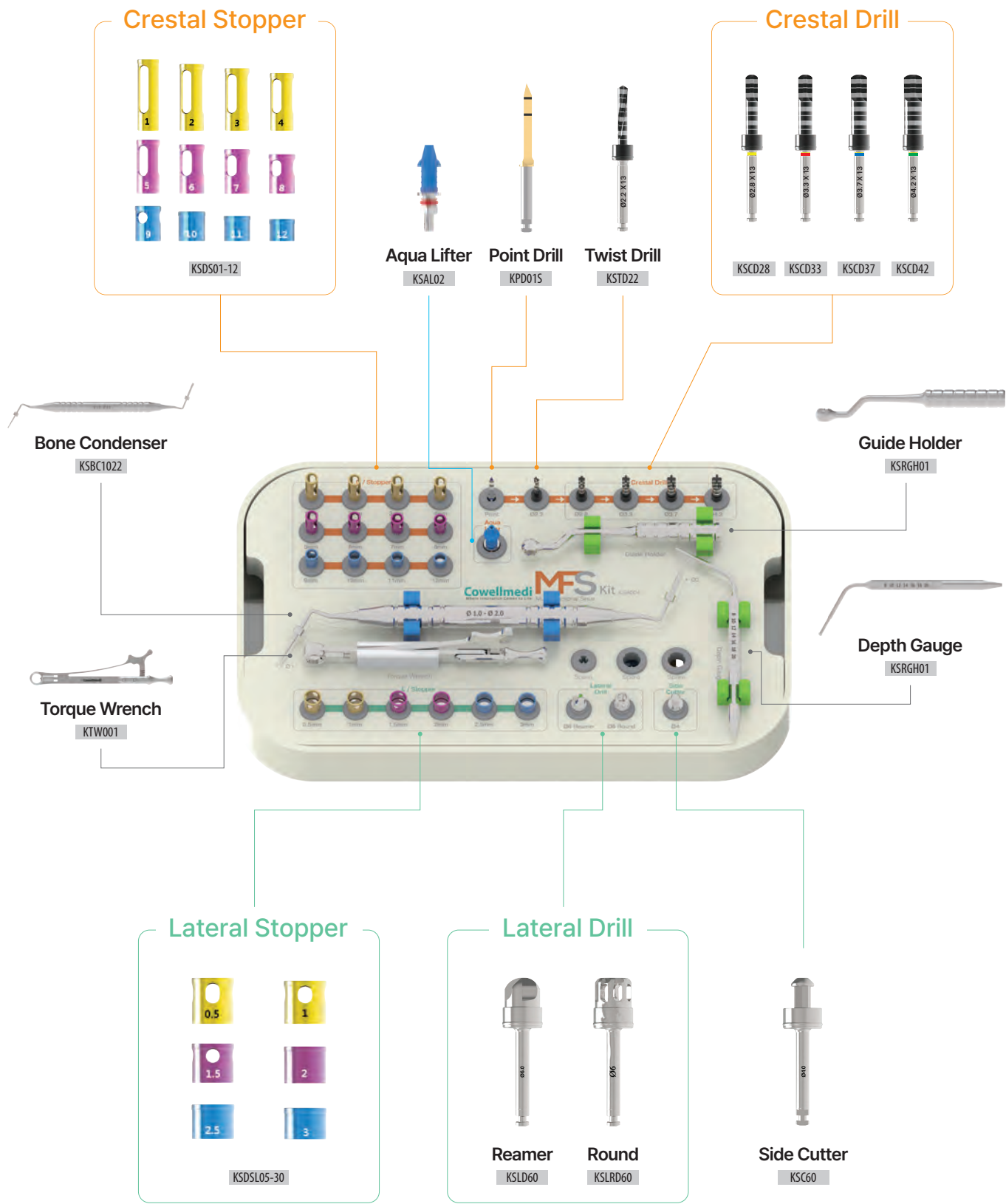


10. After 1 month - Final Prosthesis



Multi-Functional Sinus Kit [KSA004]

> Designed to perform maxillary sinus lifting. Aqua Membrane Lifter, Drill designs, and Stopper Systems are intended to help reduce the risk of sinus membrane perforation. The Kit includes all the instruments required for both crestal and lateral approaches.



Aqua Membrane Lifter System



Aqua Syringe Connector
KSAL01RC



Aqua Syringe Connector
KSAL01SC



Aqua Tube
KSALT030



Aqua Lifter Silicon
KLSALS01



Bone Carrier
KSBC01



Sinus Elevator



KSSE01



KSSE02



KSSE03

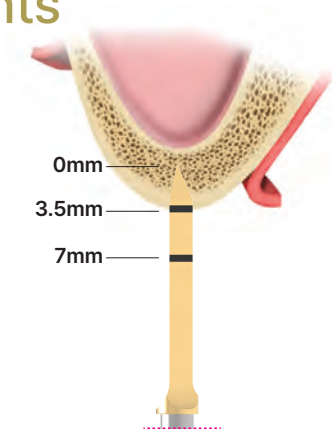
Crestal Approach - Components

1. Point Drill 800~1,000rpm

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



Code	KPD01S
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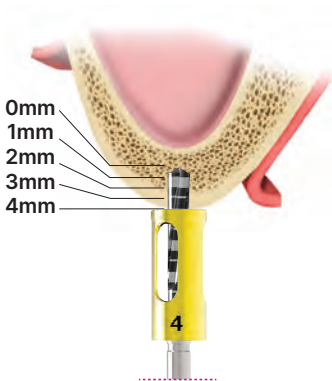


2. 2.2 Twist Drill 800~1,000rpm

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

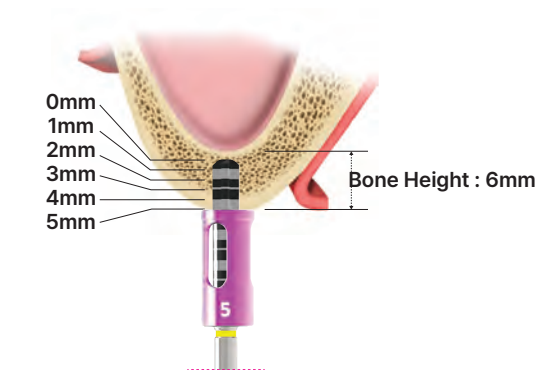


Code	KSTD22
------	--------

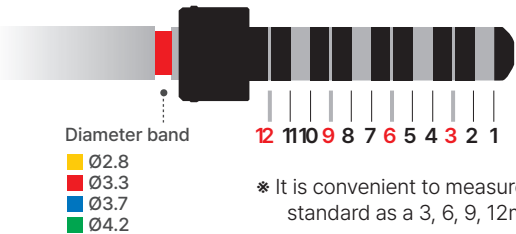


3. Crestal Drill 400~800rpm

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



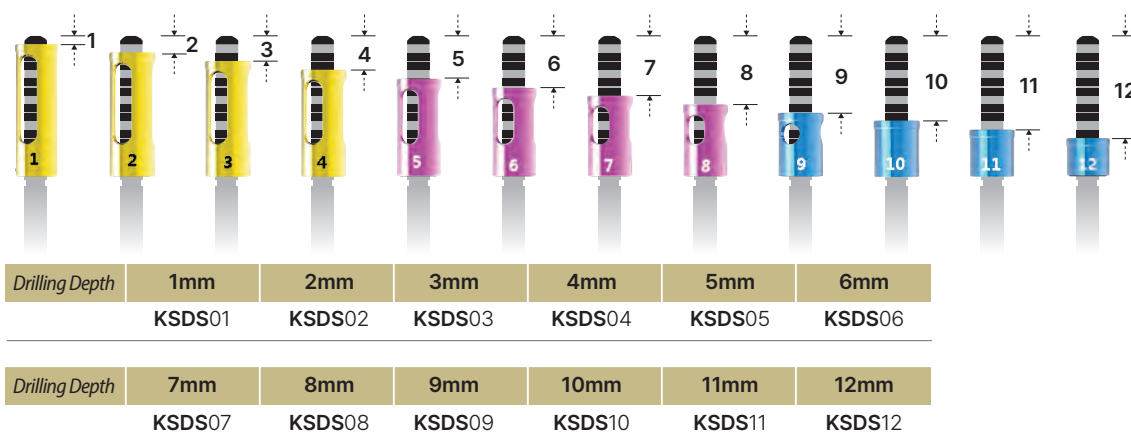
Fixture Dia.	Ø3.3	Ø3.5	Ø4.0	Ø4.5 / Ø5.0
Diameter	Ø2.8	Ø3.3	Ø3.7	Ø4.2
	KSCD28	KSCD33	KSCD37	KSCD42



* Flat floor edges minimize damage to membrane.

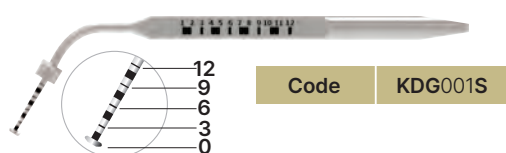
4. Crestal Drill Stopper

- > 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 stopper one step lower than expected and gradually increase the length.



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).
- > Stopper is attached to the base of the residual bone to separate the cartilage and membrane from the maxillary sinus.



6. Aqua Membrane Lifter System

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

- ① Connect Aqua Lifter to Guide Holder.
- ② Connect Aqua Tube to syringe using 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 Aqua Lifter Drill using Aqua Ratchet Connector (RC).
- ⑤ Inject saline solution.

Aqua Lifter



Code	KSAL02
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Aqua Lifter Silicon



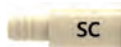
Code	KSALS01
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Aqua Ratchet Connector



Code	KSAL01RC
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Aqua Syringe Connector

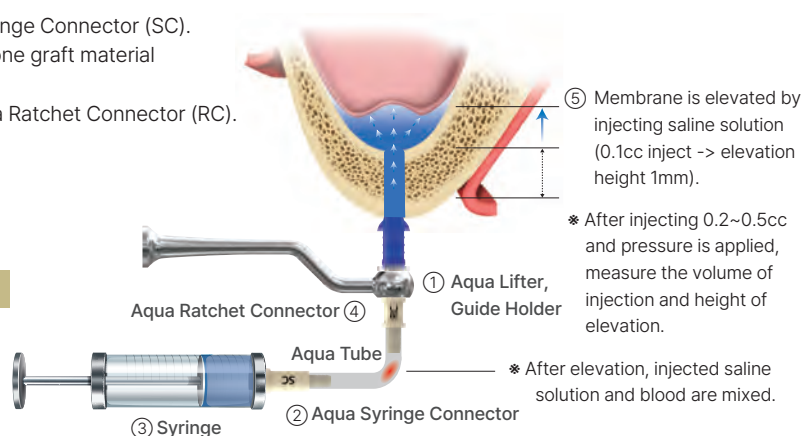


Code	KSAL01SC
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Aqua Tube



Code	KSALT030
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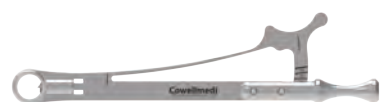


Guide Holder

Code	KSRGH01
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7. Torque Wrench



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

Code	KTW001
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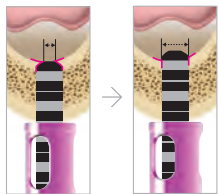


8. Bone Carrier

> Insert bone graft material using Bone Carrier.



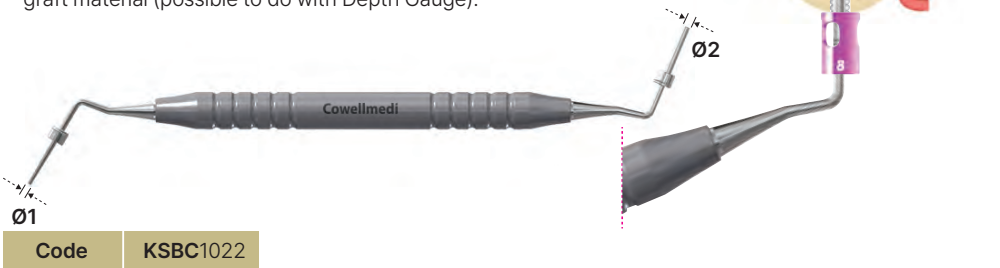
Code	KSBC01
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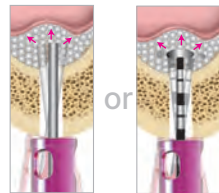
* If you need to expand hole, drill 1mm deeper using crestal drill.

9. Bone Condenser

> After connecting stopper with Bone Condenser, elevate bone graft materials to inside of maxillary sinus.
> Rotate bone graft material using Bone Condenser to disperse bone graft material (possible to do with Depth Gauge).



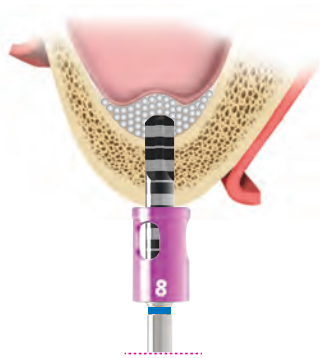
Code	KSBC1022
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* If you need to expand hole, drill 1mm deeper using crestal drill.

10. Implant Drill (Final)

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



11. Implant Placement

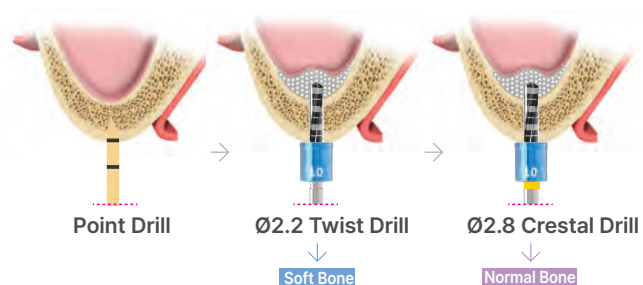
> If the residual bone is less than 3mm, do not implant the fixture, but bone graft only.



Crestal Approach - Drilling Sequence

> Placing implant over Ø4.0 is highly recommended.

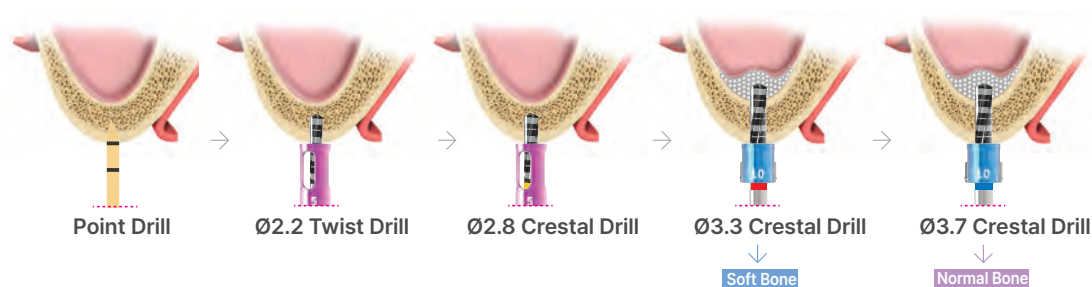
1. Ø3.3 Narrow Fixture



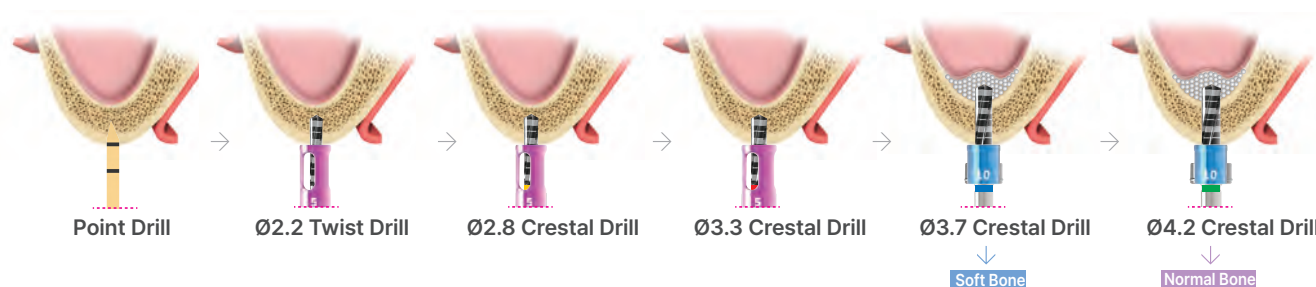
2. Ø3.5 Fixture



3. Ø4.0 Fixture



4. Ø4.5 Fixture



* Ø5.0 Fixture Normal Bone : Drilling with 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).

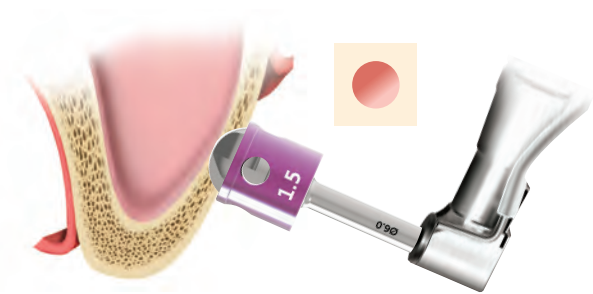
Lateral Approach - Components

1. Ø6 Lateral Reamer 800~1,000rpm

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



Code	KSLD60
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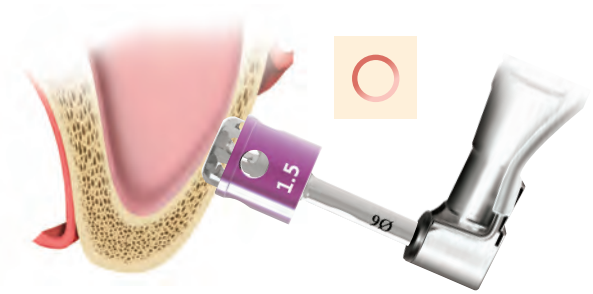


2. Ø6 Lateral Round Drill 800~1,000rpm

- > Drill after fastening 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

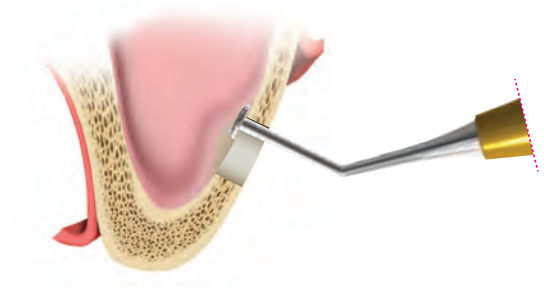
						
Drilling Depth	0.5mm	1mm	1.5mm	2mm	2.5mm	3mm
	KSDSL05	KSDSL10	KSDSL15	KSDSL20	KSDSL25	KSDSL30

4. Sinus Elevator

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



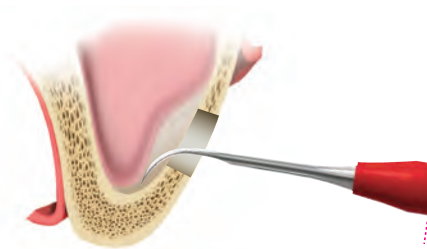
Code	KSSE01
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> CSE-02 : as stepwise, after using CSE-01, used for elevation of sinus membrane.



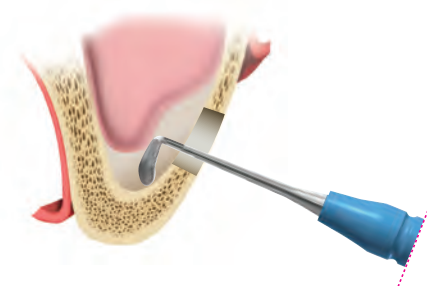
Code	KSSE02
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> CSE-03 : as stepwise, after using CSE-02, used for elevation of sinus membrane.



Code	KSSE03
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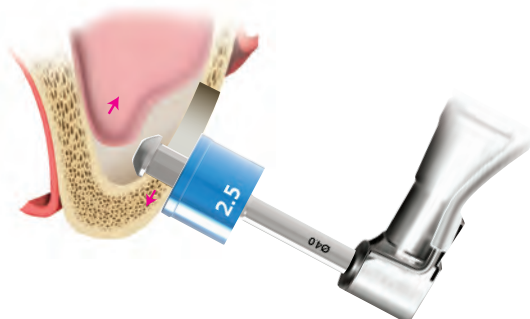


5. Ø4 Side Cutter 800~1,000rpm

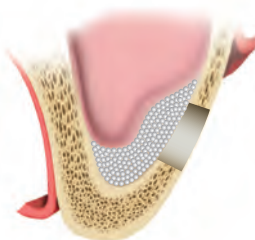
> When expanding window, Ø4 Side Cutter must be connected with stopper.



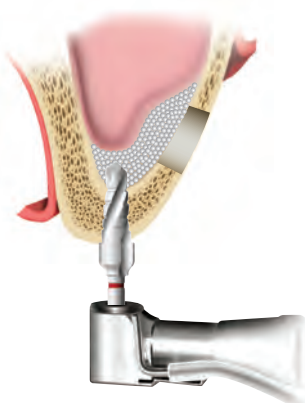
Code	KSC60
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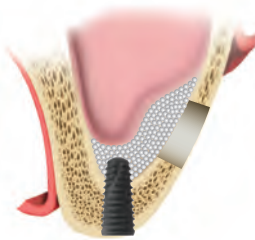
6. Sinus Bone Graft



7. Implant Drill (Final)

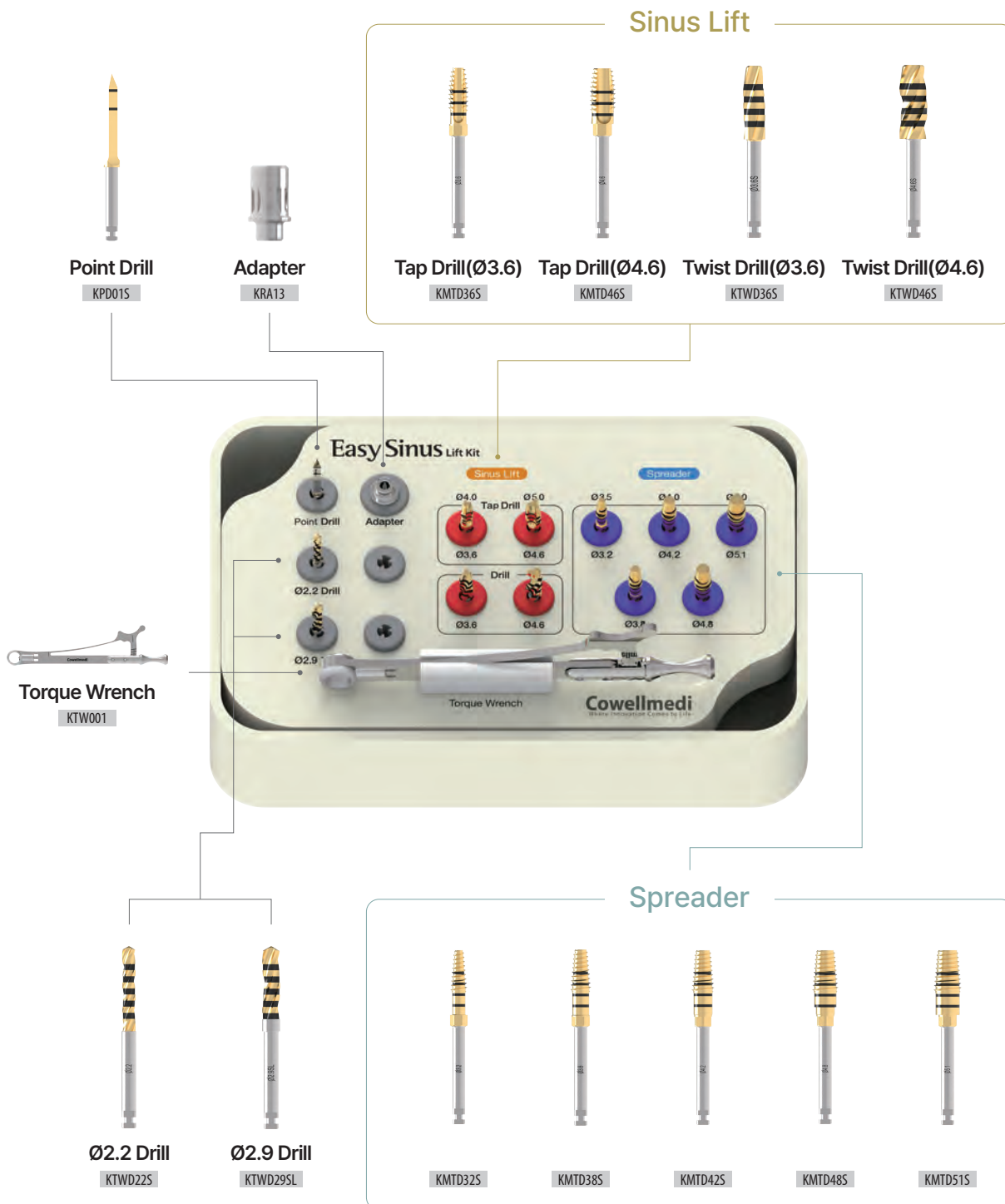


8. Implant Placement



Easy Sinus Lift Kit [KSA001]

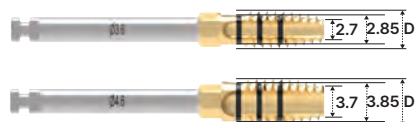
- > Easy Sinus Lift Kit is designed to assist clinicians in performing maxillary sinus lifts, ridge splitting, and bone condensing procedures. The kit includes specially designed Tap Drills and Spreaders that enable bone expansion techniques through sequential drilling. It offers a streamlined approach for clinicians seeking mechanical control in lateral and vertical bone manipulation procedures.



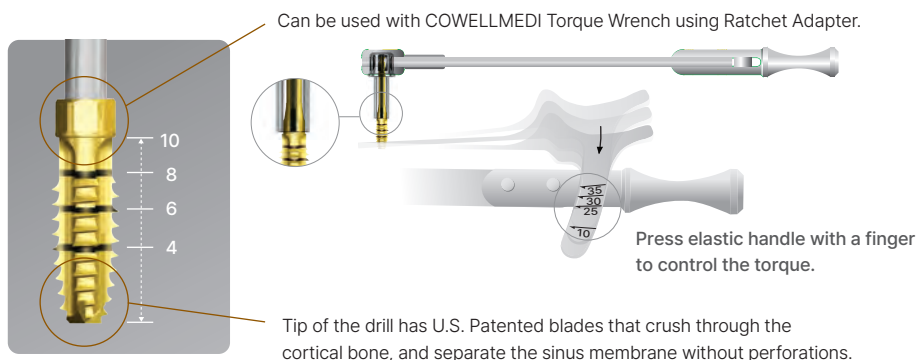
Sinus Lift

• Tap Drill (Ø3.6 , Ø4.6)

- > The usage of Tap Drill is at low speed and high torque to grind through the maxillary bone, and safely elevates sinus without membrane perforation.
- > Must be used at 20~30 rpm / 45 N.cm.
- > No irrigation is required.



Diameter	Ø3.6	Ø4.6
	KMTD36S	KMTD46S



• Twist Drill (Ø3.6, Ø4.6)

- > Twist Drill is used after tapping as final drill for dense bone (bone quality 2 or greater) or to eliminate tapping thread in order to facilitate bone grafting.
- > Must be used at 100~500 rpm / 45 N.cm.
- > No irrigation is required.

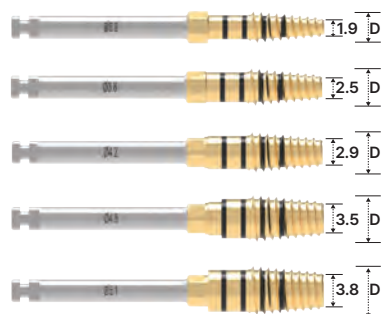


Diameter	Ø3.6	Ø4.6
	KTWD36S	KTWD46S

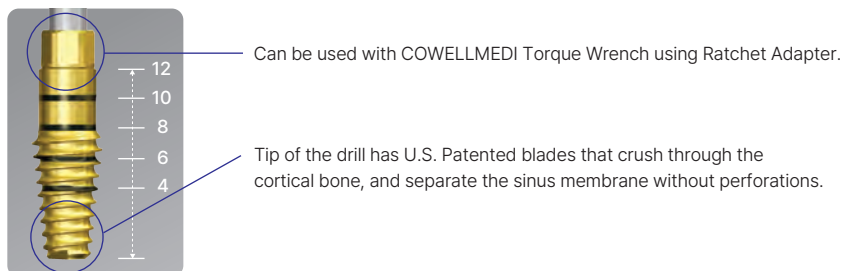


• Spreader (Ø3.2 , Ø3.8, Ø4.2, Ø4.8, Ø5.1)

- > Spreader Drill is used to condense and/or spread the bone in either sinus lift or ridge split cases.
- > Must be used at 20~30 rpm / 45 N.cm.
- > No irrigation is required.



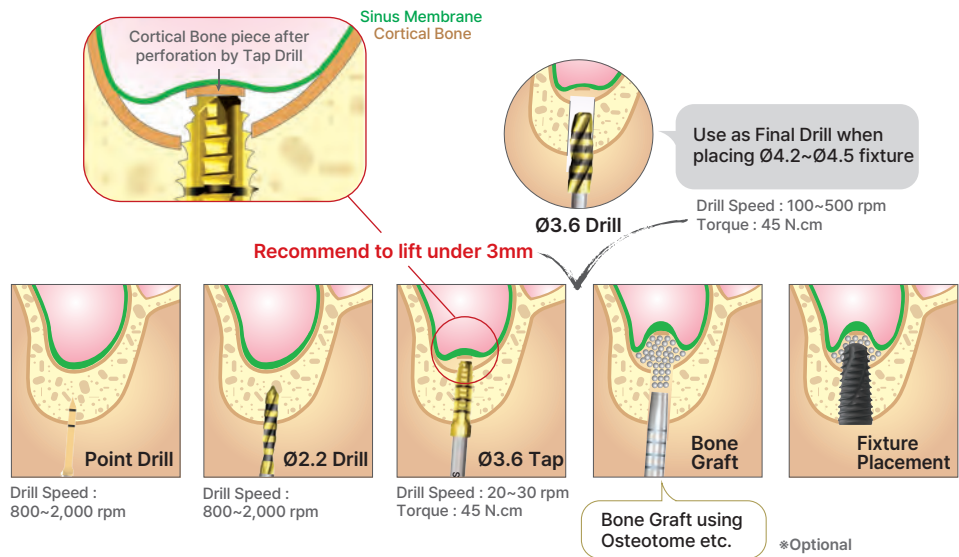
Diameter	Ø3.2	Ø3.8	Ø4.2	Ø4.8	Ø5.1
	KMTD32S	KMTD38S	KMTD42S	KMTD48S	KMTD51S



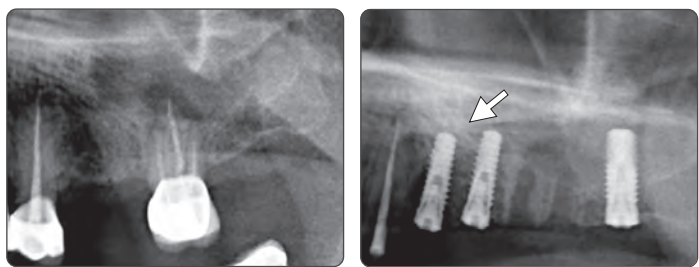
Sequence - Sinus Lift

· Only use of Sinus Lift Drill

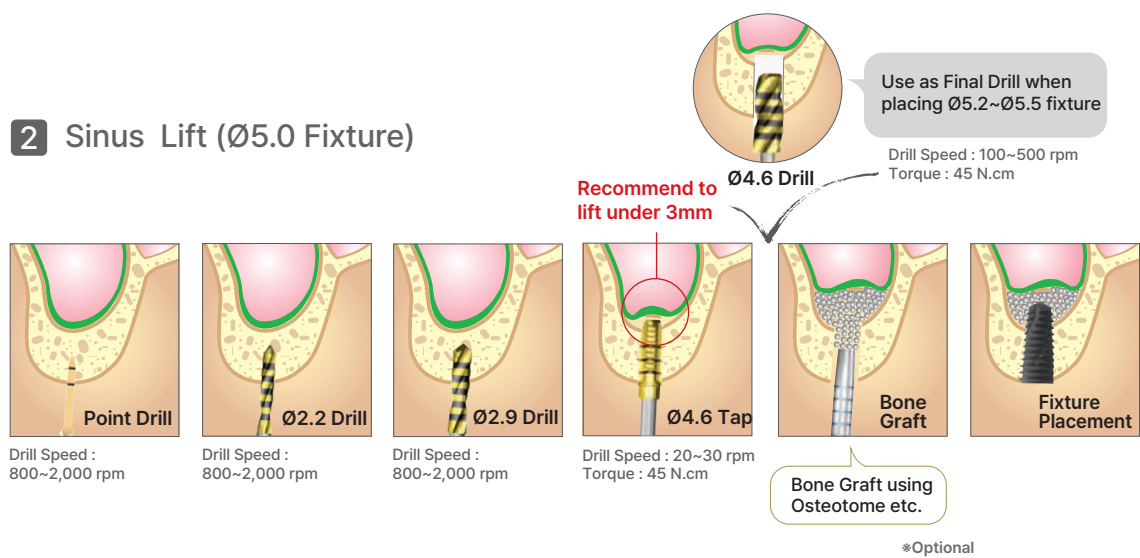
1 Sinus Lift (Ø4.0 Fixture)



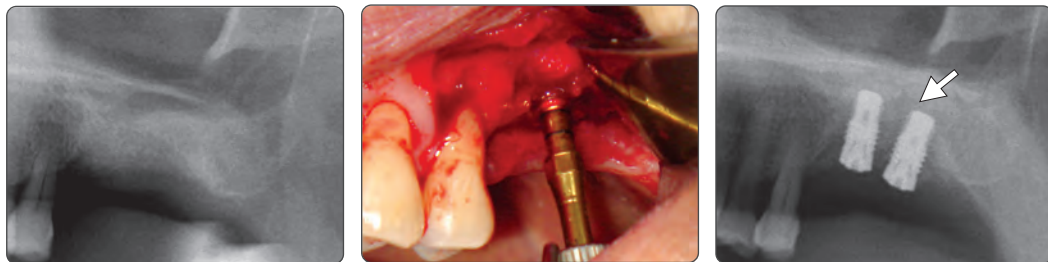
►► Immediate Implantation and Sinus Lift Technique with Tap Drill (Ø4.0 Fixture)



2 Sinus Lift (Ø5.0 Fixture)

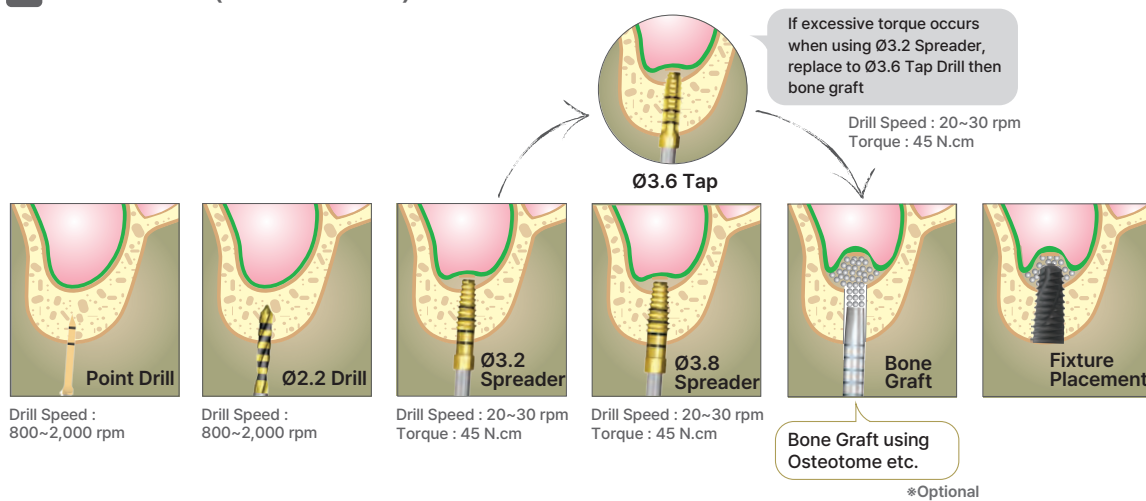


► Immediate Implantation and Sinus Lift Technique with Tap Drill (Ø5.0 Fixture)

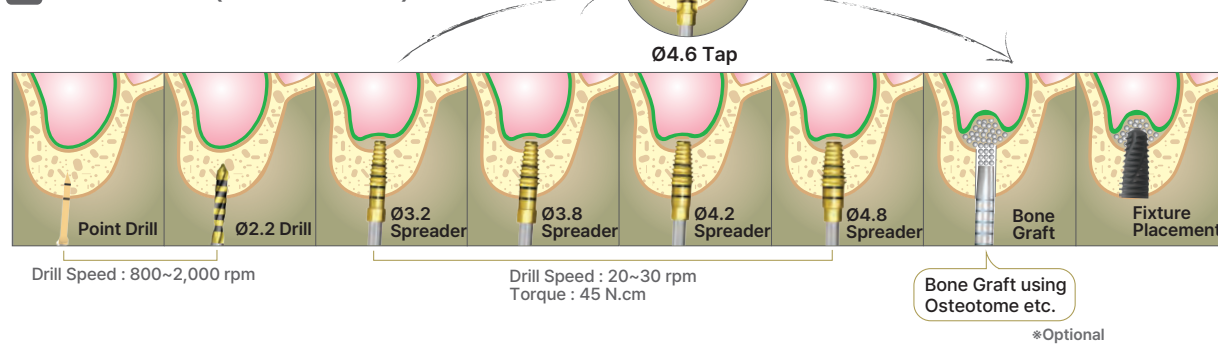


• Recommend to use Sinus Lift Drill and Spreader Drill together

1 Sinus Lift (Ø4.0 Fixture)



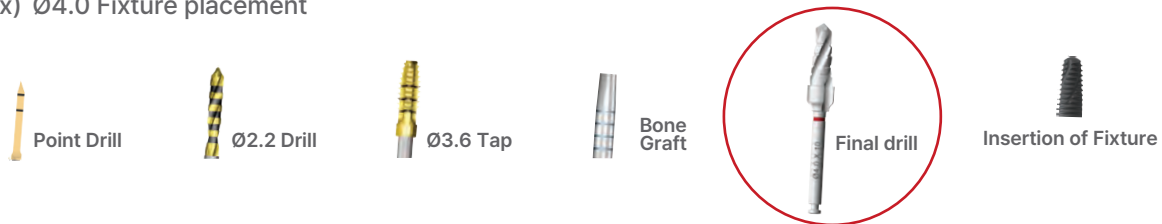
2 Sinus Lift (Ø5.0 Fixture)



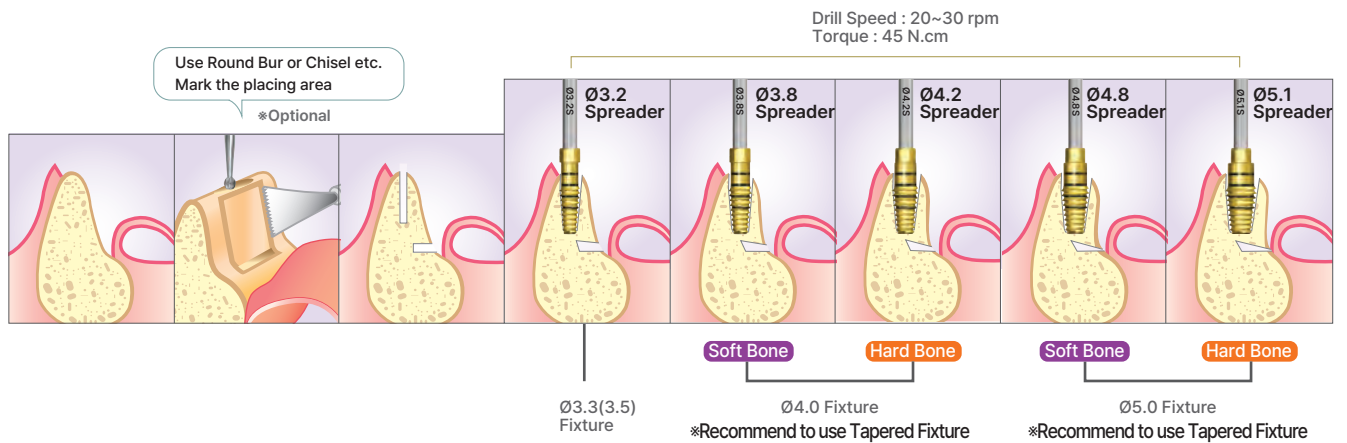
Note

- > Recommend to use Sinus Lift Drill and Spreader Drill together during the Sinus Lift operation.
- > Easy operation by using Ø3.2 Spreader rather than Point Drill.
- > Avoid to over press surrounding alveolar bone using Final Drill before fixture placement in D2.

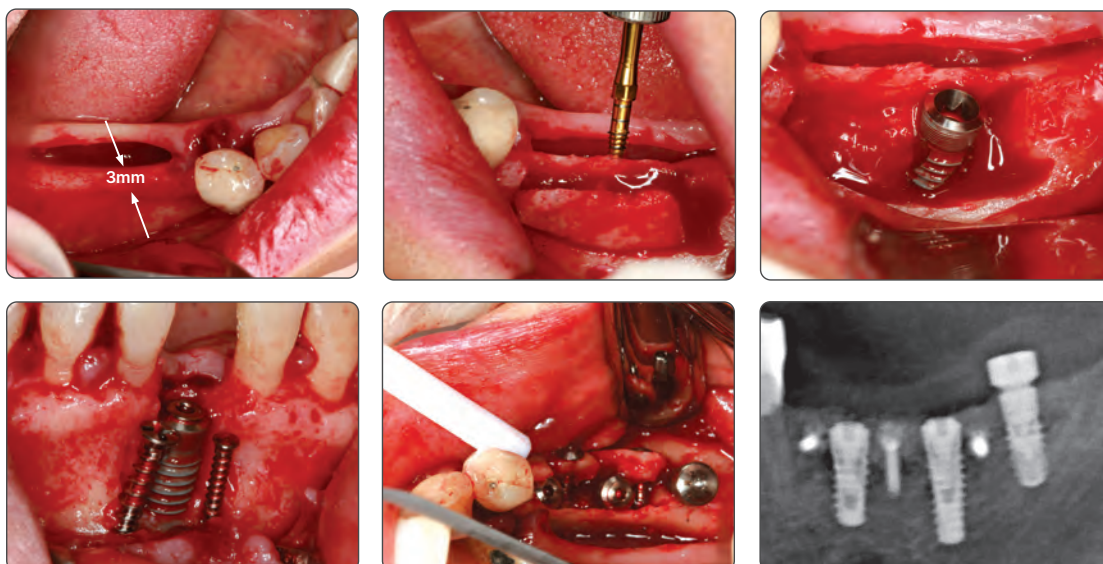
ex) Ø4.0 Fixture placement



Sequence - Spreader



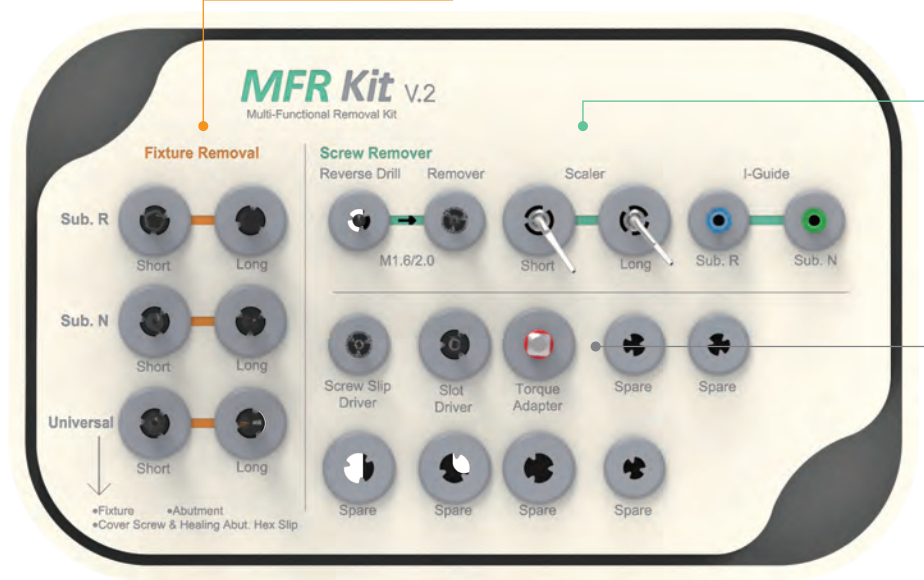
►► Ridge Split and Block Bone Augmentation Technique with Spreader Drill (Ø4.0 Fixture)



Multi-Functional Removal Kit [KHA002]

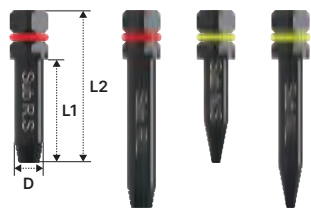
> An solution for removing fixtures, abutments, and screws.

The kit includes all the instruments required to remove fixtures, abutments, screws.



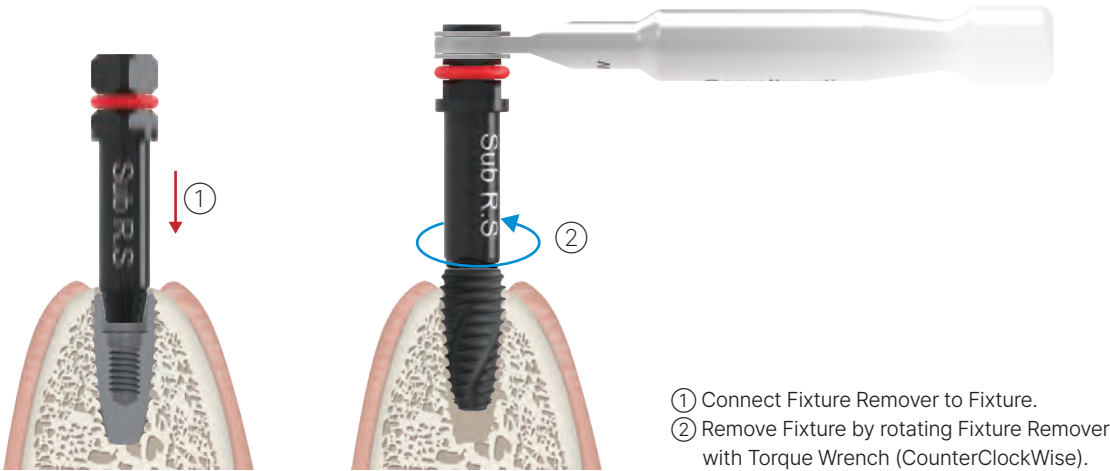
1. Fixture Removal System

Fixture Remover (Sub.)

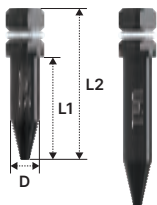


Code	L1(mm)	L2(mm)	D(Ø)	O-Ring Color
KFRR01S	20	13.5	3.8	Red
KFRR01L	26	19.5	3.8	Red
KFRN01S	20	13.5	3.2	Yellow
KFRN01L	26	19.5	3.2	Yellow

- > Used for removing Sub. Regular / Sub. Narrow Fixture.
- > Maximum torque: 400 N-cm.
- > Rotation direction: CCW.
- > Connect with Torque Adapter if necessary.
- > Tightened using Torque Wrench.



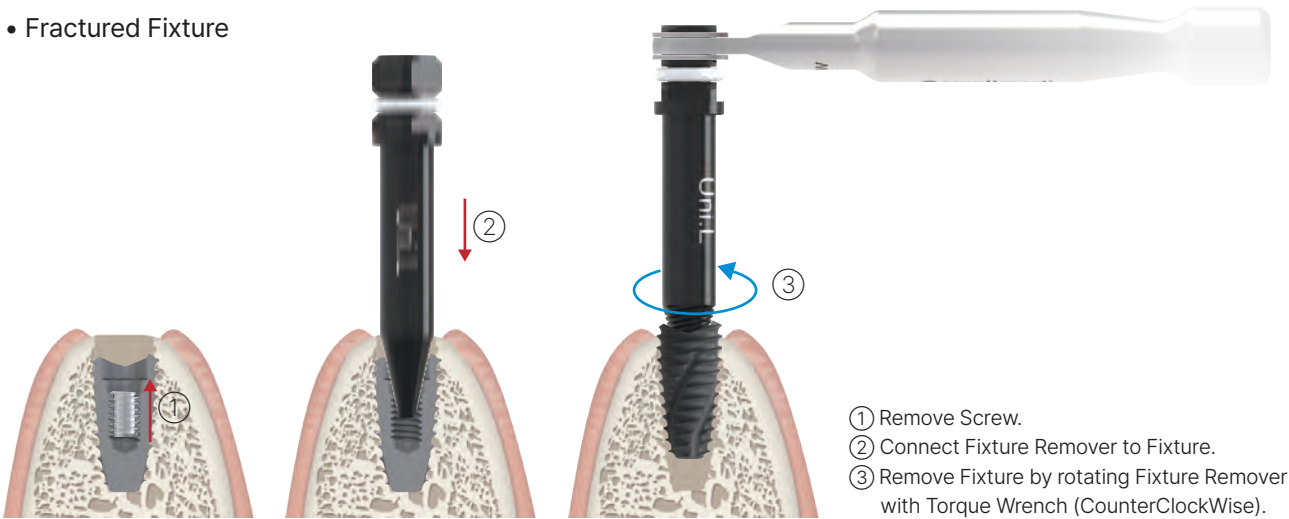
Fixture Remover (Universal)



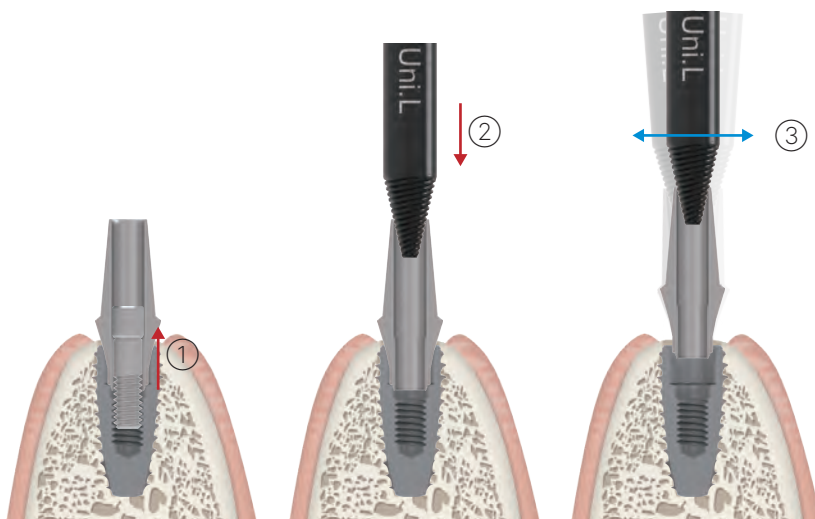
Code	L1(mm)	L2(mm)	D(Ø)	O-Ring Color
KFR01S	20	13.5	3.84	White
KFR01L	26	19.5	3.84	White

- > Used for removing Internal, External or fractured Fixture.
- > Used in case of Cover Screw / Healing Abutment hex slip.
- > Used in case of Abutment fracture (2 Piece).
- > Maximum torque: 400 N-cm.
- > Rotation direction: CCW.
- > Connect with Torque Adapter if necessary.
- > Tightened using Torque Wrench.

• Fractured Fixture

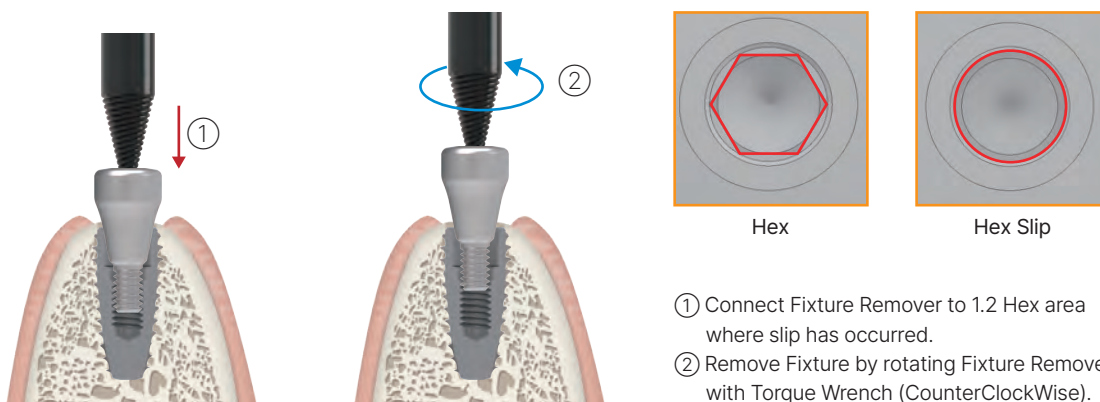


• Abutment Cold Welding / Fractured Abutment



- ① Remove Screw.
- ② Connect Fixture Remover to Abutment.
- ③ Remove Abutment by moving Fixture Remover from side to side.

• Hex Slip

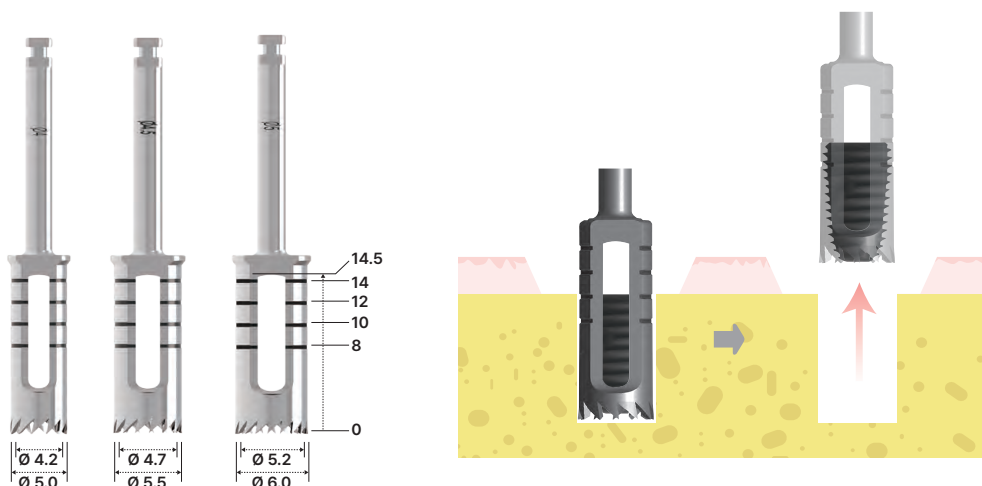


- ① Connect Fixture Remover to 1.2 Hex area where slip has occurred.
- ② Remove Fixture by rotating Fixture Remover with Torque Wrench (CounterClockWise).

Trephine Drill

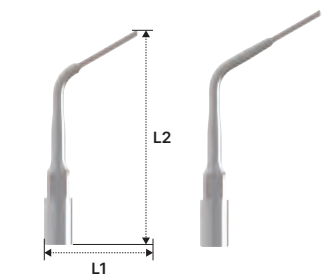
Optional

Diameter	Ø4.2 (Inner)	Ø4.7 (Inner)	Ø5.2 (Inner)
	KFRT40	KFRT45	KFRT50



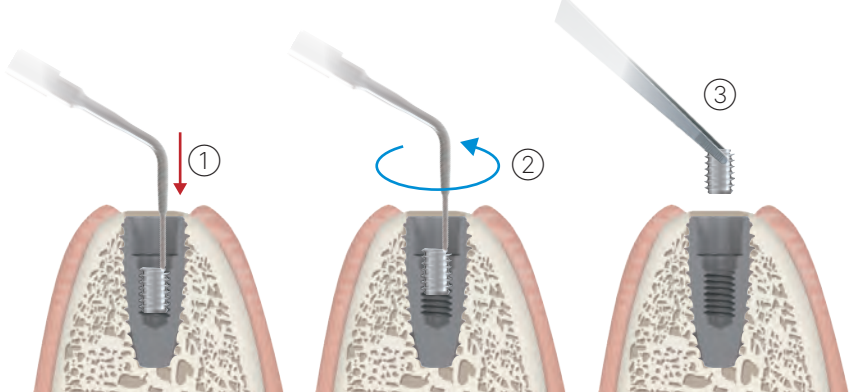
2. Screw Removal System

Scaler



Code	L1(mm)	L2(mm)
SCR-01	12.5	30
SCR-02	16	33

- > Remove fractured screw inside Fixture using ultrasonic vibration.
- > Compatible with existing dental ultrasonic devices; usable by replacing only the scaler tip.
- > When using the scaler, do not press the tip strongly against the outer wall of the screw to avoid damage to the Fixture inner wall or threads.
- > Since ultrasonic vibration may cause accumulation of metal fatigue, short and repeated application is recommended.
- > Perform irrigation.



- ① Insert Scaler.
- ② Use ultrasonic vibration to loosen Screw fixation, then rotate counterclockwise to remove.
- ③ Once the Screw is completely released, remove it with tweezers or forceps.

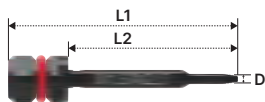
Reverse Drill



Code	L(mm)	D(Ø)	Marking
KSRGD1620	20	3.8	M1.6/M2.0

- > Create a hole in the fractured screw.
- > Drilling depth: 1–2 mm.
- > Rotation direction: CCW.
- > RPM: 2,000 rpm.
- > Perform irrigation and suction.
- > Drilling must be performed using the I-Guide.
- > Used for removal of M1.6 / M2.0.

Screw Remover

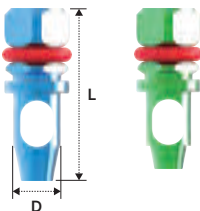


Code	L1(mm)	L2(mm)	D(Ø)	Marking
KSRSR1620S	25	18.5	1.1	M1.6/M2.0
*KSRSR1620L	30	23.5	1.1	M1.6/M2.0

- > Used in the drill hole created with the Reverse Drill.
- > Rotation direction: CCW.
- > If manual removal is difficult, use Torque Wrench for removal.
- > Used for removal of M1.6 / M2.0.

*Optional Product.

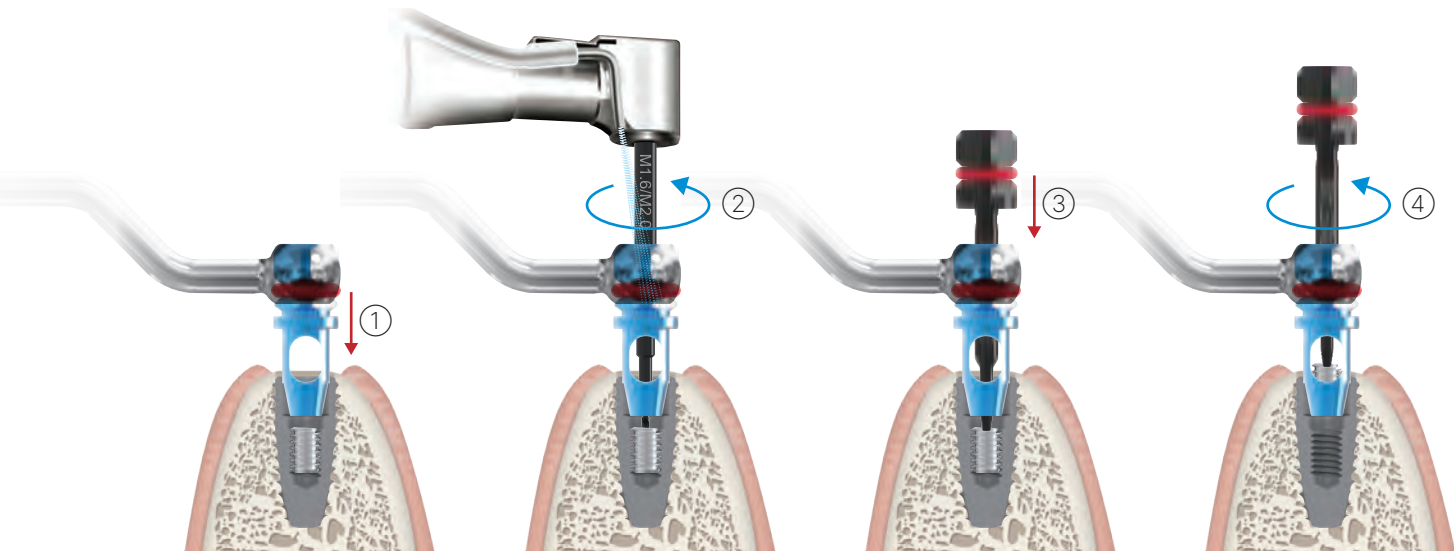
I Guide



Code	L(mm)	D(Ø)	Color
KSRIG25H	13.55	3.6	Blue
KSRIG21H	12.44	3.5	Green

- > Drilling direction guide when using Reverse Drill.
- > Blue: Sub. Regular, Green: Sub. Narrow.
- > Used by connecting with Guide Holder.

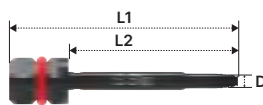
• Reverse Drill & Screw Remover



- ① Connect I Guide to Fixture using Guide Holder.
- ② Insert Reverse Drill into I Guide and drill inside the screw (CounterClockWise, 2000 RPM, depth 1-2 mm).
- ③ Engage Screw Remover into the hole created by drilling.
- ④ Remove Screw by rotating Screw Remover (CounterClockWise).

3. etc

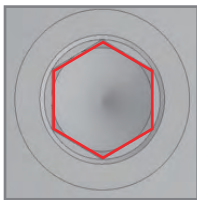
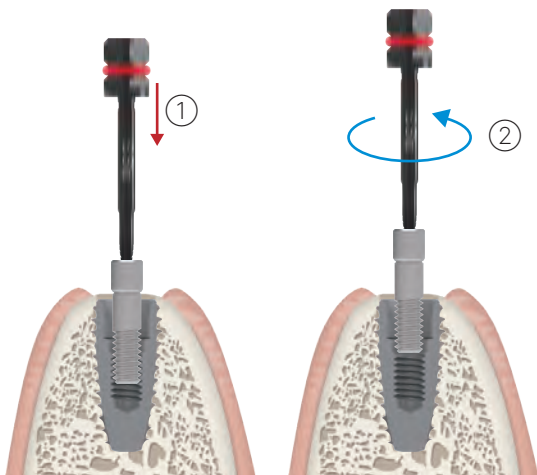
Screw Slip Driver



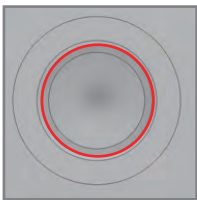
Code	L1(mm)	L2(mm)	D(Ø)	Marking
KSRSSD01S	25	18.5	1.6	S.Slip
*KSRSSD01L	30	23.5	1.6	S.Slip

*Optional Product.

- > Used in the drill hole created with the Reverse Drill.
- > Rotation direction: CCW.
- > If manual removal is difficult, use Torque Wrench for removal.
- > Used for removal of M1.6 / M2.0.



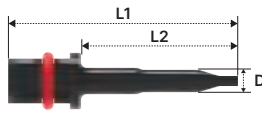
Hex



Hex Slip

- ① Connect Screw Slip Driver to Abutment Screw.
- ② Remove Screw by rotating Screw Slip Driver (CounterClockWise).

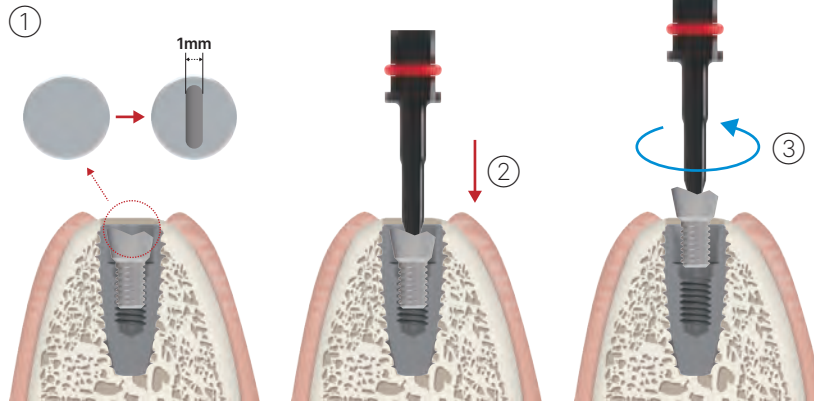
Slot Driver



Code	L1(mm)	L2(mm)	D(Ø)
KHD0827TC	20.5	14	2.35

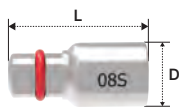
- > Used for removing Fractured Solid Type Abutment(1Piece).
- > Rotation direction: CCW.
- > Maximum torque: 80 N-cm.

0.8mm



- ① Create a groove on the top surface of fractured Abutment using a round bur (Minimum Depth: 1 mm)
- ② Engage Slot Driver into the created groove.
- ③ Remove fractured Abutment by rotating Screw Remover (CounterClockWise).

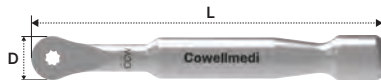
Adapter Extension



Code	L(mm)	D(Ø)
KLPRE08S	14	8.5

- > Used for length extension of Remover / Driver.

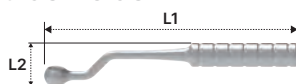
Torque Wrench



Code	L(mm)	W(mm)
KTW003	130	16

- > Can stably apply high torque of 100-300 N-cm. or more.
- > Enlarged size compared to conventional torque wrench improves torque transmission efficiency, allowing the operator to apply high torque with less effort.

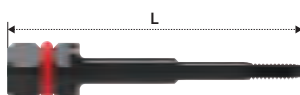
Guide Holder



Code	L1(mm)	L2(mm)
KSRGH01	90	21.5

- > Used for connecting I Guide.

Tap Repair



Code	L(mm)	Thread
*KTR16SQ	26.5	M1.6xP0.35
*KTR20SQ	26.5	M2.0xP0.4

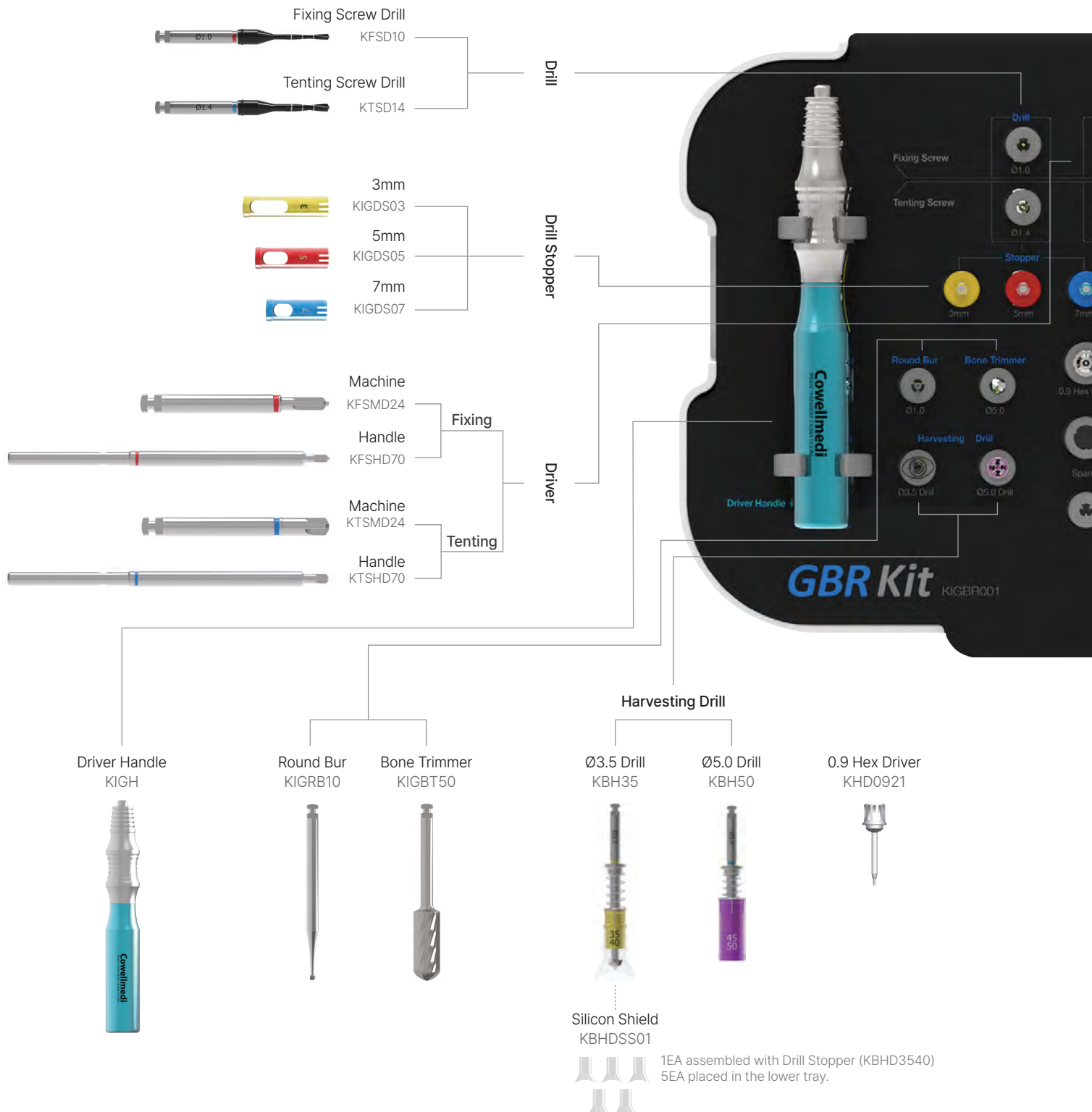
- > Restore deformed or damaged threads inside Fixture.
- > Used to match threads inside Fixture. ex) INNO Sub Regular : KTR20SQ

*Optional Product.

Cowellmedi
Where Innovation Comes to Life

GBR Kit [KIGBR001]

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



The length of the product can be measured with the scale marked on the middle tray of the kit.

0 3.57 7.15 10.72 14.29 15.3 0

Screw Kit
KIGICS001

Fixing Screw Bone

Length	Model
3mm	KIGFS03
3mm	KIGFS03
3mm	KIGFS03
3mm	KIGFS03
3mm	KIGFS03
3mm	KIGFS03
5mm	KIGFS05
5mm	KIGFS05
5mm	KIGFS05
5mm	KIGFS05
5mm	KIGFS05
5mm	KIGFS05
7mm	KIGFS07
7mm	KIGFS07
7mm	KIGFS07
7mm	KIGFS07
7mm	KIGFS07
7mm	KIGFS07

Tenting Screw Bone

Length	Model
7mm	KIGTS07
7mm	KIGTS07
7mm	KIGTS07
7mm	KIGTS07
7mm	KIGTS07
10mm	KIGTS10
10mm	KIGTS10
10mm	KIGTS10
10mm	KIGTS10
10mm	KIGTS10
13mm	KIGTS13
13mm	KIGTS13
13mm	KIGTS13
13mm	KIGTS13
15mm	KIGTS15
15mm	KIGTS15
15mm	KIGTS15
15mm	KIGTS15
15mm	KIGTS15

Tenting Cap T/Cap

Length	Model
0.3mm	KIGTC32
0.3mm	KIGTC32
0.3mm	KIGTC32

Fix Connector **Fixture**

Length	Model
0.5mm	KIGFC4505
0.5mm	KIGFC4505
1.0mm	KIGFC4510
1.0mm	KIGFC4510
1.5mm	KIGFC4515
1.5mm	KIGFC4515
2.0mm	KIGFC4520
2.0mm	KIGFC4520

Cover Cap **C/Cap**

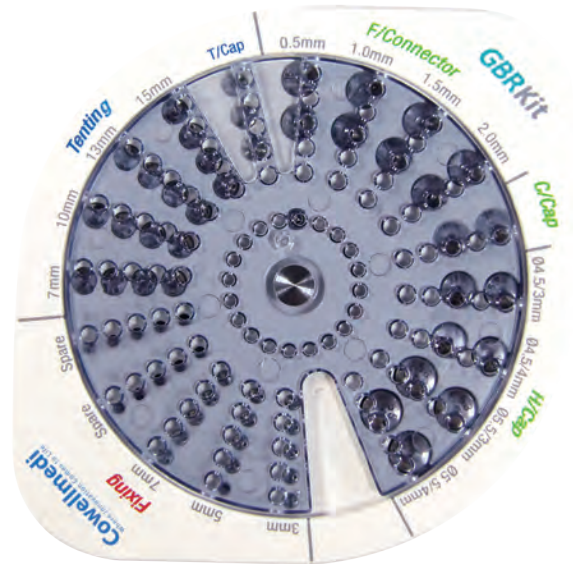
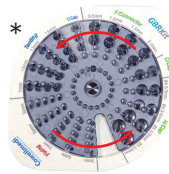
Length	Model
Ø4.5	KIGCC45
Ø4.5(3mm)	KIGHC453
Ø4.5(3mm)	KIGHC453
Ø4.5(4mm)	KIGHC454
Ø4.5(4mm)	KIGHC454
Ø4.5	KIGCC45
Ø5.5(3mm)	KIGHC553
Ø5.5(3mm)	KIGHC553
Ø5.5(4mm)	KIGHC554
Ø5.5(4mm)	KIGHC554

Healing Cap **H/Cap**

Bone Carrier **KBBC01**

Screw Kit KIGICS001

- Used without removing 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

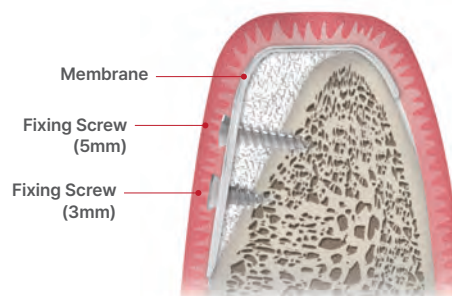
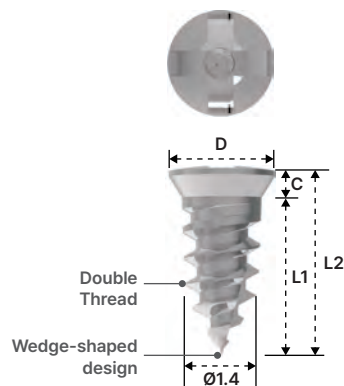


Bone

Fixing Screw (Fixing)

- Used to fix membrane to the bone.
- Place slowly using 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 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)	L1(mm)	L2(mm)	Code
2.0	0.6	3.0	3.6	KIGFS03
		5.0	5.6	KIGFS05
		7.0	7.6	KIGFS07

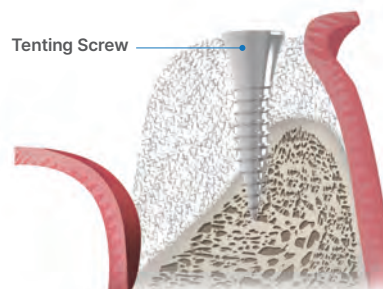
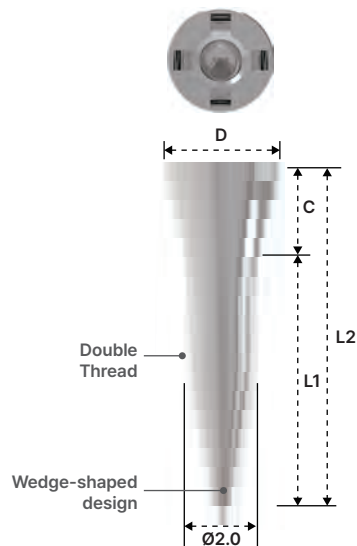


Bone

Tenting Screw (Tenting)

- Used when a large area of vertical / horizontal GBR is required.
Leave space for bone grafts.
- Place slowly using Tenting Screw Driver (Machine/Handle).
- Recommended placement depth : Hard bone-3mm, Normal bone-5mm, Soft bone-more than 5mm.
- Initial fixation of at least 15~25N.cm is required. Tightening more than 35N.cm may cause fracture of Tenting Screw so it must be fixed below 35N.cm.
- In normal bone, it is recommended to form a hole at least 3mm deep using Tenting Screw Drill before placing 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 Tenting Cap if necessary.

D(Ø,mm)	C(mm)	L1(mm)	L2(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

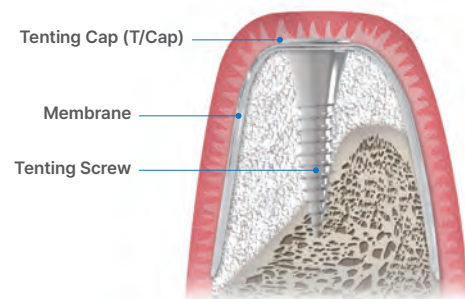
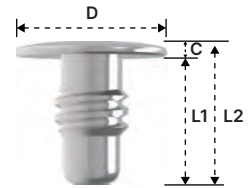


Bone

Tenting Cap (T/Cap)

- Used to fix membrane on Tenting Screw.
- Tightened with 0.9 Hex Driver.
- Recommended tightening torque force : 5~8N.cm.

D(Ø,mm)	C(mm)	L1(mm)	L2(mm)	Code
3.2	0.3	2.8	3.1	KIGTC32

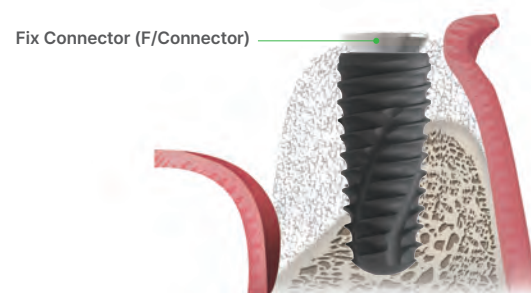
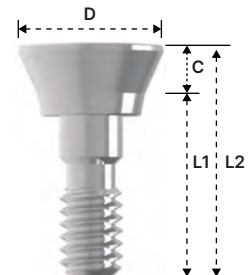


Fixture

Fix Connector (F/Connector)

- Used to fix membrane along with Cover Cap or Healing Cap after connecting to fixture.
- Tightened with 0.9 Hex Driver.
- Recommended tightening torque force: 12~15N.cm.
- Available for INNO Submerged, Submerged Short Fixtures and other fixtures compatible with them only.

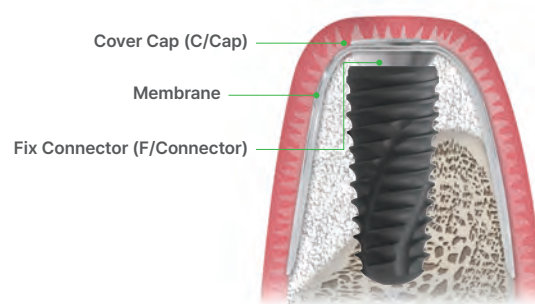
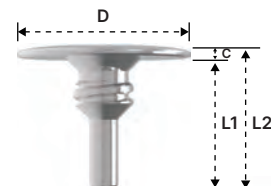
D(Ø,mm)	C(mm)	L1(mm)	L2(mm)	Code
4.5	0.5	5.7	6.2	KIGFC4505
	1.0		6.7	KIGFC4510
	1.5		7.2	KIGFC4515
	2.0		7.7	KIGFC4520



Fixture**Cover Cap (C/Cap)**

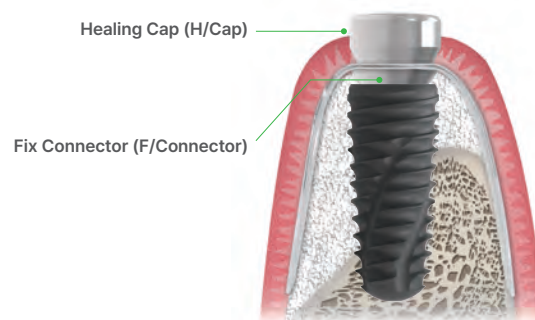
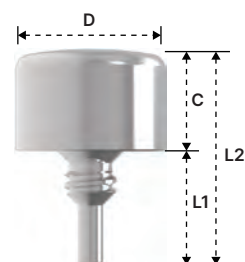
- Used to fix membrane over Fix Connector.
- For submerged surgery in case of sufficient soft tissue.
- Tightened with 0.9 Hex Driver.
- Recommended tightening torque force: 5~8N.cm.

D(Ø,mm)	C(mm)	L1(mm)	L2(mm)	Code
4.5	0.3	3.4	3.7	KIGCC45

**Fixture****Healing Cap (H/Cap)**

- Used to fix membrane over Fix Connector.
- For non-submerged surgery in case of insufficient soft tissue.
- Connect by using 0.9 Hex Driver.
- Recommended tightening torque force: 5~8N.cm.

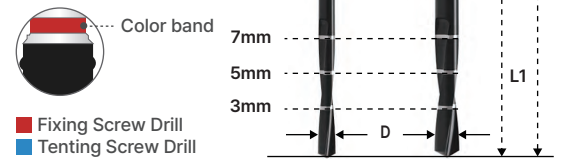
D(Ø,mm)	C(mm)	L1(mm)	L2(mm)	Code
4.5	3.0	3.4	6.4	KIGHC453
	4.0		7.4	KIGHC454
5.5	3.0		6.4	KIGHC553
	4.0		7.4	KIGHC554



Fixing Screw Drill & Tenting Screw Drill

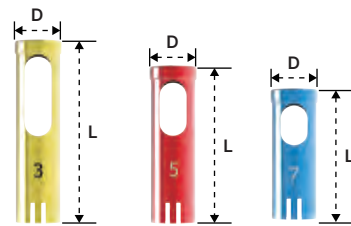
- Used to place Fixing Screw / Tenting Screw mainly in hard bone.
- Also used to perforate cortical bone when blood supply is required.
- For normal bone, drill only 3mm deep if necessary.
- Drill before placing Fixing Screw / Tenting Screw.
- Laser-marked at 3, 5, and 7mm long from the tip of drill and the length can be controllable using Drill Stoppers.
- Color-banded for distinction (Red : Fixing Screw Drill, Blue : Tenting Screw Drill).
- Recommended drilling speed : 1,000~1,200rpm.

Classification	D(Ø,mm)	L1(mm)	L2(mm)	Code
Fixing Screw Driver	1.0	1.0	31.5	KFSD10
Tenting Screw Driver	1.4			KTSD14



Drill Stopper

- Used by connecting to Fixing Screw Drill / Tenting Screw Drill.
- 3mm : Yellow, 5mm : Red, 7mm : Blue



Classification	D(Ø,mm)	L(mm)	Code
3mm	3.5	13.5	KIGDS03
5mm		11.5	KIGDS05
7mm		9.5	KIGDS07

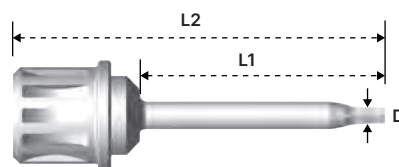


0.9 Hex Driver (Ratchet)

- Used to install Tenting Cap, Fix Connector, Cover Cap and Healing Cap.

D(Ø,mm)	L1(mm)	L2(mm)	Code
1.2	8	15	*KHD0915
	14	21	KHD0921
	20	27	*KHD0927

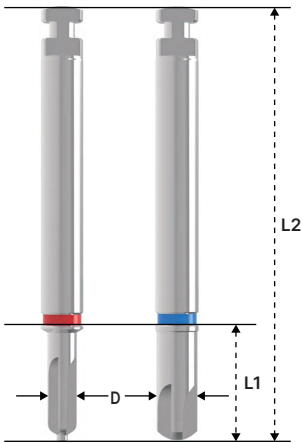
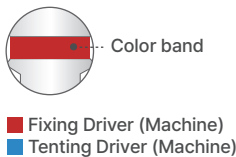
*Optional



Fixing Screw Driver & Tenting Screw Driver (Machine)

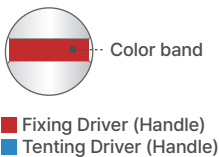
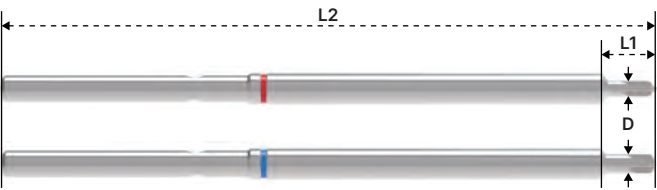
- Used to place Fixing Screw / Tenting Screw using Contra-angle.
- Color-banded for distinction (Red : Fixing Screw Driver, Blue : Tenting Screw Driver).

Classification	D(Ø,mm)	L1(mm)	L2(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)

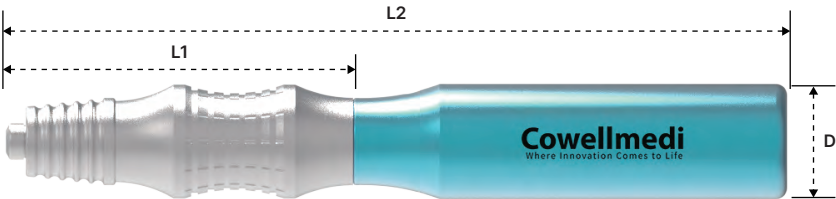
- Used to place Fixing Screw / Tenting Screw using Driver Handle.
- Color-banded for distinction (Red : Fixing Screw Driver, Blue : Tenting Screw Driver).



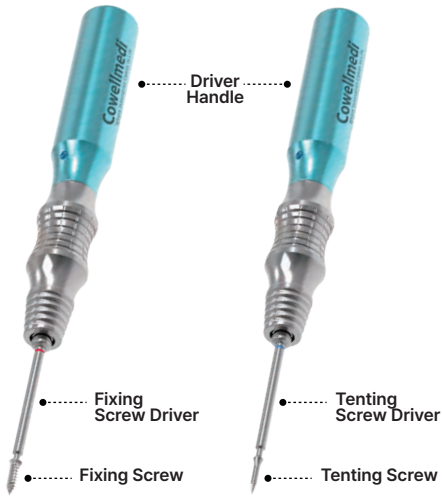
Classification	D(Ø,mm)	L1(mm)	L2(mm)	Code
Fixing Screw Driver	1.6	6.0	70.0	KFSHD70
Tenting Screw Driver	2.2			KTSHD70

Driver Handle

- Used to place and remove Fixing Screw / Tenting Screw by connecting Driver Handle.

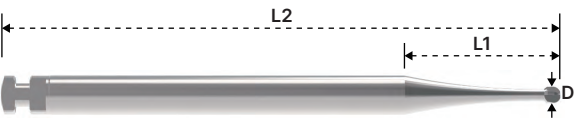


D(Ø,mm)	L1(mm)	L2(mm)	Code
19.8	75	135.0	KIGH

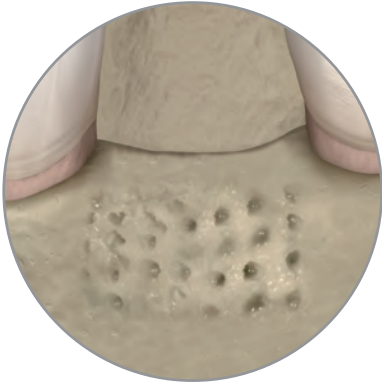


Round Bur

- Used to perforate cortical bone when blood supply is required.
- Recommended drilling speed : 1,200~1,500rpm.

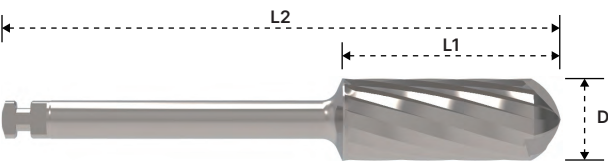


D(Ø,mm)	L(mm)	H(mm)	Code
1.0	9.5	34.0	KIGRB10

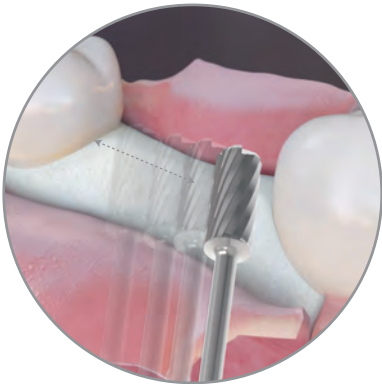


Bone Trimmer

- 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 : 1,200~1,500rpm.



D(Ø,mm)	L1(mm)	L2(mm)	Code
5.0	13	34.0	KIGBT50

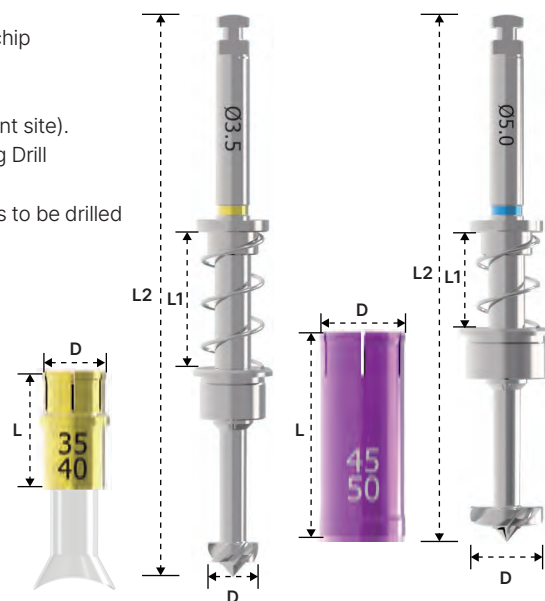


Harvesting Drill & Drill Stopper

- Drill for convenient harvesting of autogenous bone in the form of bone chip in a short period of time.
- Silicon Shield of 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 Kit (1 is assembled with Ø3.5 Harvesting Drill and 5 are packed in lower tray).
- The maximum drilling depth of Ø3.5 Harvesting Drill is 12mm, so it needs to be drilled slowly.
- Remove while rotating drill.
- Recommended drilling speed : 300~500rpm.

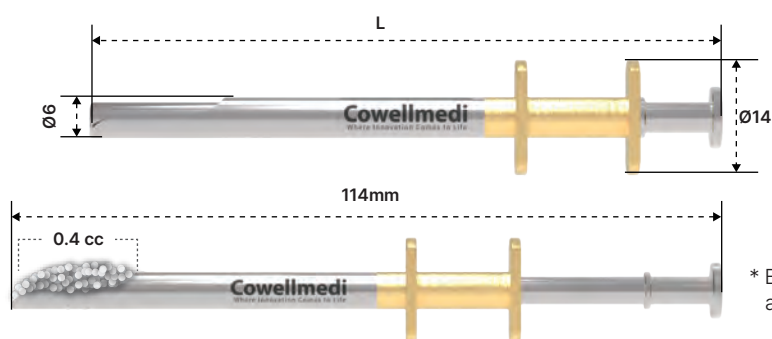
D(Ø,mm)	L1(mm)	L2(mm)	Code
3.5	9.5	39.2	KBH35
5.0	6.5	36.5	KBH50

Drill Stopper	D(Ø,mm)	L(mm)	Code
	5.6	9	KBHD3540
	6	14.3	KBHD4550



Bone Carrier

- Narrow tip is beneficially handled in most of bone graft techniques.
- Bone graft particles can be accurately and safely injected without contamination.
- rhBMP-2 can be easily coated to implant due to circular groove of tip.
- Bone graft particles and rhBMP-2 solution can be well mixed on the circular groove.



* Bone Carrier length is 94mm and the total length after stretching is 114mm.

Bone Carrier	D(Ø,mm)	L(mm)	Code
	6	94	KBBC01



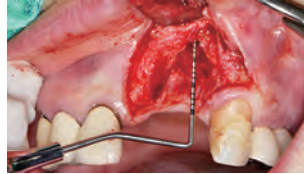
CLINICAL CASE

Fixing Screw

Bone



Buccal view of the bone defect.



14mm high defective part from the gingiva.



7mm high defective part from the gingiva.



Drilling using Fixing Screw Drill with 1.0mm in diameter.



Bone graft with INNO-CaP.



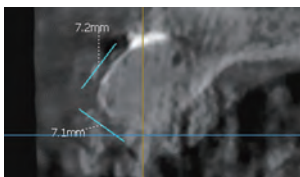
A Fixing Screw with 5mm in length was connected to Fixing Screw Driver coupled to Driver Handle.



Fixing Screw was fixed to the bone through Wifi-Mesh after placing Wifi-Mesh.



Primary closure.



CT scan image showed that the vertical augmentation with Fixing Screw was successfully done.

Tenting Screw / Tenting Cap

Bone



Buccal view after extraction of #36 showed severe vertical defect.



A Tenting Screw with 10mm in length was fixed instead of an implant for socket preservation at the site of #36.

INNO Graft® S was grafted up to the top of Tenting Screw.



After forming a hole on Wifi-Mesh and applying Wifi-Mesh, Tenting Screw Cap was fixed to Tenting Screw through the hole Wifi-Mesh.



Mattress key suture was carried out in order to decrease the possibility of exposures.



Panoramic view showed that the vertical augmentation with Tenting Screw was successfully done.

CLINICAL CASE

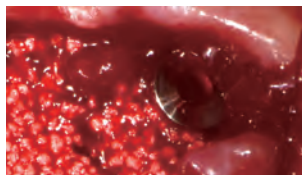
Fix Connector / Cover Cap Fixture



INNO Sub. Ø4.5x12mm Fixture was placed at the site of #37 with 3mm high buccal bone defect around.



A Fix Connector with 2mm in cuff was installed on INNO Sub. Fixture.



Bone graft with INNO Graft S.



A hole for Cover Cap fixation was formed in the center of Wifi-Mesh.

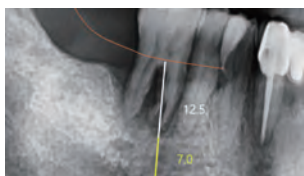


Cover Cap and Wifi-Mesh were installed on Fix Connector using 0.9 Hex Driver.



Postoperative radiographic view of #37.

Fix Connector / Healing Cap Fixture



Buccal defect.



Defect height from gingival crest to buccal wall was checked.



INNO Sub. Ø5.0x12mm Fixture.



A Fix Connector with 1mm in cuff was installed on INNO Sub. Fixture.



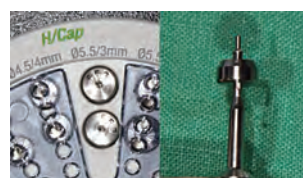
Fix Connector was placed in INNO Sub. Fixture.



INNO-CaP was grafted up to the top of Fix Connector.



A hole for Healing Cap fixation was formed in the center of Wifi-Mesh.



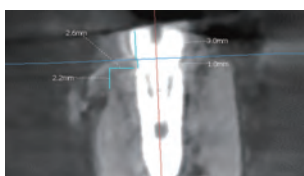
Healing CaP with 5.5mm in diameter and 3mm in cuff.



Installation of Healing Cap and Wifi-Mesh using 0.9 Hex Driver on Fix Connector placed in INNO Sub. Fixture.



Suture.



Dimension of the graft with 2.2mm in height and 2.6mm in width.

Autobone Harvester [KIAH001]

> Devised to harvest autogenous bone not only from the general site but also from the site where the implant will be placed.

Drill Stopper



Ø3.5 / 4.0

KBHD3540



Ø4.5 / 5.0

KBHD4550



Ø6.0

KBHD60



Silicon Shield

KBHDSS01

* placed in the lower tray.



Harvesting Drill



Ø3.5

KBH35



Ø4.0

KBH40



Ø4.5

KBH45



Ø5.0

KBH50



Ø6.0

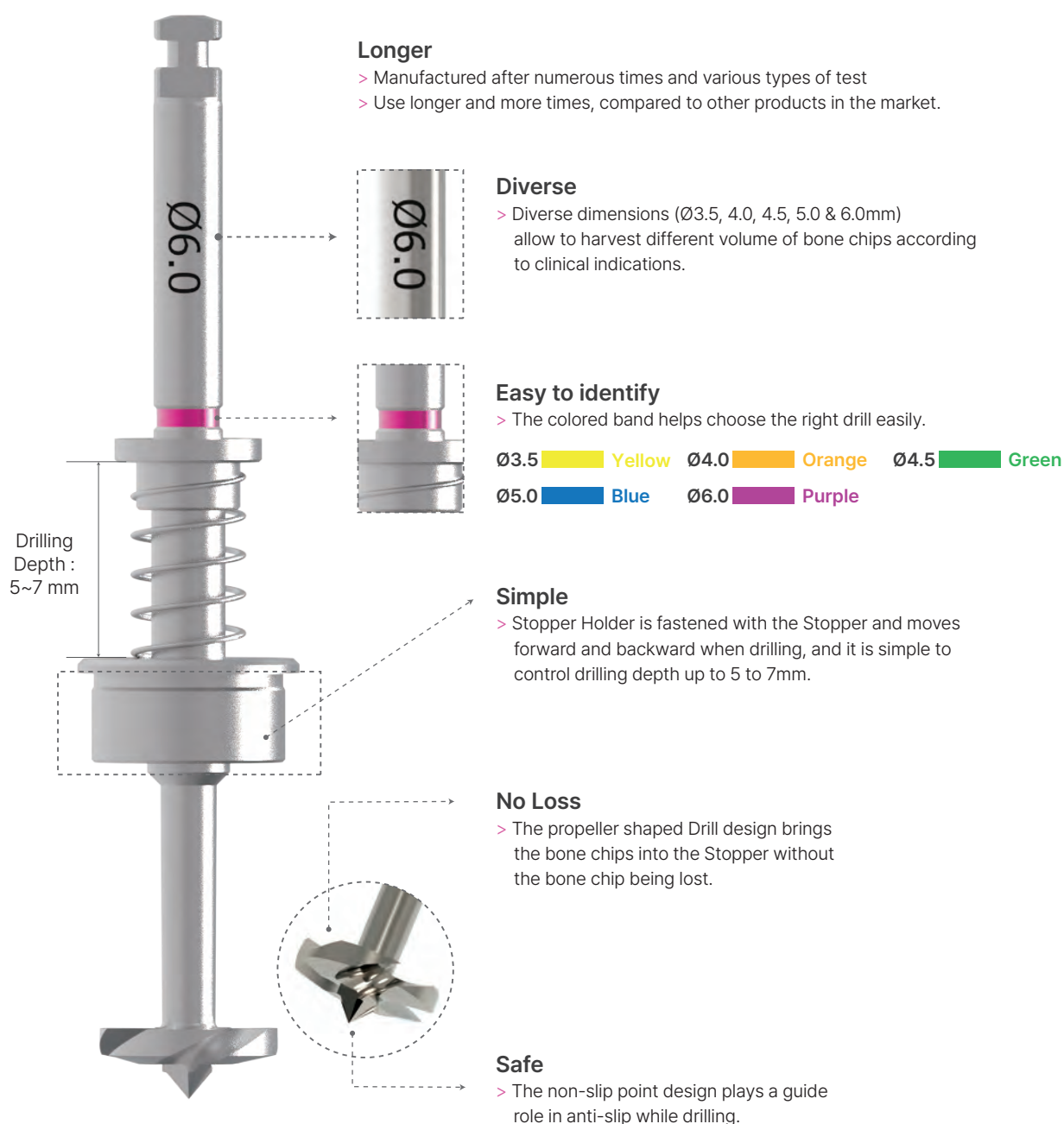
KBH60

Key Concepts

Maximize your return on minimal investment

- > The key concept of the Autobone Harvester is 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 (Implant Site)



Stopper

- > Used by fastening to 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 checking 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 Stopper Holder of Ø4.5 & 5.0 Drill.



For 6.0 Drill



Stopper

- > Used by fastening to Stopper Holder of Ø6.0 Drill.



Harvesting sequence:

Implant Site using Ø3.5/4.0

Harvesting Drill with the Silicon Shield



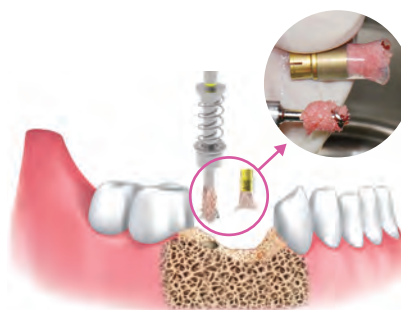
1. Point drill to mark harvesting and implant site.



2. 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.



3. Drill at 300 to 500rpm with irrigation and harvest bone chips.



4. Disassemble the Silicon Shield, the Stopper and collect the bone chips for bone grafting.



5. Use Final Drill (equal to or over Ø3.5/4.0) according to the drilling protocol of the manufacturer and treatment planning.



6. Place the implant.

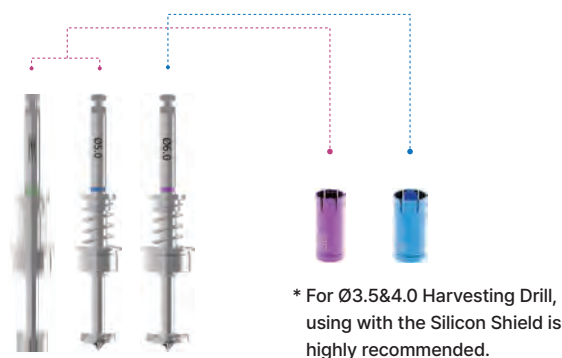


7. Apply the harvested bone chips on the site.

Harvesting sequence:

Buccal Bone Harvesting
using Ø4.5/5.0/6.0
Harvesting Drill

Select the drill according to its
diameter and clinical indications.



- Drill at 300 to 500rpm with irrigation and harvest autogenous bone chips.

A Clinical Case using Ø3.5/4.0 Harvesting Drill

by Dr. Soohong Kim, DDS, Ph.D



Drilling at 300rpm with irrigation was carried out after marking implant and harvesting position.



The Silicone Shield was brought into close contact with various types of bone levels and prevented bone chip loss.



The amount of bone taken was easily ascertained through the transparent Silicone Shield.



The bone was transferred to a bone dish after disassembling the Silicon Shield and Stopper. The amount of the bone was much more than expected.



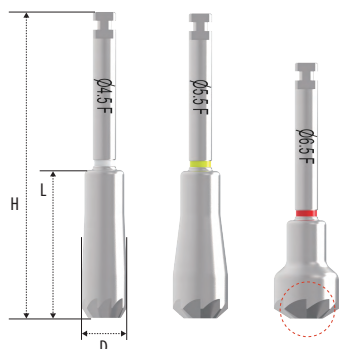
After the implant placement, healing abutments were connected and carried out GBR in the defective area.

* 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.

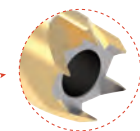
Bone Profiler Drill

Fixture

- > This is designed for precise bone removal around the fixture
- > The Drill Guide should be securely attached to the fixture before use
- > Rotation Direction: Clockwise (CW) / 800~1200 RPM



Code	D(Ø)	L(mm)	H(mm)	Color Band
KBP4515	4.5	15	31	White
KBP5515	5.5	15	31	Yellow
KBP6510	6.5	10	26	Red

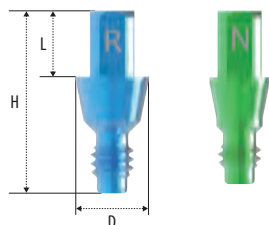


· As the central hole of the drill connects with the guide, it serves to accurately position the drill for precise drilling

Drill Guide

Fixture

- > Guide for Bone Profiler Drill(Fixture)
- > Tightened with the Hex Driver(Torque force : 10~15N)
- > Sub Regular : Blue, Sub Narrow : Green

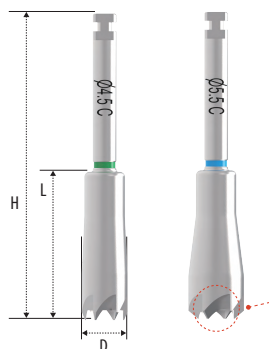


Code	D(Ø)	L(mm)	H(mm)	Color Band
KBPDG01R	3.3	3	8.3	Blue
KBPDG01N	2.63	3	7.82	Green

Bone Profiler Drill

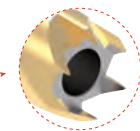
Cover Screw

- > This is designed for precise bone removal around a Cover Screw
- > Drill Guide should be securely attached to the Cover screw before use
- > Rotation Direction: Clockwise (CW) / 800~1200 RPM



Code	D(Ø)	L(mm)	H(mm)	Color Band
KBP4515C	4.5	15	31	Green
*KBP5515C	5.5	15	31	Blue

*Optional

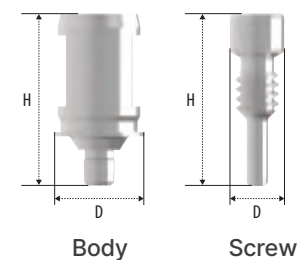


· As the central hole of the drill connects with the guide, it serves to accurately position the drill for precise drilling

Drill Guide

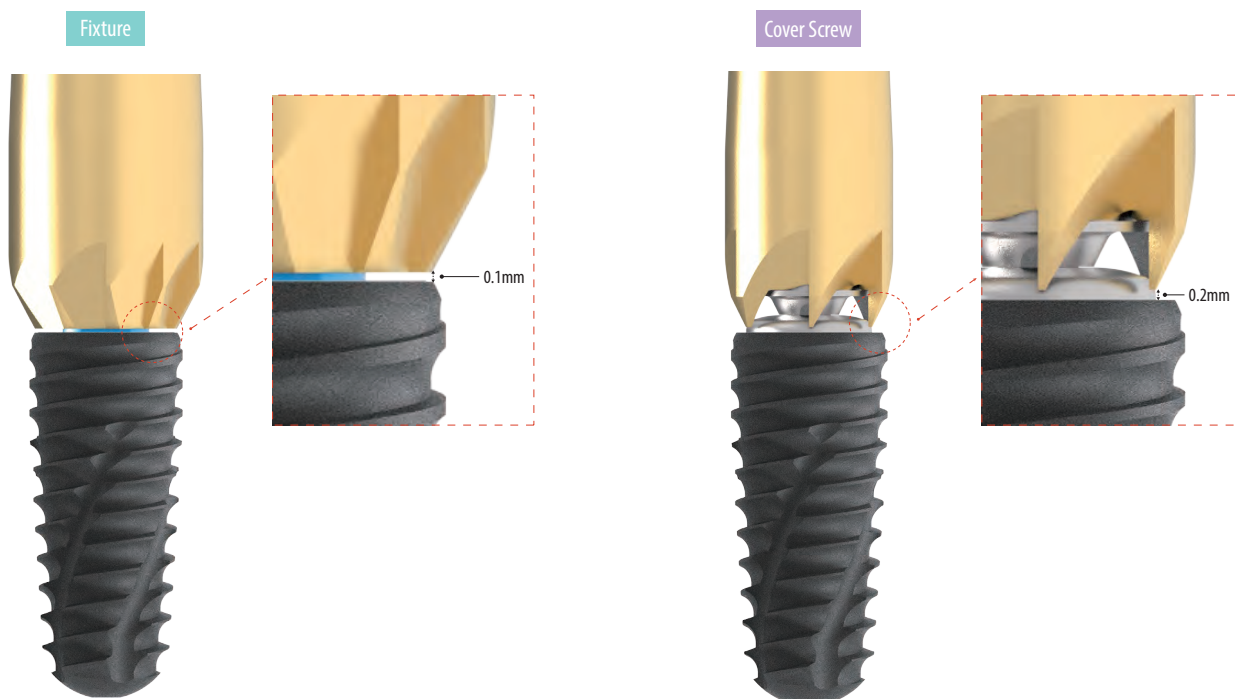
Cover Screw

- > Guide for Bone Profiler Drill(Cover Screw)
- > This should be secured into the 1.2 Hex hole of the Cover Screw before use
- > Tightened with the Hex Driver(Torque force : 10~15N)

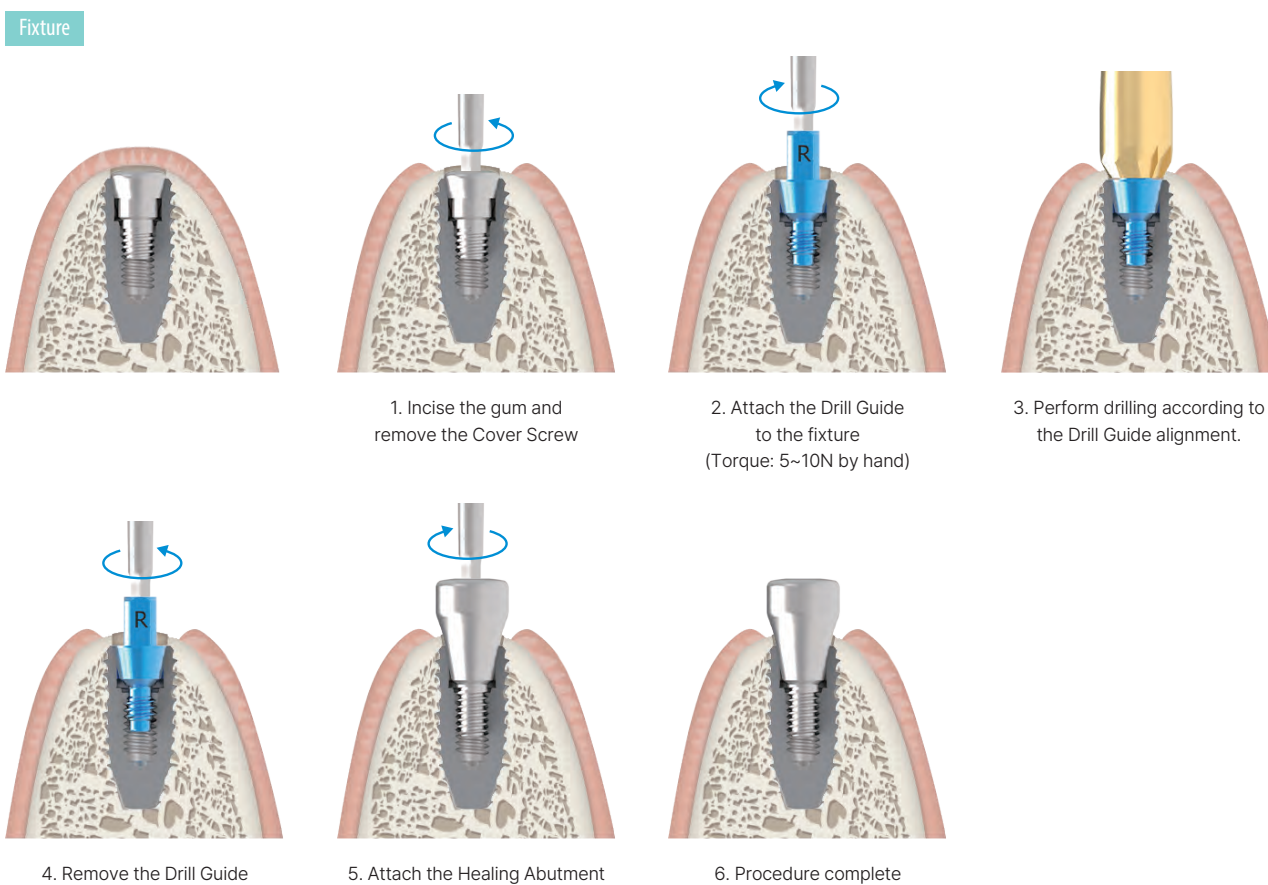


Code	D(Ø)	H(mm)
KBPDGB	3.3	6.3
KBPDGS	1.95	6.3

Safety clearance

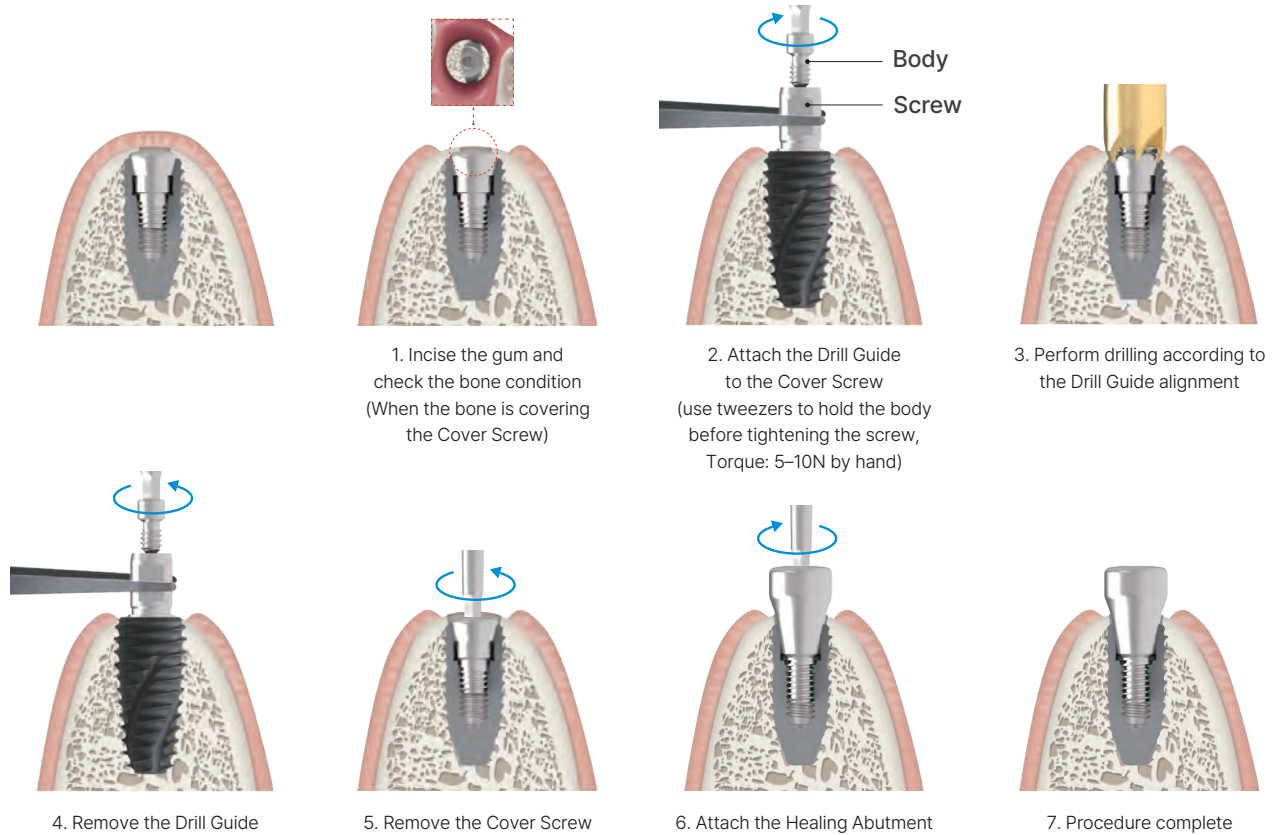


Instructions for Use

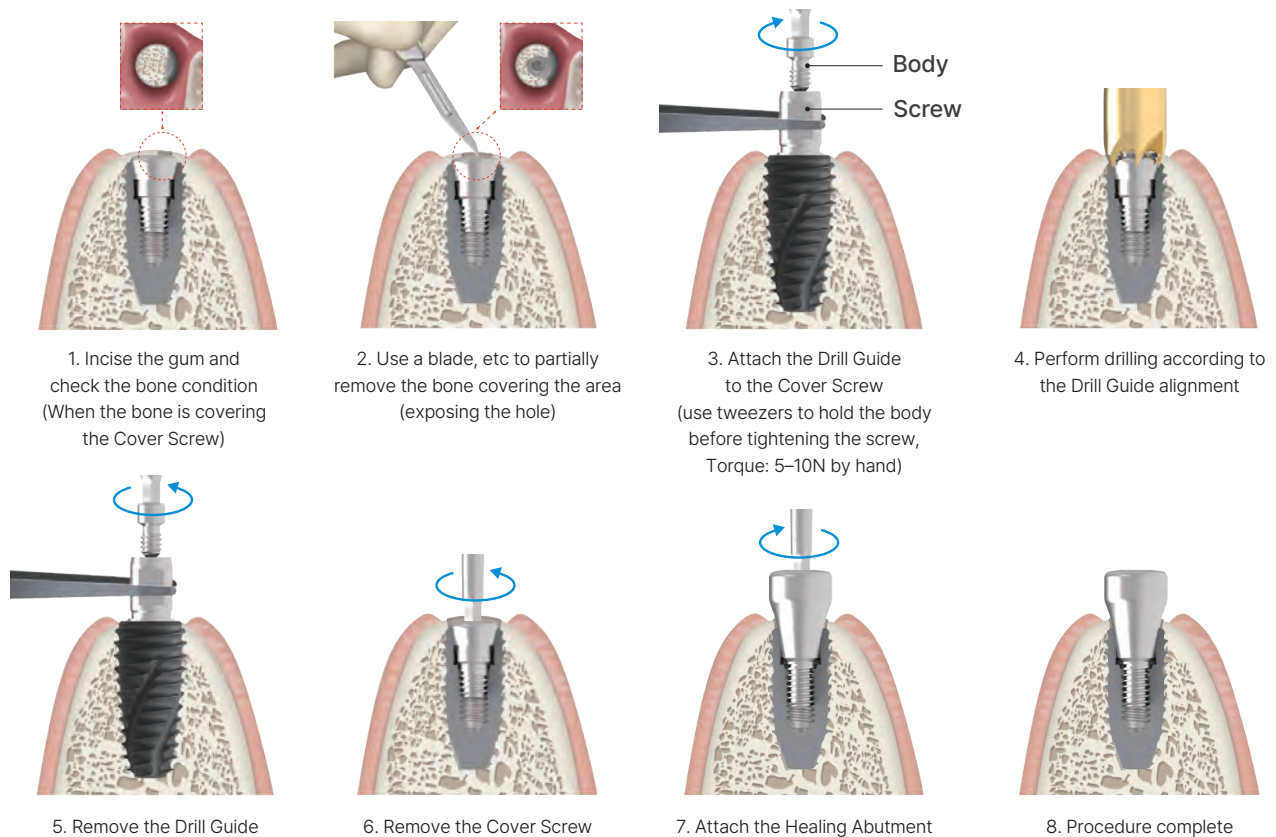


Cover Screw

> When the bone slightly covers the area around the Cover Screw (Hole exposed)



> When the bone covers the area around the Cover Screw

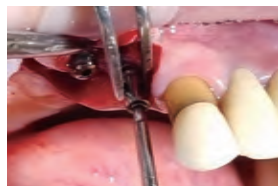


Clinical Case 1

Cover Screw



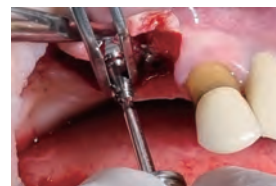
1. After gum incision, check the condition of the bone



2. Attach the Drill Guide to the Cover Screw (use tweezers to hold the body before tightening the screw)



3. Perform drilling according to the Drill Guide alignment



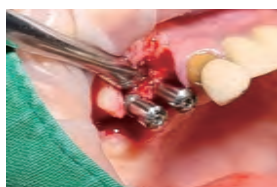
4. Remove the Drill Guide



5. Remove the Cover Screw



6. Attach the Healing Abutment



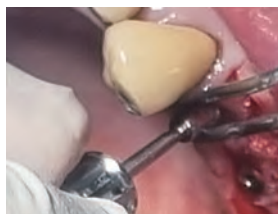
7. Procedure complete

Clinical Case 2

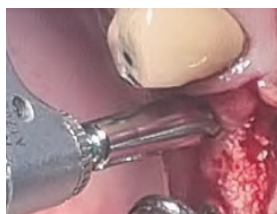
Cover Screw



1. After gum incision, check the condition of the bone



2. Attach the Drill Guide to the Cover Screw (use tweezers to hold the body before tightening the screw)



3. Perform drilling according to the Drill Guide alignment



4. Remove the Drill Guide



5. Remove the Cover Screw



6. Attach the Healing Abutment

Clinical Case 3

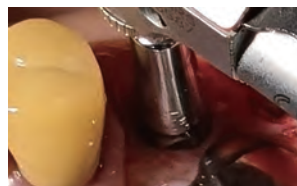
Cover Screw



1. After gum incision, check the condition of the bone



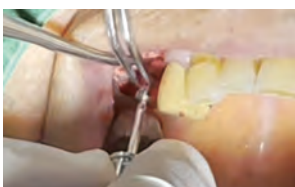
2. Attach the Drill Guide to the Cover Screw
(use tweezers to hold the body before tightening the screw)



3. Perform drilling according to the Drill Guide alignment



4. Remove the Drill Guide



5. Remove the Cover Screw



6. Attach the Healing Abutment

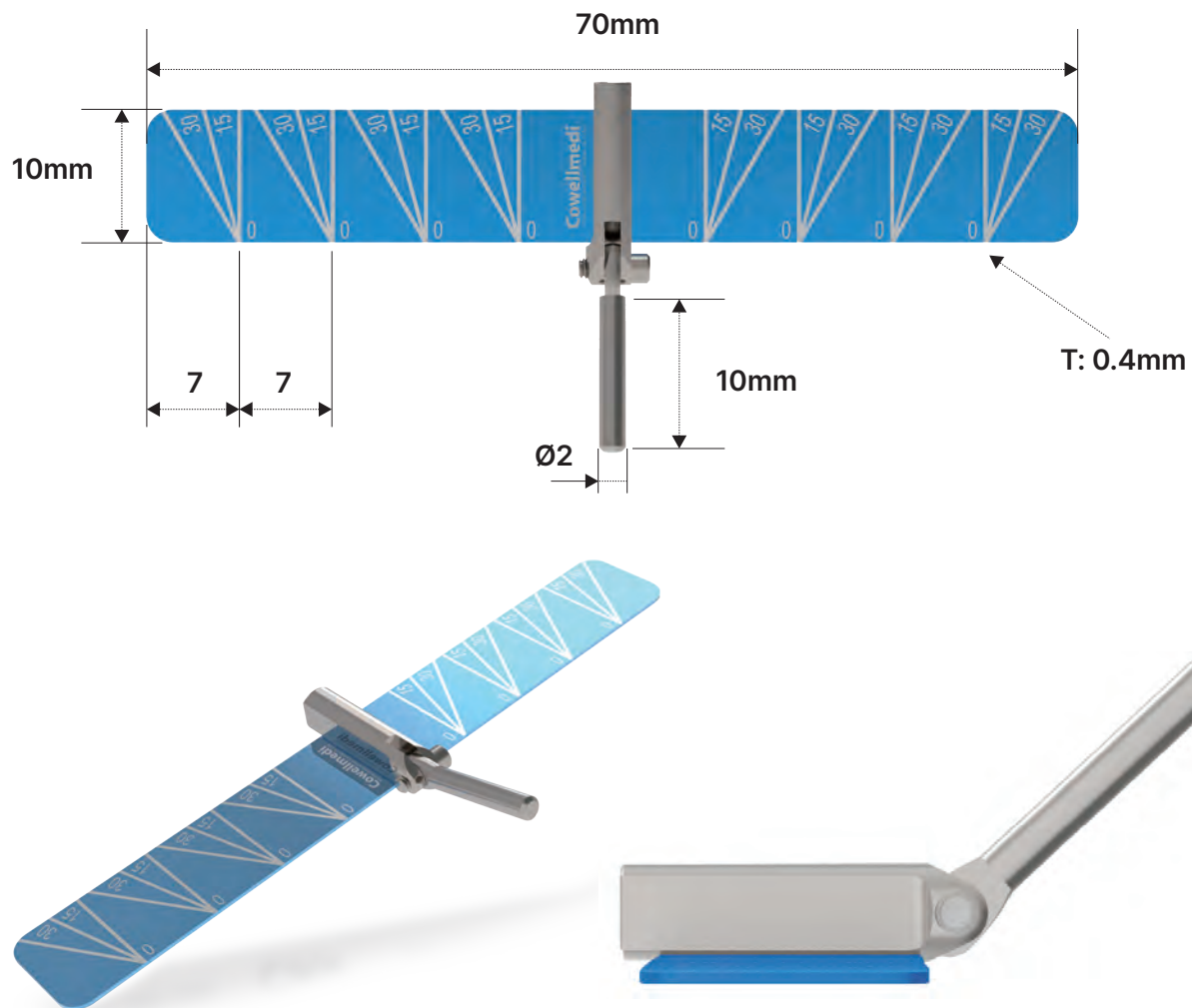
Analog Surgical Guides

- AO4 Surgical Stent
- Volume-Up Guide



AO4 Surgical Stent [KDSS001]

> A guide template intended to assist implant placement, particularly for AO4/AO6 techniques.



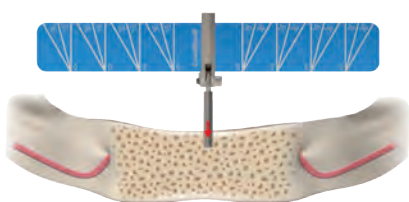
Characteristic

- > 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

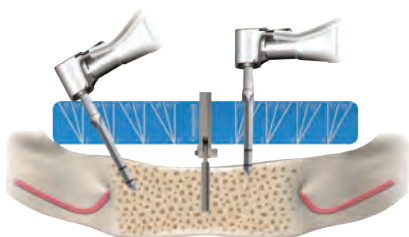
- > Edentulous cases (fully edentulous patients).
- > Cases where shorter chair time may be desirable, depending on the treatment plan and clinical conditions.
- > Patients with systemic conditions should be assessed and managed according to the clinician's judgment and applicable guidelines.
- > Cases requiring guided/accurate implant positioning.

Instruction



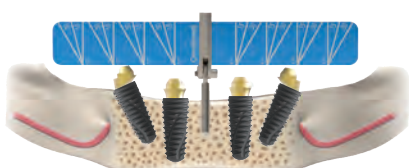
Place the AO4 Surgical Stent

- > 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

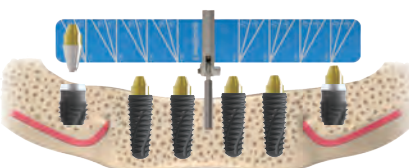
- > Drill with reference to the angled line and place the fixture.



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 30N.cm torque force.
- * Anterior site: Place the Multi A abutment (15°) or the Multi S abutment with 15N.cm torque force (it is possible to allow emergence of the prosthetic screw).

or



Placement Lock Abutment

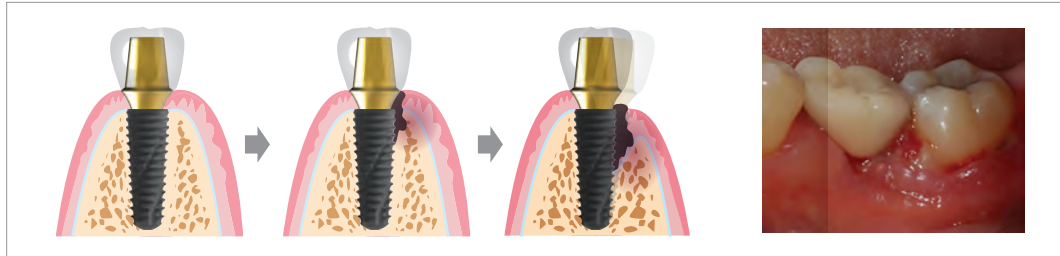
- > After placing the INNO Fixture, connect Lock Abutment according to the site.
- * If implant placement at an angle is not appropriate or not desired, using the INNO Sub. Short Implant is highly recommended.

Volume-up Guide System

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

1. CONCEPT

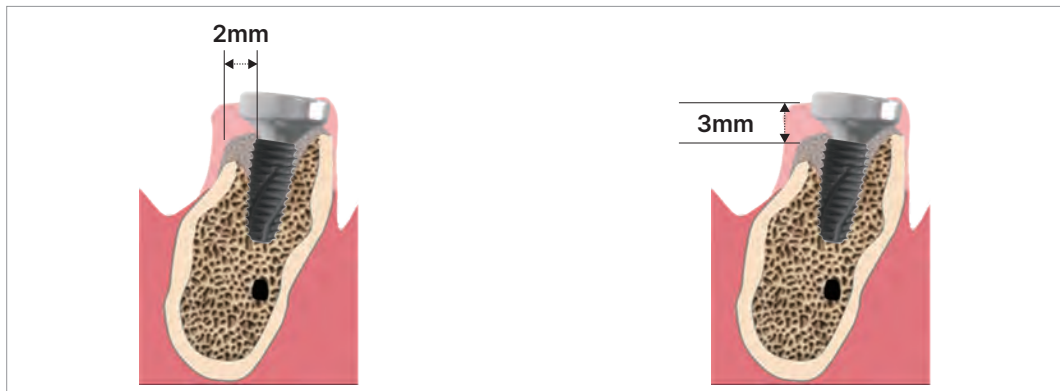
- > Peri-implant inflammations represent serious diseases after dental implant treatment, which affect both the surrounding hard and soft tissue.



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)

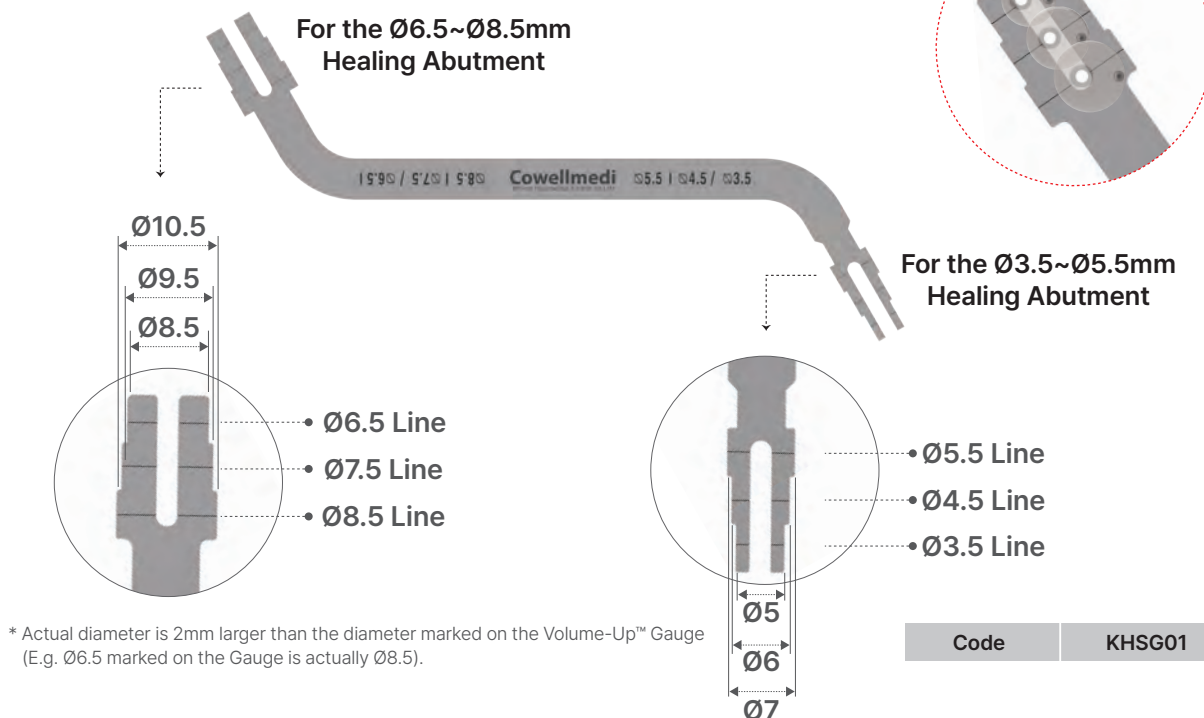
Alveolar bone regeneration at minimum 3mm lower position to maintain gingival height.
(Clinic Oral Implants Res 2000;11: 1-11.)



The Volume-up Guide System helps place implant in the right position according to 2 above mentioned clinical factors and helps select right dimension of the Healing Abutment to be used as a scaffold while gingival forming.

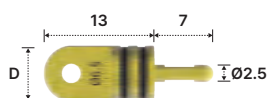
2. SPECIFICATION

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.

Volume-up Parallel Pin



- > Used for bridge or multiple units with the Volume-up Gauge.
- > For bridge or multiple units.
- > For Ø3.5, Ø4.5 and Ø5.5, place the fixture and use the Healing Abutment instead of the Volume-up Parallel Pin.



Departure Avoidance

- > Connected with a silk to prevent it from falling out into the oral cavity.

Diameter Marking

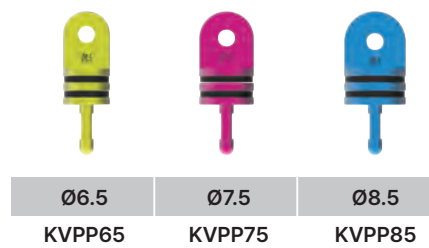
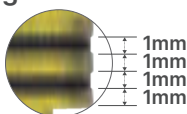
- > Marked and colored by diameter.

Gingival Height Marking

- > 1~4mm of cuff marking.

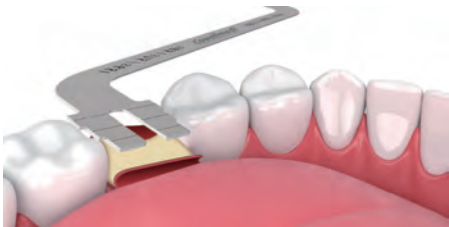
Pin

- > Inserted into the hole formed by the Point Drill.



3. PROCEDURE

I. Single Implant



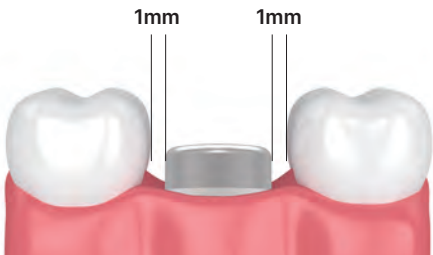
Set the Volume-up Gauge on the implant site according to the diameter line marked on the Volume Up Gauge.



Position the Point Drill in the drill insertion groove of the Volume-up Gauge.



Drill and place the implant in accordance with the manufacturer's implantation sequence.



If implant placement torque is equal to or over 20~30N.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.

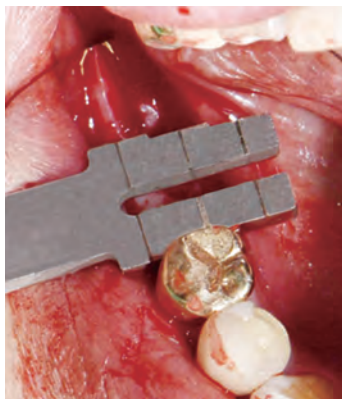


Carry out the same as the previous step.

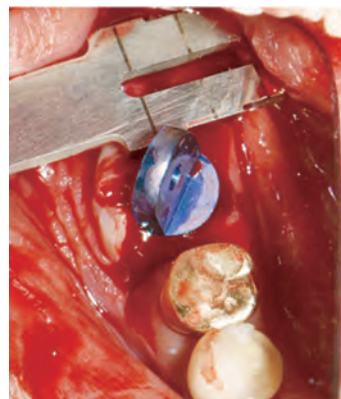
4. CLINICAL CASE



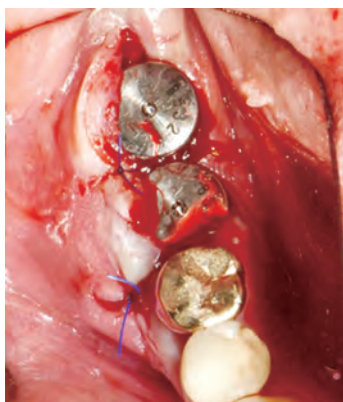
Preoperative view of the healed ridge.



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 into 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.



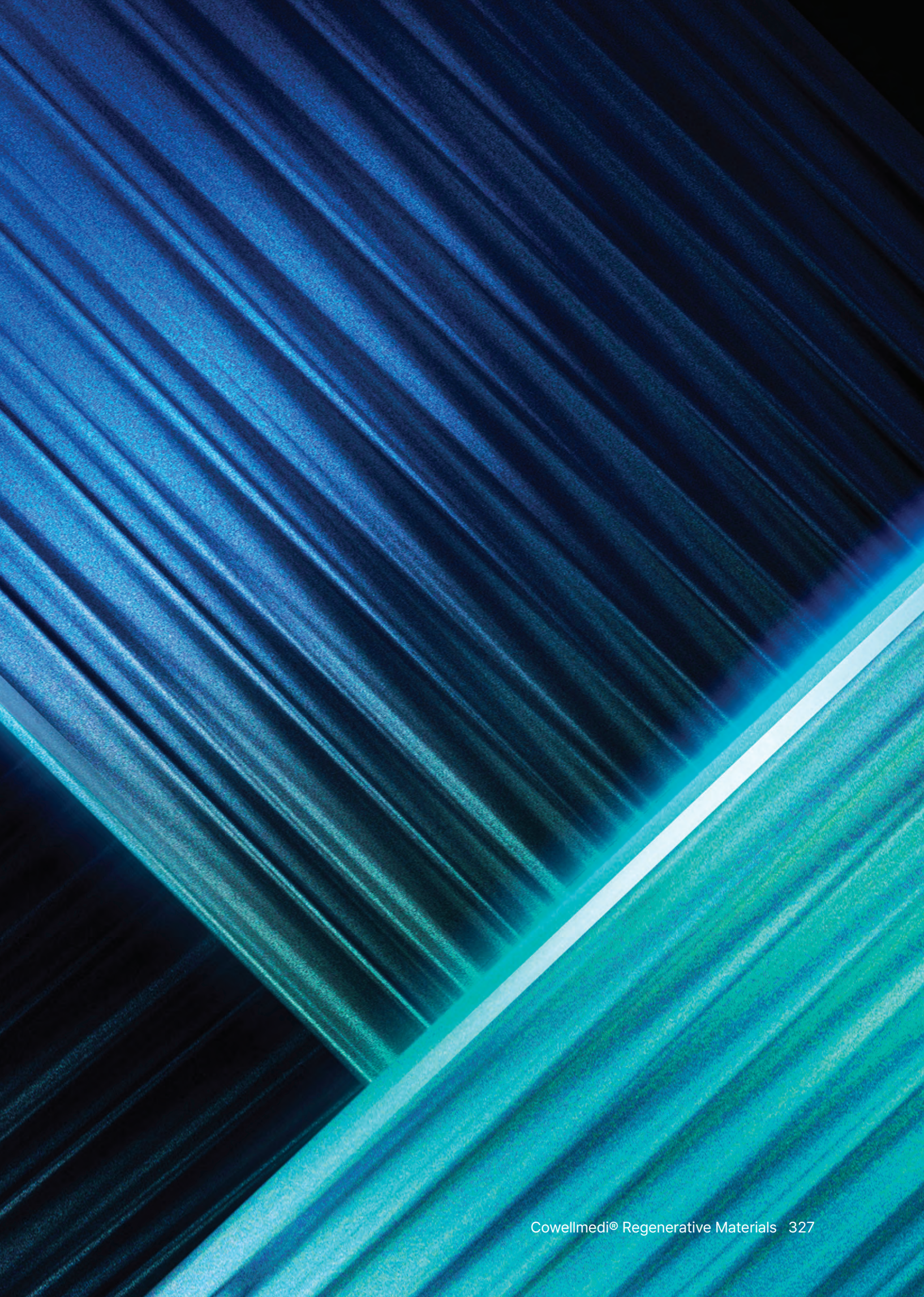
After 4 weeks, the contracted buccal alveolar bone & gingiva to the natural shape and width were restored, which will allow esthetically and functionally improved prosthesis fabrication helping prevent food permeation.



Cowellmedi® Regenerative Materials

Inspire Confidence through A Comprehensive Approach

• COWELL® BMP	328
• INNO Graft® A	348
• INNO Graft® B	351
• INNO Graft® S	355
• Mega Derm Plus	360
• Non-resorbable Membranes	363



Experience innovation

COWELL® BMP



THE WORLD FIRST E.rhBMP-2-based bone graft, supported by
10 YEARS OF CLINICAL DATA AND 40+ STUDIES.

COWELL® BMP

Osteoinductive Bone Graft rhBMP-2 + BCP/DCP

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.



Composition

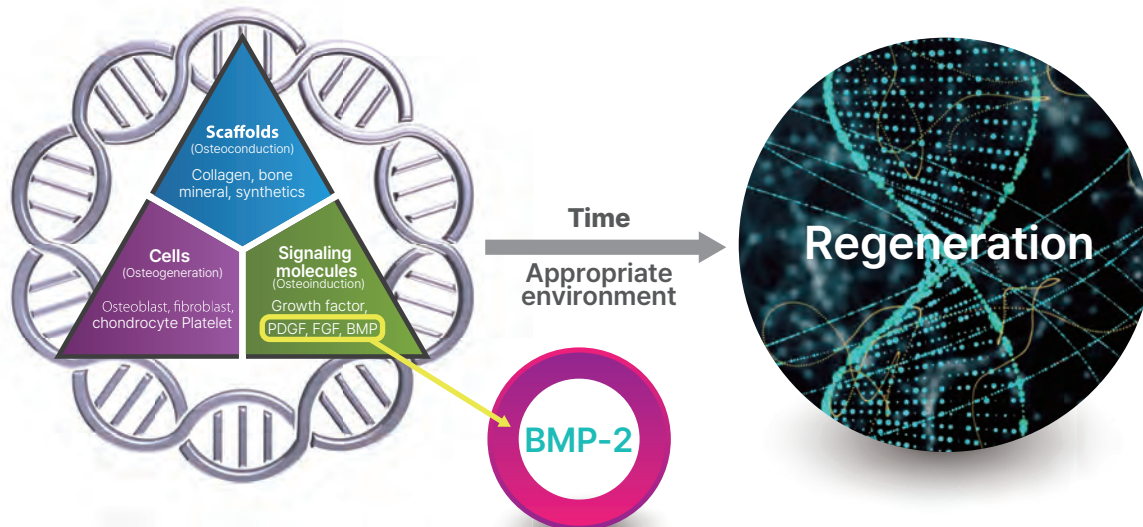
- COWELL® BMP is bone graft material based on the E.rhBMP-2, developed for the first time in the world. It is supported by 10 years of clinical data and over 40 studies.
- BCP/DCP as a carrier allows maintenance of space.

Features

- 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).

Development Background

Triad of Tissue Engineering



Autologous stem cell transplantation

- Less effective due to difficulty of the engraftment in early stage of tissue regeneration
- Cell cultivation causes enormous expense

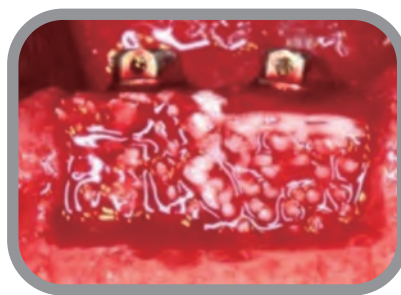
However, Stem cell growth factors

- Effective in tissue regeneration for all vertebrates
- Even human growth factor is effective in both human and animals

Stem cell transplantation VS rhBMP-2



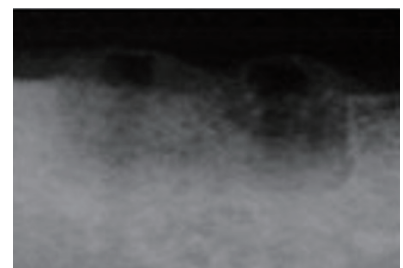
Stem cell transplantation



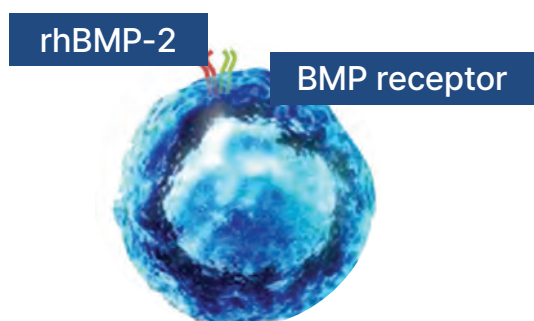
Stem cell & rhBMP-2



rhBMP-2

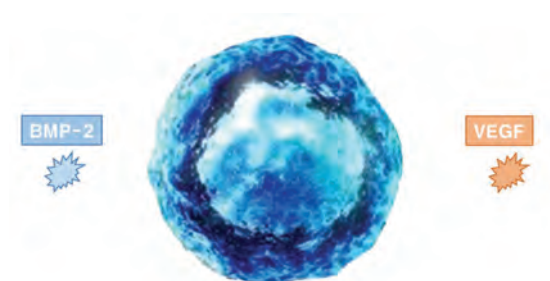


Mechanism of Action of COWELL® BMP



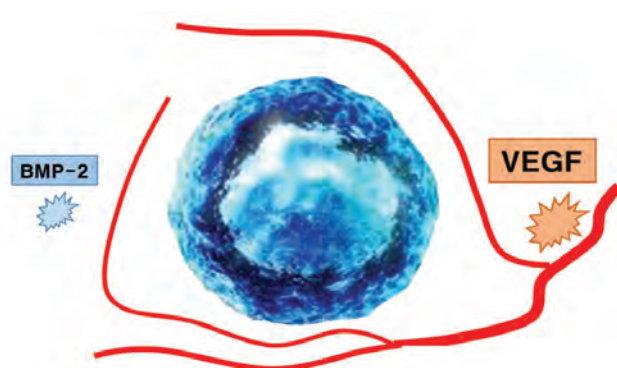
Mesenchymal Stem cell

1. rhBMP-2 bonds with BMP-2 receptor of Stem cell to activate intracellular phosphorylating enzyme.

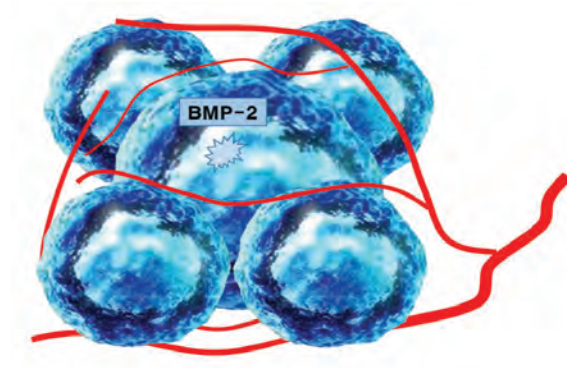


2. BMP-2 of Stem cell and VEGF activates for protein synthesis and secretion.

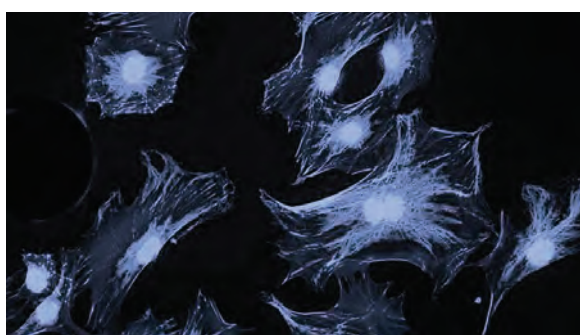
* VEGF : Vascular Endothelial Growth Factor



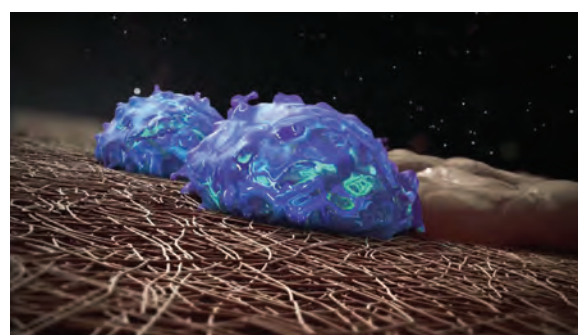
3. VEGF promotes cell growth by inducing angiogenesis to nourish Stem cell.



4. BMP-2, activates cell division of surrounding Stem cell and promotes rapid proliferation.



5. Proliferated Stem cells, differentiate into various cells according to surrounding tissues.

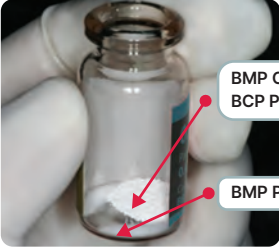


6. Differentiated cells form neoplastic tissues and remodel them according to the surrounding environment.

Product Type

COWELL® BMP (One vial)





BMP Coated
BCP Particle

BMP Powder

**BMP Powder
+ BMP Coated BCP Particle**

- Dose and particle size of the COWELL® BMP



0.1g

Product Code	Particle Size
BB1010	0.41~1.0mm



0.25g

Product Code	Particle Size
BB1025	0.41~1.0mm



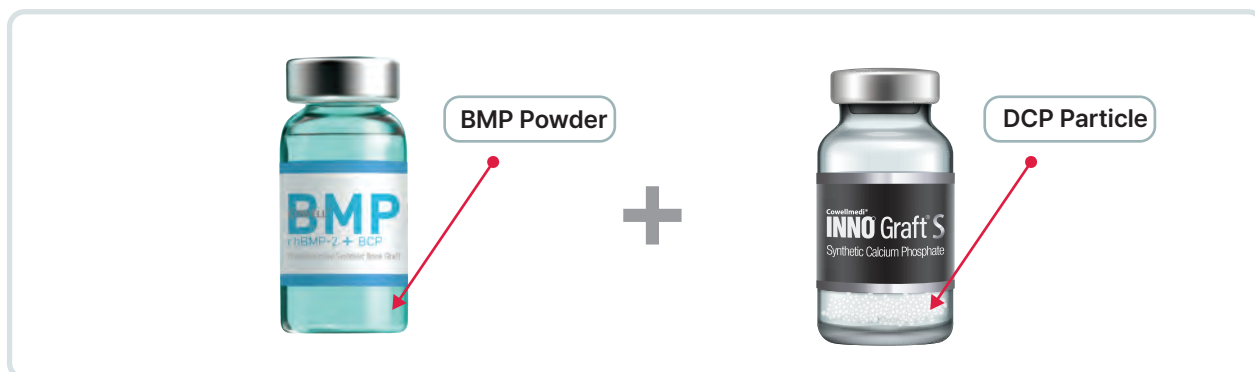
0.5g

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 0.25mg

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 0.5mg

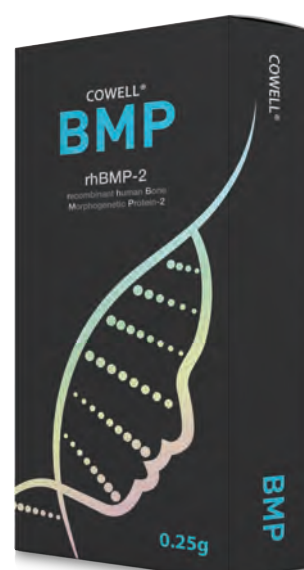
Product Code	BMP Dose	Particle Dose	Particle Size
EBB0525	0.5mg	0.25g	0.41~1.0mm
EBB0505	0.5mg	0.5g	0.41~1.0mm
EBB1150	0.5mg	1g	0.41~1.0mm
EBB1250	0.5mg	2g	0.41~1.0mm

BMP 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

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



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

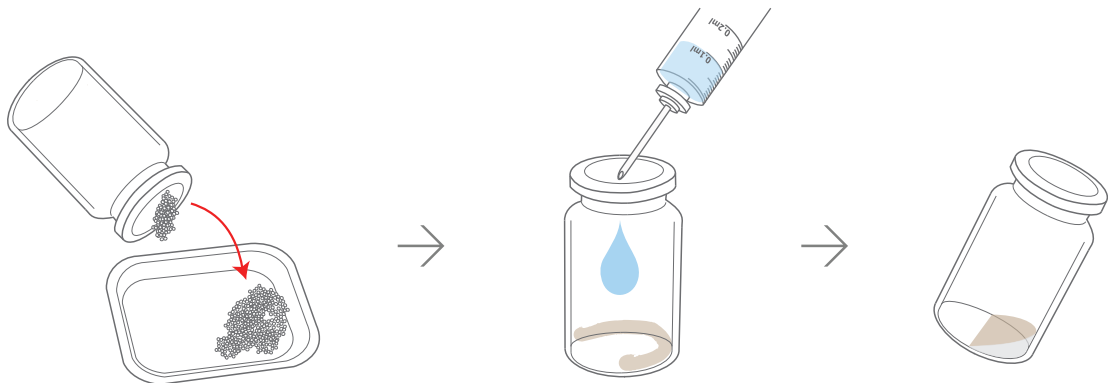
BMP 2mg

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



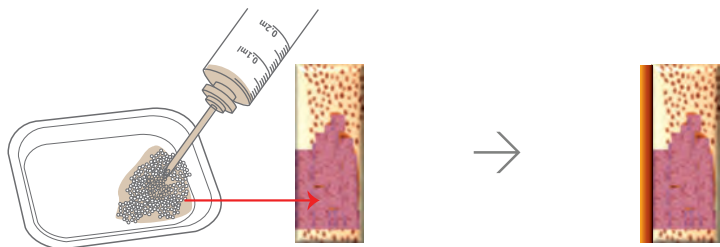
User Guide COWELL® BMP

How to use COWELL® BMP



a. Transfer DCP graft material (Vial I).

b. Inject distilled water into vial II with lyophilized rhBMP-2 power in it and mix with the powder.



c. Mix BMP solution with DCP or plus autogenic / allograft and, apply to the recipient site.

d. Cover the defect area using a barrier membrane or suture natural soft tissue without membrane.

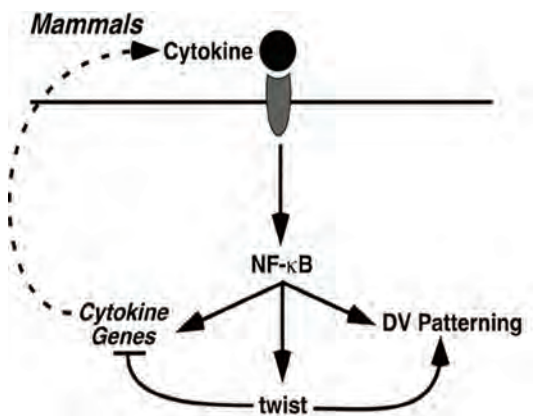
Dose of distilled water to make the mixture (BMP-2 Solution)

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

Safety of COWELL® BMP

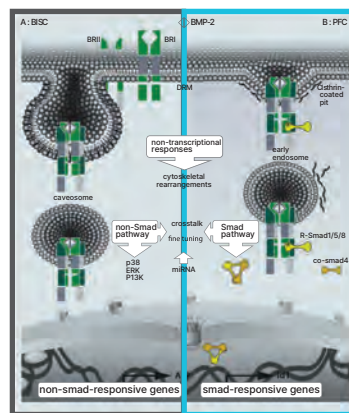
Q: Does rhBMP-2 cause bone overgrowth?

A: rhBMP-2 is safe from bone overgrowth because Twist-2 is synthesized in Stem cells to stop cell division when bone formation period is completed.



Cell, Vol. 112, 169–180, January 24, 2003

European Journal of Endocrinology (2000) 142 9–21



- Bonding to BMP-2 receptor
- Signal pathway
- Nuclear activation
- **VEGF, BMP Synthesis**

Cell proliferation **Cell differentiation**

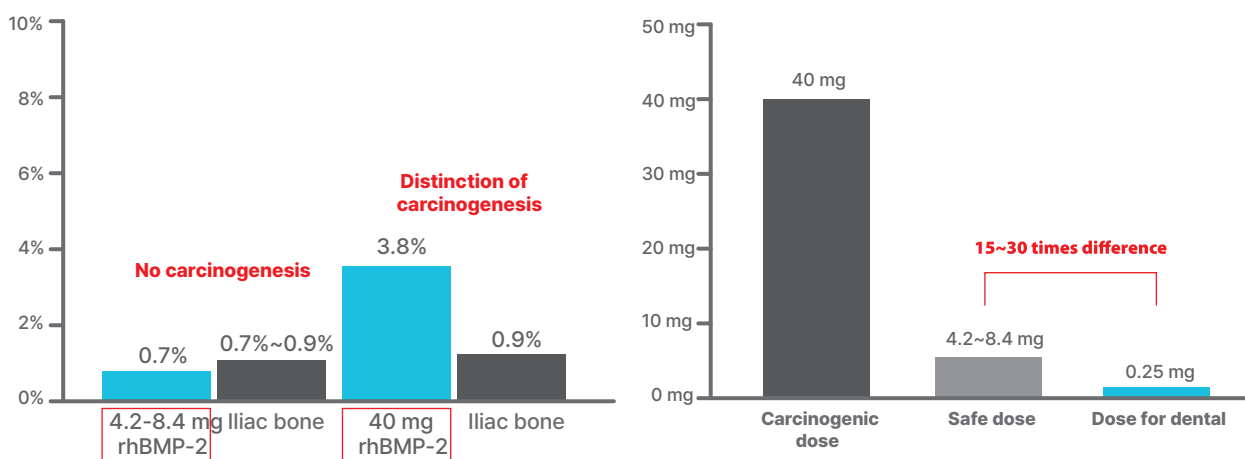
Q: Correlation between cancer incidence and usual dose of rhBMP-2?

A: Generally, rhBMP-2 may be related to cancer incidence only when total dose is over 40mg.

Countless research has proven that the safety standard dose is 4.2~8.4mg.

COWELL® BMP is supplied below the safety standard dose only.

(E.g., COWELLBMP 0.25 g contains 0.25 mg of rhBMP-2, which is 15 to 30 times lower than the safety threshold.)



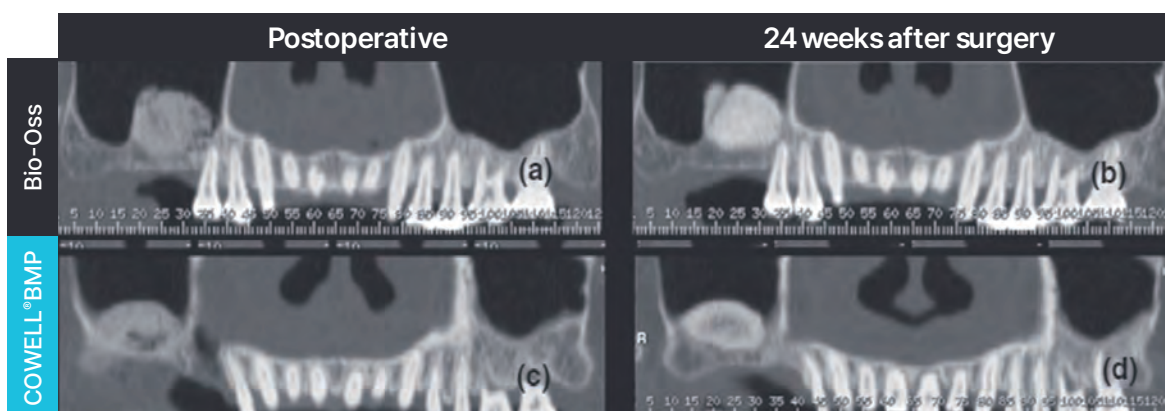
Q: Swelling occurrence after using rhBMP-2?

A: Relief incision may cause swelling due to angiogenesis proliferation in muscle but it is pain-free. Also, swelling is a transitional phenomenon and it is not a side effect.



Q : Seroma occurrence after using rhBMP-2?

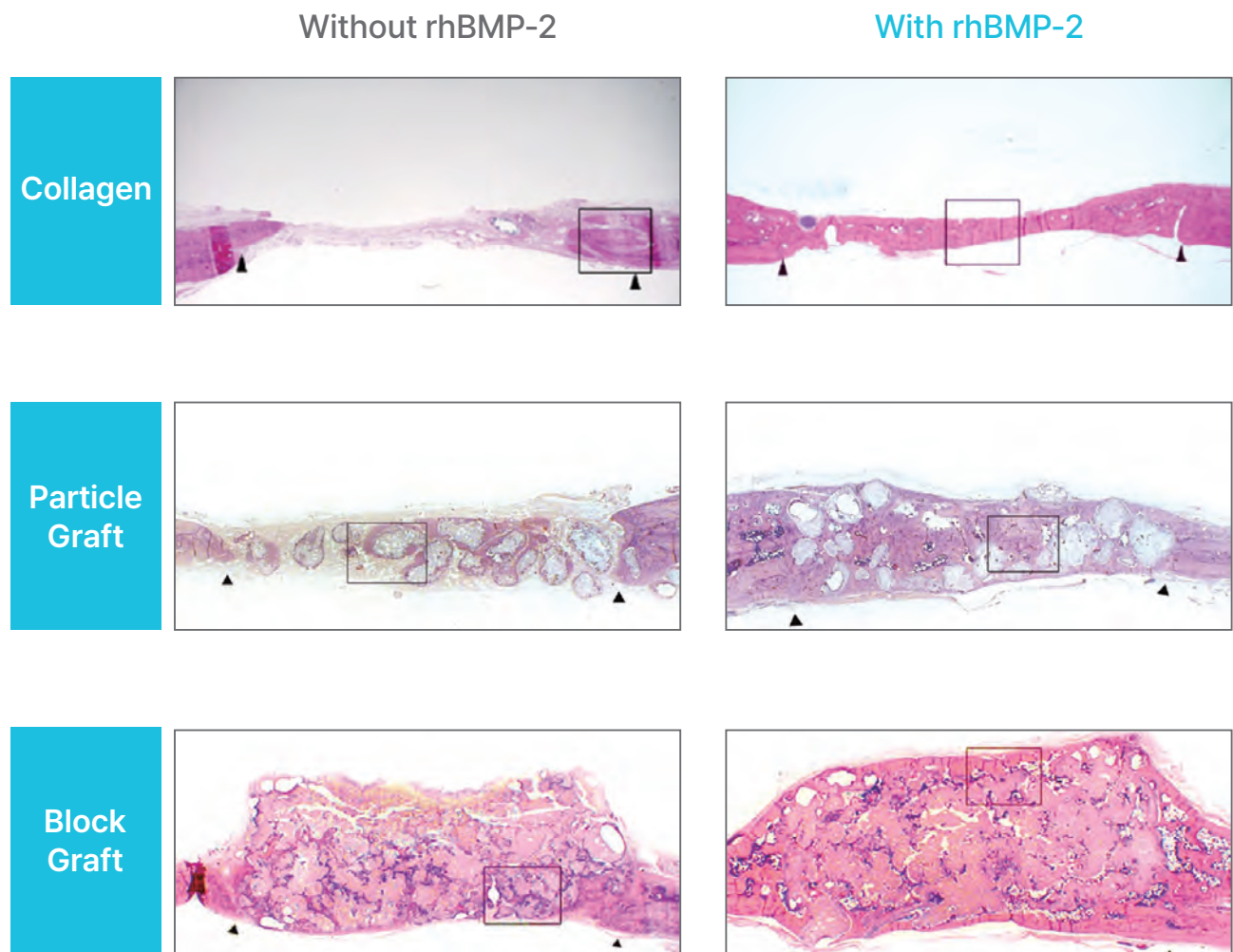
A : After sinus lift surgery, excessive secretion of exudate during healing period may accumulate in the grafted site of sealed maxillary sinus and develop into seroma but soon disappear. To limit the use to a maximum of 0.25 mg is safer rather than a high dose.



Effectiveness of COWELL® BMP

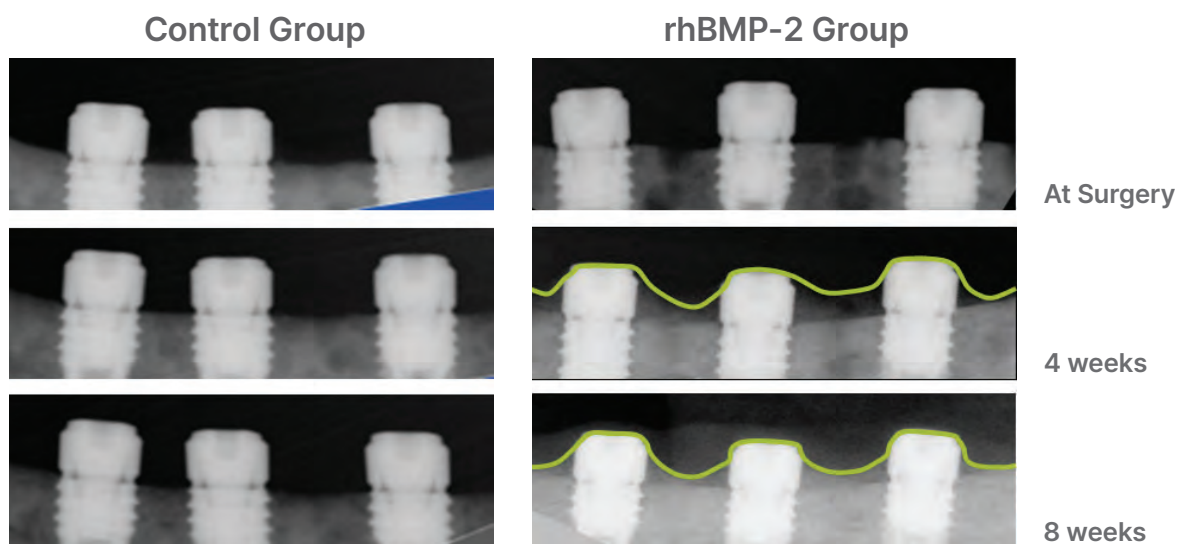
■ Critically Defective Model

Bone Graft Type

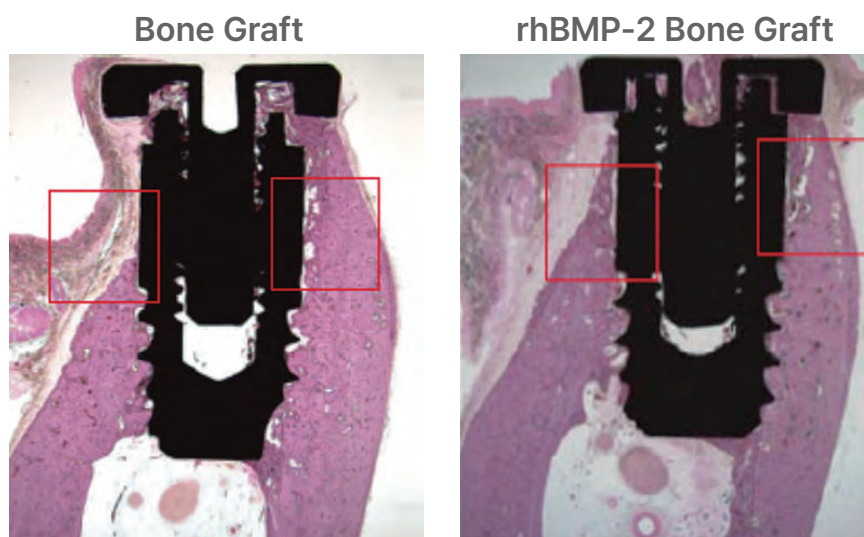


■ rhBMP-2 Coated Implant

Vertical Defect



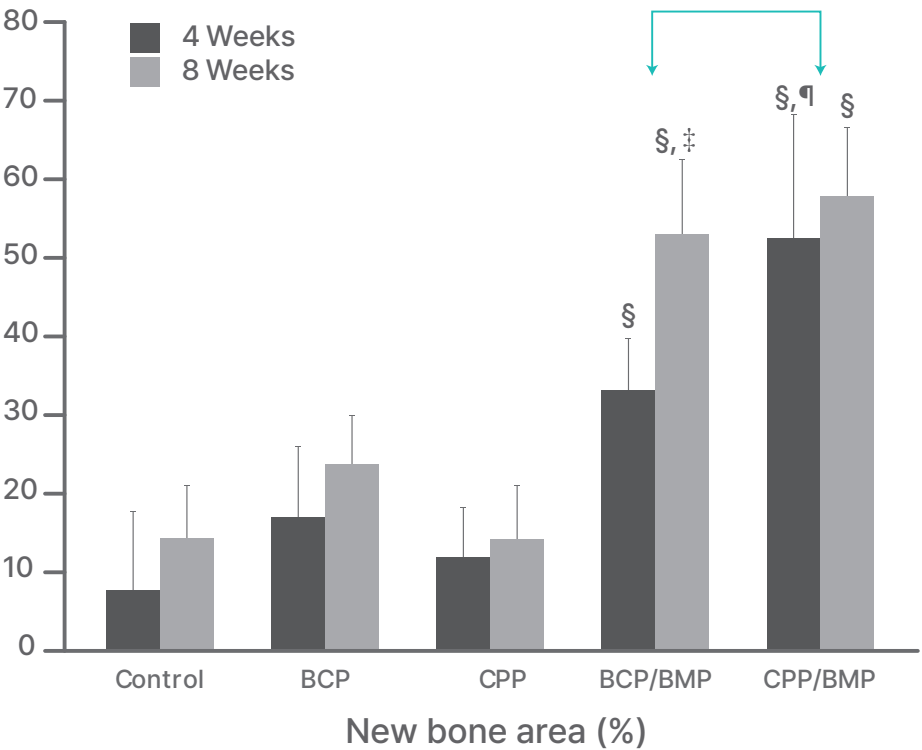
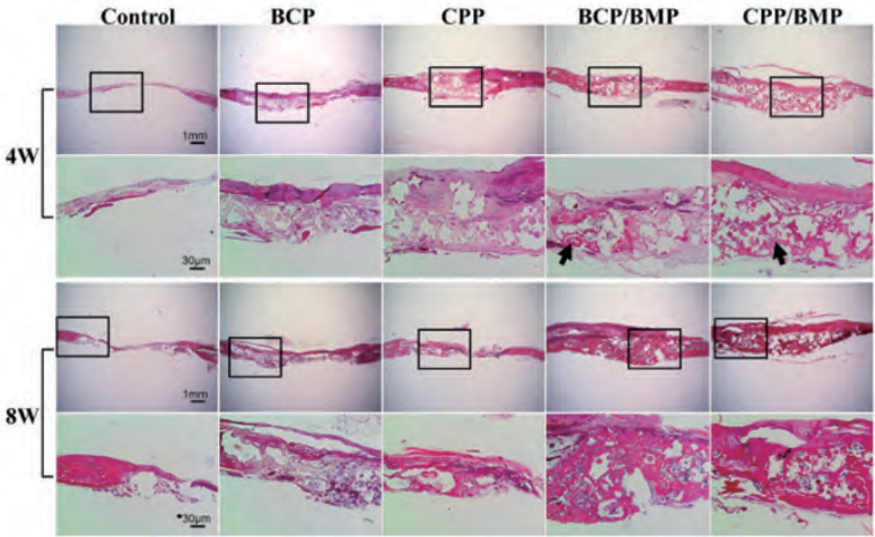
Dehiscence Defect



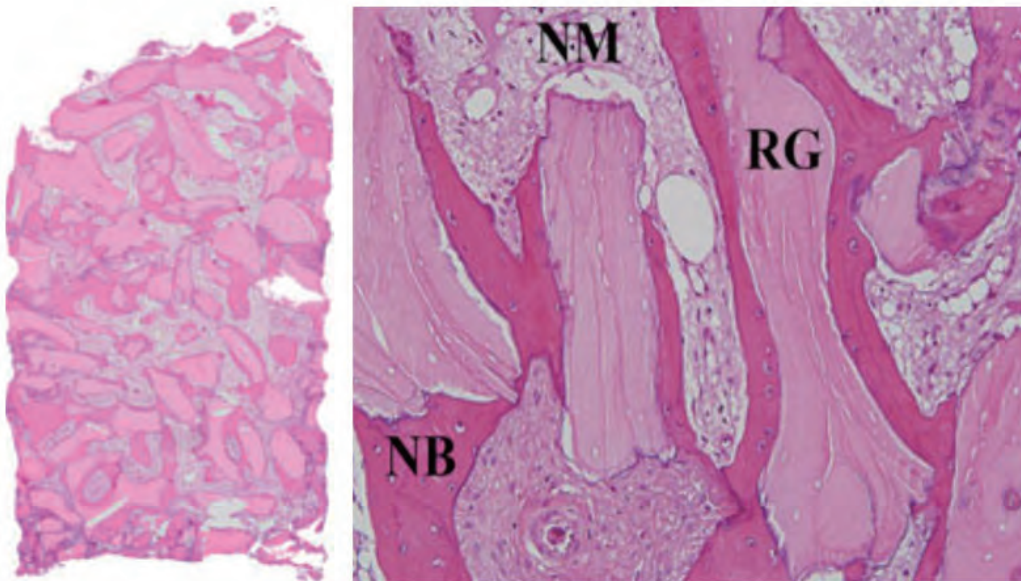
* Bone is safely formed without barrier membrane after rhBMP-2 bone graft, however, when use of general bone graft, barrier membrane is essential

Comparison with other materials

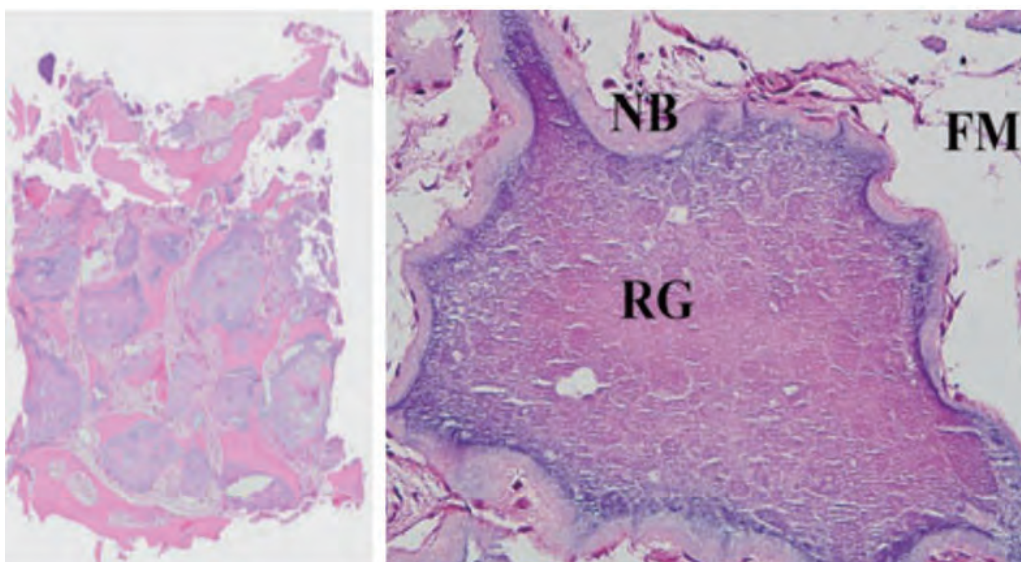
Both Calcium Pyrophosphate, CPP(Ca/P=1) and Biphasic Calcium Phosphate, BCP(Ca/P=1.55) are effective for early osteoanagenesis. CPP, however, has higher absorption rate than BCP and is slightly more effective for osteoanagenesis.



There is no difference in the ratio of new bone generation.
However, Graft B forms hard fibrous tissue between particles and the COWELL® BMP fills bone marrow tissue.
The Graft B received site has high resistance against drilling while the COWELL® BMP has excellence in bone remodeling by bone.



Control ("Graft B")



COWELL BMP

CLINICAL CASE 1

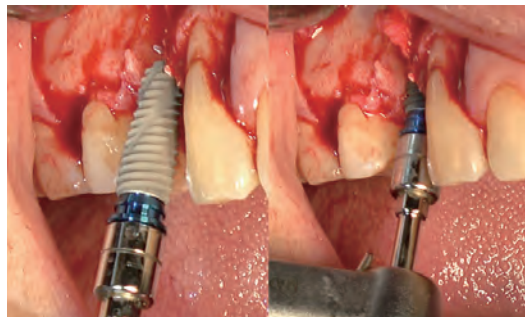
Case 1.
Bone Regeneration and Gingival Improvement Using Bone Augmentation
using COWELL® BMP



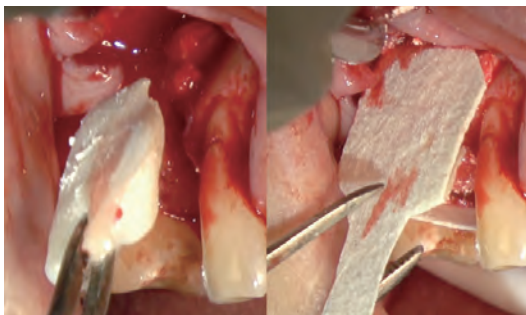
Dr. Claudio Sotomayor Julio,
D.D.S.
Chille



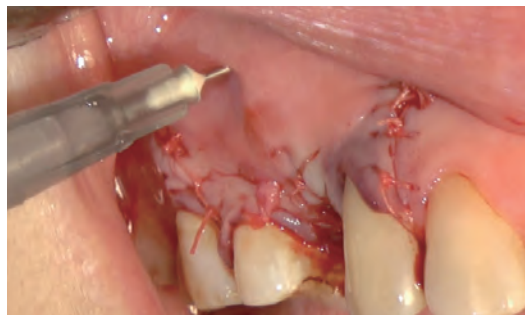
Pre-OP



INNO implant placement



2 layers of membrane placement
with COWELL® BMP BCP powder



COWELL® BMP injection



Post-OP



1 month



4 months healing period and removal
of adhesive provisional tooth



2 weeks after connection surgery



5 months



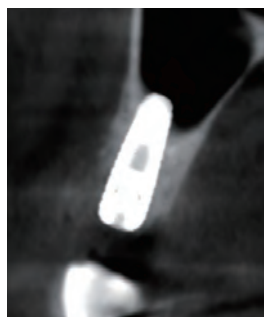
5 month after surgery : final rehabilitation



Pre-OP
(18. 08. 02)



Post-OP
(18. 08. 02)



4 months
(18. 12. 03)



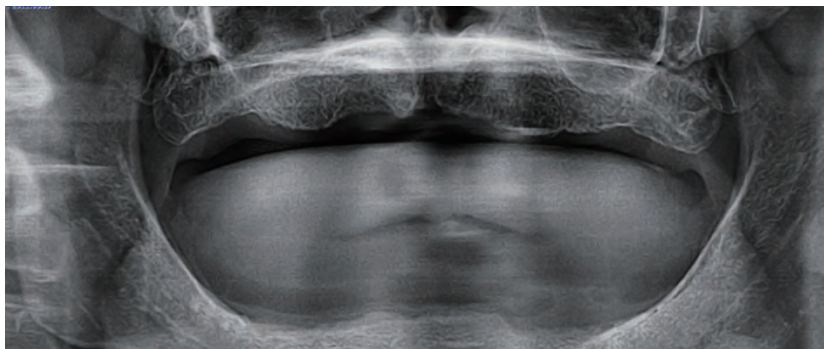
1 year
(19. 08. 06)

CLINICAL CASE 2

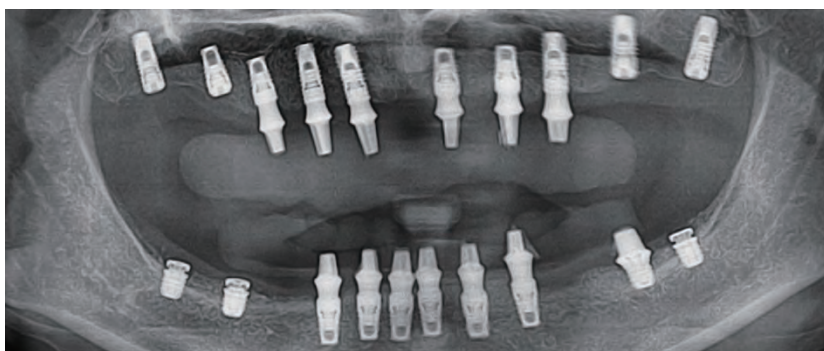
Case 2.

Bone regeneration in combination of rhBMP-2 and autogenous bone

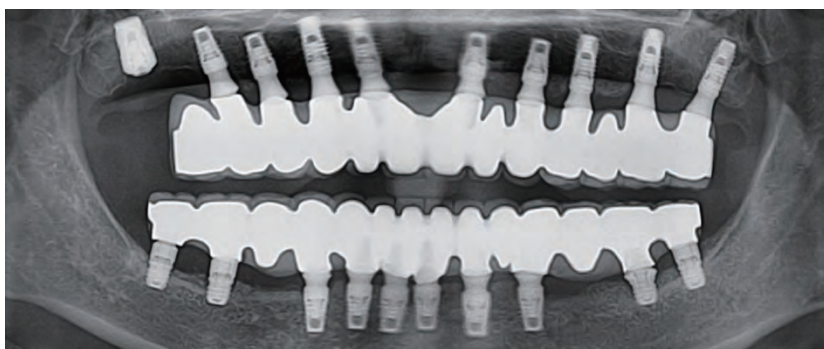
62 years old, Female



Pre-OP
2010. 04. 05



Post-OP
2010. 04. 05



10 months
2011. 02. 25



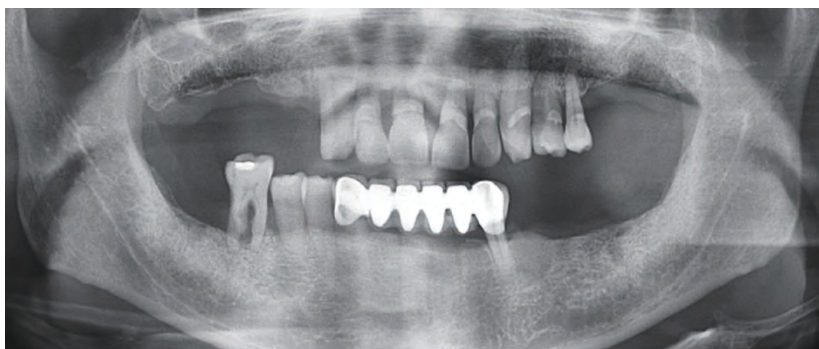
8 years
2019. 01. 18

CLINICAL CASE 3

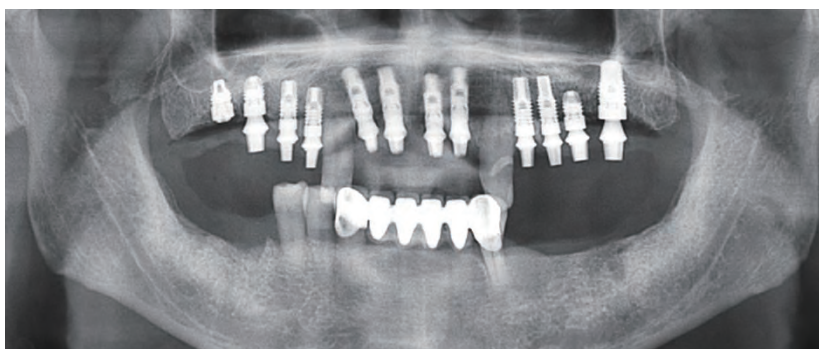
Case 3. Staged implantation in healed ridge and extraction socket

63 years old, Male

Pre-OP
2010. 04. 06



Post-OP
2010. 04. 30



9 months
2011. 01. 19



8 years
2019. 01. 08



Scientific Evidence of COWELL® BMP's Effectiveness

1. Analysis of hydrolyzable polyethylene glycol hydrogels and deproteinized bone mineral as delivery Systems for glycosylated and non-glycosylated bone morphogenetic protein-2.
Acta Biomater. 2012 Jan;8(1):116-23.
2. Effects of rhBMP-2 Coating Tricalcium Phosphate on Socket Preservation in Dog Extraction Socket.
Tissue Engineering and Regenerative Medicine, Vol. 5, No. 4~6, pp 637-642 (2008)
3. Effects of Polycaprolactone-Tricalcium Phosphate, Recombinant Human Bone Morphogenetic Protein-2 and Dog Mesenchymal Stem Cels on Bone Formation: Pilot Study in Dogs.
Yonsel Med J 50(6): 825-831,(2009)
4. The induction of bone formation in rat calvarial defects and subcutaneous tissues by recombinant human BMP-2, produced in *Escherichia coli*.
Biomaterials 31 (2010) 3512-3519
5. Alveolar ridge augmentation using anodized implants coated with *Escherichia coli*-derived recombinant human bone morphogenetic protein 2.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod. (2011) Jul;112(1):42-9
6. Bone formation of *Escherichia coli* expressed rhBMP-2 on absorbable collagen block in rat calvarial defects.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2011;111:298-305
7. Bone formation of block and particulated biphasic calcium phosphate lyophilized with *Escherichia coli*-derived recombinant human bone morphogenetic protein 2 in rat calvarial defects.
Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2011;112:298-306.
8. Induction of bone formation by *Escherichia coli*- expressed recombinant human bone morphogenetic protein-2 using block-type macroporous biphasic calcium phosphate in orthotopic and ectopic rat models.
J Periodontal Res. (2011) Dec; 46(6):682-90.
9. Enhanced adipogenic differentiation and reduced collagen synthesis induced by human periodontal ligament stem cells might underlie the negative effect of recombinant human bone morphogenetic protein-2 on periodontal regeneration.
J Periodontal Res (2011): 46: 193-203
10. The Effects of rhBMP-2 Injection at Distraction Osteogenesis of Rats Tibia.
Tissue Engineering and Regenerative Medicine, Vol. 8, No. 2, pp 158-163 (2011).
11. Discontinuous Release of Bone Morphogenetic Protein-2 Loaded Within Interconnected Pores of Honeycomb-Like Polycaprolactone Scaffold Promotes Bone Healing in a Large Bone Defect of Rabbit Uina.
Tissue Eng Part A. 2011 Oct;17(19-20):2389-97.V
12. The effect of immobilization of heparin and bone morphogenic protein-2 to bovine bone substitute on osteoblast-like cell's function.
J Adv Prosthodont 2011; 3:145-51
13. Multicenter, randomized clinical trial on the efficacy and safety of *Escherichia coli*-derived rhBMP-2 with B-Tricalcium phosphate and hydroxyapatite in human extraction sockets.
J Adv Prosthodont 2011; 4:178-182
14. Effects of Anodized Implants Coated With *Escherichia coli*-Derived Recombinant Human Bone Morphogenetic Protein-2 on Osseointegration in Rabbits.
Tissue Engineering and Regenerative Medicine, Vol. 8, No. 1, pp 62-68 (2011)
15. Novel analysis model for implant osseointegration using ectopic bone formation via the recombinant human bone morphogenetic protein-2/macroporous biphasic calcium phosphate block system in rats: a proof-of concept study.
J Periodontal Implant Sci 2012; 42:136-143

16. Effects of anodized implants coated with Escherichia coli-derived rhBMP-2 in beagle dogs. *Int. J. Oral Maxillofac. Surg.* 2012; 41: 1577-1584.
17. Bone formation of middle ear cavity using biphasic calcium phosphate lyophilized with Escherichia coli-derived recombinant human bone morphogenetic protein 2 using animal model. *International Journal of Pediatric Otorhinolaryngology* 77 (2013) 1430-1433
18. Bone formation and remodeling of three different dental implant surfaces with Escherichia coli-derived recombinant human bone morphogenetic protein 2 in a rabbit model. *Int J Oral Maxillofac Implants.* 2013; 28(2):424-30
19. Recombinant Human Bone Morphogenetic Protein-2 Stimulates the Osteogenic Potential of the Schneiderian Membrane: A Histometric Analysis in Rabbits. *Tissue Eng Part A.* 2013 Sep;19(17-18):1994-2004
20. The effect of anodized implants coated with combined rhBMP-2 and recombinant human vascular endothelial growth factors on vertical bone regeneration in the marginal portion of the peri-implant. *Oral Surg Oral Med Oral Pathol Oral Radiol* 2013;115:e24-e31.
21. Sinus augmentation using BMP-2 in a bovine hydroxyapatite/collagen carrier in dogs. *J Clin Periodontol* 2014; 41: 86-93.
22. Low-Dose Recombinant Human Bone Morphogenetic Protein-2 to Enhance the Osteogenic Potential of the Schneiderian Membrane in the Early Healing Phase: In Vitro and In Vivo Studies. *J Oral Maxillofac Surg* 72:1480-1494, 2014
23. Prospective randomized, controlled trial of sinus grafting using Escherichia coli-produced rhBMP-2 with a biphasic calcium phosphate carrier compared to deproteinized bovine bone. *Clin Oral Implants Res.* 2015 Dec;26(12):1361-8.
24. Controlled release of BMP-2 using a heparin-conjugated carrier system reduces in vivo adipose tissue formation. *J Biomed Mater Res A.* 2015 Feb;103(2):545-54.
25. The efficacy of BMP-2 preloaded on bone substitute or hydrogel for bone regeneration at peri-implant defects in dogs. *Clin Oral Implants Res.* 2015 Dec;26(12):1456-65.
26. Effect of rhBMP-2 Immobilized Anorganic Bovine Bone Matrix on Bone Regeneration. *Int. J. Mol. Sci.* 2015, 16, 16034-16052.
27. Effects of rhBMP-2 on Sandblasted and Acid Etched Titanium Implant Surfaces on Bone Regeneration and Osseointegration: Split-Mouth Designed Pilot Study. *Biomed Res Int.* 2015; 2015:459393.
28. Comparison of collagen membrane and bone substitute as a carrier for rhBMP-2 in lateral onlay graft. *Clin Oral Implants Res.* 2015;26(1):e13-9.
29. Effects of BMP-2 Delivery in Calcium Phosphate Bone Graft Materials with Different Compositions on Bone Regeneration. *Materials* 2016, 9, 954
30. Source and Carrier Effect on the Bioactivity of BMP Bio-Implants. *Master of Science* 2013. Sylvie Di Lullo 2013, Faculty of Dentistry, University of Toronto
31. Soft and hard tissue changes when socket preservation using rhBMP-2, PRP and Non-Resorbable dP TFE membrane. *Dental implant Journal: Vol. 3, May, 2014*
32. The effect of rhBMP-2 bonegraft on infrabony defects. *Dental implant Journal: Vol. 3, May, 2014*



INNO Graft® A

freeze-dried allogeneic bone graft

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.

INNO Graft® A

freeze-dried allogeneic bone graft



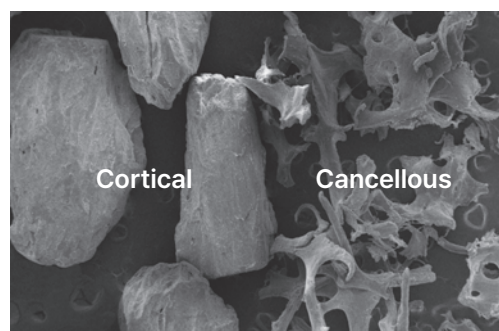
Product Features

- > 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.
- > Cortical powder maintains the space of the transplanted area during the new bone formation due to the delayed absorption rate. [Osteoconduction]
- > 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.

Indications for Use

- > Alveolar bone defect area.
- > Oral and maxillofacial reconstruction.
- > Maxillary sinus bone grafting.
- > Root cyst resection site.
- > Implant placement.
- > Tooth extraction.

SEM Image



Specification

Item No.	Particle Size	Volume
IGA3	0.3~0.8 mm	0.3 cc
IGA6	0.3~0.8 mm	0.6 cc
OSS10	0.3~0.8 mm	1.0 cc

How To Use

1 Pull and remove the blue suture cap.

2 To prevent air from entering the syringe during rehydration, completely submerge the hydration cap in sterile saline solution and slowly push the pusher to drain the air inside.

3 Push and pull the pusher two to five times to bring sufficient sterile saline solution into the syringe.

4 After sufficient rehydration for at least 5 to 10 minutes, the remaining sterile saline solution in the syringe is discharged as much as possible.

5 After pointing the syringe tip upward, remove the white hydration cap by turning it counterclockwise and implant InnoOss into the surgical site.

Notice! The rubber packing in the syringe is coated with a very small amount of medical silicone oil for lubrication. Medical grade silicone oil stabilizes over time, so its lubricating properties do not take effect immediately. Use after restoring lubrication performance by pushing and pulling the pusher back and forth little by little with weak force. If you pull the pusher straight away, the rubber packing and the pusher may be removed or damaged.

Clinical Cases

CASE 1



Fig.1 Pre-OP radiograph.



Fig.2 Implant placement.



Fig.3 Bone graft (INNO Graft A).



Fig.4 Post-OP 2 months.



Fig.5 Post-OP 1 year.

CASE 2

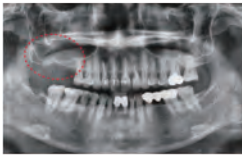


Fig.1 Pre-OP radiograph.

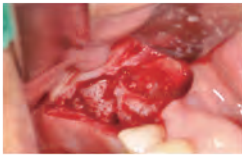


Fig.2 Sinus elevation via lateral approach.

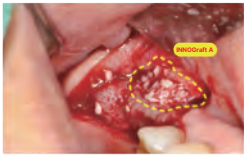


Fig.3 Filled sinus with INNO Graft A.

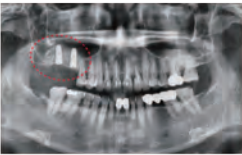


Fig.4 Post-OP radiograph.

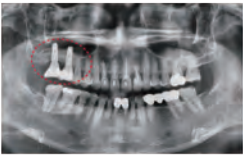


Fig.5 Post-OP 6 months.

InnoOss Allo

Allograft, FDBA

> InnoOss Allo is classified as a MEDICAL DEVICE.

Specification

Type	Particle Size	Particle Dose
OSS3A	0.4~1.0 mm	0.3g
OSS6A		0.6g





INNO Graft® B

Predictable GBR Bovine Cancellous Substitute

Made of 100% bovine cancellous bone.

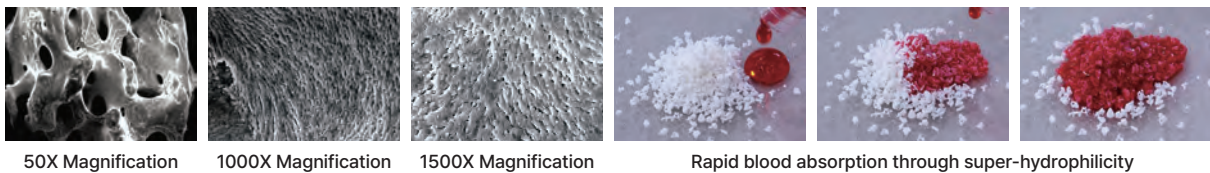
INNO Graft® B

Predictable GBR Bovine Cancellous Substitute

- > Fast blood penetration.
- > Super-hydrophilicity.
- > 3D structure.
- > Fast and easy to handle.
- > Enhances bone regeneration.
- > Mutually connected porosity.
- > Optimal cell attachment and blood absorption.
- > Stimulates the activity of osteoclasts and osteoblasts.



A Bone 100% fused to Natural Human Bone



Safe & Trustable Material

- > Made of 100% bovine cancellous bone.
- > Cleansing more than 30 times to completely remove organic matter.
- > Firmed bone formation as highly dense.
- > 100% pure HA & 99.73% of bone crystallization.



Specifications

Product Code	Particle Size	Volume
IGB2015	0.25~1.0mm	0.15g
IGB2025	0.25~1.0mm	0.25g
IGB2050	0.25~1.0mm	0.5g
IGB2100	0.25~1.0mm	1g

CLINICAL CASE 1



Fig 01. Preoperative radiograph.

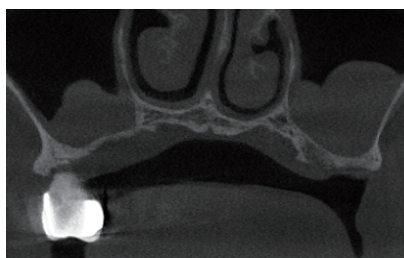


Fig 02. Preoperative CBCT image.
Sinusitis in bone sinus cavities.



Fig 03. Incision and flap elevation.
Removal of granulation tissue.



Fig 04. Suction of pus from the sinus.



Fig 05. Bone grafting
with INNO Graft® B.
Resorbable membrane application.



Fig 06. Postoperative radiograph.



Fig 07. Preoperative CBCT image.



Fig 08. Postoperative radiograph
at week 6. Final restoration delivery.

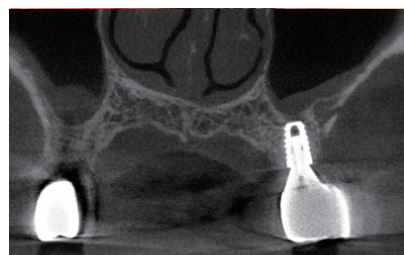


Fig 09. CBCT image of postoperative
10 month.

CLINICAL CASE 2



Fig 01. Preoperative radiograph. 3 months after extraction in lower left posterior.

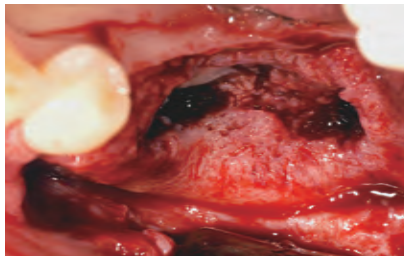


Fig 02. Incision and flap elevation.

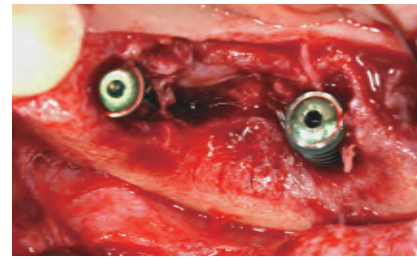


Fig 03. Implant placement on #35, 37



Fig 04. Bone grafting with INNO Graft® B and InnoOss Allo.



Fig 05. Non-resorbable membrane application.



Fig 06. Suture.



Fig 07. Postoperative radiograph.

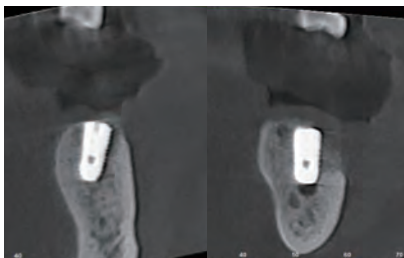


Fig 08. Postoperative CBCT image of #35(Lt), #37(Rt).



Fig 09. Clinical view of postoperative 2 weeks.



Fig 10. Clinical view of postoperative 4 months. Final restoration delivery.



Fig 11. Radiograph of postoperative 4 months.

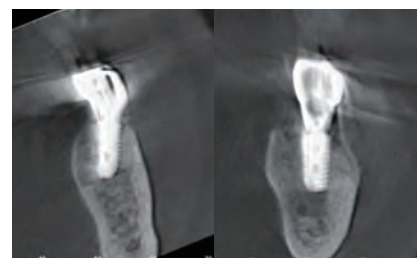


Fig 12. 4 month postoperative CBCT image of #35(Lt), #37(Rt).



INNO Graft® S

Calcium Phosphate, Synthetic Bone Graft

INNO Graft® S is an osteoconductive synthetic resorbable bone graft material consisting of Calcium Phosphate.

INNO Graft® S

Calcium Phosphate, Synthetic Bone Graft

Osteoconductive resorbable synthetic bone graft material

> INNO Graft® S is an osteoconductive synthetic resorbable bone graft material consisting of Calcium Phosphate.



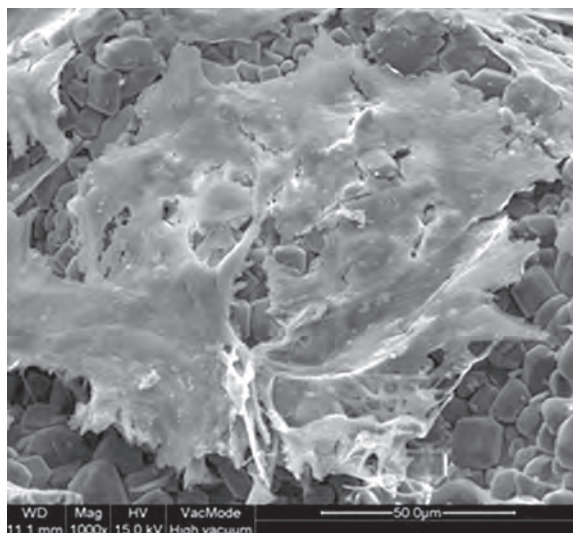
Excellent Biocompatibility and Conductivity

> The characteristic biocompatibility and conductivity of the INNO Graft® S represent the most safety.

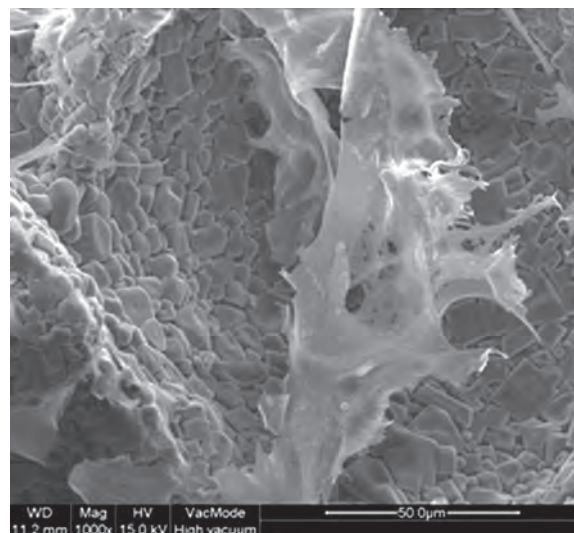
A porosity for new bone ingrowth

> The porosity promotes ingrowth of osteoblast, osteoclast, and growth factors.

Cell culture SEM images (14 days)

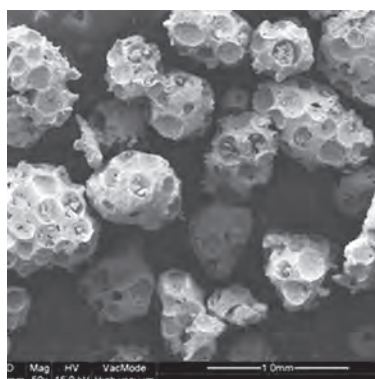


X1,000

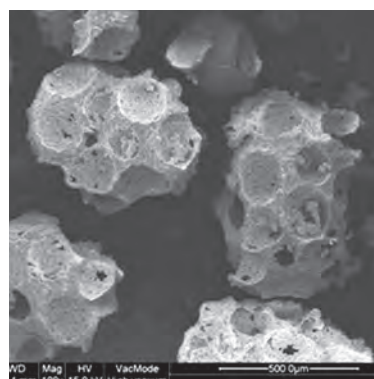


X1,000

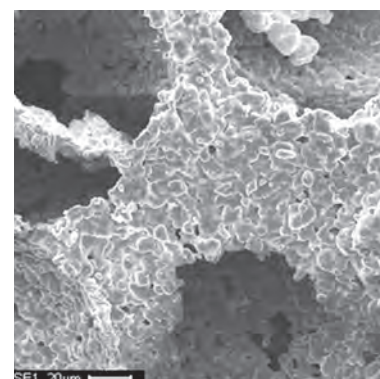
Particle surface SEM image



X50



X100



X500

Indications

Sinus graft surgery

- > For sinus graft, INNO Graft® S is used alone or in combination with the other graft materials.
- > Healing periods 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

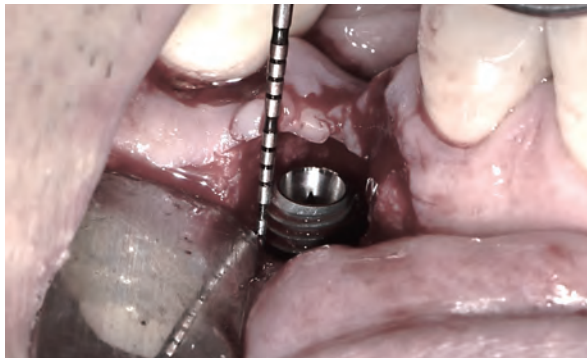
GBR (Guided Bone Regeneration)

- > Minimize the amount of autogenous bone.
- > Sub-graft materials.
- > Vertical and lateral augmentation.
- > It is highly recommended to use with COWELL® BMP.

Specifications

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

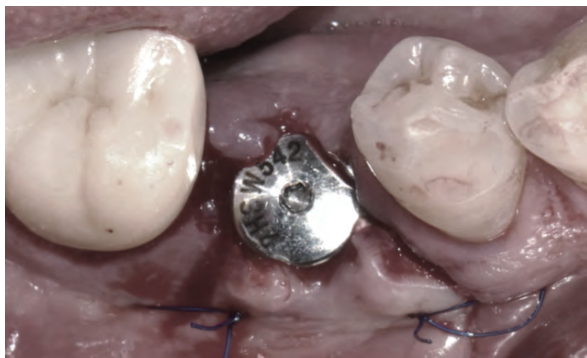
CLINICAL CASE 1



#45 Implant placement



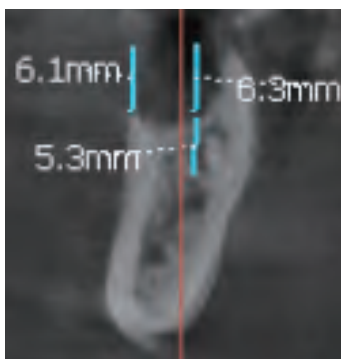
INNO Graft® S



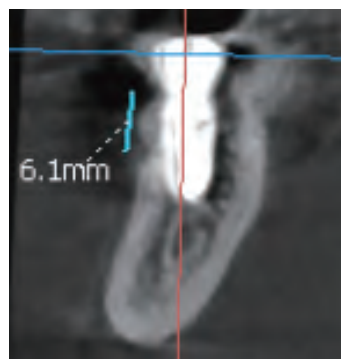
Post-OP



POD 10 weeks



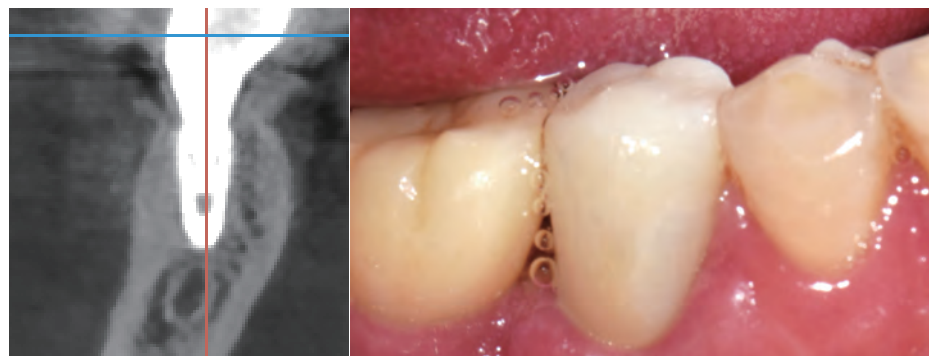
Pre-OP



Post-OP



10 weeks



1 year 6 months

CLINICAL CASE 2



Pre-OP



Severe defect



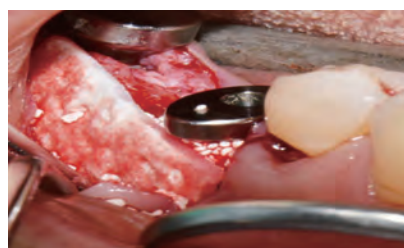
Vertical defect



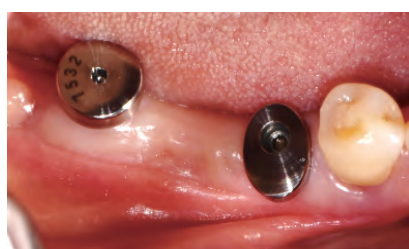
Horizontal defect



INNO Graft® S



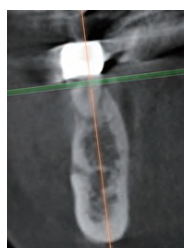
MegaDerm Plus



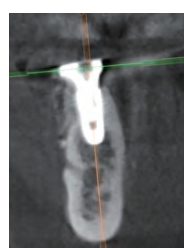
Healing period



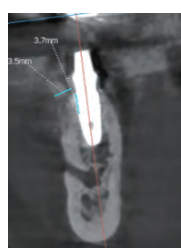
POD 11 weeks



Pre-OP



Post-OP



11 weeks



1 year 9 months



11 weeks



12 weeks



1 year 9 months

MEGA DERM PLUS

Acellular Dermal Matrix

This product can carry out the functional blocks of the membrane (soft tissue penetration protection) due to its long absorption period, and has good manipulability.



MEGA DERM PLUS

Acellular Dermal Matrix



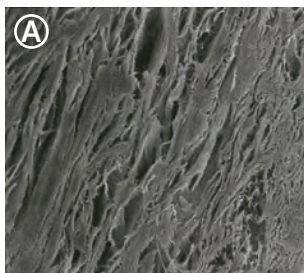
Product Features

- > This product can carry out the functional blocks of the membrane (soft tissue penetration protection) due to its long absorption period, and has good manipulability.
- > This product is manufactured under the stringent standards of the MFDS.
- > 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)

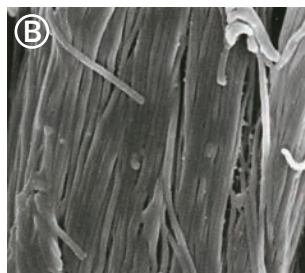
Application

- > Mucogingival defect.
- > Soft tissue formation around the implant area.
- > Wide perforation in the Schneiderian membrane.

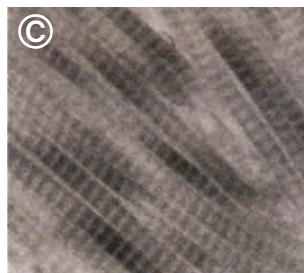
SEM Images (They have kept the collagen structure after the E-Beam sterilization.)



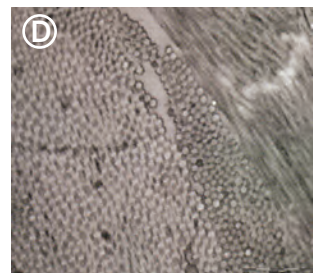
A. SEM (x200)



B. SEM (x20,000)



C. TEM (Transverse section)

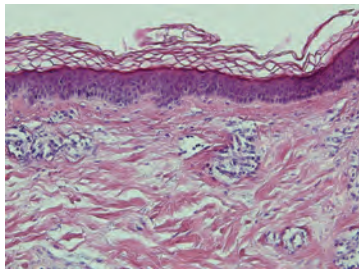


D. TEM (Cross section)

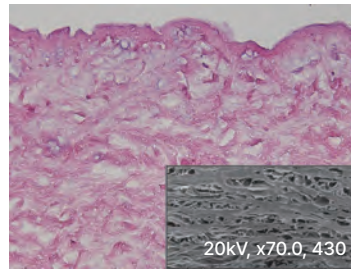
Specifications

Product Code	Size	Thickness
D1520P	15x20mm	0.5~0.7mm
D1525P	15x25mm	0.5~0.7mm

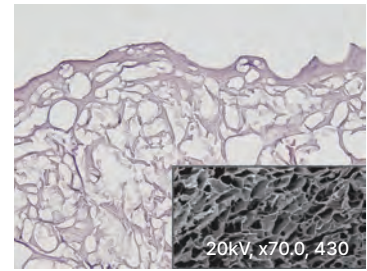
MEGA DERM PLUS three-dimensional structure of the dermis



Normal skin

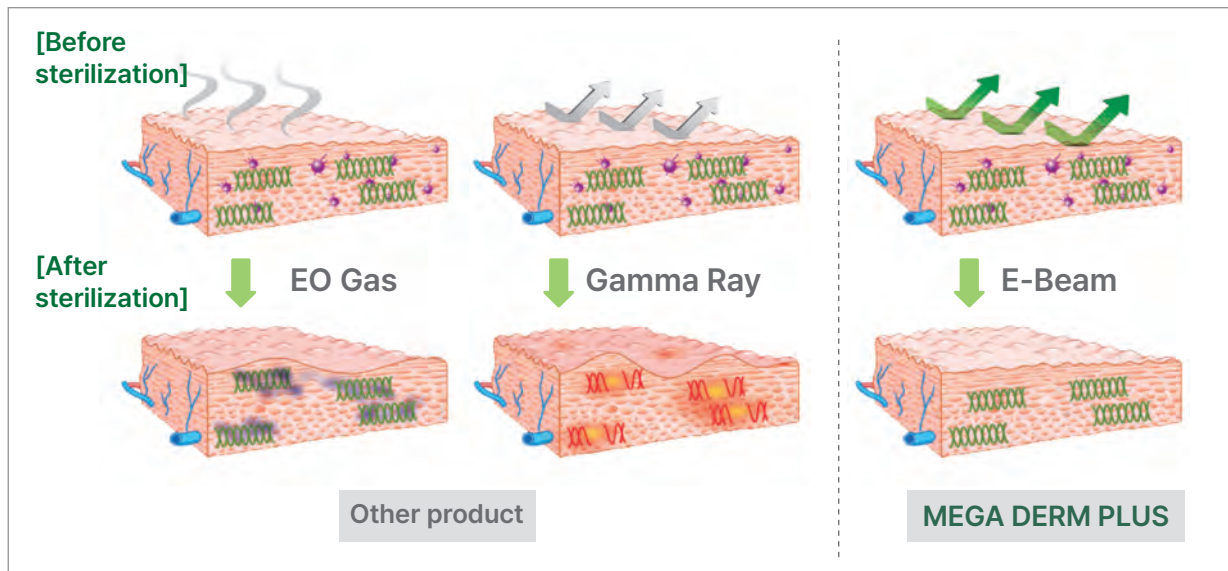


MEGA DERM PLUS



Other product

The world's first 'E-Beam' sterilization that does not destroy the collagen structure



Non-resorbable Membranes

- Wifi-Mesh
- PTFE-Mesh



Non-resorbable Membranes

Wifi-Mesh and PTFE-Mesh

> Wif i-Mesh, PTFE-Mesh and Ti-Mesh are non-resorbable barrier membranes to be applied over intraoral defects, especially, tooth extraction and bone augmented sites. Wif i-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 Wifi-Mesh is reinforced with titanium frames (Titanium Gr II, ASTM F 67) embedded between two layers of PTFE sheets.

Wifi-Mesh

> Packing unit: 1ea



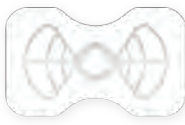
Product Code	Size	Thickness
BTP1424AA	14X24	0.25
BTP1424AB	14X24	0.25
BTP1525BB	15X25	0.25
BTP1725CA	17X25	0.25
BTP1725CA12	17X25	0.25
BTP2030AB	20X30	0.25
BTP2030AB12	20X30	0.25
BTP2530AB	25X30	0.25
BTP2530AB15	25X30	0.25
BTP3040AB	30X40	0.25
BTP3040AB15	30X40	0.25



BTP1424AA



BTP1424AB



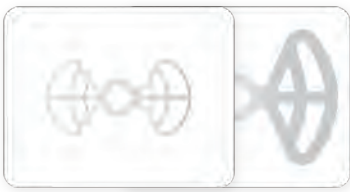
BTP1525BB



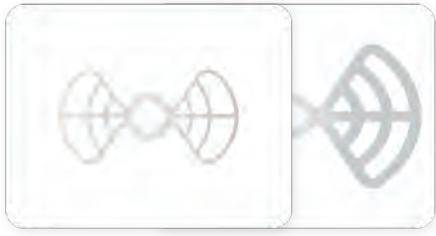
BTP1725CA / BTP1725CA12



BTP2030AB / BTP2030AB12



BTP2530AB / BTP2530AB15



BTP3040AB / BTP3040AB15

* The titanium material is the same.

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

PTFE-Mesh

> Packing unit: 5ea

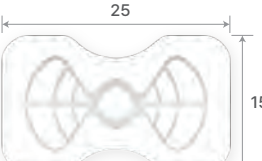
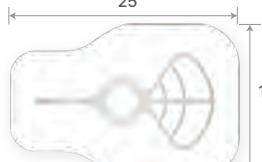


Product Code	Size	Thickness
TS24301	24X30	0.1

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 the porosity of plaster and it even allows to application of the Open Membrane Sheet Technique
- > Prevention of Displacement: Not only being sutured along with gingiva but also being fixed with components from the GBR Kit to prevent displacement of the product.
- > 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 Wifi i-Mesh and in any center part of the PTFE-Mesh and remove.

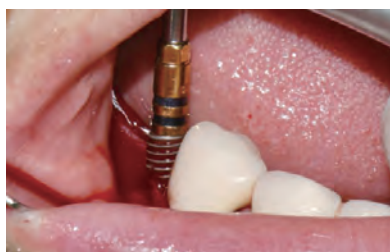
Indications

 BTP1424AA	Only one wall defect of buccal or lingual bone in very narrow area 
 BTP1424AB	Two wall defects of buccal and lingual bone in very narrow area 
 BTP1525BB	Inter-dental two wall defects of buccal and lingual bone in very narrow area 
 BTP1725CA / BTP1725CA12	Inter-dental two wall defects of buccal and lingual bone in narrow area 
 BTP2030AB / BTP2030AB12	Two wall defects of buccal and lingual bone in narrow area 
 BTP2530AB / BTP2530AB15	Two wall defects of buccal and lingual bone in large area 
 BTP3040AB / BTP3040AB15	Two wall defects of buccal and lingual bone in very large area 

CLINICAL CASE 1



Pre-op



Implant placement



Implant placement



Clinical occlusal view of #45 and #46 showed severe bone defects.



Buccal bone graft technique with Wifi-mesh of #45



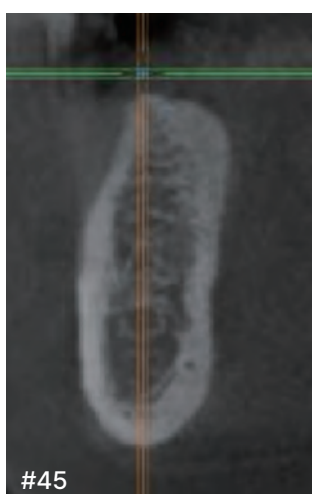
Wifi-Mesh trimming



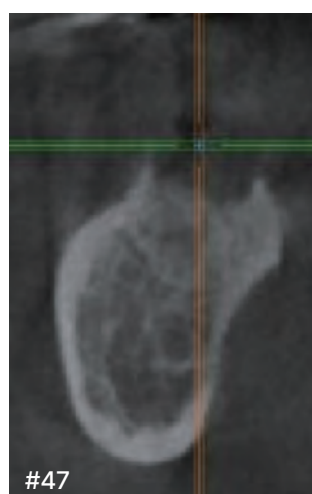
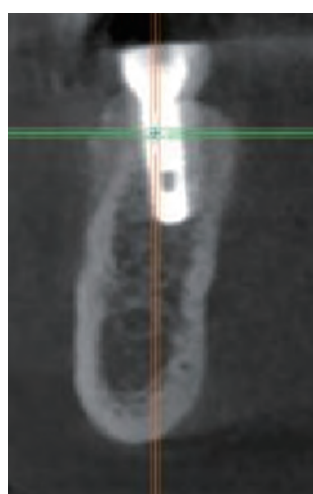
Wifi-Meshes were applied to the defect.



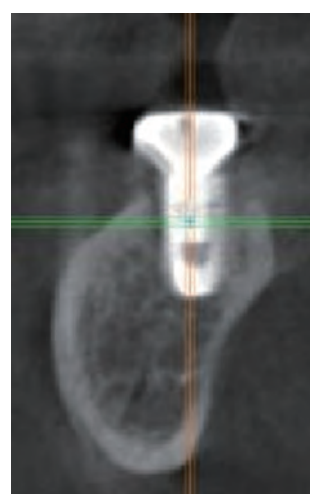
Open membrane technique in extraction socket of #46



#45

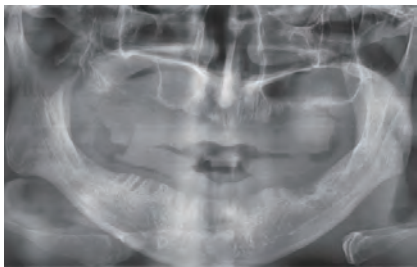


#47



CLINICAL CASE 2

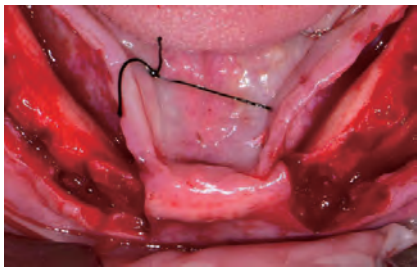
By. Dr. Hoyeol Jang



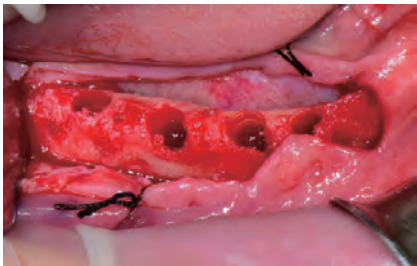
Pre-OP panorama



Occlusal view of the bone defect



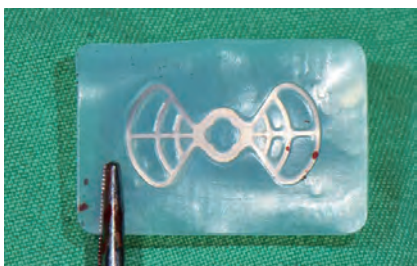
Flap reflection



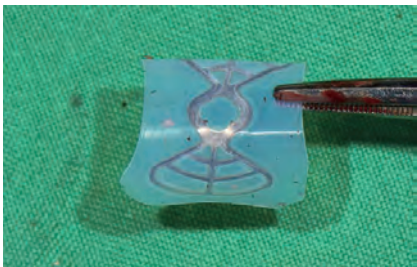
Drilling



Implant placement of #43, 44, 45 & 46



Wifi-Mesh



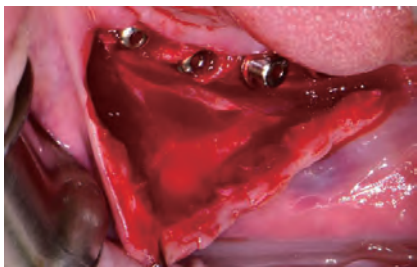
Wifi-mesh preparation
*It must be bent to form a shape, and If it is bent incompletely, it can spread inside the gingiva.



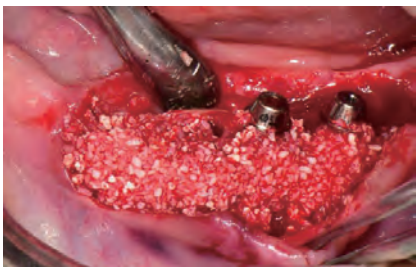
Wifi-mesh placement



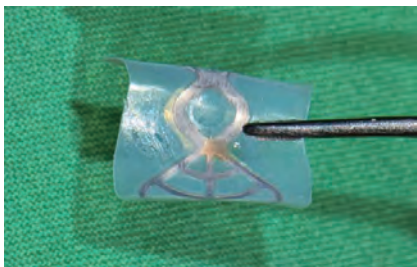
Implant placement of #33, 34, 35 & 36



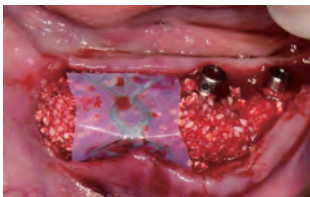
Releasing incision



Bone graft



Wifi-mesh preparation



Wifi-Mesh placement



Membrane holding suture

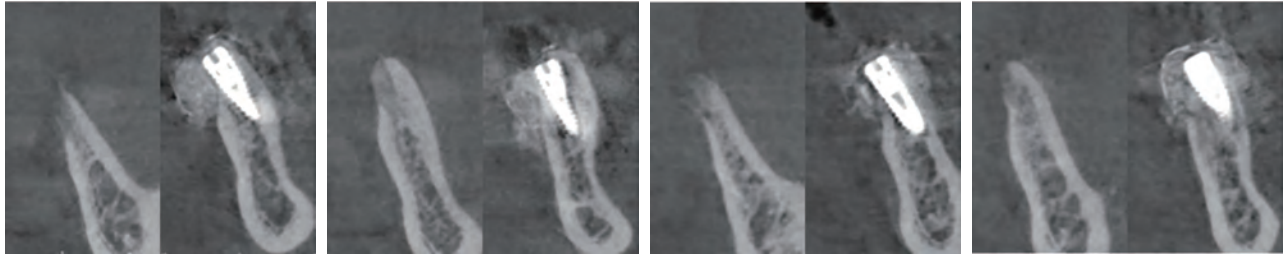


Primary suture



Post OP panorama

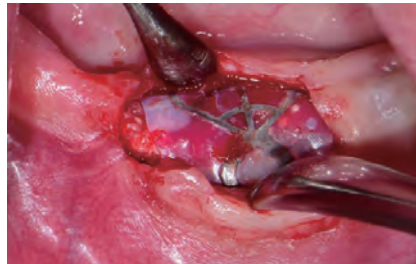
CLINICAL CASE 3



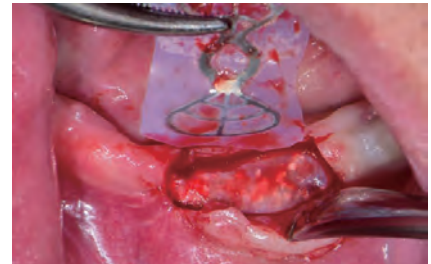
CT scan images after GBR show significant amount of alveolar bone regeneration.



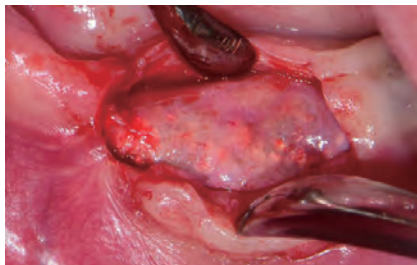
2 months after the 1st surgery



2nd surgery and Wifi-Mesh removal



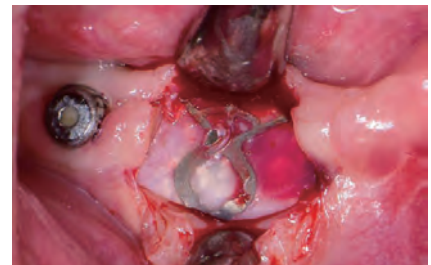
The Wifi-mesh was easily removed.



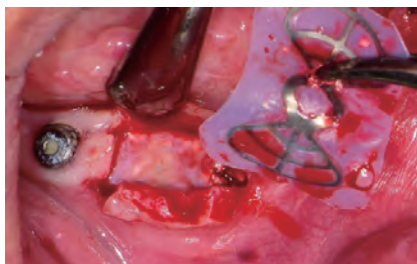
The defect area was fully filled with the new bone.



Installation of healing abutments



Incision of #43 and 44



Membrane removal



Both horizontal and vertical bone regeneration was noticed clinically.



Uncovering surgery of Lower jaw



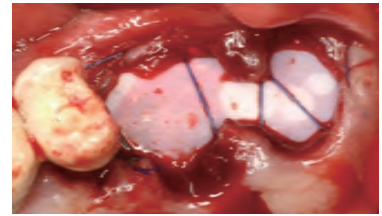
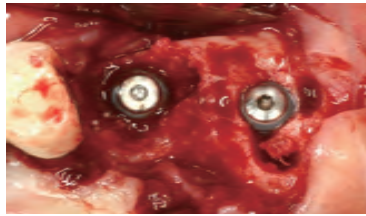
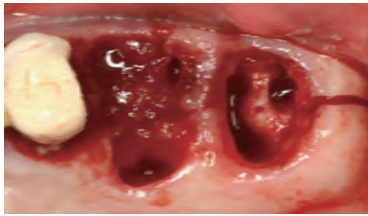
2nd OP panorama



POD 3 months Temporary loading

CLINICAL CASE 1

Open membrane technique and immediate implant placement in maxillary molars



The maxillary molars were extracted. PTFE-Mesh was covered over the bone graft of socket preservation and implants.



3 weeks.

3 weeks after the graft operation, PTFE-Mesh was removed. The new keratinized gingiva was regenerated on the bone graft particles.



4 months.

4 months after the graft operation, the keratinized gingiva was regenerated in the defect of socket.



Pre-OP



Post-OP



6 months

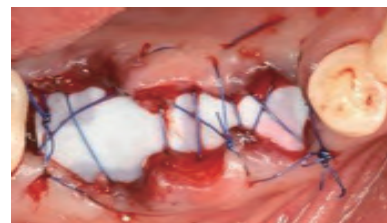


32 months

After 6 months of implant placement, the splinted crown was placed. There was no loss of marginal bone at the 32 months follow-up visit. As result, the immediate implant placement and the open membrane technique with socket bone graft could make the new keratinized gingiva.

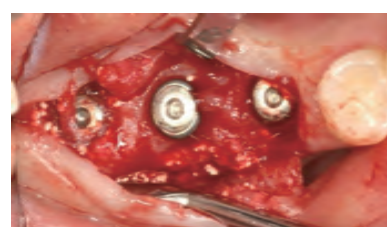
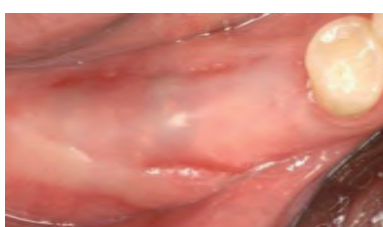
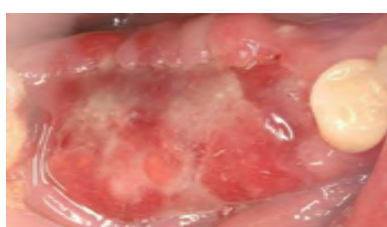
CLINICAL CASE 2

Lateral bone graft with immediate implant placement in mandibular molars



Lateral bone graft with implant placement was done in mandibular 1st molar.

The extraction sockets of 2nd molar and 2nd premolar were grafted with the open membrane technique.



3 weeks after the graft operation, PTFE-Mesh was removed. The new keratinized gingiva was regenerated on the bone graft particles.

3 months after the graft operation, the keratinized gingiva was regenerated in the defect of socket.



Pre-OP

Lateral bone grafting



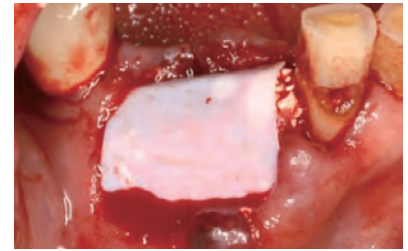
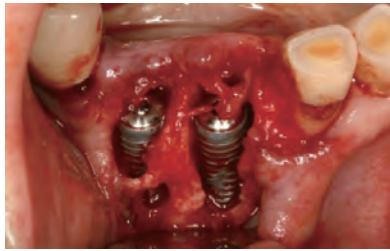
4 months

31 months

During healing period, the crestal bone level was decreased in the site of lateral bone graft. From 4 months to 31 months of follow-up visit, there was no the loss of marginal bone. As result, lateral bone graft with implant placement and open membrane technique in extraction socket could make the new keratinized gingiva.

CLINICAL CASE 3

Socket preservation with immediate implant placement in mandibular premolars



Socket bone grafting with immediate implant placement was performed in the buccal wall defect of mandibular premolars. The extraction sockets of premolars were grafted with the open membrane technique.



3 weeks after the graft procedure, PTFE-Mesh was removed. The new keratinized gingiva had regenerated on the bone graft particles.



3 months after the graft operation, the keratinized gingiva was regenerated in the socket defect, and the splinted crown was placed.



Pre-OP



Post-OP



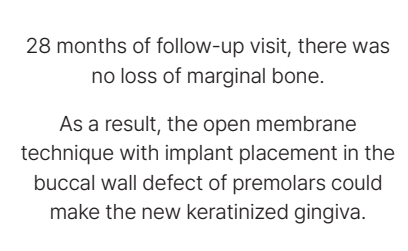
3 months



15 months

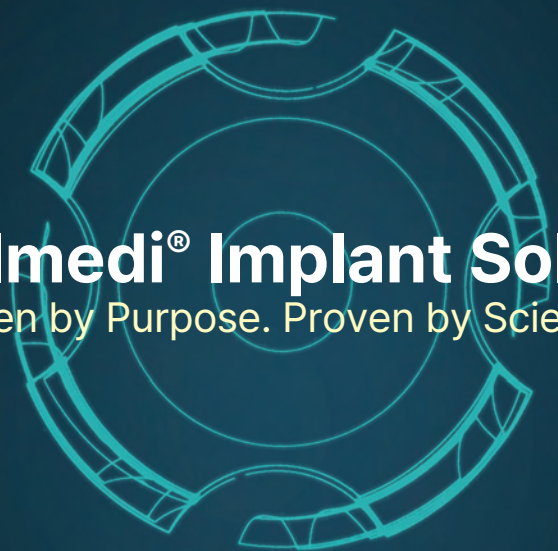


28 months



28 months of follow-up visit, there was no loss of marginal bone.

As a result, the open membrane technique with implant placement in the buccal wall defect of premolars could make the new keratinized gingiva.



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