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R2 GATE

**"Diagnosis & Treatment Planning"
are the most important.**

Get R2GATE!
Dominate digital dentistry!

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R2GATE® : Digital Dentistry

by MEGAGEN

Turning imagination
into reality
since 2012

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I. R2 STUDIO™

R2 STUDIO creates a Virtual Patient
for full digital analysis & treatment realization

Beyond CBCT....

A single CBCT scan collects
extensive patient information, providing 3D images of the skeletal information, soft tissues, nerve pathways, skin.

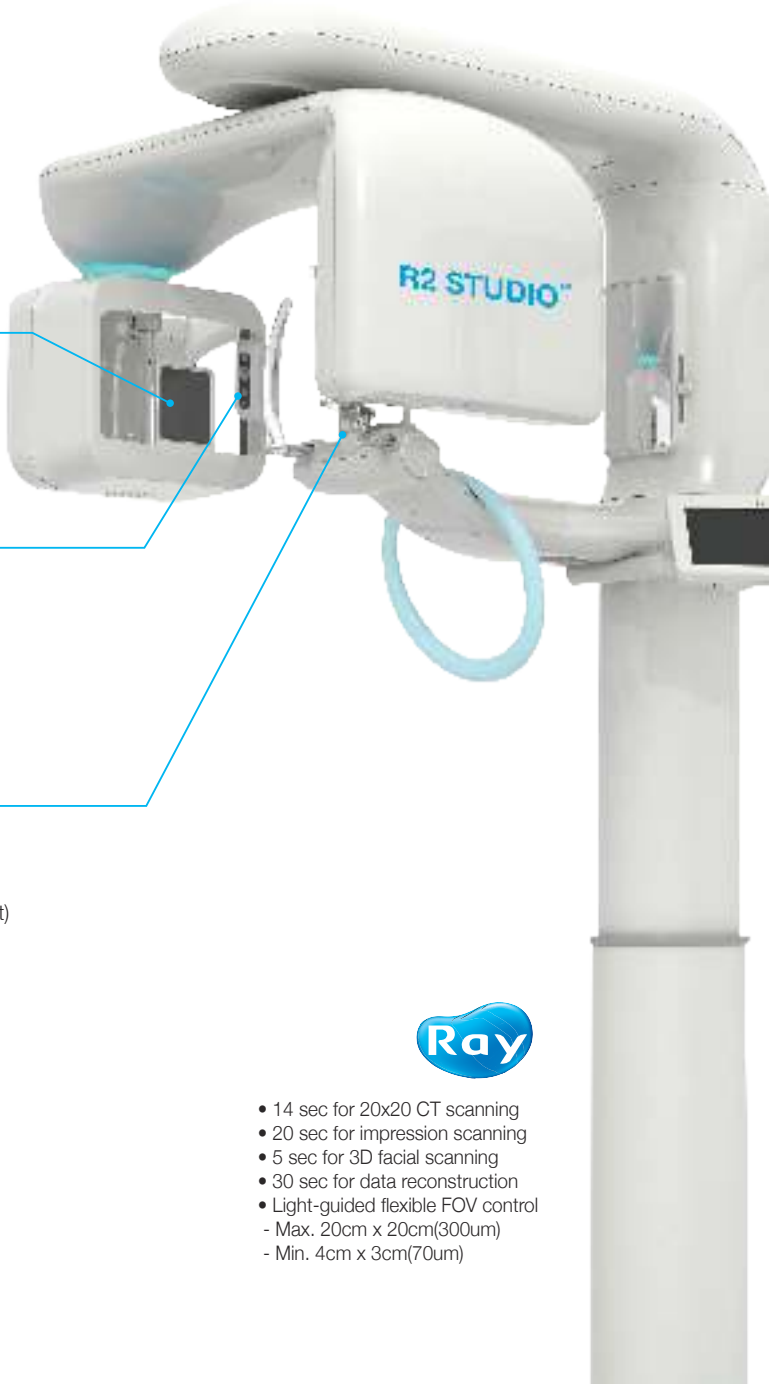
How does it differ from CBCT

However, R2 STUDIO extends this digital data collection to include a 3D facial scan & precise dentition, allowing the creation of the virtual patient that can reflect the patient's individual smile and overall character.

CBCT
- Broad 20x20 FOV to create virtual patient
- 16 sec for 20 x 20 CBCT scanning
- Light-guided flexible FOV control

3D Facial scan
- Real 3D depth camera (1280x720)applied
- Independent photo taking module
- 5sec for full size of facial scanning
- 1800x848 full size 3D file (OBJ format)

Object (impression)scan
- Handy scan process
- 20sec for impression scanning
- Auto STL converting process
- Easy to export model file (Open STL format)



Ray

- 14 sec for 20x20 CT scanning
- 20 sec for impression scanning
- 5 sec for 3D facial scanning
- 30 sec for data reconstruction
- Light-guided flexible FOV control
  - Max. 20cm x 20cm(300um)
  - Min. 4cm x 3cm(70um)

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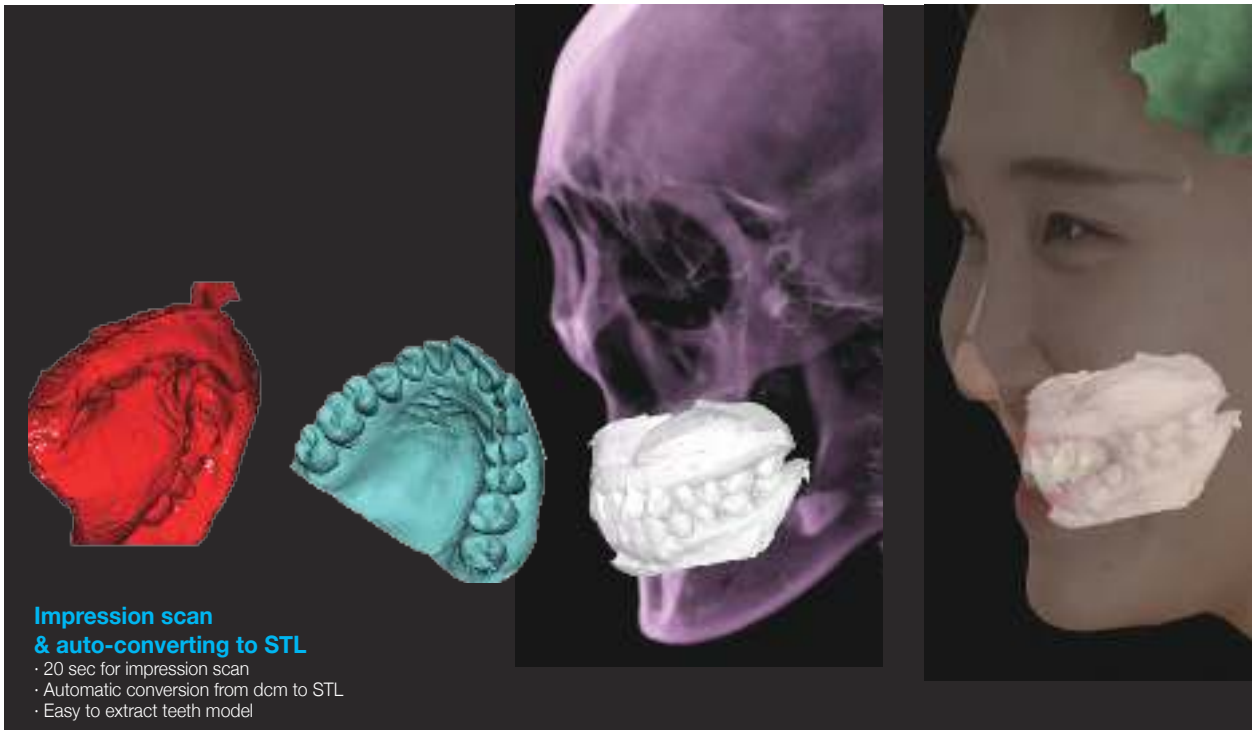
3D facial scan reflect the patient's individual smile and overall character

R2 STUDIO creates digital model from an impression scan



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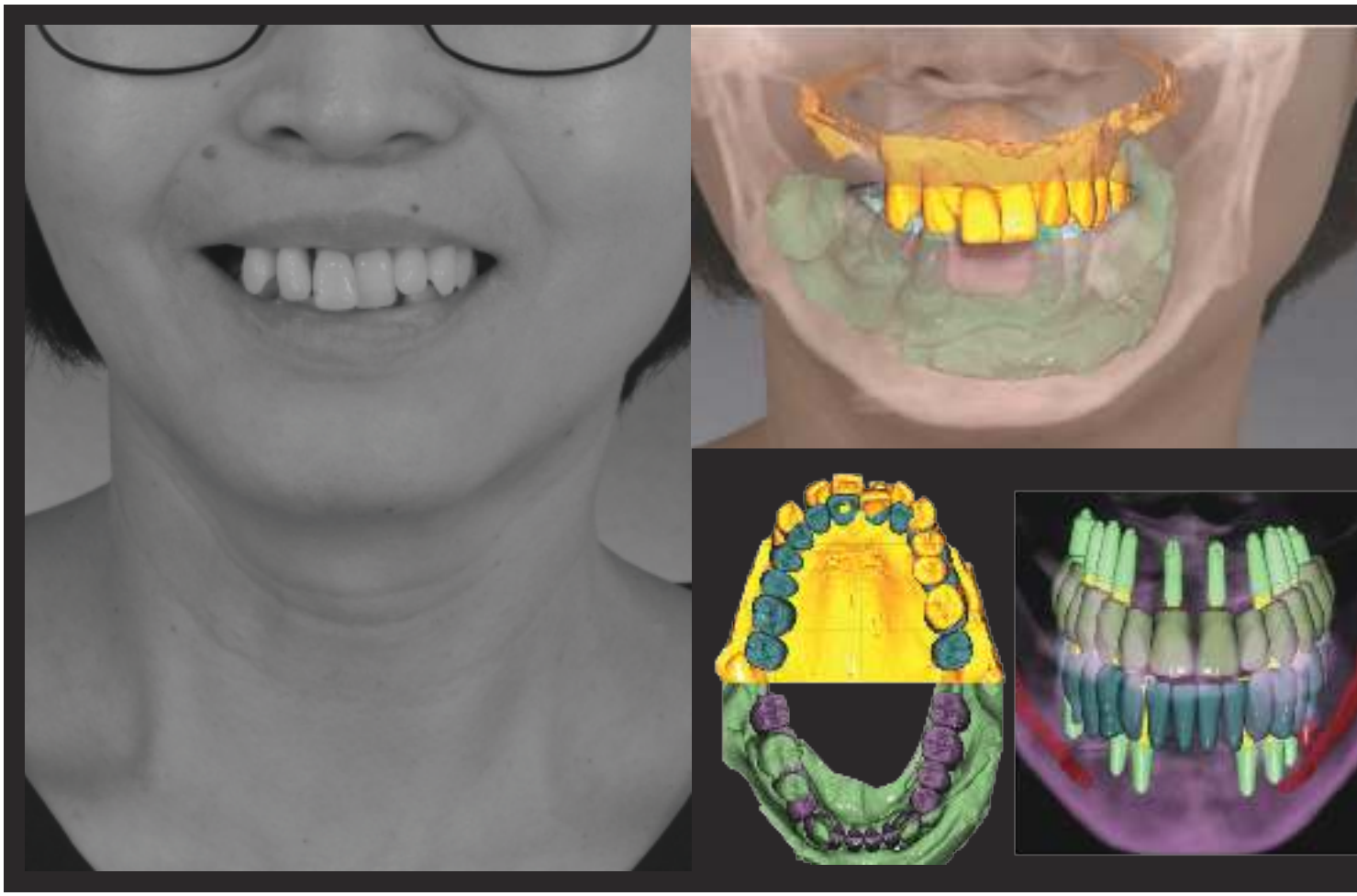
Digital diagnosis & treatment planner

II. R2GATE® Digital Oral Design

Creates a fully virtual patient & applies digital diagnosis to evaluate & transfer virtual treatment into the perfect solution

R2GATE Digital Oral Design(DOD)

R2GATE Digital Oral Design(DOD) is a digital planner for the whole dental team, so everyone understands their role and contribution to the treatment plan.



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"Imagining the final goal is
the starting point of treatment"

R2 GATE Turning imagination into reality

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Adding the human element to CBCT technology

R2STUDIO™

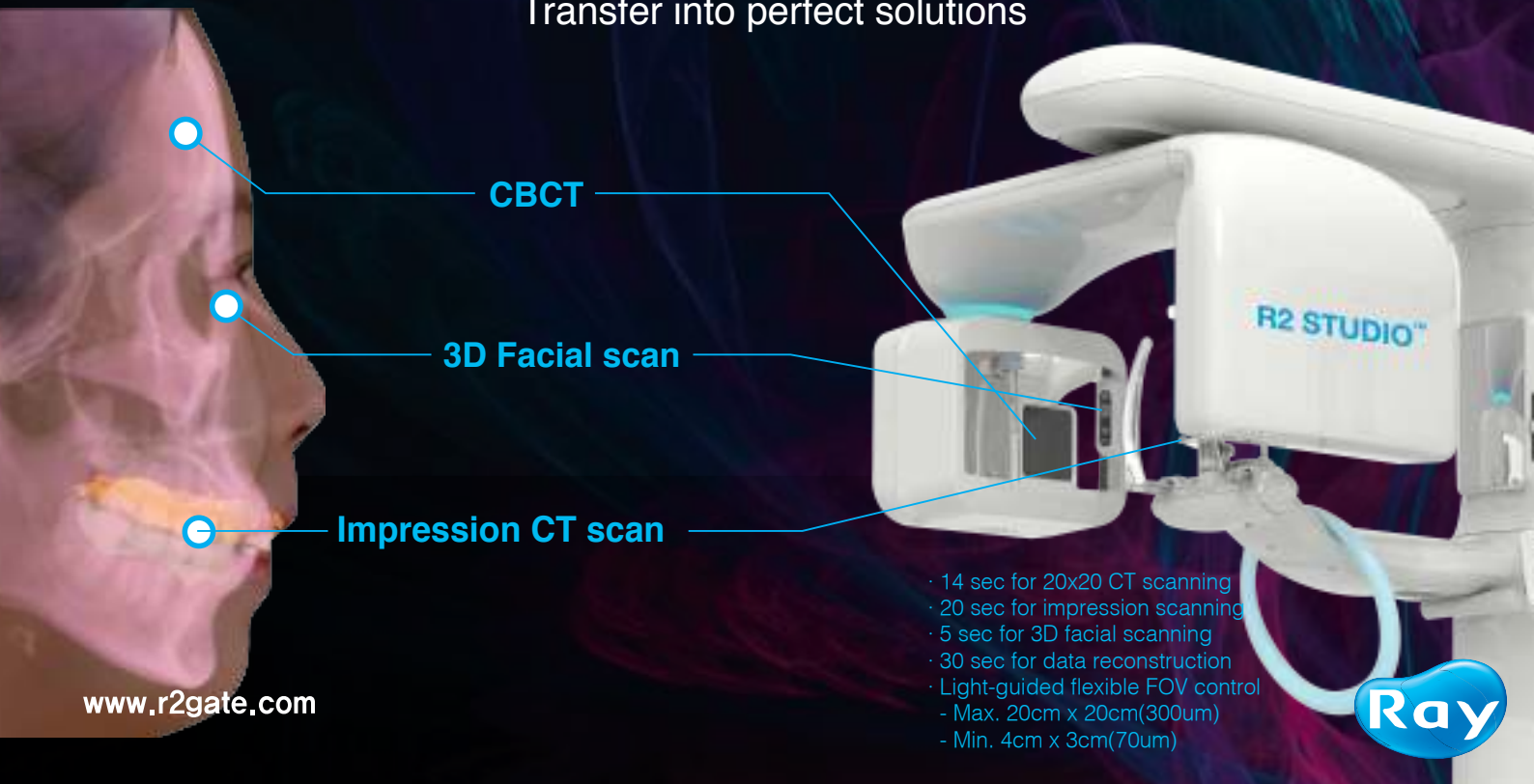
by MEGAGEN

Contain person's sensibility & Creating the Virtual Patient

R2 STUDIO creates a virtual patient for full
digital analysis & treatment realization
All-in-one: CBCT, PANO plus facial & impression CT scans

R2GATE® Digital Oral Design

Create fully virtual patient(CBCT, facial & oral scans)
Apply digital diagnosis to evaluate virtual treatment
Transfer into perfect solutions



- 14 sec for 20x20 CT scanning
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- Light-guided flexible FOV control
  - Max. 20cm x 20cm(300um)
  - Min. 4cm x 3cm(70um)

Ray

www.r2gate.com

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R2GATE®

by MEGAGEN

Turning imagination into reality

SINCE 2012

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What is R2GATE®

R2GATE is an innovative implant diagnostic software that analyses the oral condition and it shows the best option for implant treatment.

CBCT (Dicom)

CBCT is the most efficient method for implant diagnosis. Through CBCT, you can easily identify the shape of the bone and other skeletal structures. But it has an original distortion and not accurate enough for complete treatment planning by itself.

Digital EYE (Bone)

After intuitively checking the shape and density of bone via Digital Eye, you can obtain strong initial stability by customizing the drilling sequence.
The software also provides a guideline for whether immediate loading is possible or not.

STL (Soft tissue & teeth)

R2GATE merges the STL (3D scanning of model or impression) with the CBCT file to overcome the CBCT's limitations such as Metal Scattering and distortion.
STL intuitively shows the gingiva and neighboring teeth.

Top-Down Treatment planning

The purpose of implant treatment is to recover lost and functionless teeth.
With R2GATE, you can select the ideal position of an implant by checking the crown design, and occlusion with neighboring and antagonist teeth.

The most innovative and intuitive diagnosis software for Dental implant planning in the world.

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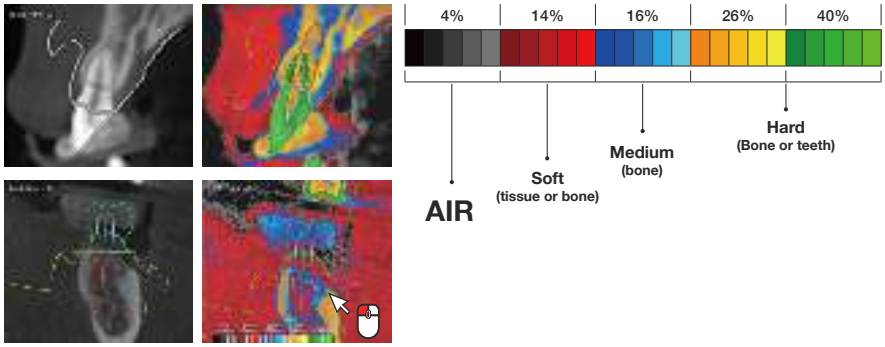
I. Digital EYE™

Does your CBCT show you right information?

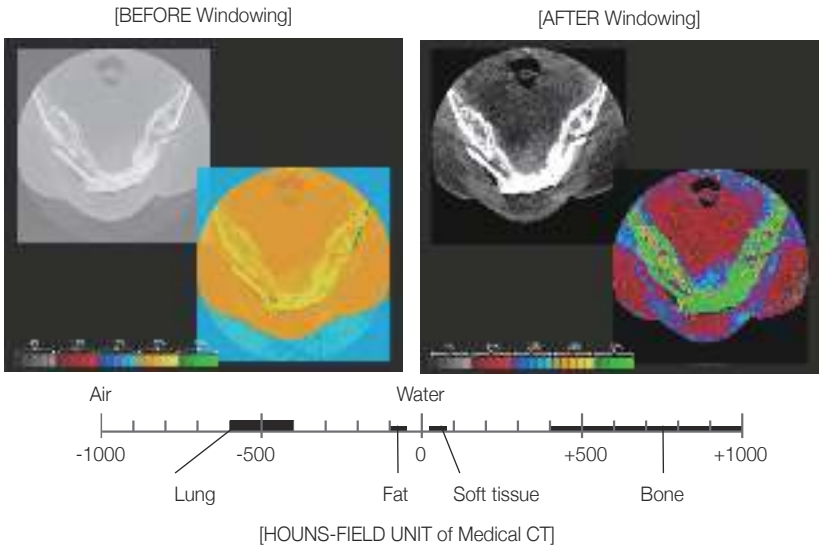
Black and White? It's only 5%

Regular black and white CBCT analyzes the data in 256-level of shades. We can only detect 16 levels with naked eyes. R2GATE's Digital EYE regenerates 256 shades into color to deliver much more detailed, intuitive bone condition.
It standardizes the brightness level that various CT equipment has and provides objective HOUNS FIELD UNIT.
It significantly differs from the color that other CT data provides. Based on this information, you can decide implant position and size and its drilling sequence for the initial stability of the implant.



Re-arrange of DICOM files for standardization.

Windowing function standardizes the brightness level that different CT equipment has and provides objective HOUNSFIELD UNIT.
It significantly differs from the color that other CT data provides.
Based on this information, you can decide implant position and size and the drilling sequence for the initial stability of the implant.



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II. ONE-DAY IMPLANT™

Get your implant and prosthetics in one day!

Digital EYE™

Provides the predictable indications for Immediate loading.
According to the bone density and R2GATE treatment planning, patients can have customized abutments before the surgery, and it can be placed right after the implant surgery.

Place a Fixture as it is planned

Completely connect the Handpiece carrier into a fixture, and drill it down as it is planned using your R2GATE Guide

a. Depth of a fixture align the upper line of Handpiece Carrier with Guide Window as [Image 1]
b. Matching internal hex of a fixture fill the window with the green part of a carrier body as [Image 2]

[Image 1] [Image 2]

Prosthetics can be manufactured as single, bridge, or screw-retained type according to your preferences.

Cementation type

- Customized Abutment
- PMMA Temporary

Screw retained type

- Ti-Base
- PMMA CAD/CAM Provisional restoration.

Over-Denture type

- Stock abutment
- Customized abutment
- 3D Printed Denture

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R2GATE® is already tried and trusted world wide.

Japan, China, Taiwan, Thailand, USA, UAE, Romania, Italy, Netherland, Australia, Germany, UK, Russia, Ukraina, Turkey...
Doctors are using R2GATE through out 50 countries.

R2 GATE
2013 ~ 2019

96,667 cases
Delivered to world wide

293,704 Implants

110,650 Prosthesis

R2GATE GUIDE

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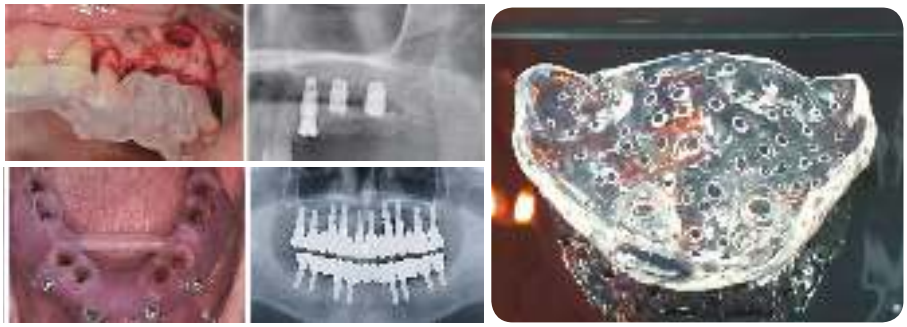
I. Advantage of R2GATE GUIDE

Experience the most innovative implant guide surgery!
Virtual planning becomes a reality.

R2GATE GUIDE doesn't need a metal sleeve or spoons.
It has the internal-structure for drill stopper and hex controller. R2GATE Guide surgery is more convenient and precise.

Precise R2GATE Guide using 3D Printer.



R2GATE guides are designed directly based on your diagnosis and are printed by 3D Printer.
The unique structures of R2 Guide(for drill stopper, implant position, and hex control)are printed as one-body for improved precision and convenience.

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I. Advantage of R2GATE GUIDE

R2GATE integrated with Major implant systems.

R2GATE Surgical Kits are available!

Full Kit and Universal Kit are available.
The full kit consists of a complete set of drills and system-specific implant carriers.
The Universal kit consists of drills from initial to 2.8 drills for any implant systems.
The implant carrier and disposable drills may be added as your option.

R2GATE Full Surgical KIT

R2GATE Universal KIT

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▸▸ Simple and Practical R2GATE UNIVERSAL KIT

Flexible kit for all implant systems

Simple and practical **Universal Kit**

R2GATE Universal Kit includes essential guide drills and tools that can be used for various implant systems. Final drills and other necessary tools can be added for your preferred implant system.

Add optional Tools for your preferred implant system

You can add optional tools like implant carrier, tap drill, cortical bone drill and more for your preference. Refer to MegaGen Implant Catalogue for more information.

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Must have Accessory kit

R2GATE Narrow Guide kit for Mini System

Are you planning to use for a Mini implant? Are you worried about the surgery because of narrow surgical space? Narrow Guide Kit with ø3.5mm drill core is designed to overcome narrow surgical spaces such as anterior mandibular, narrow distance between adjacent teeth or adjacent implants.

R2GATE Anchor kit

R2GATE Anchor kit For the fixation of fully edentulous guid

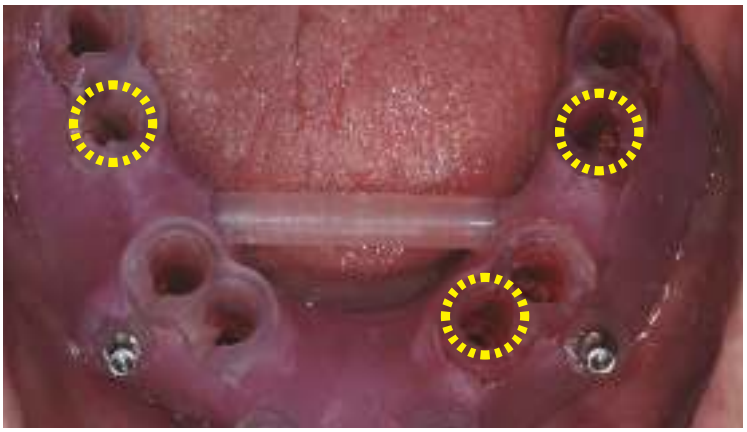
R2GATE Anchor Kit is used to fix fully edentulous R2GATE Guide in the mouth.

Anchor Pin:

Put R2GATE Guide and Putty Bite together and put it into patient's mouth. Let the patient bite firmly. Then, insert an anchor pin into the pin holes on the guide and fix them using a driver. If bone density is dense, Slightly drilling to penetrate cortical bone area with 2.0 x 13.0mm drill will be helpful for better fixation.

Anchor Screw:

For fully edentulous guide, placing fixtures and connecting anchor screw in a triangular form is highly recommended for better fixation as the image below.



When regular fixture and wide fixture are needed to place in edentulous case, there will be 2 set of R2GATE guides for regular fixture and wide fixture placement. Anchor screw will provide same position of fixation for both of R2GATE Guides.

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II. R2GATE Guided Surgery

1. Preparations for R2GATE Guide™ Surgery

❶ Package check

Check what are contained in the delivery package received from R2GATE Design Center.

Prosthetics type
ZA : Zirconia customized abutment
PR : Provisional restorations

Patient's name

R2GATE Guide™ type
R : Regular core R2GATE Guide™
W : Wide core R2GATE Guide™

Patient's name

❷ Received two R2GATE Guide™?

Do you plan to place a wide diameter fixture ? One is for regular diameter of drills and another is for wide diameter of drills & fixture insertion.

All diameter of general drill hole(core) and guide part of drills are 5.0mm. So from 3.5 to 4.5 diameter fixture can be placed through general drill hole. But In order to insert wide diaeter fixture (over the 5.0mm), drill hole(core) should be made for wide diameter drilling and fixture insertion.

Drilling sequence:
Up to 4.3mm diameter of drilling, use the regular hole R2GATE Guide™ (marked "R"). Then that change to wide hole R2GATE Guide™ and continue to drill with bigger diameter drills.

❸ Sterilization for R2GATE Guide™ and prostheses

Put the R2GATE Guide™ and all prosthetics into a bowl (jar) with an antiseptics (ex. Chlorhexidine Gluconate) for 30 minutes before surgery.

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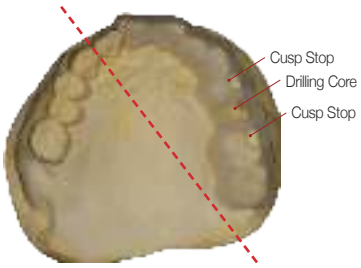
▸▸ Types and retention of R2GATE Guide™

1. Tooth - supported type

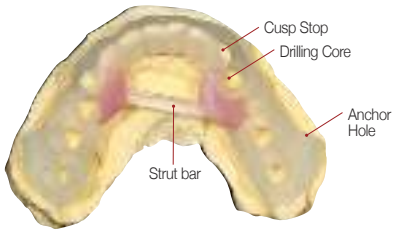


[Minimum size of model] Even it's tooth support type R2GATE Guide™, 3/4 arch model is required for design and accurate retention.

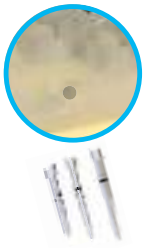
1~4 implants The residual teeth are still remained around the implantation site. The Main retention of R2GATE Guide™ comes from the remaining teeth. So, with the larger number of remaining teeth, retention will be higher and more stable. The damage and porosity of the remaining teeth on the model are not acceptable for the design of R2GATE Guide™ and its adaptation.

∗ Cusp Stop : To check the accuracy of R2GATE Guide™, Designer makes a few number of "Cusp stopper" on the cusp of the mesio-distal neighbor teeth. When R2GATE Guide™ is seated, check its fitness of contact between cusp and hole. There should not be a gap.

2. Dual - supported type



Free-end case Most of the free-end case, R2GATE Guide™ gets the retention from a remaining tooth and residual ridge. All anatomical forms of teeth, alveolar ridge, vestibule should be represented clearly on the model.



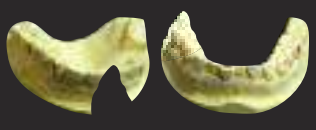
∗ Anchor Hole : The anchor hole can be designed for additional retention. The location will be decided during diagnosis and confirmed by user. Ø2.0 drilling might be required to insert anchor pin into the hard bone. (Maxillary anterior, Mandibulary regions).

3. Fully tissue - supported type

Fully edentulous case In the fully edentulous case, R2GATE Guide™ gets the support from the residual ridge and gets the retention from anchor pins. All anatomical structure (palatal, vestibulare) should be represented clearly on the model.

∗ Putty bite : Right initial positioning of R2GATE Guide™, putty bite will be provided. Combine putty bite and R2GATE Guide™ first than put it in the patient mouth together. Let the patient bite it strong and insert the anchor pin into each hole.

The distortion of the model is an important factor of the error on diagnosis and R2GATE Guide™. Please understand checking point of R2GATE Guide™ fabrication, and try to make accurate impression and model.



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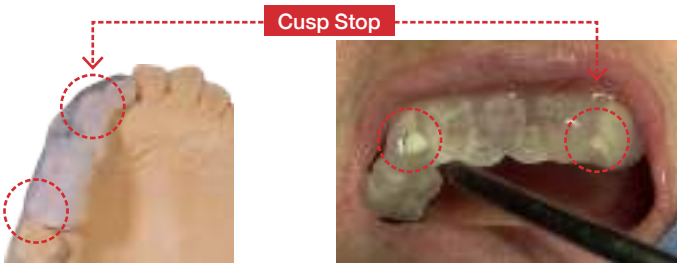
2. Adaptation of R2GATE Guide™ before surgery

This procedure is essential to check the accuracy of R2GATE Guide™.

❶ Tooth & tissue supported type

Check the "Cusp stop" of R2GATE Guide™ To check the accuracy of R2GATE Guide™, our designer makes a few number of "Cusp stoppers" on the cups of the neighboring teeth. When R2GATE Guide™ is seated, check its fitness between cusp and R2GATE Guide™ hole. There should not be any gaps.



❷ Fully tissue supported type

Putty bite and Anchor pin For an edentulous case, R2GATE Guide™ is seated using the putty bite and fixed with anchor pins specially designed for R2GATE Guide™ positioning.

1. The connected R2GATE Guide™ and the seating jig are delivered into the mouth together and seated.
2. Patient should bite with maximum occlusal force on the R2GATE Guide™ and seating jig.
3. Tighten the anchor pin using a hand driver.
4. 2.0mm drilling will be required in advance if the drilling point have a thick cortical bone.

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3. Necessary items to produce R2 Guide

❶ R2 Tray used for taking CBCT

R2 Tray SE

Ref.C
R2TRAYSE

❷ Hole trimmer set for R2 Guide trimming

Stopper trimmer

- Tools for trimming the stopper in R2 Guide

Thread	Guide Diameter	Ref.C
Narrow	Ø3.5	AGHTN2
Regular	Ø5.0	AGHTR2
Wide	Ø6.5	AGHTW2

Hole trimmer

- Tool for trimming guide holes in R2 Guide

Thread	Guide Diameter	Ref.C
Narrow	Ø3.5	AGHTN3
Regular	Ø5.0	AGHTR3
Wide	Ø6.5	AGHTW3

Reamer Handle

Ref.C
TCMRH

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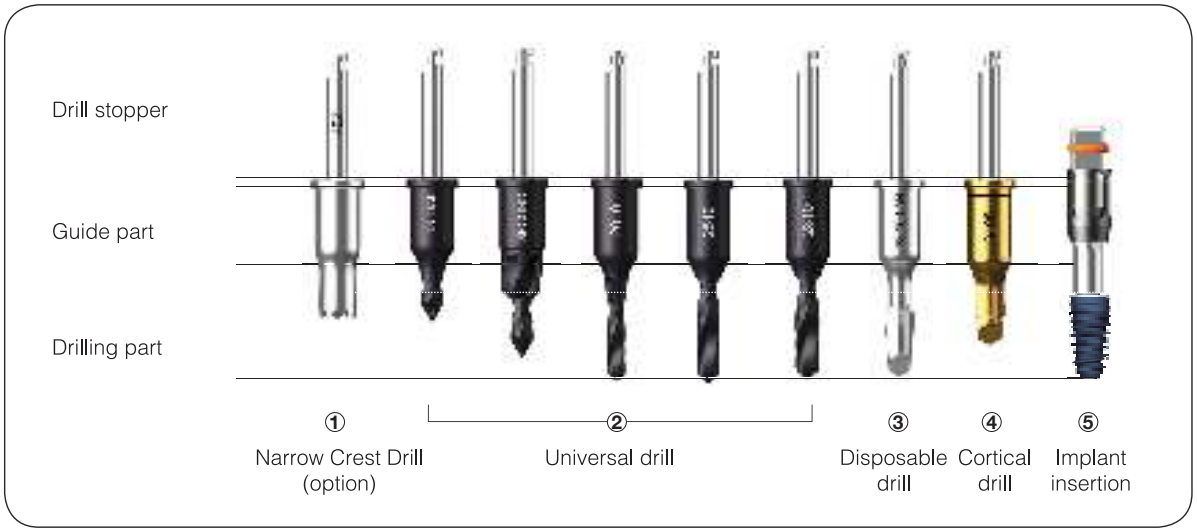
4. Basic principles of drilling with R2GATE Guide™

No spoons, No sleeves
Our guided drill design does not need spoons or sleeves

All of our drilling components from initial drill to implant carrier are designed as guide and drilling part.
You do not need any additional sleeves or spoons, to shorter the surgery time.

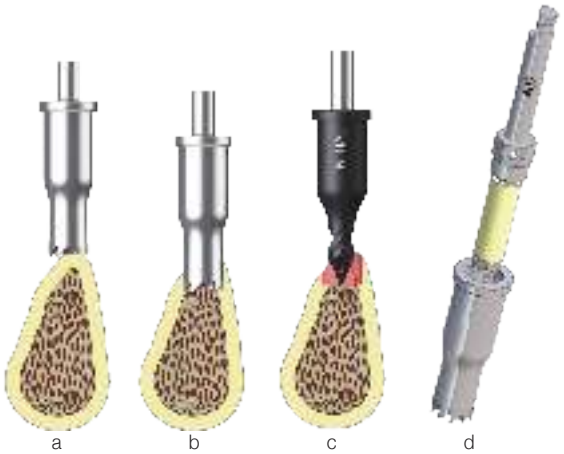


Narrow Crest Drill
for narrow or steep alveolar ridge.

If a regular drill is used on narrow or steep alveolar ridge cases, a drill may slip and the drilling path will be made in the wrong direction. In this case, use a narrow crest drill first and flatten the drilling area to prevent slipping.

How to use the Narrow Crest Drill.

a. Counter-clockwise: Engage the blade onto the ridge by rotating a drill with less than 100 RPM
b. Clockwise: Drill with 400~600 RPM
c. Start a drilling sequence with initial drill
d. You can collect bone by separating the drill body after drilling



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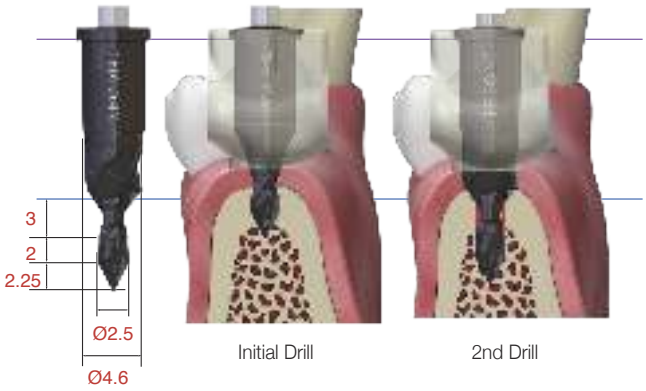
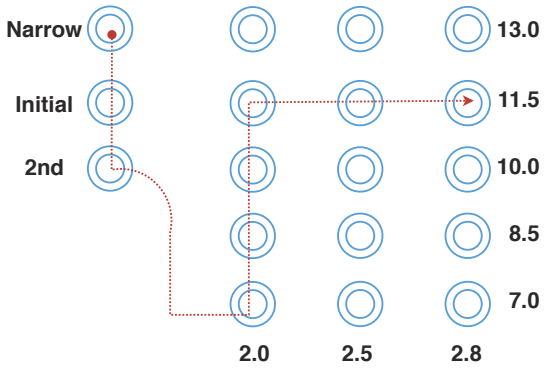
1st & 2nd Drilling

The 2nd drill also works as a profiler drill which removes excess bones above the fixture platform for a better has connection of prosthetics. If bone density is dense or high resistance during drilling, stop 2nd drilling protocol and repeat 2nd drilling protocol right before fixture placement.



Crucial Step: Basic drilling

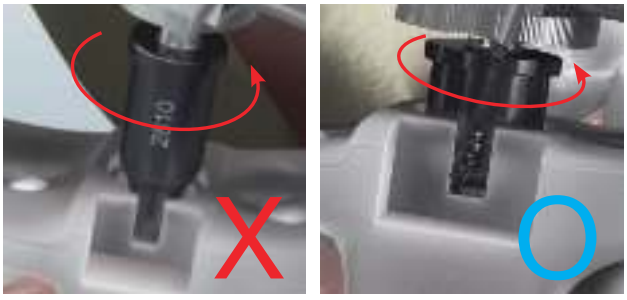
Narrow Ø2.0 diameter drilling is very important to complete the coronal path of the drill. Especially when the guide core is short due to thick gingiva, gradual drilling to secure the depth of a fixture is essential for successful surgery.



Eg) When placing a 11.5mm length fixture
Narrow drill ► initial Drill ► 2nd drill ► 2.0x7 ► 2.0x8.5 ► 2.0x10 ► 2.0x11.5 ► 2.5x11.5 ► 2.8x11.5 ► Final drill ► Cortical bone drill

Slow drilling in a Drill Core

Before drilling, you have to check the guide part of dirll to be inserted into the drill core of guide compeletely. when drill is in right postion, start drilling with recommended RPM [300 ~ 500 RPM]



Slow UP & DOWN Motion

Drilling must be done in the order of increasing the depth of osteotomy and then widening the diameter according to the suggested drilling protocol. Keep repeating up and down motion slowly until the drill stopper touches the stopper position on the guide.

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Deliver Fixture as planned

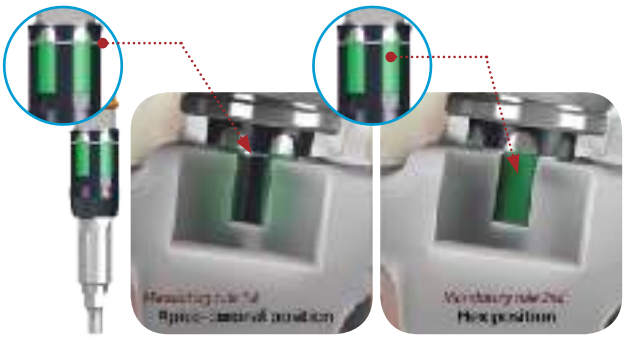
Make sure to connect Handpiece Carrier onto a fixture and deliver it through the R2GATE Guide as planned.

a. Fixture depth control

Align the upper line of the Handpiece Carrier with the Guide Window as [Image 1]

b. Hex position control

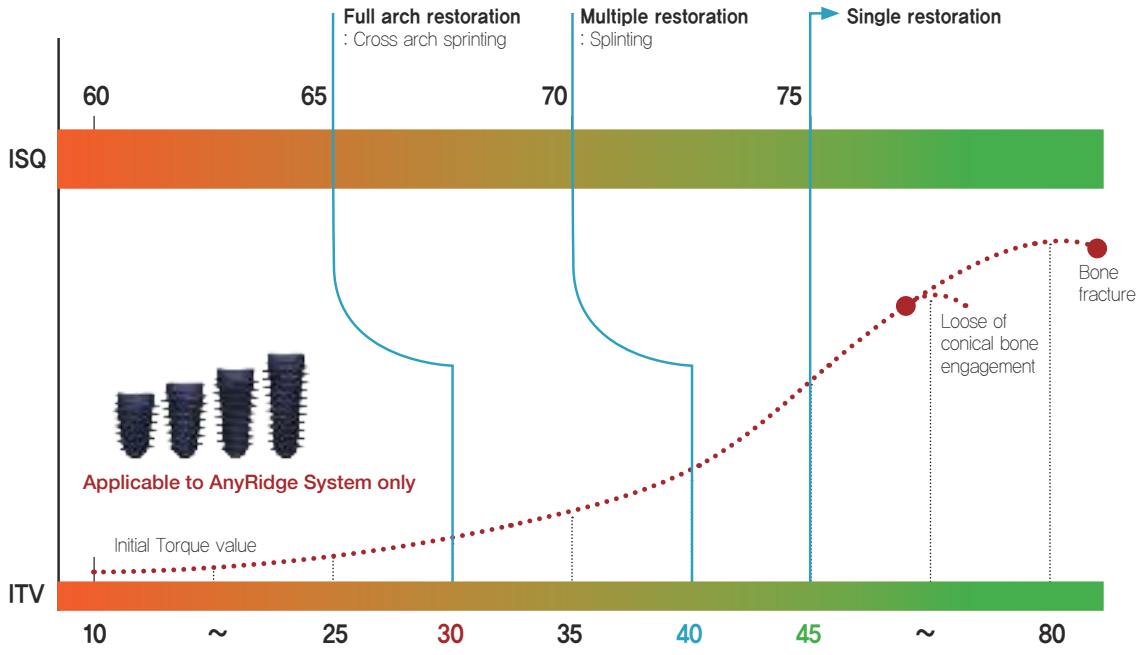
Align the green part of Handpiece Carrier as [Image 2] to make hex position in buccal direction.



[Image 1] [Image 2]

We provide a general standard for immediate loading [ISQ & ITV]

If you use AnyRidge System, the recommended ITV (Initial Torque Value) and ISQ (Implant Stability Quotient) for immediate loading are ITV = 45Ncm/ISQ=75 or above. These values are only for the AnyRidge system and cannot be applied to other systems.



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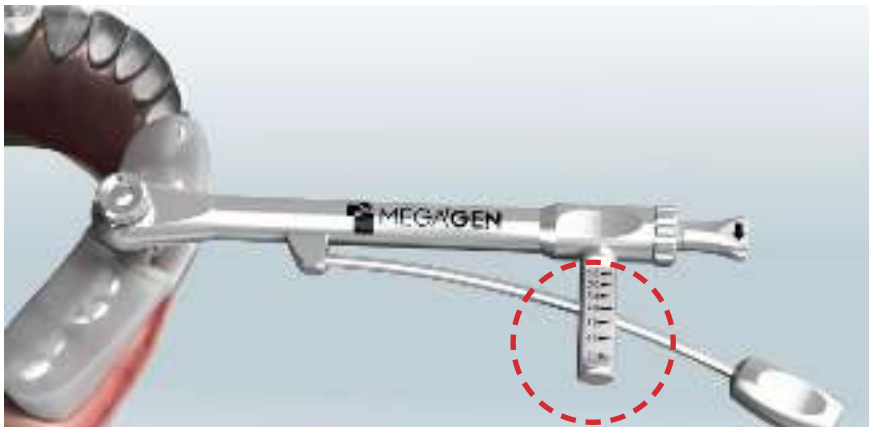
5. Recommended condition for ONE-DAY IMPLANT & immediate loading

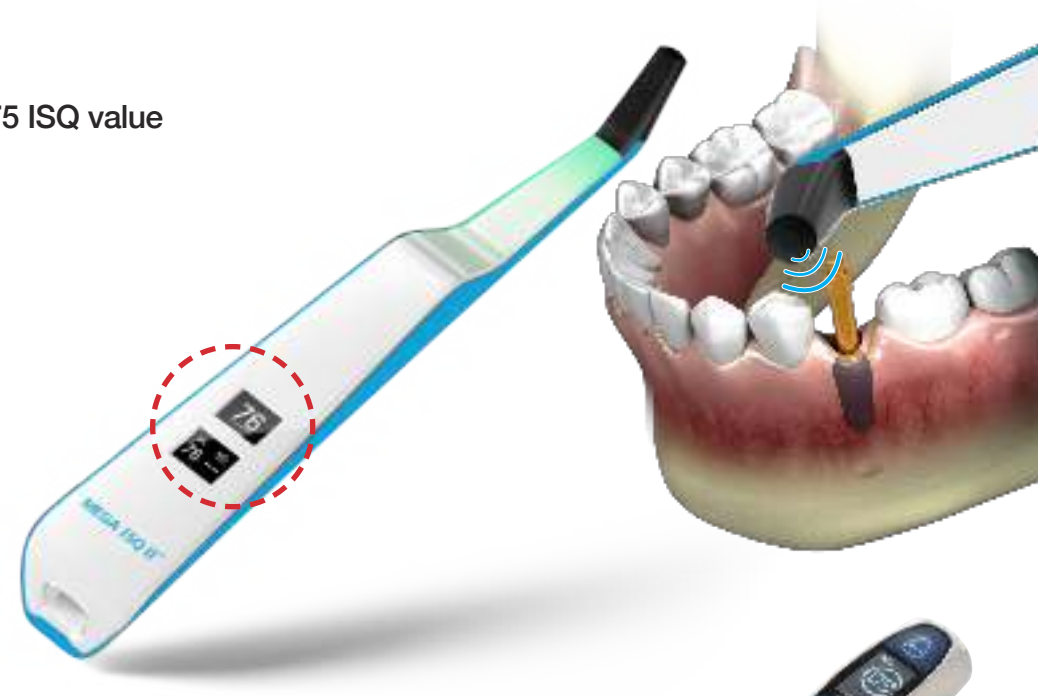
According to our own clinical experiences & data, we strongly recommend to check two values : Insertion Torque & ISQ value.

1 Insertion Torque value :
more than 45Ncm



Available on our R2GATE Universal Kit.

2 ISQ value:
more than 75 ISQ value

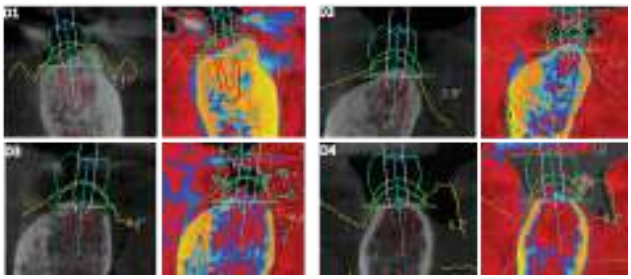


R2GATE Digital Center

To have stable ISQ value, we recommend to use MEG-TORQ to fasten a smartpeg with 5 Ncm torque force consistently.

Digital EYE™ ;
Color-coded analysis of bone morphology & density

Although CBCT uses 256 shades of B&W, the human eye can only detect 16(6%). Therefore, Digital EYE converts the CBCT shades into full color with a standardized brightness, allowing intuitive analysis of the bone condition to position & size the implant, determine the drill sequence, and predict the initial stability for immediate loading(ONE-DAY IMPLANT™).

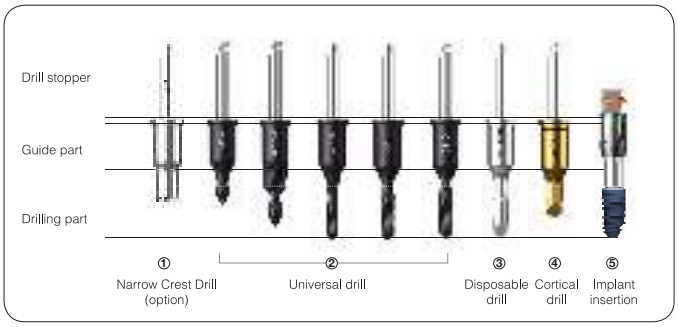


Creating the reality of ONE-DAY Teeth & Digital All-on-4(6)

- accurate diagnosis
- reduced chair-time
- minimally invasive surgery
- immediate loading using digital prosthesis
- excellent clinical results

Convenient drilling system

- All drills combine drill, guide, & drill stopper into one-body
- No need for metal sleeves or spoons!
- Shorter surgery time!
- Disposable final drill provided for each surgery to optimize initial stability



Compatible with all major implant systems

Significant cost savings!

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R2 Digital Center

I. Various R2GATE Services

We provide various R2GATE Services. Enjoy them conveniently.

R2GATE® Planning Service

Optimal Implant positioning basis on the TOP-Down concept.

R2GATE allows you to do Prosthetic driven Treatment Planning for optimal positioning of the implant. It provides an eidetic view of all elements that you need for implant practice as CBCT, STL, and Prosthetic design before surgery

R2GATE Guided™ Service

Realize the Tx.planning perfectly.

The surgical guide will be made using state of the art 3D printing technology with the result of Tx.planning. R2 Guide completes your daily implant practice without uncertainty.

R2GATE®

ONE-DAY IMPLANT® service.

Under certain conditions, various prostheses may be delivered on the same day as surgery. Recover function & aesthetics immediately!

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II. R2GATE Order process

Order

1

CBCT

CAST

- CBCT Taking
- Model fabrication.
- Send it to R2 Center.

Implant Planning

2

- Model Scan
- Digital wax-up
- Implant planning
- Send planning file back to Clinic

Caution!

Ask R2 Tray to local R2 Digital Center before placing an order

If a patient is partially edentulous or if there are multiple teeth with metal fillings or restorations, R2 Tray must be used. R2 tray must be sent to R2 Digital Center along with study models and bite registration.

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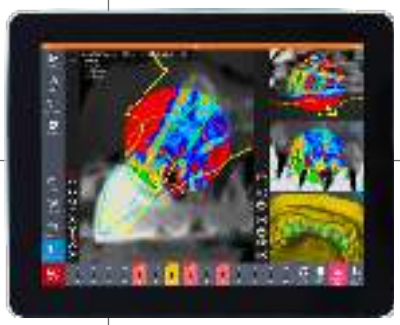
Simple order process : R2GATE Service is very simple, fast and cost effective.

We have world-wide R2 Digital Center network. Please contact to nearest Digital Center or MegaGen distributors at applicable countries.

User Confirmation



- Download project file to R2GATE Lite
- Open project file.
- Modification or confirmation

Manufacturing

- R2 Guide Design
- 3D Printing & trimming
- CAD/CAM

Delivery

- Packaging
- Delivery

Your confirmation is the most important to shorten the delivery time.

Diagnostic information sent to R2GATE lite can be confirmed.
Corrected and approved data are saved
as project files and transferred to the R2 Digital Center
R2GATE Lite is the essential option for you.

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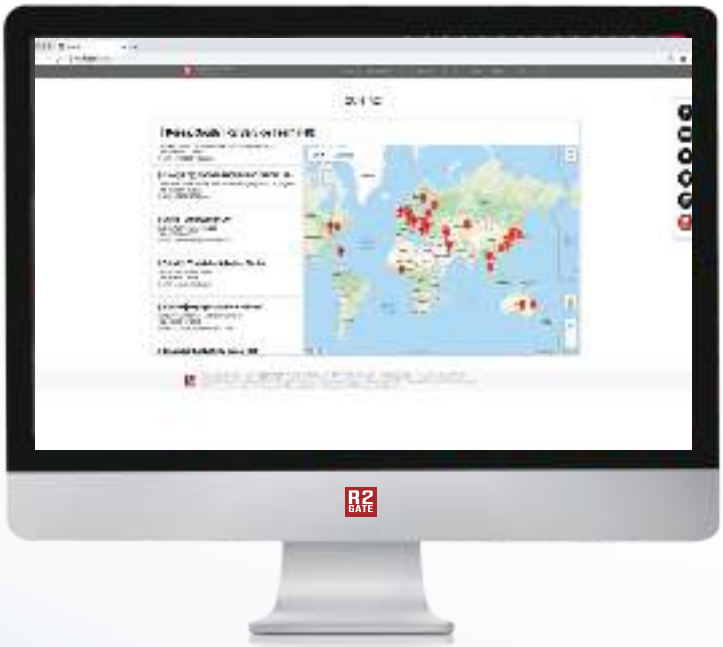
III. R2 Digital Center Network

Please find the nearest R2 Digital Center from your country.

Already 113 R2 Digital Centers!

For more information about
R2 Center around the world,
please visit the website below!

www.r2gate.com/contact



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R2GATE Lite™

Meet the most innovative

implant diagnostic software program in

the most innovative way!

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R2GATE Lite™

Meet the most innovative implant diagnostic software program in the most innovative way!

Whenever, Where-ever!

Diagnostic information sent to R2GATE Lite can be confirmed by the dentist immediately. Corrected and approved data are saved as project files and transferred to the R2 Digital center in real time.

Communication with R2GATE Lite™

Throughout consultation about implant treatment with a patient, ensuring the patient clearly understands their oral condition and the future possible outcome of the treatment is a major factor in assuring patient satisfaction. Using R2GATE LITE on IPAD, the doctor can easily show the visual information on treatment planning from diagnosis through to the optimal treatment.

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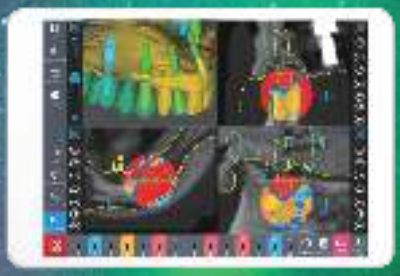
Communication and Design efficiency



With R2GATE Lite, everywhere it becomes your clinic for you & your patients. You can check, edit, confirm, or send a file to R2GATE Design Center at anytime, and anywhere.

the world's first
Mobile Diagnostic Software

R2GATE Lite™

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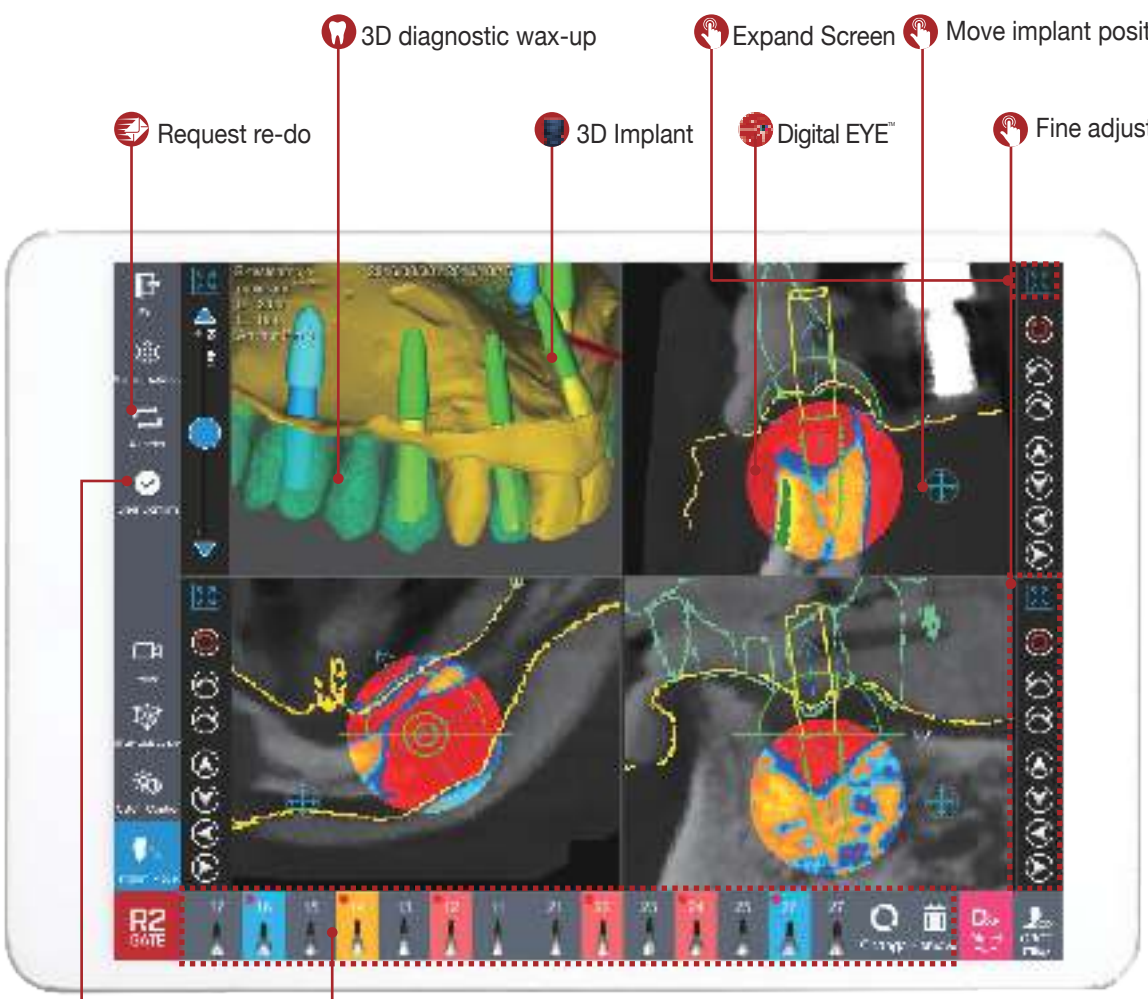
R2GATE Lite™
Light and Upgrade



You can easily select, add, remove, or modify an implant. Using the international teeth numbering system, you can edit an implant that is currently loaded on the planning.
Pink represents an implant that is already planned, yellow indicates selected implant.
Blue indicates implant newly created implant by user.
Red dot in the selected implant indicates that user has modified the size, position, or angle from initial loading stage.

Check
√ Diagnostic wax up
√ Implant position
√ Digital EYE™ - Bone density

Modify
√ Implant position & controls

Confirm
√ Touch to order R2GATE GUIDE

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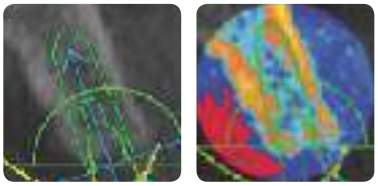
3 essential key factors for implant diagnosis : Bone, soft tissue, teeth

For an ideal implant treatment, cortical bone, soft tissue, and prosthetics must work together.
R2GATE intuitively analyzes and shows the condition of cortical bone and soft tissue, and optimate prosthetic outcome for ideal treatment planning.
For multiple implant cases especially, the distance between implants/platform level and the implant axis angle can be easily understood beforehand for simpler treatment and prosthetic procedure.

Digital EYE™

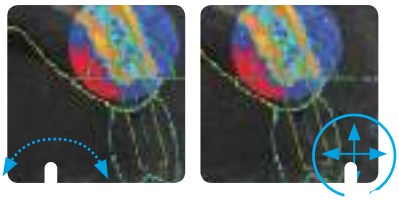
Standard black and white CT analyses the data in 256 shade levels, but human eyes only detect 16 levels with the naked eye.
R2GATE Digital EYE regenerates 256 shades into color to deliver a much more detailed and intuitively understandable guideline of the bone condition.
Also, it standardizes the brightness level that each CT equipment has and provides an objective Houns Field Unit. This significantly differs from the color that other CT data provides.



Easily shift, zoom in, zoom out, rotate with your finger

Easily change the position of the implant wirh your finger.

- Implant rotation: Lightly touch the screen and drag to rotate the implant.
- Implant shift: Lightly touch the ⊕ sign from the lower part of the screen, and drag to move the implant position.
- Zoom in & out: You can easily zoom in & out by using two fingers. Please use the “Moving Key” on the right corner of the screen if accurate adjustment is needed.



Fast and easy diagnosis check

You can confirm the diagnosis immediately by using the "User Confirm" function, or you can send the changes to the center. If you need to revise the model or the implant placement site, you can use the "Diagnosis Reconfirm" function to conveniently receive the diagnosis again.

Auto detecting
All the information that you have done through R2GATE Lite is automatically saved, and all confirmation or modified data will be sent to R2GATE Design Center.

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Clinical Case Report

Turning your imagination into reality

- Diagnosis & Treatment planning with R2GATE® and the clinical result
- Understanding and Purpose of Surgical Stent Surgery
- Clinical cases using an R2GATE Guide™ (1)
- Clinical cases using an R2GATE Guide™ (2)

- Author : Dr.Jong Cheol Kim (The investor of R2GATE®)

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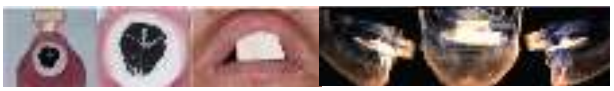
1. Diagnosis & Treatment planning with R2GATE® and the clinical result - *Dr. Jong-Cheol Kim*

Implant surgical procedure using guided static surgery

A 68 year old patient presented with the necessity of full mouth reconstruction. Unfortunately, he suffered from pneumonia and had to be hospitalized for about 6 months before the implant surgery. There was partial maxillary bone loss as shown in the panorama below taken before surgery. The patient would need GBR procedure to recover lost bone. At a late stage, the patient and his family changed their minds, preferring minimally invasive implant surgery after the long-term hospitalization due to pneumonia. In this situation, flapless surgery would offer the least invasive option if no GBR treatment was to be carried out. In this case, direct surgery would not be possible, and a blind technique would be required. Under such conditions, most doctors would want to simulate the surgery using all available options - CT images, prognosis program and customized guided drills. This is the story of an approach to guided static surgery converging CBCT (a media device) and CAD/CAM technology through this clinical case.

These are the photos and panoramas of the patient's oral cavity after 6 months hospitalization. We need to take alginate or rubber impressions for a full mouth reconstruction using guided surgery. The plaster model is the sent to a digital center which produces the stents. 3 different materials based on the plaster model are sent back to us. Using a wax rim, the operator will decide the implantation position of the upper central incisor, and mark the extension line connected to central line of the face. The facial soft tissue can also be controlled and the bite plane of the deployment angle can be decided by editing the wax rim. We can refer the arrangements of the stent from these procedures. The position of the CR and vertical dimension are decided with a Gothic arch attached to the plaster model. We can decide the so called 'verti-centric' with a Gothic arch.

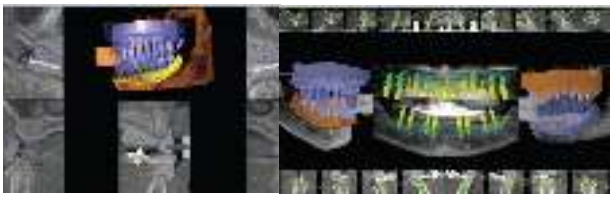


These pictures show the Gothic arch traces that indicate the movements of the mandible and the stable mandibular position. Proper VD (Vertical Distance) has been decided. Bite material will be poured into the oral cavity with the Gothic arch to record the 'verti-centric', then a CBCT image is taken. The pictures to the right are the CBCT photos with the Gothic arch. Preparation is now complete.

CBCT images are sent to the digital center server online, the Gothic tray containing verti-centric movements, the plaster model and the wax rim with facial information will be also be sent by regular mail. Specialists at the digital center will start mounting on an Articulator based on the received materials. These pictures show the model mounting procedure. The maxillary and mandibular plaster models, the inter-maxillary space and the wax rim information can be digitalized using a dental scanner.

These pictures show the diagnostic wax-up made based on scanned materials by Dental CAD saving a lot of time. All the information regarding the diagnostic wax-up can be opened as a file on R2GATE® program.

The principle of R2GATE® developed by Megagen implant Co., Ltd. is layering the DICOM (CBCT) image and the STL file (attained by scan and CAD). By layering the images, we can simulate the implantation based on the prosthetic appliance position seeing the diagnostic wax-up, the plaster model image and the bone condition at the same time. This makes mock surgery using the 'Top-Down treatment' idea possible. The operator's surgical concept can be simulated using two- and three-dimensional images. Below pictures show the simulated implantation of 10 maxillary teeth and 8 mandibular teeth. Another advantage of R2GATE® is the actualization of the mock surgery results as opposed to other CT viewers which only check the result via a monitor. This simulation result can be extracted as a file that can be used to design with Dental CAD.



These pictures show the full denture drilling guide designed based on the sources from digital CAD. Not only the drilling guide holes, but also the pin holes needed to fix the stent can be designed. In addition

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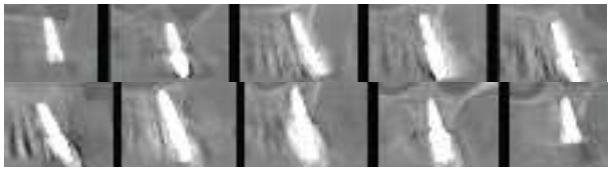
MegaGen's R2GATE Guide™ is very accurate

the customized abutment and prosthetic appliance can be designed. This means we can recover function and aesthetics immediately by placing the upper prosthetic appliance (if the case of suitable ISQ value) because an upper prosthetic appliance fitting exactly to the implants placed through the customized drill guide can be produced in advance. The CAM method currently attracts more users than CAD. CAM has 2 different ways of manufacturing - milling or 3D printing. This will be expanded in the following pages.

These pictures show the maxillary and mandibular implant drill guides produced by 3D printing. The pictures below show the customized zirconia abutments and temporary crowns produced by milling. As a result, the dentist can receive a drilling guide and a maxillary prosthetic appliance, and may decide whether to connect the maxillary prosthetic appliance or not depending on the ISQ value. The bone can be drilled through the fixed guided stent using anchor pins as you see in the pictures below. This shows the result of flapless minimally invasive implant surgery.

Panoramas and pictures of 10 implants placed using a maxillary stent in the same way. The customized zirconia abutment and the temporary crowns produced in advance were placed after observing a satisfactory ISQ value.
The satisfied CT results can be observed.



Maxillary CT after the surgery

You can check the satisfactory CT results.

We produced the final prosthesis after 3 months. At this time, the mandible has zirconia abutments and temporary PMMA crowns have been placed in the mandible to allow further recovery of the patient.

This shows panoramas and standard radiographs at 1 month after the final prosthesis was placed. This has been a brief introduction to the general process of guided static surgery using R2GATE®. Due to time & space limitations, this is only an overview - we hope you will be stimulated to ask for more information about R2GATE® and CAD/CAM. Over the following pages, we will elaborate on the explanation and focus on the prognosis before surgery with R2GATE®, on surgical simulation, and hope that the whole process will be clear.

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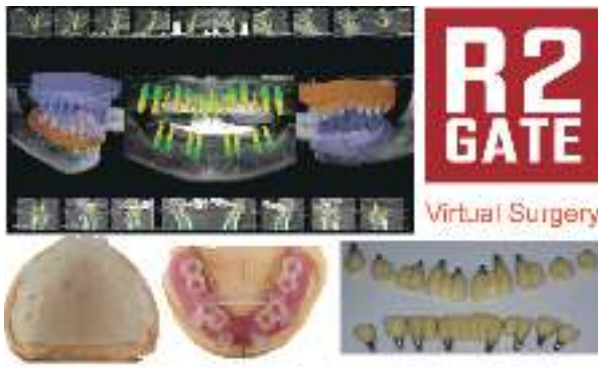
2. Understanding and Purpose of Surgical Stent Surgery

- *Dr. Jong-Cheol Kim*

As you can see on the previous pages, R2GATE®'s virtual simulation has the advantage of combining DICOM (CBCT) and STL files enabling the depiction of the overall status of the patient with real time digital videos before commencing surgery. This handy function means that dentists can decide the optimal position for placing implant fixtures and allow a quick overview of the diagnostic wax-up, the soft tissue and the bone. In other words, virtual simulation has reached an outstanding level for finding implant positions as close as possible to real surgery using CAD/ CAM. A simple schematic diagram follows below.

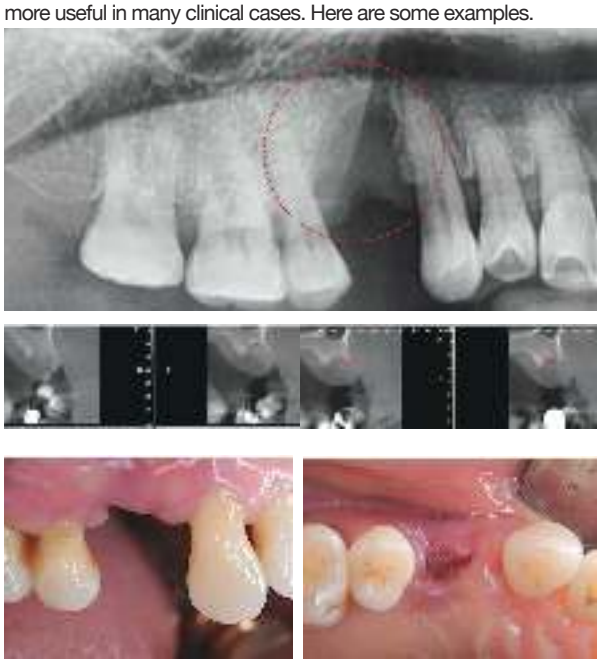
CBCT
DICOM:Digital Imaging & Communications in Medicine

STL
Standard Tessellation Language



R2GATE Guide™ surgery

This schematic method of stent surgery can be either 'Open flap surgery' or 'Flapless surgery'. Most clinicians think that 'Guided surgery" means "Flapless surgery". With this concept, the range of clinical applications for drill guides is extremely limited in cases of the lack of hard and soft bone tissue. If instead, one thinks of 'Guided surgery" as correct "implant position', it makes the application much more useful in many clinical cases. Here are some examples.



This case is a 56-year-old female with a right maxillary second premolar defect. As can be seen in radiographs, the mesiodistal "Interproximal bone level" area seems adequate, but the faciolingual area shows significant bone loss.

The defect of the mesiodistal space is quite wide, making it difficult to decide the position of both prosthesis and implantation. With R2GATE® however, true virtual patient simulation procedures can be carried out. The dentist is able to determine surgical options before surgery thanks to the simulation available with R2GATE®.

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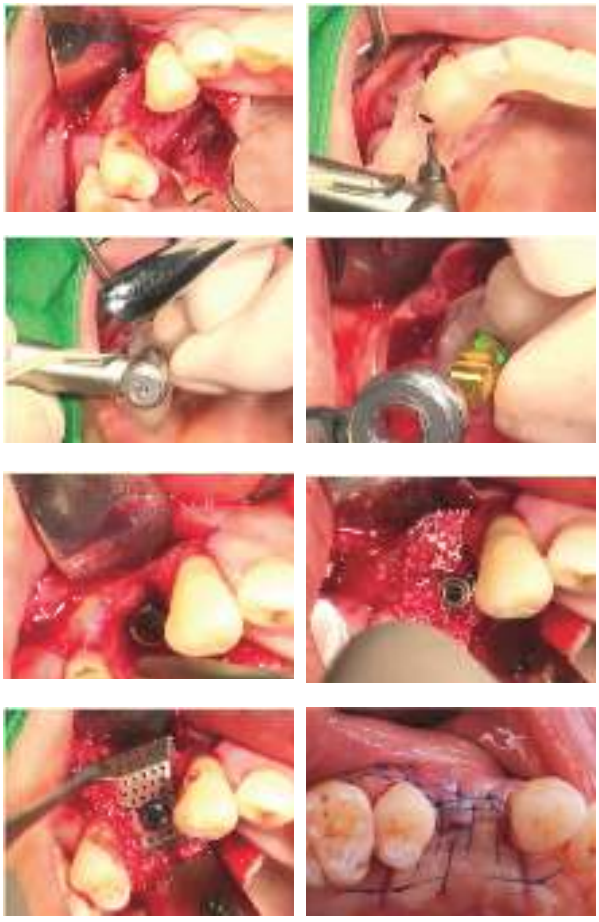
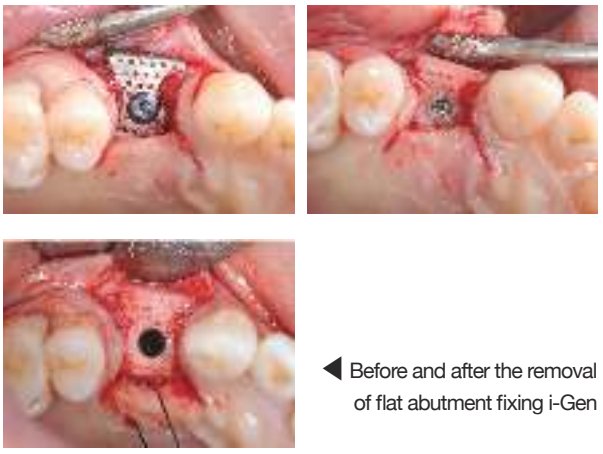
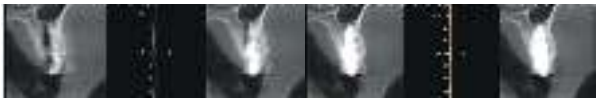
R2GATE Guide™ does a very important role for the implant cases with defects



The position of the implants can be determined using R2GATE® and easily configured – use of an R2GATE Guide™ and Ti-mesh (i-Gen) is decided with the virtual diagnostic procedure. Final suturing is also shown.



◀ Before and after the removal of flat abutment fixing i-Gen



4 months after the surgery

R2GATE Guide™ guided surgery is '3D positioning and realization of implantation' as you can see in the clinical case presented. Over the next pages, we will introduce a variety of clinical cases using an R2GATE Guide™.

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3. Clinical cases using an R2GATE Guide™ (1) - *Dr. Jong-Cheol Kim*

As described earlier, the Clinical Significance of Guided Surgery using R2GATE® software and an R2GATE Guide™ is 3D positioning and its realization with implants. Now I would like to present some clinical cases using R2GATE® software and an R2GATE Guide™.

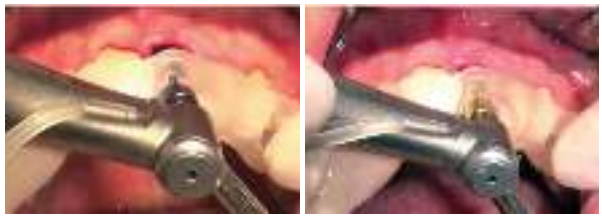
The patient above came to the clinic complaining of movement in the #21 tooth. Cervical caries was immediately identified with the CT. This patient requested rapid, aesthetic, functional recovery over the shortest possible duration of treatments. We planned immediate loading of zirconia customized abutment and a temporary crown, if excellent initial stability could be obtained after implantation using R2GATE® and an R2GATE Guide™. 2 preparations were needed in the clinic.

Firstly, an alginate impression of both the upper / lower jaw was taken and stone casts produced. Accurate impressions and stone casts are essential as they are the basis for all the material (data) using R2GATE®.

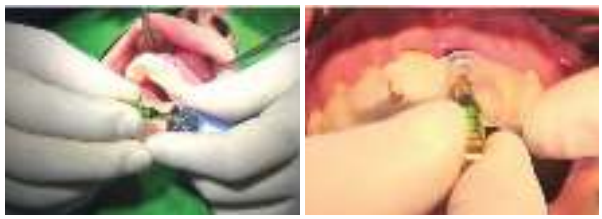
Second a CBCT scan is needed. As shown in these pictures, the patient bites a unique tray (R2 tray) and the CBCT scan is shot. This R2 tray is utilized as a standard of superposition of the CBCT and the STL files. These 2 processes are preoperative in the clinic. Stone casts can be sent via parcel service and the CBCT file via internet to the R2GATE® Center.

The R2GATE Guide™ and prosthesis are produced with this data.

This R2GATE Guide™ must be placed carefully to avoid damaging the buccal alveolar bone following the tooth extraction.



The drilling may then be performed to the size of the implant using drills exclusive for the R2GATE Guide™ system exactly according to our virtually planned surgery in R2GATE®. As the pictures show, complete drilling processes are recommended to be performed following the guide part of the R2GATE Guide™.



Pick up the implant after finishing drilling, using the hand ratchet connector. The correct combination between ratchet connector and fixture should be accurately checked. The fixture can then be placed in the prepared site after this confirmation.

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You can use the R2GATE Guide™ for Immediate Implant Placement case

We recommend the use of an implant motor. Once the implant is almost completely placed with the motor, the final vertical depth and position of the implant should be completed using a torque wrench to match exactly with the virtual plan.

The location of the fixture may be matched to the R2GATE® plan by matching the window of the R2GATE Guide™ and the black line and green code on the ratchet connector.

▲ The figures above can be applied only to an AnyRidge Implant. These figures cannot be generally applied to other implant systems.

In order to assess the possibility of immediate loading, we use both the placement torque and the ISQ value. Only when using the AnyRidge System, we may try immediate loading – and then only if the placement torque is over 45N and the ISQ value is over or equal to 70 in D3~D1 bone without parafunctional problems.

The pre-made customized zirconia abutment may be connected after bone grafting the gap between the socket and the fixture.

These pictures show the temporary crown, immediately after surgery and then the healed site after 2 weeks.

After time needed for soft tissue healing, the prosthesis can be made using an impression for final prosthesis taken at the customized abutment level.

After 4 months, this is the image of the final prosthesis loaded.
For the success of immediate loading,
1. Bone quality
2. Implant design
3. Surgical technique
4. Occlusal loading control
should all be considered.

Next we will introduce you to how to use the 'Digital EYE™' to assess bone quality using R2GATE® for surgical planning.

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It guarantees a success of an implant through 'Digital EYE™' function even at the poor bone quality

4. Clinical cases using an R2GATE Guide™ (2)

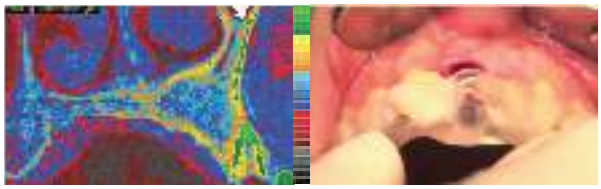
- Dr. Jong-Cheol Kim

At the end of the last article, the necessary conditions for the success of immediate loading were briefly mentioned.

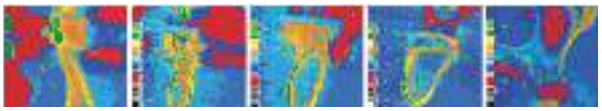
1. Bone quality
2. Implant design
3. Surgical technique
4. Occlusal loading control

Most long-term observational research mentions that the above four requirements affect the success of immediate loading. Utilizing CBCT as an assessment of bone quality is now being introduced in research papers. In evaluating bone quality R2GATE® also uses a function that enables preoperative evaluation of bone quality and makes it possible to suggest a suitable drilling sequence to increase initial stability.

CT images shown on both the left and right are the same patient's CT image. Depending on the machine, as shown in the pictures, totally different images are created. CBCT is different to MSCT (Multi Slice CT) – it does not apply the HU (Hounsfield Unit) concept. This makes it more difficult to evaluate the bone quality.



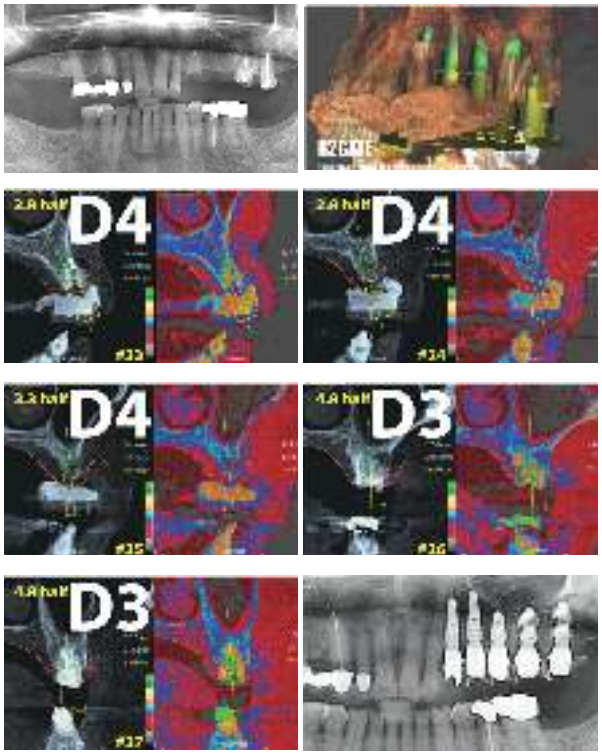
In order to resolve the disadvantages of CBCT, R2GATE® has installed the 'Digital EYE™'. The colors shown on the image of the soft tissue helps to understand the bone quality thanks to the contrast of color. You may identify the relatively hard cortical bone density and the cancellous bone clearly falls under classification D4 according to Lekholm and Zarb's classification. Considering this bone quality, you might make 2 step under-drilling compared to the planned fixture diameter.



[Ex. 1, 2, 3, 4, 5]

Correct drilling sequence, implant position, and loading protocol can be determined based on CT analysis. Take note though [Example 4, 5] even if initial stability can be gained by determining bone density, do you think immediate loading is always possible?

What are your thoughts, readers?



This clinical case used 'Digital EYE™', predicted the bone quality and pre-set the drilling sequence to obtain satisfactory initial stability, and also increased the number of implants for a 'One Day Implant' case. What the ISQ value would be at the time of surgery?

Edentulous clinical cases need restoration and we present another clinical trial. Do you think that a fixation screw is the only way to

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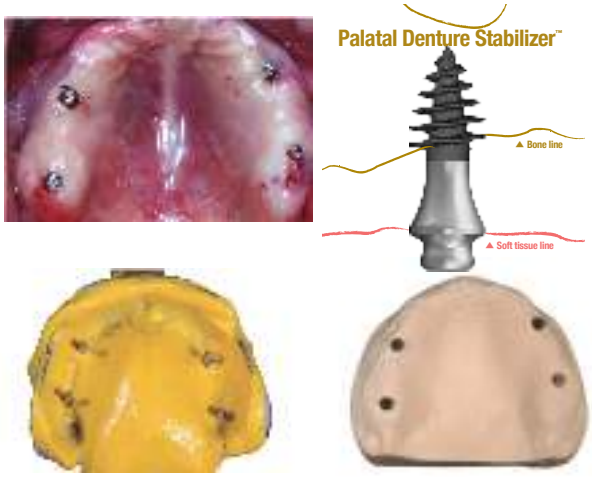
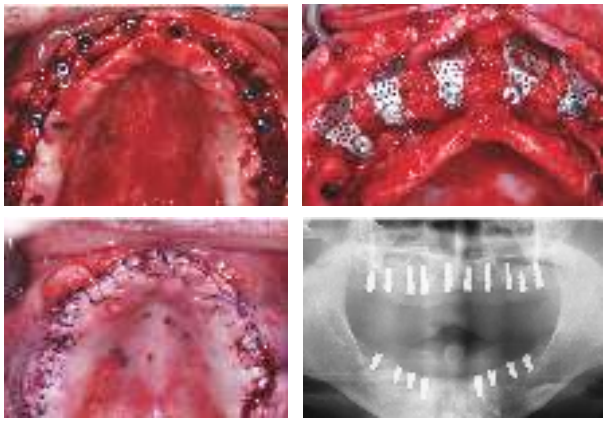
R2GATE Guide™ is very effective for Full Mouth cases, even with thin ridge

obtain stability of the stent when using an R2GATE Guide™ for edentulous cases? Tooth-supported guides have the highest precision. Currently, 'Team Eureka R2' is trying to develop a way to obtain 'Dual stability' by using the Palatal Denture Stabilizer.



One way to change fully edentulous cases to a tooth-supported case would be placing mini implants. Mini implants were originally developed for the purpose of maintaining temporary dentures and the can be used on edentulous cases with R2 surgery. For the mini implant placement, the implant position is not important - simply place it where it can be placed most easily.

Two R2GATE Guide™s can be easily manufactured based on the basic CAD/CAM system. The first R2GATE Guide™ gets support from four mini implants. The method is to place fixtures on areas not related to the location where the mini implants will be placed. Then, a surgical stent will be used to place the fixtures and finally the mini fixtures are removed.



As mentioned in an earlier article, the author placed implants on the basis of the R2GATE Guide™, executed GBR, and made the closure suturing. Once again, the purpose and significance of R2GATE Guide™ surgery is not simply flapless surgery but to virtually manage & observe the result of surgery before the actual surgery following your own clinical philosophy.

'Megagen Eureka R2' started ambitiously with the intention of beginning a 2nd Renaissance in the field of implant treatment and recovery using our own program. The 'R2GATE' programme is evolving to realize this aim. Next year, we will be able to move beyond the implant field and provide new methods for GBR. In addition, we hope to achieve virtual surgery on the lower jaw using face analysis.

- Courtesy of Dr. Kwang-Bum Park, Dr. Seong-Eon Kim, Dr. Sang-Taek Lee.

* This clinical case can be viewed on www.R2GATE.com
'How to get a reliable ISQ value'

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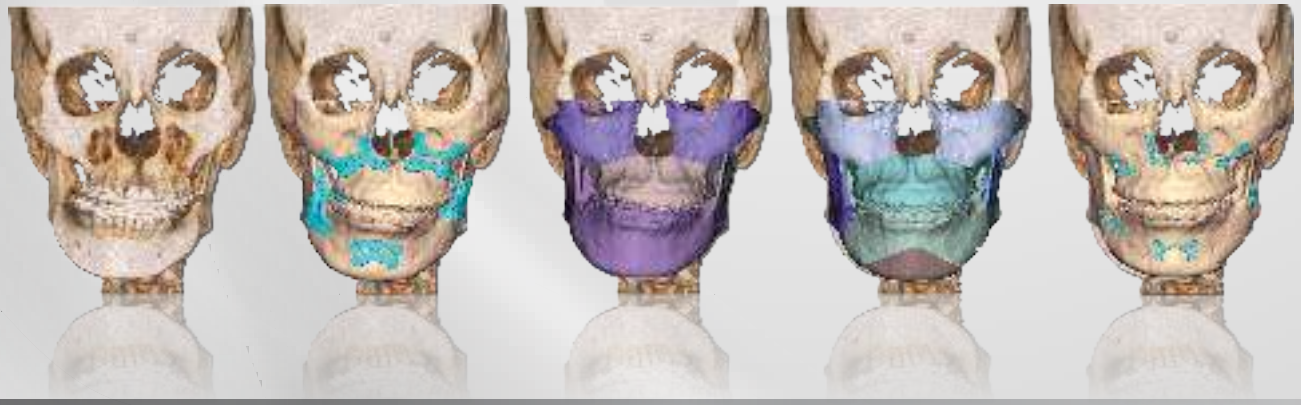
FACEGIDE™

All good up to analyses

R2GATE is an innovative implant diagnostic software that analyses the oral condition and shows the best options for implant treatment. With FACEGIDE, we take one step further into maxillofacial surgery. Using the same technology for accurate reading of the bone and tissue situation and with advanced software options, FaceGide opens the door to using **R2GATE®** for more predictable **Orthognathic surgery**.



“How to use R2GATE® for Orthognathic surgery?”

Safety and Minimal Invasiveness, Predictability

Efficiency, Patient-Oriented

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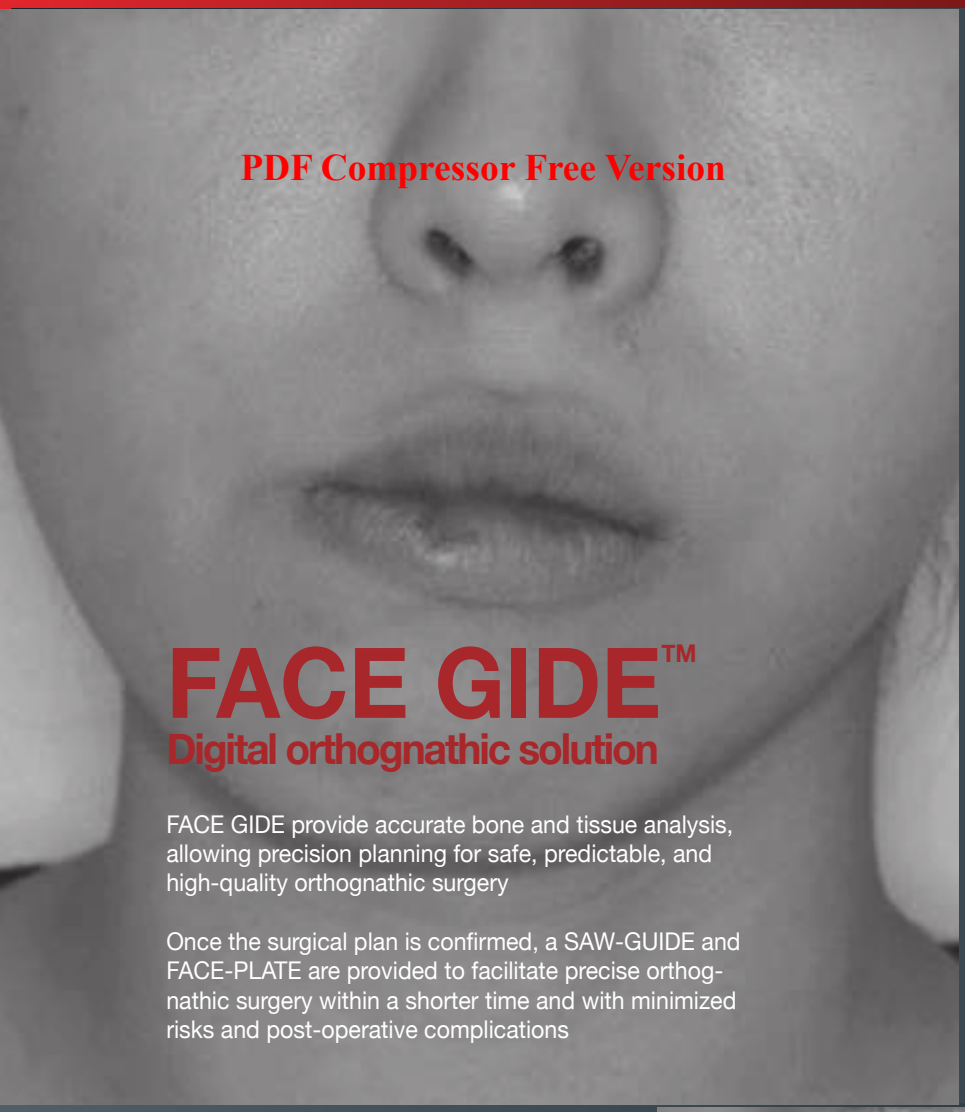
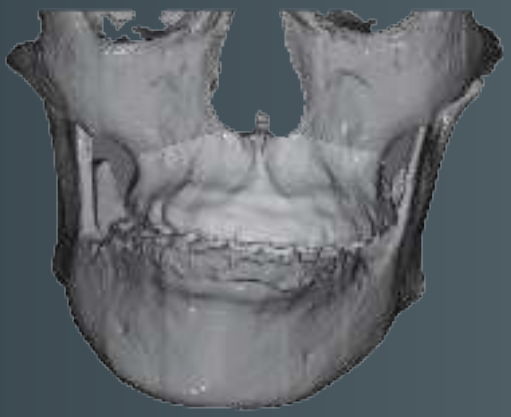
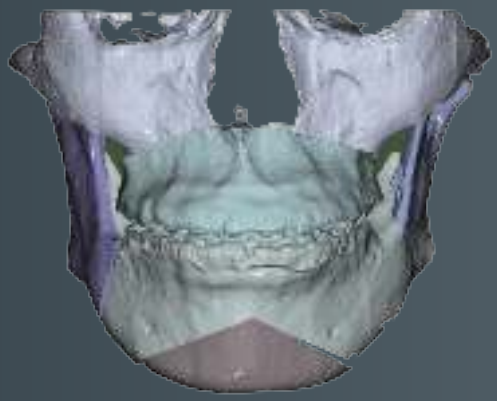




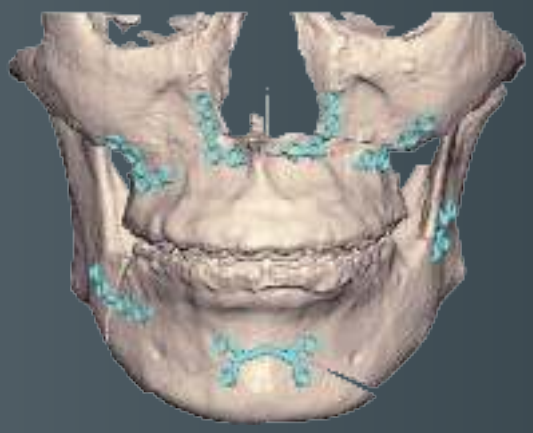


FACE GIDE™

Digital orthognathic solution

FACE GIDE provide accurate bone and tissue analysis, allowing precision planning for safe, predictable, and high-quality orthognathic surgery

Once the surgical plan is confirmed, a SAW-GUIDE and FACE-PLATE are provided to facilitate precise orthognathic surgery within a shorter time and with minimized risks and post-operative complications



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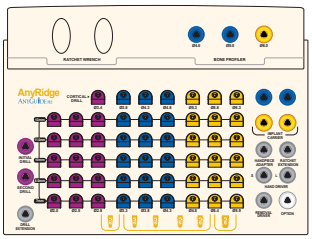
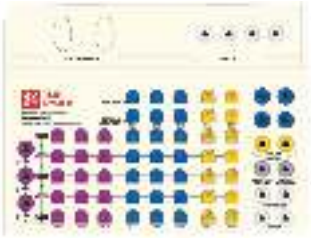
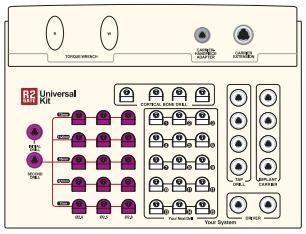
R2GATE Surgical KIT

R2GATE® Full Surgical KIT

PDF Compression Free Version

I. R2GATE Full Surgical Kit for AnyRidge System

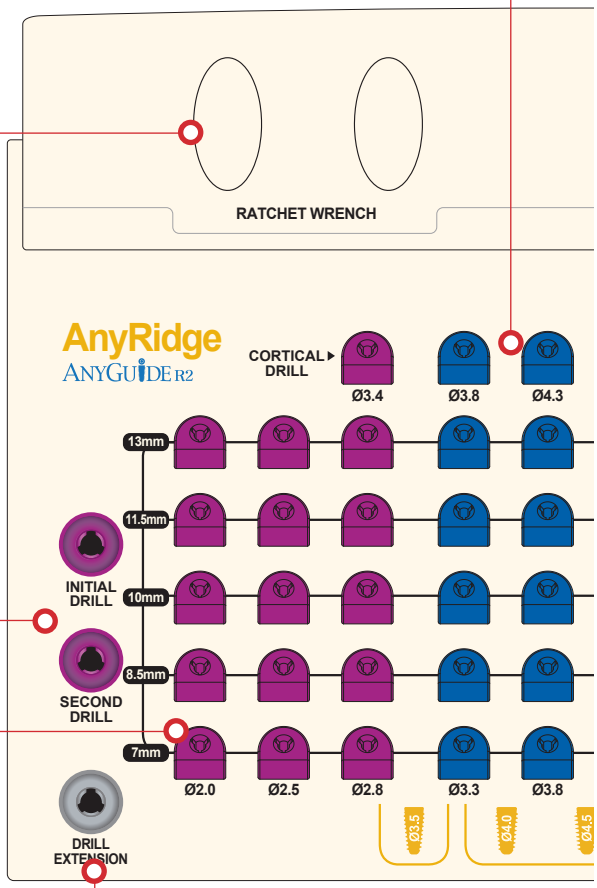
- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Ref.C

KAGIN3000

Cortical Bone Drill

In type I or II bone, crestal bone is partly reduced to lower the pressure against the fixture during placement.



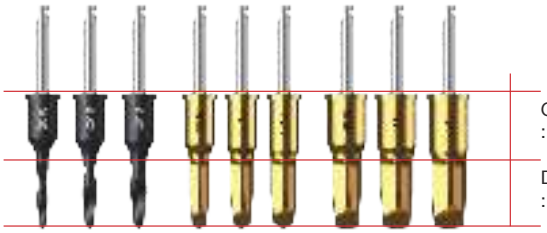
Initial Drill

Initial Drill | Second Drill

Drilling to make the initial drill path

Guide Stop Drill

Drill diameter : Ø2.0 ~ Ø5.9
Drill Length : 7.0 ~ 13.0mm



Guide length : 13.5mm

Drilling length : 7.0 ~ 13.0mm

Drill Extension

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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Bone Profiler

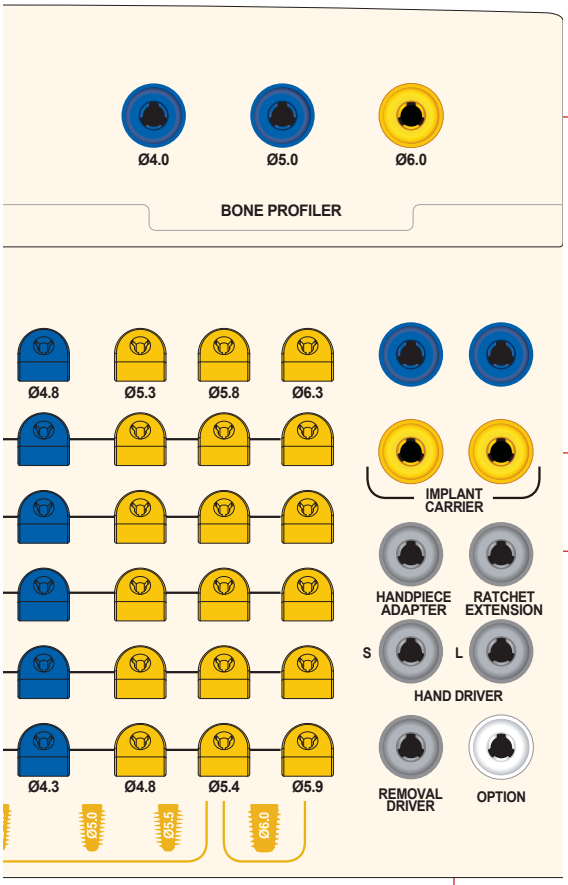
This is used to minimize the interference of the crestal bone when connecting ZrGEN Abutment, [Used before placing the fixture / Recommended RPM 600 ~1000]

Implant Carrier

: Handpiece type
: Ratchet type

▶ R – AnyRidge Regular
(ø3.5 ~ø4.5)

▶ W – AnyRidge Wide
(ø5.0 ~ ø6.0)



Hand Driver

: 1.2 hex driver (Short)
: 1.2 hex driver (Long)
: Abutment Remover Driver

Carrier-Handpiece Adapter

Carrier Extension

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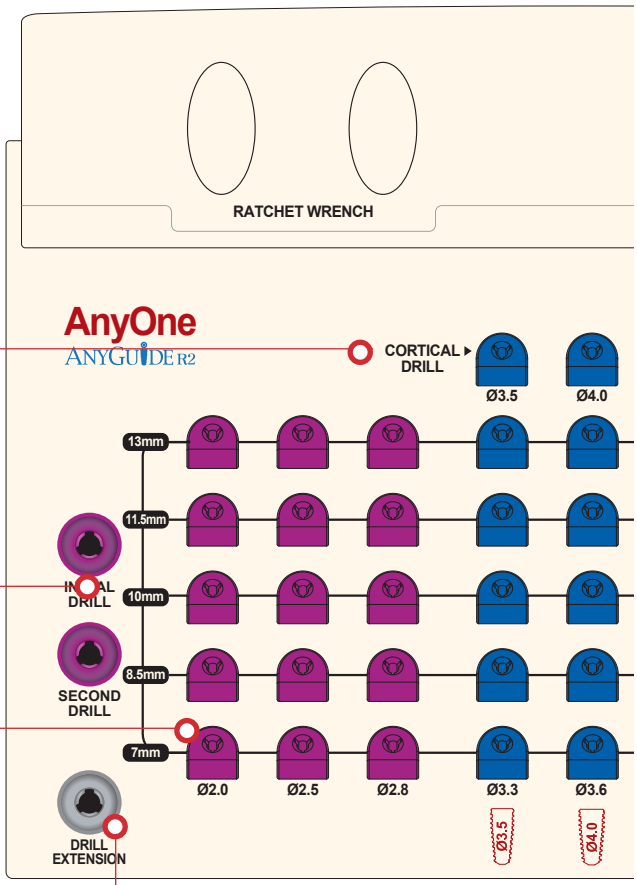
II. R2GATE Full Surgical Kit for AnyOne System

- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Ref.C
KAGIN3001

Cortical Bone Drill

In type I or II bone, crestal bone is partly reduced to lower the pressure against the fixture during placement.



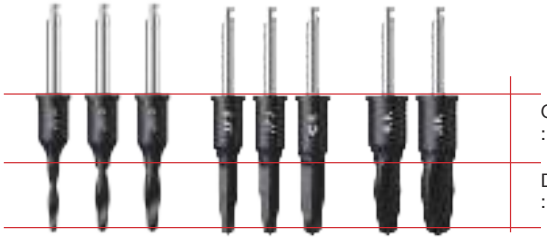
Initial Drill

Initial Drill | Second Drill

Drilling to make the initial drill path

Guide Stop Drill

Drill diameter : Ø2.0 ~Ø 5.9
Drill Length : 7.0 ~ 13.0mm



Guide length
: 13.5mm

Drilling length
: 7.0 ~ 13.0mm

Drill Extension

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

PDF Compressor Free Version

Bone Profiler

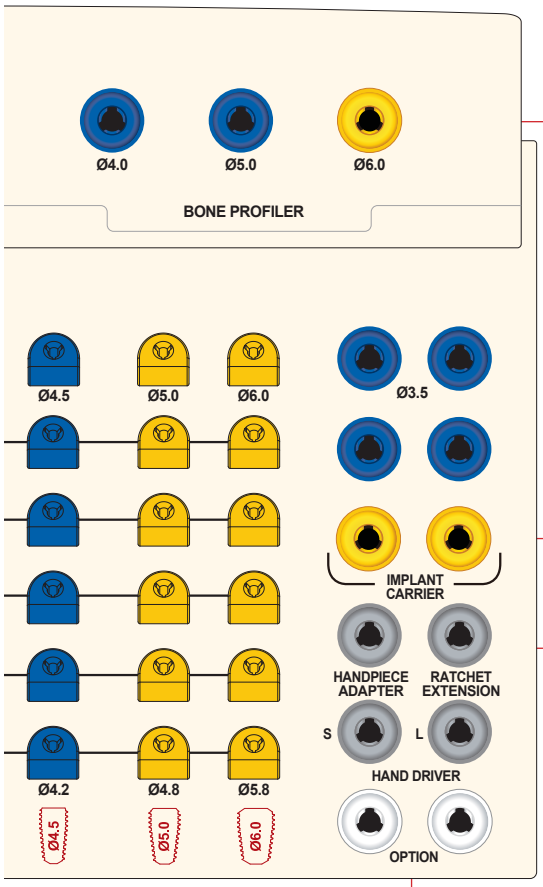
This is used to minimize the interference of the crestal bone when connecting ZrGEN Abutment. [Used before placing the fixture / Recommended RPM 600 ~1000]

Implant Carrier

: Handpiece type
: Ratchet type

▶ R – AnyOne Regular
(ø3.5 ~ø4.5)

▶ W – AnyOne Wide
(ø5.0 ~ ø6.0)



Hand Driver : 1.2 hex driver (Short/Long)

Carrier-Handpiece Adapter

Carrier Extension

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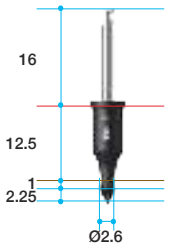
Components for R2GATE Full Surgical Kit (Continued)

- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Initial Drill

- Use the initial drill in order to mark the drilling position on the bone. Start drilling slowly, when drill guide part is fully contacted with drilling core of R2GATE Guide™.
- Recommended drilling speed range is 300 ~ 800 RPM with copious irrigation.

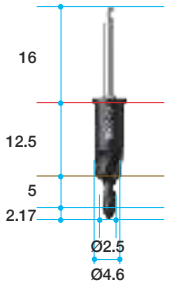
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.6	Ø5.0	1.0	R2ID2601



Second Drill

- This unique step-drill(from Ø2.0 to Ø4.6) is used to flare out the upper cortical bone of the osseotomy.
- It helps not only the rest drilling procedure but abut- ment connection. In case of hard bone, if the 2nd drilling will be disturbed by thick cortical bone. Stop the drilling and try it after final drilling procedure.

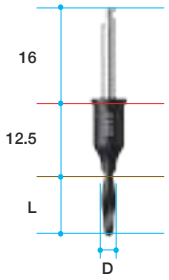
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.5	Ø5.0	5.0	R2SD2505



Stopper Drill

- Universal drills consist of Ø2.0, Ø.2.5, Ø2.8 diam- eter to enlarge the osteotomy gradually.
- The length of drill are designed as 7.0, 8.5, 10, 11.5,13mm for most common length of implant system.
- Recommended drilling speed range is 500 ~ 800 RPM with copious irrigation.

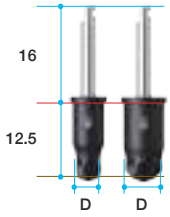
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.0	Ø5.0	6.5	AGSD2007
		8.0	AGSD2008
		9.5	AGSD2010
		11.0	AGSD2011
		12.5	AGSD2013
Ø2.5		6.5	AGSD2507
		8.0	AGSD2508
		9.5	AGSD2510
		11.0	AGSD2511
		12.5	AGSD2513
Ø2.8		6.5	AGSD2807
		8.0	AGSD2808
		9.5	AGSD2810
		11.0	AGSD2811
		12.5	AGSD2813



Bone Profiler

- Recommended drilling speed is 300 ~ 800 RPM.

Diameter	Guide Diameter	Ref.C
Ø4.0	Ø5.0	AGBP40
Ø5.0		AGBP50
Ø6.0	Ø6.5	AGBP60



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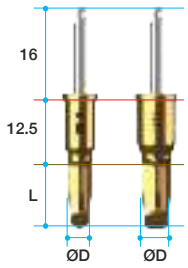
Stopper Drill[AR]

- Recommended drilling speed is 300 ~ 800 RPM.

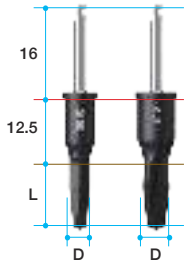


Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.3	Ø5.0	6.5	ARSD3307
		8.0	ARSD3308
		9.5	ARSD3310
		11.0	ARSD3311
		12.5	ARSD3313
Ø3.8		6.5	ARSD3807
		8.0	ARSD3808
		9.5	ARSD3810
		11.0	ARSD3811
		12.5	ARSD3813
Ø4.3		6.5	ARSD4307
		8.0	ARSD4308
		9.5	ARSD4310
		11.0	ARSD4311
		12.5	ARSD4313

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø4.8	Ø6.5	6.5	ARSD4807
		8.0	ARSD4808
		9.5	ARSD4810
		11.0	ARSD4811
		12.5	ARSD4813
Ø5.4		6.5	ARSD5407
		8.0	ARSD5408
		9.5	ARSD5410
		11.0	ARSD5411
		12.5	ARSD5413
Ø5.9		6.5	ARSD5908
		8.0	ARSD5907
		9.5	ARSD5910
		11.0	ARSD5911
		12.5	ARSD5913

Stopper Drill[AO]

- Recommended drilling speed is 300 ~ 800 RPM.



Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.3	Ø5.0	7.0	AOSD3307
		8.0	AOSD3308
		9.5.0	AOSD3310
		11.0	AOSD3311
		12.5	AOSD3313
Ø3.6		7.0	AOSD3607
		8.0	AOSD3608
		9.5	AOSD3610
		11.0	AOSD3611
		12.5	AOSD3613
Ø4.2		7.0	AOSD4207
		8.0	AOSD4208
		9.5	AOSD4210
		11.0	AOSD4211
		12.5	AOSD4213

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø4.8	Ø6.5	7.0	AOSD4807
		8.0	AOSD4808
		9.5	AOSD4810
		11.0	AOSD4811
		12.5	AOSD4813
Ø5.8		7.0	AOSD5807
		8.0	AOSD5808
		9.5	AOSD5810
		11.0	AOSD5811
		12.5	AOSD5813

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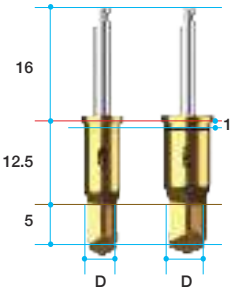
Components for R2GATE Full Surgical Kit (Continued)

Cortical Bone Drill[AR]

- Recommended drilling speed : 300 ~ 800 RPM

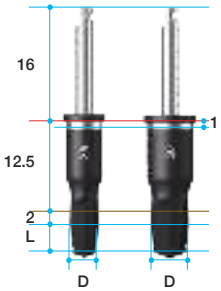
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.4	Ø5.0	5.0	R2CD3405
Ø3.8			R2CD3805
Ø4.3			R2CD4305
Ø4.8			R2CD4805
Ø5.3	Ø6.5		R2CD5305
Ø5.8			R2CD5805
Ø6.3			R2CD6305



Cortical Bone Drill[AO]

- Recommended drilling speed : 300 ~ 800 RPM

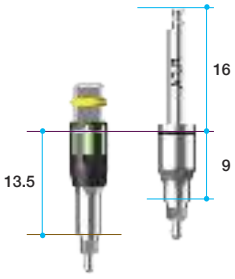
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.9	Ø5.0	6.0	AODD39
Ø4.3			AODD43
Ø4.8			AODD48
Ø5.3	Ø6.5	5.5	AODD53
Ø6.3			AODD63



Implant Carrier[AR]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlargement of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

Connection	Guide Diameter	Type	Ref.C
2.3 Hex	Ø5.0	Ratchet	ICRH2324
	Ø6.5		ICWH2324
	Ø5.0	Handpiece	ICRH2324H
	Ø6.5		ICWH2324H



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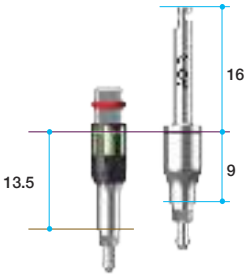
Implant Carrier[AO]

- Two different implant carriers for regular stent since Ø3.5 fixture has different abut- ment connection
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

Connection	Guide Diameter	Type	Ref.C
2.3 Hex	Ø5.0	Ratchet	ICRH2518
			ICRH2523
	Ø6.5		ICWH2523
	Ø5.0	Handpiece	ICRH2518H
			ICRH2523H
	Ø6.5		ICWH2523H



Carrier-Handpiece Adapter

- Useful to use the handpiece for the implant placement following initial delivery of a fixture with a fixture carrier.

Diameter	Ref.C
5.0	AGHA

Carrier Extension

- To extend the length of implant carrier.

Diameter	Ref.C
4.0	MRE400S

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Drill Extension

- No more than 35Ncm torque : May distorted when excessive force is applied.
- Extends drills & other handpiece instruments.

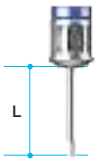
Ref.C
MDE150

Hand Driver (1.2 Hex)

- Used for all Cover Screws, Abutment Screws, and Healing Abutments.
- Available in 4 lengths for added convenience.
- Hand Driver can be directly inserted into the Torque Wrench without using an adaptor.
- Hex tip can with stand 35-45Ncm of torque without distorting.

Length(mm)	Type	Ref.C
5.0	*Ultra-short	TCMHDU1200
10	Short	TCMHDS1200
15	Long	TCMHDL1200
20	*Extra-long	TCMHDE1200

(*) Separate sales item.



Ratchet Wrench

- Used to exert more force than the Handpiece.
- No bearing system : No breakage and no corrosion problems.
- Arrow laser marking indicates direction of force.

Ref.C
MRW040S

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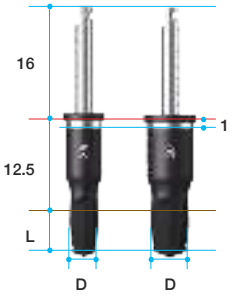
System Options for the AnyOne External

Cortical Bone Drill

- Recommended drilling speed: 300~800 rpm

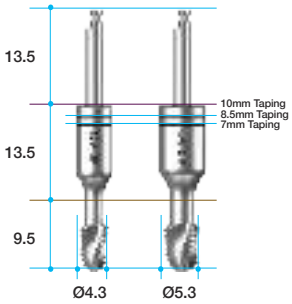
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.9	Ø5.0	6.0	AODD39
Ø4.3			AODD43
Ø4.8			AODD48
Ø5.3	Ø6.5	5.5	AODD53
Ø6.3			AODD63



Tap Drill

- The purpose of tab drills in the R2GATE universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlargement of osteotomy.
- Recommended insertion torque and speed is 45 ~50Ncm, under 40 RPM.

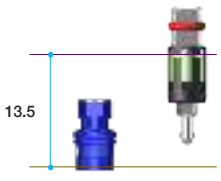
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.9	Ø5.0	9.5	R2TD35AO
Ø4.3			R2TD40AO
Ø4.8			R2TD45AO
Ø5.3	Ø6.5		R2TD50AO
Ø6.3			R2TD60AO



Implant Carrier

- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor
- Recommended insertion torque is 45~50Ncm.

Diameter	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRAOE
	Ø6.5		ICWAOE



R2GATE® Standard KIT

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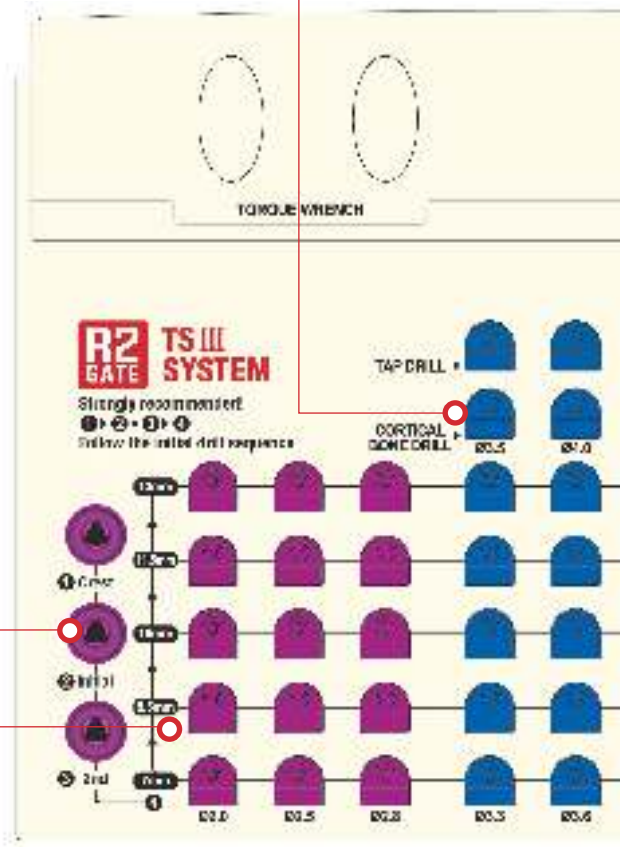
I. R2GATE Standard Kit for TSIII System (Osstem co.)

- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Ref.C
KAGTS3000

Cortical Bone Drill

In type I or II bone, cortical bone is partly reduced to lower the pressure against the fixture during placement.



Initial Drill

Initial Drill | Second Drill

Drilling to make the initial drill path

Guide Stop Drill

Drill diameter : Ø2.0 ~Ø 5.9
Drill Length : 7.0 ~ 13.0mm

Guide length : 13.5mm

Drilling length : 7.0 ~ 13.0mm

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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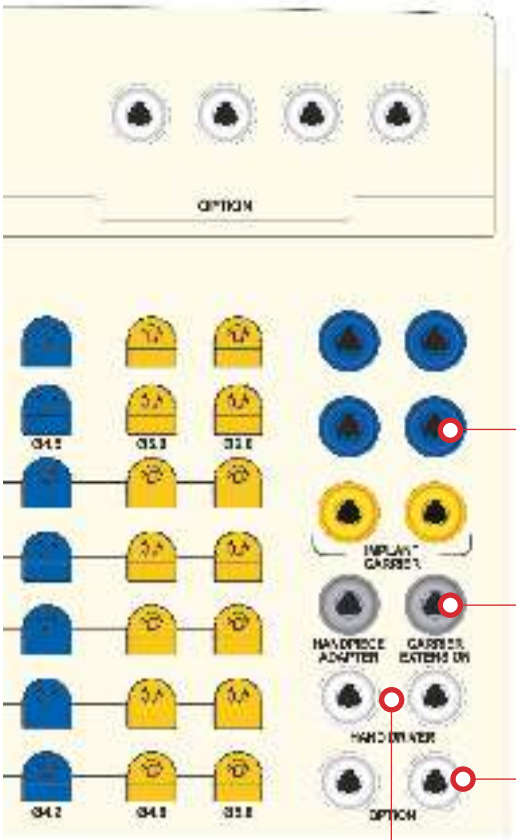
Implant Carrier

: Handpiece type
: Ratchet type

▶ R3.5 – Osstem Mini

▶ R3.5 – Osstem Regular



Drill Extension

Hand Driver : 1.2 hex driver (Short/Long)

Carrier-Handpiece Adapter

Carrier Extension

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II. R2GATE Standard Kit for SuperLine System (Dentium co.)

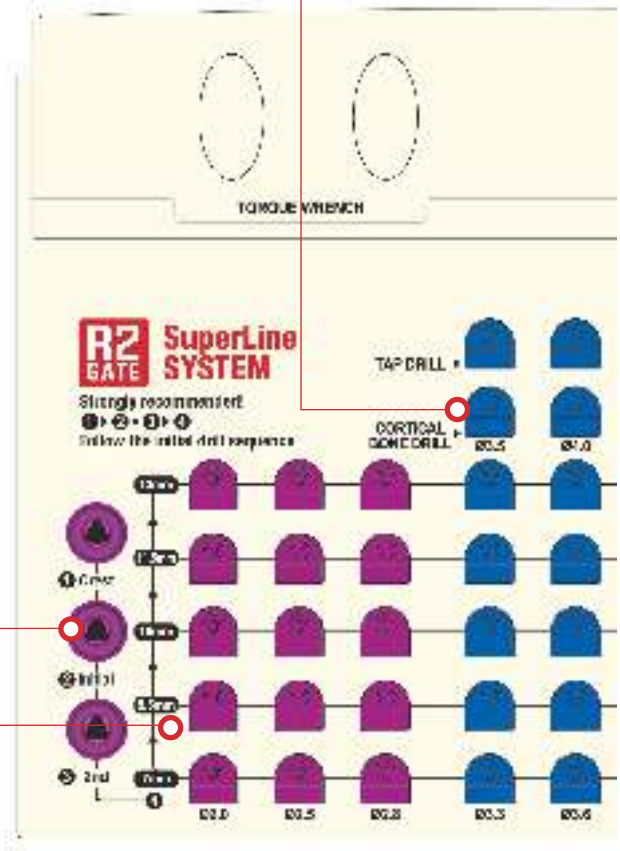
- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Ref.C

KAGSL3000

Cortical Bone Drill

In type I or II bone, crestal bone is partly reduced to lower the pressure against the fixture during placement.



Initial Drill

Initial Drill | Second Drill

Drilling to make the initial drill path

Guide Stop Drill

Drill diameter : Ø2.0 ~Ø 5.9
Drill Length : 7.0 ~ 13.0mm

Guide length
: 13.5mm

Drilling length
: 7.0 ~ 13.0mm

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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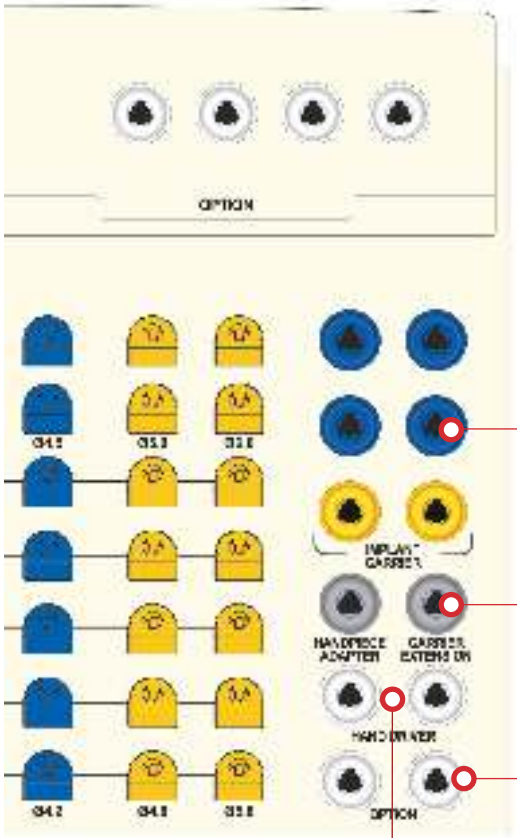
Implant Carrier

: Ratchet type

▶ R – Dentium Super Line
(ø3.7 ~ ø4.5)

▶ W – Dentium Super Line Wide
(ø5.0 ~ ø6.0



Drill Extension

Hand Driver : 1.2 hex driver (Short/Long)

Carrier-Handpiece Adapter

Carrier Extension

PDF Compressor Free Version

III. R2GATE Standard Kit for UFII System (DIO co.)

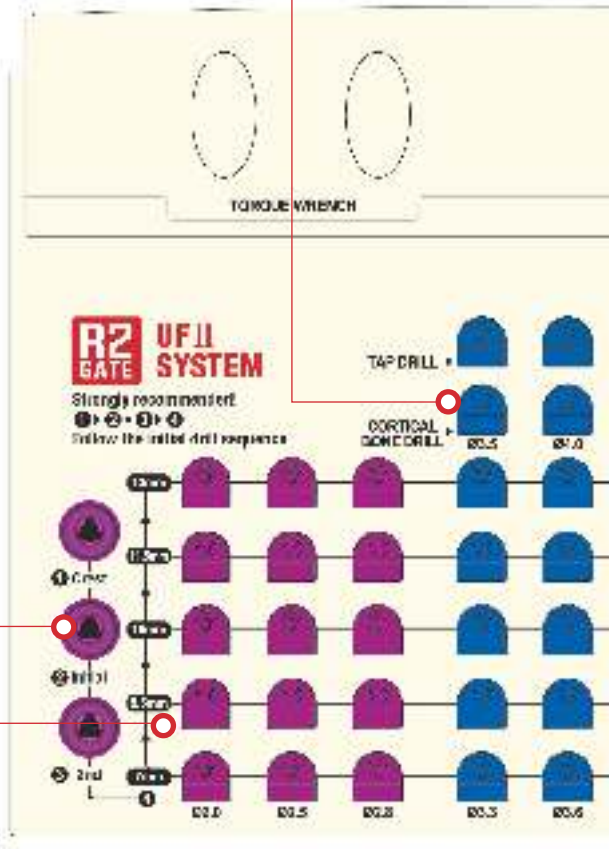
- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Cortical Bone Drill

In type I or II bone, crestal bone is partly reduced to lower the pressure against the fixture during placement.

Ref.C

KAGUF3000



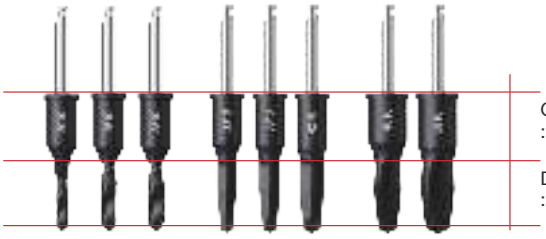
Initial Drill

Initial Drill | Second Drill

Drilling to make the initial drill path

Guide Stop Drill

Drill diameter : Ø2.0 ~Ø 5.9
Drill Length : 7.0 ~ 13.0mm



Guide length
: 13.5mm

Drilling length
: 7.0 ~ 13.0mm

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

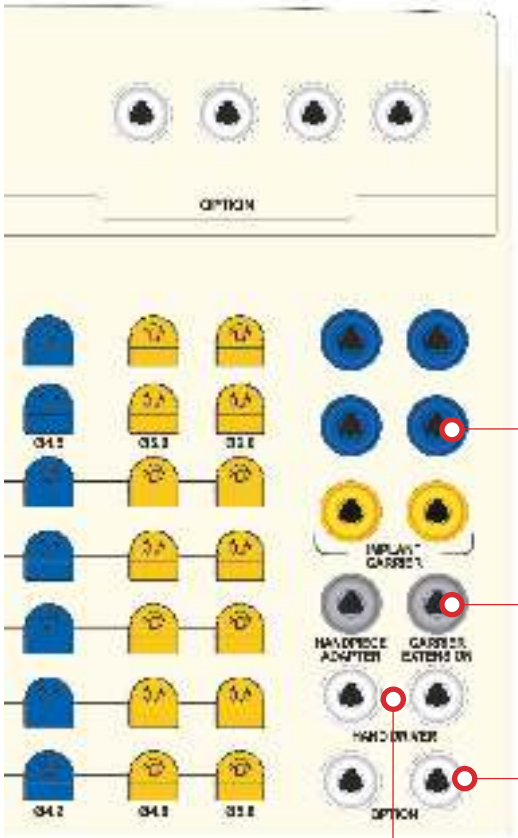
PDF Compressor Free Version

Implant Carrier

: Ratchet type

▶ R –DIO UF II Regular
(ø3.7 ~ ø4.5)

▶ W – DIO UF II WIDE
(ø5.0 ~ ø5.5)



Drill Extension

Hand Driver : 1.2 hex driver (Short/Long)

Carrier-Handpiece Adapter

Carrier Extension

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IV. R2GATE Standard Kit for ISII System (Neo Biotech co.)

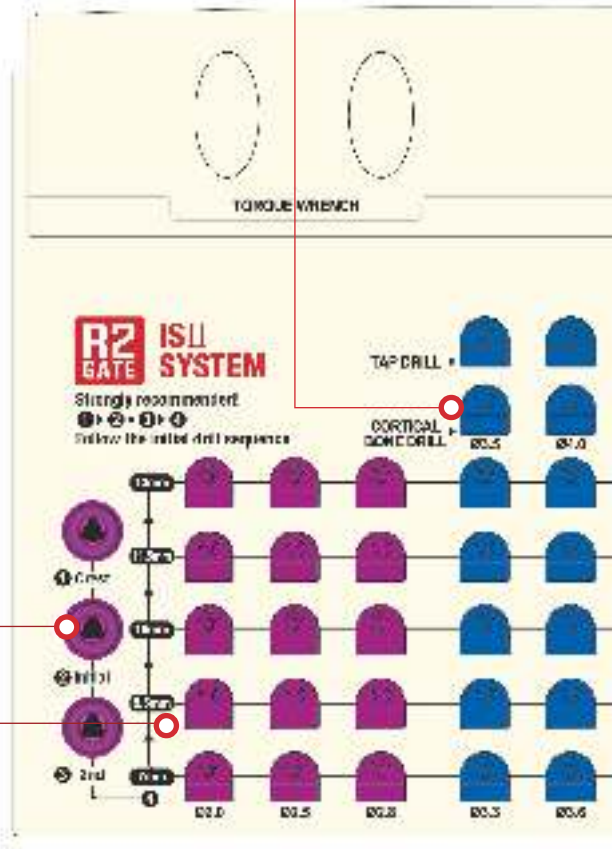
- If you only use a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Ref.C

KAGIS3000

Cortical Bone Drill

In type I or II bone, crestal bone is partly reduced to lower the pressure against the fixture during placement.



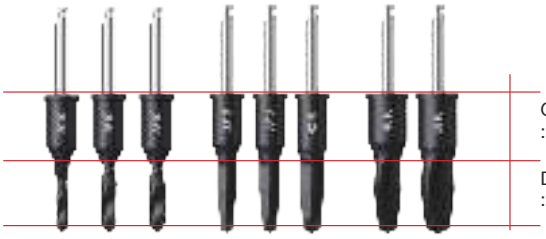
Initial Drill

Initial Drill | Second Drill

Drilling to make the initial drill path

Guide Stop Drill

Drill diameter : Ø2.0 ~Ø 5.9
Drill Length : 7.0 ~ 13.0mm



Guide length
: 13.5mm

Drilling length
: 7.0 ~ 13.0mm

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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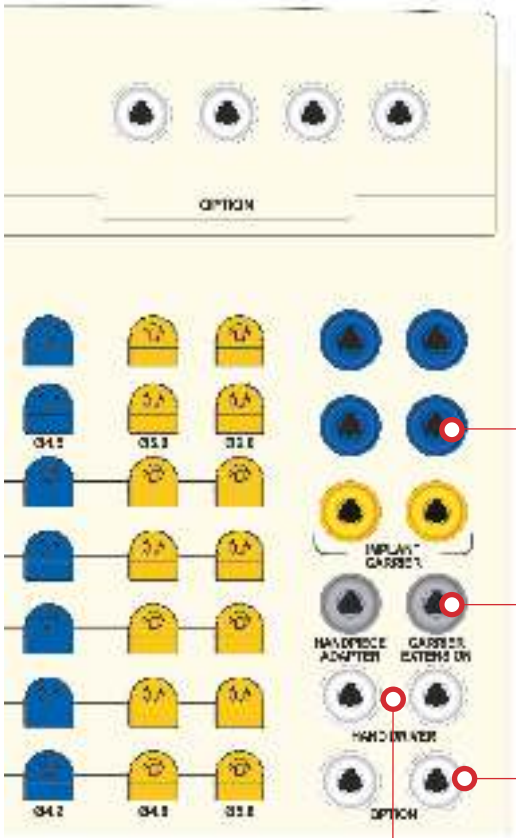
Implant Carrier

: Ratchet type

▶ R – NEO IS II Regular
(ø3.5 ~ ø4.5)

▶ W – NEO IS II WIDE
(ø5.0)



Drill Extension

Hand Driver : 1.2 hex driver (Short/Long)

Carrier-Handpiece Adapter

Carrier Extension

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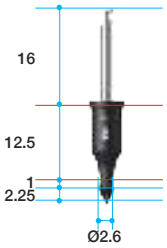
Components for R2GATE Standard Kit (Continued)

- If you use only a specific system, corresponding system's full kit can be provided.
- R2GATE full surgical kit is composed with all of drills and components that are needed for the Digital Guided Surgery which uses R2GATE Guide™ after R2GATE™ diagnosis. It helps to actualize minimally invasive surgery and makes exact clinical result as the diagnosis.

Initial Drill

- Use the initial drill in order to mark the drilling position on the bone. Start drilling slowly, when drill guide part is fully contacted with drilling core of R2GATE Guide™.
- Recommended drilling speed range is 300 ~ 800 RPM with copious irrigation.

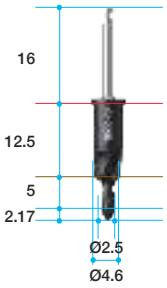
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.6	Ø5.0	1.0	R2ID2601



Second Drill

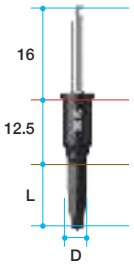
- This unique step-drill(from Ø2.0 to Ø4.6) is used to flare out the upper cortical bone of the osseotomy.
- It helps not only the rest drilling procedure but abut- ment connection. In case of hard bone, if the 2nd drilling will be disturbed by thick cortical bone. Stop the drilling and try it after final drilling procedure.

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.5	Ø5.0	5.0	R2SD2505



Stopper Drill

- Universal drills consist of Ø2.0, Ø.2.5, Ø2.8 diam- eter to enlarge the osteotomy gradually.
- The length of drill are designed as 7.0, 8.5, 10, 11.5,13mm for most common length of implant system.
- Recommended drilling speed range is 500 ~ 800 RPM with copious irrigation.



Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.0	Ø5.0	6.5	R2SD2007
		8.0	R2SD2008
		9.5	R2SD2010
		11.0	R2SD2011
		12.5	R2SD2013
Ø2.5		6.5	R2SD2507
		8.0	R2SD2508
		9.5	R2SD2510
		11.0	R2SD2511
		12.5	R2SD2513
Ø2.8		6.5	R2SD2807
		8.0	R2SD2808
		9.5	R2SD2810
		11.0	R2SD2811
		12.5	R2SD2813
Ø3.3	Ø5.0	7.0	AOSD3307
		8.0	AOSD3308
		9.5.0	AOSD3310
		11.0	AOSD3311
		12.5	AOSD3313
Ø3.6		7.0	AOSD3607
		8.0	AOSD3608
		9.5	AOSD3610
		11.0	AOSD3611
		12.5	AOSD3613
Ø4.2		7.0	AOSD4207
		8.0	AOSD4208
		9.5	AOSD4210
		11.0	AOSD4211
		12.5	AOSD4213

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø4.8	Ø6.5	7.0	AOSD4807
		8.0	AOSD4808
		9.5	AOSD4810
		11.0	AOSD4811
		12.5	AOSD4813
Ø5.8		7.0	AOSD5807
		8.0	AOSD5808
		9.5	AOSD5810
		11.0	AOSD5811
		12.5	AOSD5813

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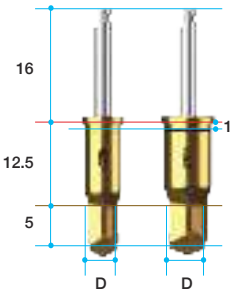
Cortical Bone Drill

- Recommended drilling speed : 300 ~ 800 RPM

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.4	Ø5.0	5.0	R2CD3405
Ø3.8			R2CD3805
Ø4.3			R2CD4305
Ø4.8			R2CD4805
Ø5.3	Ø6.5		R2CD5305
Ø5.8			R2CD5805
Ø6.3			R2CD6305



Carrier-Handpiece Adapter

- Useful to use the handpiece for the implant placement following initial delivery of a fixture with a fixture carrier.

Diameter	Ref.C
5.0	AGHA

Torque Wrench & Adapter

- Torque Wrench has torque options from 15Ncm to 45Ncm and is used for the placement of an implant and final tightening of the Abutment Screw.

Type	Ref.C
Torque Wrench	TW70
Torque Wrench Adapter(Ratchet)	TTAR100

Ratchet

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Components for R2GATE Standard Kit

Carrier Extension

- To extend the length of implant carrier.

Diameter	Ref.C
4.0	MRE400S

Drill Extension

- No more than 35Ncm torque : May distorted when excessive force is applied.
- Extends drills & other handpiece instruments.

Ref.C
MDE150

Hand Driver (1.2 Hex)

- Used for all Cover Screws, Abutment Screws, and Healing Abutments.
- Available in 4 lengths for added convenience.
- Hand Driver can be directly inserted into the Torque Wrench without using an adaptor.
- Hex tip can with stand 35-45Ncm of torque without distorting.

Length(mm)	Type	Ref.C
5.0	*Ultra-short	TCMHDU1200
10	Short	TCMHDS1200
15	Long	TCMHDL1200
20	*Extra-long	TCMHDE1200

(*) Separate sales item.

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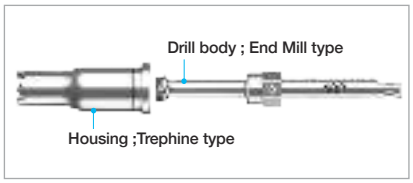
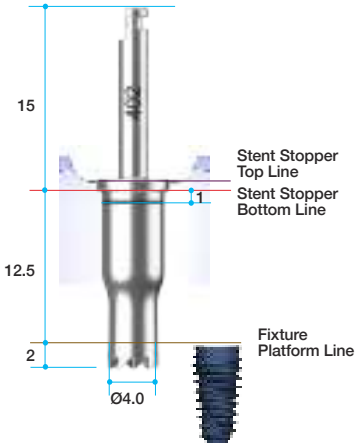
Narrow Crest Drill

- It is used when fixture will be slantly implanted or to flat the sloped bone surface of narrow ridge to prevent any slips during drilling.
- Design as 2-piece: drill body and housing
- Can be disassemble. Easy to clean and remove bone chips
- Can harvest autogenous bone if it is used after soft tissue



Diameter	Guide Diameter	Length(mm)	Ref.C
Ø4.0	Ø5.0	15.5(12.5/2)	NCD402



Set the site by drilling counter-clockwisely with low speed (≤100rpm)

Start drilling clockwisely (400~600rpm)

Bone is now flat. Perform drilling with proper drilling sequence.

Disassemble body and housing after drilling to remove bone chip. Clean and sterilize after every usage.

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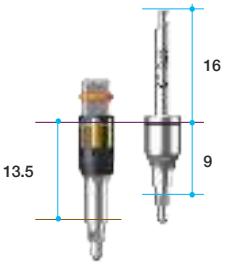
Components for R2 TSIII Standard Kit

Implant Carrier

- Two different implant carriers for regular guide since Ø3.5 fixture has different abutment connection- ICRH2127 : Ø3.5 fixture- ICRH2523O : Ø4.0, Ø4.5 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

Connection	Guide Diameter	Type	Ref.C
2.1 Hex	Ø5.0	Ratchet	ICRH2127
2.5 Hex			ICRH2523O
2.1 Hex		Handpiece	ICRH2127H
2.5 Hex			ICRH2523HO

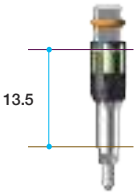


Components for R2 Super Line Standard Kit

Implant Carrier

- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

Connection	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRH2523SL
	Ø6.5		ICWH2523SL



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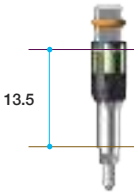
Components for R2 UFII Standard Kit

Implant Carrier

- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

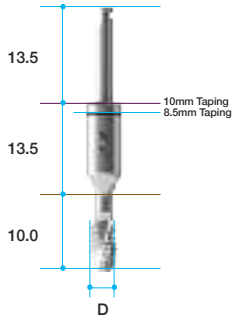
Connection	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRH2523UF
	Ø6.5		ICWH2523UF



Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
UF	Ø3.8	Ø5.0	10	R2TD38UF
	Ø4.0			R2TD40UF
	Ø4.5			R2TD45UF
	Ø5.0	Ø6.5		R2TD50UF
	Ø5.5			R2TD55UF

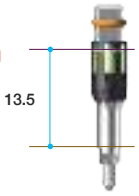


Components for R2 ISII Standard Kit

Implant Carrier

- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

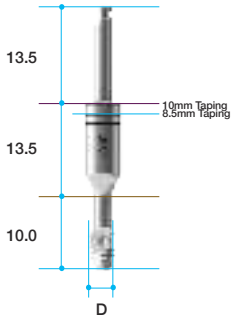
Connection	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRH2518IS
			ICRH2523IS
	Ø6.5		ICWH2523IS



Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
IS	Ø3.5	Ø5.0	10	R2TD35IS
	Ø4.0			R2TD40IS
	Ø4.5			R2TD45IS
	Ø5.0	Ø6.5		R2TD50IS



R2GATE Universal Kit

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Maximize the cost- effectiveness & efficiency.

Ref.C
KAGUN3000

When you want to do R2GATE surgery with R2GATE Guide™, Please inform us your favorite implant system

Make your own R2GATE Surgical Kit with your favorite implant system. R2GATE Universal kit consists of basic drilling set which can be used for any implant system. You can add system options as “Implant Carrier”, “Cortical Bone Drill”, “Tap Drill” to your favorite implant system. The specification of final drills will be decided with treatment planning and delivered to you with R2GATE Guide™ will be from the R2GATE Design Center.

Universal Kit

Consisted of basic drilling set which can be used for any implant system

Customized instrument

for various implant system

AryRidge / AryRidge Octa 1 / AnyOne MiNi / ST BoneLevel(Straumann) / Nobel Active(Nobel Biocare) / SuperLine(Dentium) / TSIII(Osstem)

(Available system can be varied by country due to registration process)

Intermediate & final drill

will be delivered with R2GATE Guide™

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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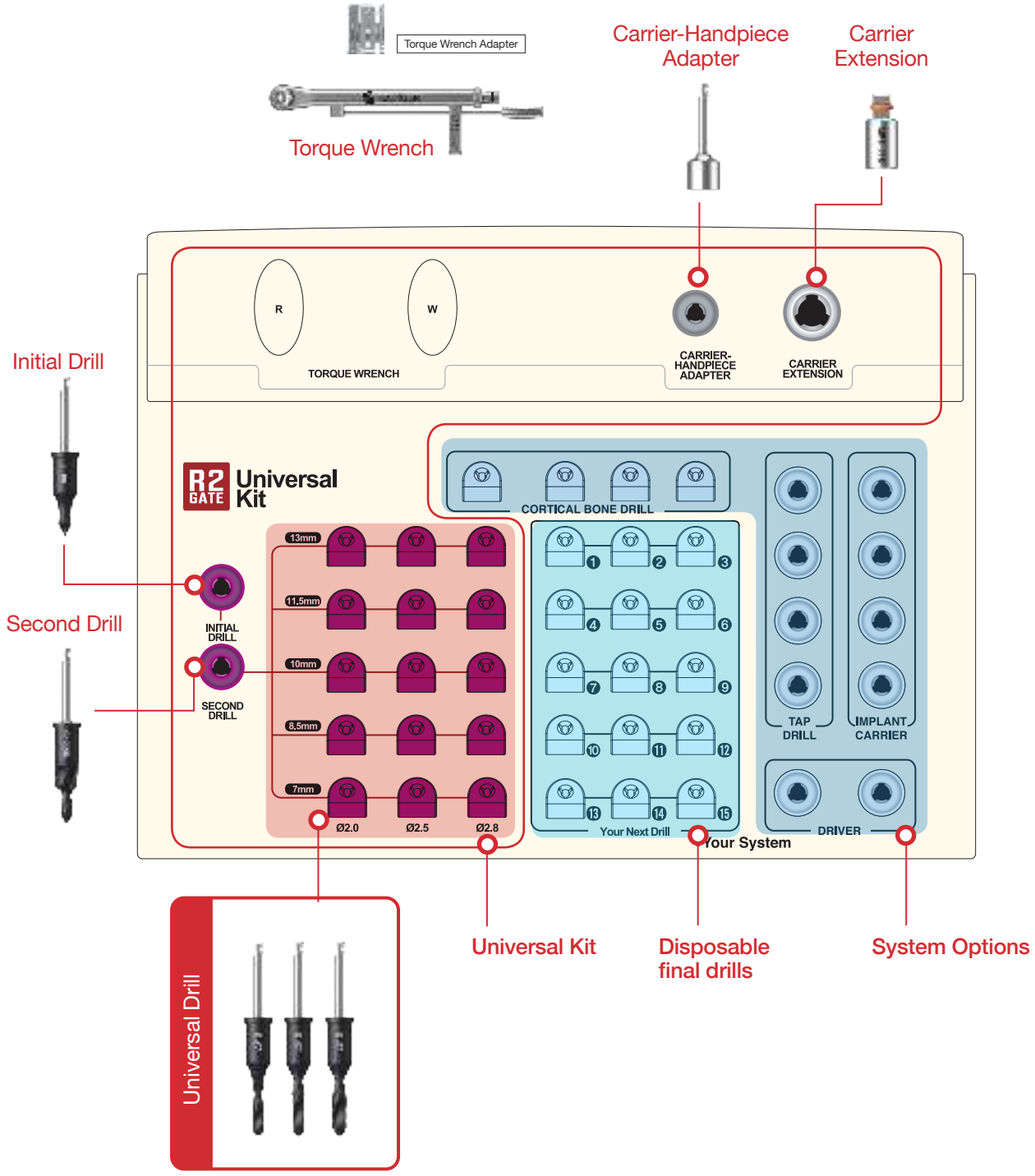
R2GATE Universal Kit



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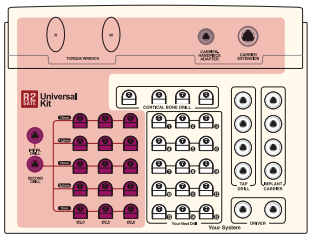
Drills & Components for R2GATE Universal Kit

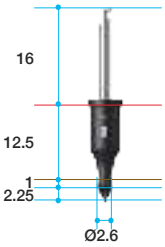
Basic drilling set for any implant system. It consists of initial drill, 2nd drill, universal drills and essential tools.



Initial Drill

- Use the initial drill in order to mark the drilling position on the bone. Start drilling slowly, when drill guide part is fully contacted with drilling core of R2GATE Guide™.
- Recommended drilling speed range is 300 ~ 800 RPM with copious irrigation.

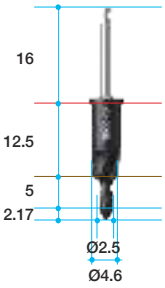
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.6	Ø5.0	1.0	R2ID2601



Second Drill

- This unique step-drill(from ⌀2.0 to ⌀4.6) is used to flare out the upper cortical bone of the osseotomy.
- It helps not only the rest drilling procedure but abutment connection. In case of hard bone, if the 2nd drilling will be disturbed by thick cortical bone. Stop the drilling and try it after final drilling procedure.

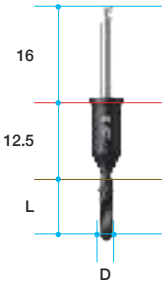
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.5	Ø5.0	5.0	R2SD2505



Stopper Drill

- Universal drills consist of ⌀2.0, ⌀.2.5, ⌀2.8 diameter to enlarge the osteotomy gradually.
- The length of drill are designed as 7.0, 8.5, 10, 11.5,13mm for most common length of implant system.
- Recommended drilling speed range is 500 ~ 800 RPM with copious irrigation.

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø2.0	Ø5.0	6.5	R2SD2007
		8.0	R2SD2008
		9.5	R2SD2010
		11.0	R2SD2011
		12.5	R2SD2013
Ø2.5		6.5	R2SD2507
		8.0	R2SD2508
		9.5	R2SD2510
		11.0	R2SD2511
		12.5	R2SD2513
Ø2.8		6.5	R2SD2807
		8.0	R2SD2808
		9.5	R2SD2810
		11.0	R2SD2811
		12.5	R2SD2813



Carrier-Handpiece Adapter

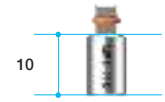
- Useful to use the handpiece for the implant placement following initial delivery of a fixture with a fixture carrier ratchet type.

Square	Ref.C
4.0	AGHA

Carrier Extension

- To extend the length of implant carrier.

Square	Ref.C
4.0	MRE400S



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Torque Wrench & Adapter

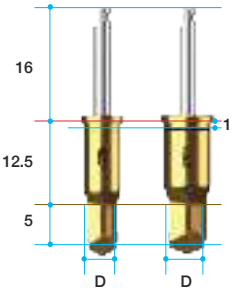
- Torque Wrench has torque options from 15Ncm to 45Ncm and is used for the placement of an implant and final tightening of the Abutment Screw.

Type	Ref.C
Torque Wrench	TW70
Torque Wrench Adapter(Ratchet)	TTAR100

Cortical Bone Drill[AR]

- Recommended drilling speed : 300 ~ 800 RPM

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.4	Ø5.0	5.0	R2CD3405
Ø3.8			R2CD3805
Ø4.3			R2CD4305
Ø4.8			R2CD4805
Ø5.3	Ø6.5		R2CD5305
Ø5.8			R2CD5805
Ø6.3			R2CD6305

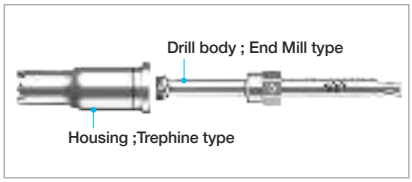


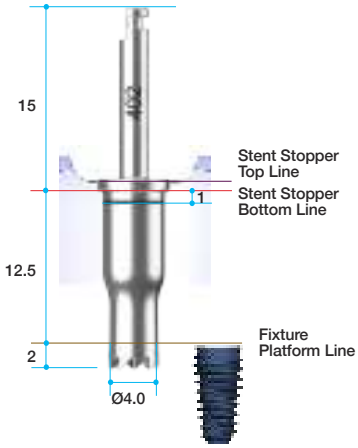
Optional Instrument

Narrow Crest Drill

- It is used when fixture will be slantly implanted or to flat the sloped bone surface of narrow ridge to prevent any slips during drilling.
- Design as 2-piece: drill body and housing
- Can be disassembled. Easy to clean and remove bone chips
- Can harvest autogenous bone if it is used after soft tissue

Diameter	Guide Diameter	Length(mm)	Ref.C
Ø4.0	Ø5.0	15.5(12.5/2)	NCD402





1 Set the site by drilling counter-clockwisely with low speed (≤100rpm)

2 Start drilling clockwisely (400~600rpm)

3 Bone is now flat. Perform drilling with proper drilling sequence.

4 Disassemble body and housing after drilling to remove bone chip. Clean and sterilize after every usage.

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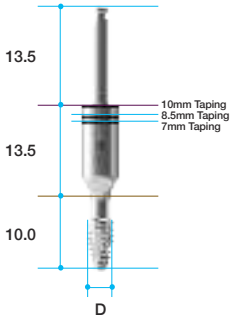
1. System Options for AnyRidge Octa 1

Tap Drills

- This drill is used to test the insertion before placing the fixture, as required by some implant systems
- To avoid any enlargement of osteotomy, select tab drill one size smaller
- Recommended insertion torque is 45-50Ncm at speed under 40RPM

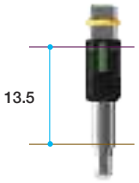
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.9	Ø5.0	9.5	R2TD33ARO
Ø4.0			R2TD37ARO
Ø4.4			R2TD41ARO
Ø4.7			R2TD44ARO
Ø5.0			R2TD48ARO



Implant Carrier

- Use to extract fixture from ampule, then insert fixture in osteotomy and turn clockwise 2 – 3 times manually
- Once engaged in the osteotomy, connect Handpiece Adaptor & use implant motor
- Recommended insertion torque is 45~50Ncm

Connection	Guide Diameter	Type	Ref.C
2.1 Octa	Ø5.0	Ratchet	ICRO2127
2.5 Octa			ICRO2530

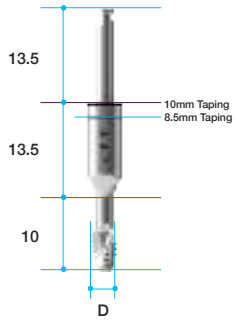


2. System Options for Straumann

Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture inser- tion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
BoneLevel	Ø3.3	Ø5.0	10	R2TD33BL
	Ø4.1			R2TD41BL
	Ø4.8			R2TD48BL
Bone Level Taperd	Ø3.3	Ø5.0		R2TD33BLT
	Ø4.1			R2TD41BLT
	Ø4.8			R2TD48BLT
Standard & Standard Plus	Ø3.3	Ø5.0		R2TD33GL
	Ø4.1			R2TD41GL
	Ø4.8			R2TD48GL
	Ø4.8	Ø6.5		R2TD48WGL
Taperde Effect	Ø3.3	Ø5.0		R2TD33TE
	Ø4.1			R2TD41TE
	Ø4.8			R2TD48TE



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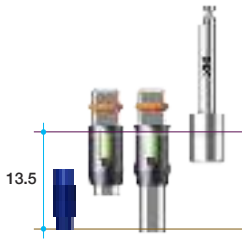
Implant Carrier[BL & BLT]

- Can be differentiated into two types of mount based on its surface treatment and etc.
  - ICRSBL1 : Loxim Mount
  - ICRSBL2 : Used if Loxim mount is fractured
  - ICRSBN : Normal Mount
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

System	Connection	Guide Diameter	Type	Ref.C
Bone Level, Bone Level Tapered	Loxim Mount	Ø5.0	Ratchet	ICRSBL1
				ICRSBL2
	Normal Mount			ICRSBN
	Normal Mount		Handpiece	ICRSBNH
	Loxim Mount			ICRSBLH



Implant Carrier [Optional]

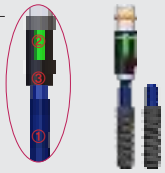
- Can be differentiated into two types of mount based on its surface treatment and etc.
- IC*O1** : Loxim Mount
- IC*O2** : Used if Loxim mount is fractured
- IC*ON** : Normal Mount
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

System	Connection	Guide Diameter	Type	Ref.C
Standard	Loxim Mount	Ø5.0	Ratchet	ICRO1S
				ICRO2S
	Norma Mount			ICRONS
	Loxim Mount	Ø6.5		ICWO1S
				ICWO2S
	Norma Mount			ICWONS
Standard Plus & Tapered Effect	Loxim Mount	Ø5.0		ICRO1SP
				ICRO2SP
	Norma Mount			ICRONSP
	Loxim Mount	Ø6.5		ICWO1SP
				ICWO2SP
	Norma Mount			ICWONSP

Cautions for Bone Level_Implant Carrier

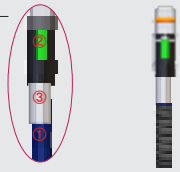
Loxim Mount

ICRSBL1



Implant carrier window ② or ③ has to be straight with undotted surface of Mount①.

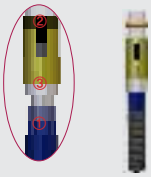
ICRSBL2



Implant carrier window ② or ③ has to be straight with undotted surface of Mount①.

Normal Mount

ICRSBN



Implant carrier window ② or ③ has to be straight with undotted surface of Mount①.

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3. System Options for Nobel Biocare

Implant Carrier [Optional]

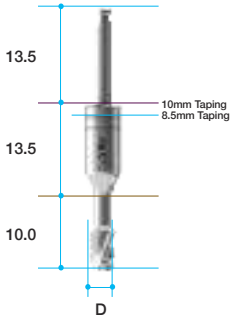
- Two different implant carriers for regular stent since Ø3.5 fixture has different abutment connection- ICRH2224 : Ø3.5 fixture- ICRH2624 : Ø4.1, Ø5.0 fixture - ICWH2624
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clockwise direc- tion 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

System	Connection	Guide Diameter	Type	Ref.C
Active & Conical Connection	2.2 Hex	Ø5.0	Ratchet	ICRH2224
	2.6 Hex			ICRH2624
	2.6 Hex	Ø6.5		ICWH2624
Replace Select Tapered & Straight	Trip 1	Ø5.0	Ratchet	ICRT35RT
	Trip 2			ICWT43RT
	Trip 3	Ø6.5		ICWT50RT

Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
Active	Ø3.5	Ø5.0	10	R2TD35NA
	Ø4.3			R2TD43NA
	Ø5.0			R2TD50NA
Conical connection	Ø3.5	Ø5.0		R2TD35CC
	Ø4.3			R2TD43CC
	Ø5.0	Ø6.5		R2TD50CC
Replace Select Straight	Ø3.5	Ø5.0		R2TD33BM
	Ø3.7			R2TD37BM
	Ø4.3			R2TD40BM
	Ø5.0	Ø6.5		R2TD50BM



4. System Options for Astra

Implant Carrier [Optional]

- Two different implant carriers for regular guide since Ø3.5 fixture has different abutment connection- ICRH2127OS : Ø3.0, Ø3.6,Ø4.2 fixture - ICWH2538OS : Ø4.3, Ø5.4 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clockwise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

System	Connection	Guide Diameter	Type	Ref.C
OsseoSpeed TX	2.1 Hex	Ø5.0	Ratchet	ICRH2127OS
	2.5 Hex	Ø6.5		ICWH2538OS

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5. System Options for Biomet 3i

Implant Carrier [Optional]

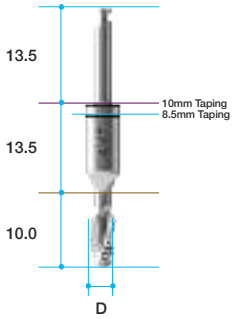
- Two different implant carriers for regular guide since Ø3.5 fixture has different abutment connection- ICRH2221CT : Ø3.4, Ø4.1 fixture- ICWH2711CT : Ø5.0, Ø6.0 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

System	Connection	Guide Diameter	Type	Ref.C
Certain	Hex 2.2	Ø5	Ratchet	ICRH2221CT
	Hex 2.7	Ø6.5		ICWH2711CT

Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
Certain	Ø3.4	Ø5.0	10	R2TD34CT
	Ø4.1			R2TD41CT
	Ø5.0	Ø6.5		R2TD50CT

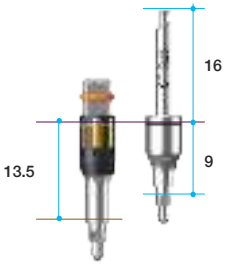


6. System Options for TSIII

Implant Carrier [Optional]

- Two different implant carriers for regular guide since Ø3.5 fixture has different abutment connection- ICRH2127 : Ø3.5 fixture- ICRH2523O : Ø4.0, Ø4.5 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

Connection	Guide Diameter	Type	Ref.C
2.1 Hex	Ø5.0	Ratchet	ICRH2127
2.5 Hex			ICRH2523O
2.1 Hex		Handpiece	ICRH2127H
2.5 Hex			ICRH2523HO



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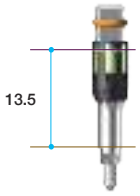
7. System Options for SuperLine

Implant Carrier [Optional]

- Two different implant carriers for regular guide since Ø3.5 fixture has different abutment connection - ICRH2523SL : Ø3.4, Ø3.8, Ø4.3 fixture - ICWH2523SL : Ø4.8 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

Connection	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRH2523SL
	Ø6.5		ICWH2523SL

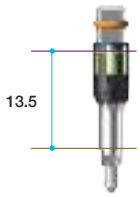


8. System Options for ISII

Implant Carrier [Optional]

- Three different implant carriers for regular guide since Ø3.5 fixture has different abutment connection - ICRH2518IS : Ø3.5 fixture - ICRH2523IS : Ø4.0, Ø4.5 fixture - ICWH2523IS : Ø5.0 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

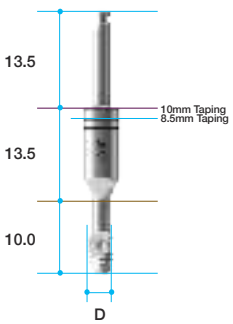
Connection	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRH2518IS
			ICRH2523IS
	Ø6.5		ICWH2523IS



Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
IS	Ø3.5	Ø5.0	10	R2TD35IS
	Ø4.0			R2TD40IS
	Ø4.5			R2TD45IS
	Ø5.0	Ø6.5		R2TD50IS



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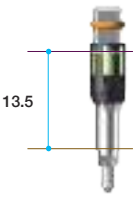
9. System Options for UFII

Implant Carrier [Optional]

- Two different implant carriers for regular guide since Ø3.5 fixture has different abutment connection
  - ICRH2523UF : Ø3.8, Ø4.0, Ø4.5, Ø5.0, Ø5.5 fixture
- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direction 2~3 times manually.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

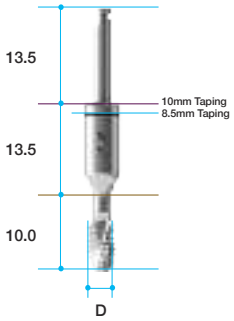
Connection	Guide Diameter	Type	Ref.C
2.5 Hex	Ø5.0	Ratchet	ICRH2523UF
	Ø6.5		ICWH2523UF



Tap Drill [Optional]

- The purpose of tab drills in the universal kit system is insertion test. some of implant are required this procedure before final fixture insertion. choose the one-step under size of tab to protect from enlarge- ment of osteotomy.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

System	Diameter	Guide Diameter	Length(mm)	Ref.C
UF	Ø3.8	Ø5.0	10	R2TD38UF
	Ø4.0			R2TD40UF
	Ø4.5			R2TD45UF
	Ø5.0	Ø6.5		R2TD50UF
	Ø5.5			R2TD55UF



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Final Drill Option [Disposable or Permanent]

Stopper Drill[Straight]

For all implant system

- Common use
- Step back type drillling
- Provided from local R2GATE Design Center to users. The size of disposable drills are decided depend size on treatment planning regarding to fixture size and bone density of patient.
- Recommended drilling speed is 300 ~ 800 RPM.
- Final drill.
- The base is disposable and can be made for permanent under your order

Diameter	Guide Diameter	Length(mm)	Permanent Ref.C	Disposal Ref.C
Ø3.4	Ø5.0	7.0	R2PS3407	R2DS3407
		8.0	R2PS3408	R2DS3408
		9.0	R2PS3409	R2DS3409
		10.0	R2PS3410	R2DS3410
		11.0	R2PS3411	R2DS3411
		12.0	R2PS3412	R2DS3412
		13.0	R2PS3413	R2DS3413
Ø3.8		7.0	R2PS3807	R2DS3807
		8.0	R2PS3808	R2DS3808
		9.0	R2PS3809	R2DS3809
		10.0	R2PS3810	R2DS3810
		11.0	R2PS3811	R2DS3811
		12.0	R2PS3812	R2DS3812
		13.0	R2PS3813	R2DS3813
Ø4.3		7.0	R2PS4307	R2DS4307
		8.0	R2PS4308	R2DS4308
		9.0	R2PS4309	R2DS4309
		10.0	R2PS4310	R2DS4310
		11.0	R2PS4311	R2DS4311
		12.0	R2PS4312	R2DS4312
		13.0	R2PS4313	R2DS4313
Ø4.8	Ø6.5	7.0	R2PS4807	R2DS4807
		8.0	R2PS4808	R2DS4808
		9.0	R2PS4809	R2DS4809
		10.0	R2PS4810	R2DS4810
		11.0	R2PS4811	R2DS4811
		12.0	R2PS4812	R2DS4812
		13.0	R2PS4813	R2DS4813
Ø5.3		7.0	R2PS5307	R2DS5307
		8.0	R2PS5308	R2DS5308
		9.0	R2PS5309	R2DS5309
		10.0	R2PS5310	R2DS5310
		11.0	R2PS5311	R2DS5311
		12.0	R2PS5312	R2DS5312
		13.0	R2PS5313	R2DS5313
Ø5.8		7.0	R2PS5807	R2DS5807
		8.0	R2PS5808	R2DS5808
		9.0	R2PS5809	R2DS5809
		10.0	R2PS5810	R2DS5810
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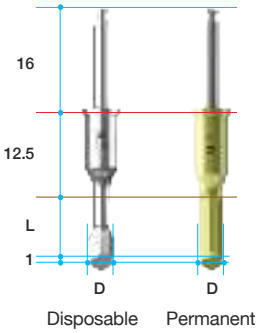
		12.0	R2PS5812	R2DS5812
		13/0	R2PS5813	R2DS5813



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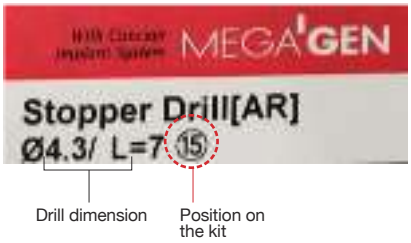
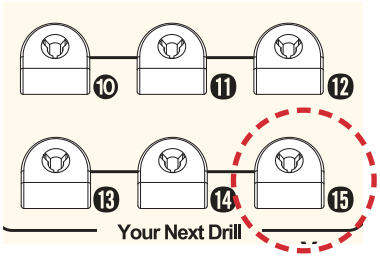
Drill position on the kit

- Every disposable drills have the numbering system to clarify it's own position on the universal kit.
- Check the drill size and position number, then install it to the right position.





Sterilized package

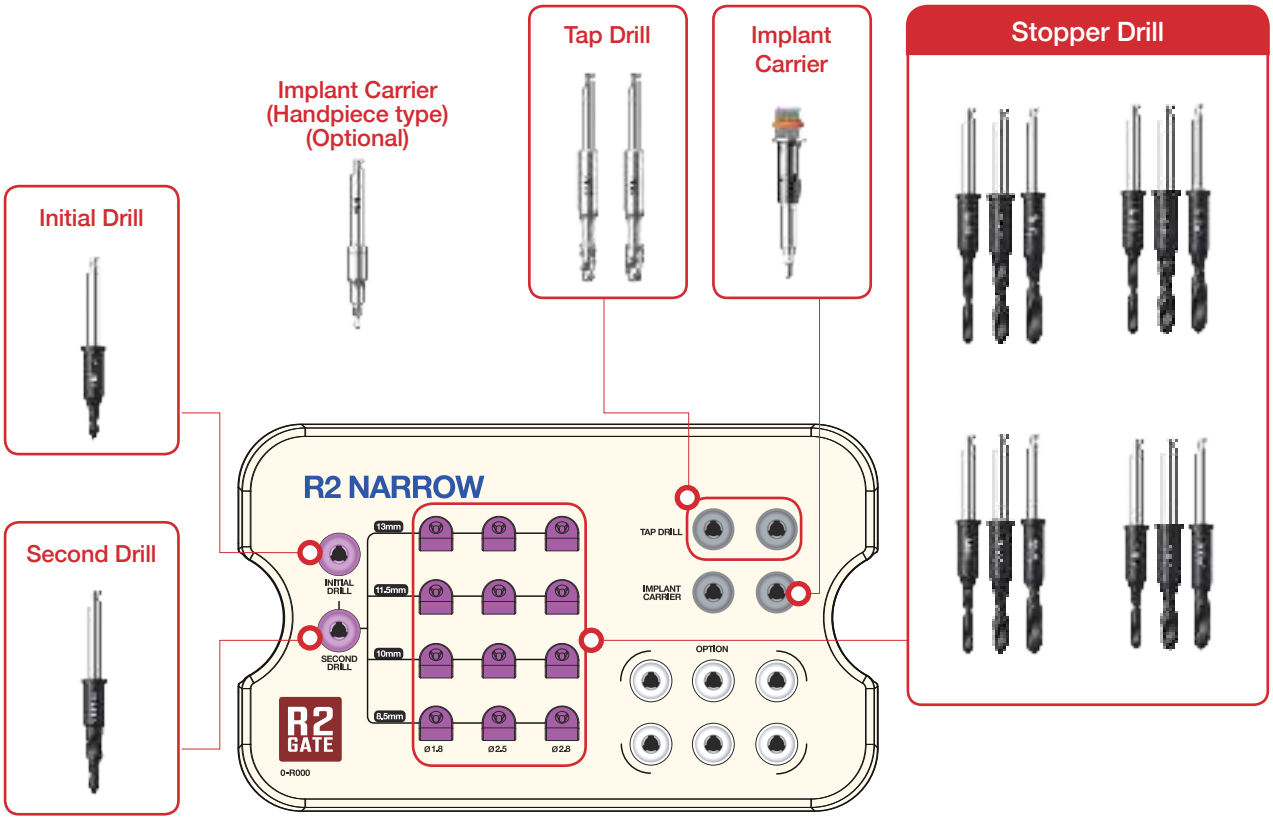
- All disposable drills are packaged at clean room and sterilized by "Gamma-ray".
- Check the "Sterilized" seal on the package and open it at the operation site before surgery.

PDF Compressor Free Version

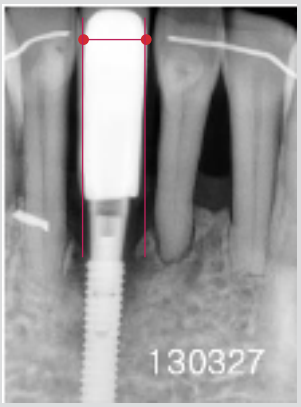
R2GATE Narrow Kit

Ref.C

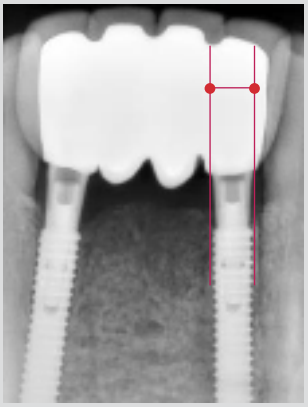
KAGNS3000



When do we use R2GATE Narrow Kit?



[Mandible single case]
When Ø5.0 stent cannot be fabricated due to narrow distance between the teeth.



[Mandible multiple case]
When fixture cannot be place near adjacent teeth due to large stent core on regular stent.

Regular VS Narrow Stent Guide Core

Regular Stent
[Guide Core Ø5]

Narrow Stent
[Guide Core Ø3.5]

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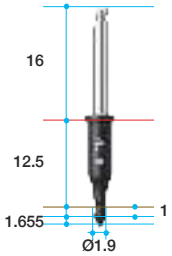
Components of R2GATE Narrow Kit

Initial Drill

- Use the initial drill in order to mark the drilling position on the bone. Start drilling slowly, when drill guide part is fully contacted with drilling core of R2GATE Guide™.
- Recommended drilling speed range is 300 ~ 800 RPM with copious irrigation.

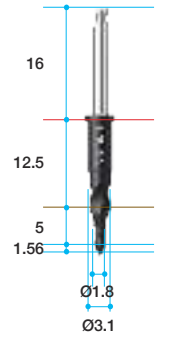
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø1.9	Ø3.5	1.0	R2ID1901N



Second Drill

- This unique step-drill(from Ø2.0 to Ø4.6) is used to flare out the upper cortical bone of the osseotomy.
- It helps not only the rest drilling procedure but abut- ment connection. In case of hard bone, if the 2nd drilling will be disturbed by thick cortical bone. Stop the drilling and try it after final drilling procedure.

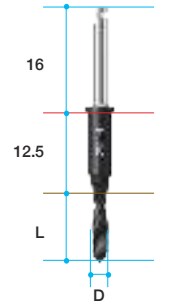
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø1.8	Ø3.5	5.0	R2SD1805N



Stopper Drill

- Universal drills consist of Ø2.0, Ø.2.5, Ø2.8 diam- eter to enlarge the osteotomy gradually.
- The length of drill are designed as 7.0, 8.5, 10, 11.5,13mm for most common length of implant system.
- Recommended drilling speed range is 500 ~ 800 RPM with copious irrigation.

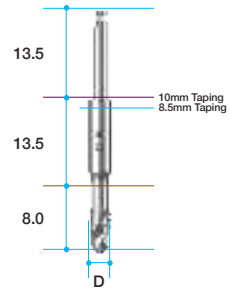
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø1.8	Ø3.5	8.0	R2SD1808N
		9.5	R2SD1810N
		11.0	R2SD1811N
		12.5	R2SD1813N
Ø2.5		8.0	R2SD2508N
		9.5	R2SD2510N
		11.0	R2SD2511N
		12.5	R2SD2513N
Ø2.8		8.0	R2SD2808N
		9.5	R2SD2810N
		11.0	R2SD2811N
		12.5	R2SD2813N



Tap Drill

- The purpose of tab drills in the universal kit system is insertion test.
- Recommended insertion torque and speed is 45 ~ 50Ncm, under 40 RPM.

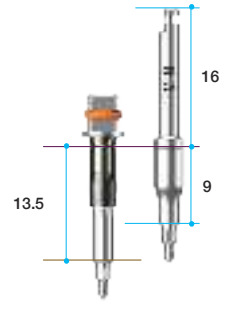
Diameter	Guide Diameter	Length(mm)	Ref.C
Ø3.0	Ø3.5	8.0	R2TD30MI
Ø3.4			R2TD34MI



Implant Carrier

- To pick up the fixture from the ampule and insert it to the ossetomy. Then turn it to clock-wise direc- tion 2~3 times manualy.
- When it gets fixation from the osteotomy, connect the handpiece adaptor and use implant motor.
- Recommended insertion torque is 45~50Ncm.

Connection	Guide Diameter	Type	Ref.C
1.7 Hex	Ø3.5	Ratchet	ICNH1722
		Handpiece	ICNH1722H



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Anchor Kit

For an edentulous case or free end case, R2GATE Guide™ is fixed with Anchor Pins specially designed for stability of the R2GATE Guide™.

System	Ref.C
AnyRidge	KAGAS3000
AnyRidge Octa 1	KAGAS3002
AnyOne	KAGAS3001

You can order your own Anchor kit for your favorite implant system

Torx Tip

Tip Driver

Anchor Pin

Stent Anchor

M1.8 (AnyRidge)

M2.0 (AnyOne)

Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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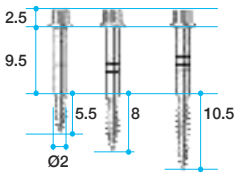
Components for Anchor Kit

Anchor Pin

- Distinguish the length size by the numbers of Line marking
- Connect through Trox Tip

Diameter	Length(mm)	Marking Line	Ref.C
Ø2.0	5.5	1	TCMACP2015
	8.0	2	TCMACP2018
	10.5	3	TCMACP2020

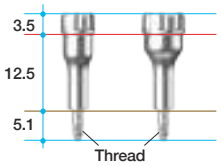


Stent Anchor

- Connect through Hand & Hand Driver

Thread	Guide Diameter	Ref.C
M1.6 (AnyRidge Octa1)	Ø5.0	*AGSANR16
	Ø5.0	*AGSARR16
M1.8 (AnyRidge)	Ø5.0	AGSAR18
	Ø6.5	AGSAW18
M2.0 (AnyOne)	Ø5.0	AGSAR20
	Ø6.5	AGSAW20

(*) Separate sales item.



Trox Tip

Length(mm)	Ref.C
80	AGTT80

Tip Driver

Ref.C
TD

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▸▸ How to use Anchor Kit?

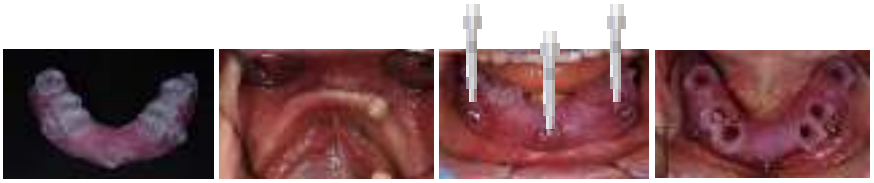
Case 1.

When it is possible to get stability from neighboring teeth. (No need to use the Anchor kit)

Place the R2GATE Guide™ by placing it onto the neighboring teeth.

Case 2.

When it is hard to get stability from fully edentulous case or neighboring teeth.

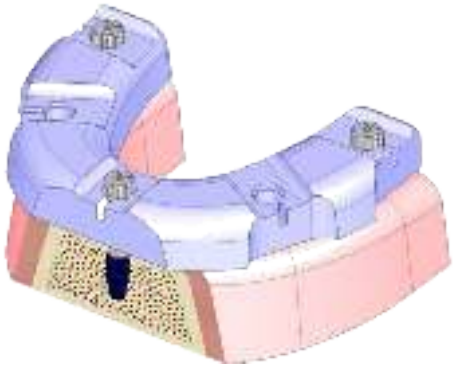


1. Fix the R2GATE Guide™ temporarily by asking patient to bite the R2GATE Guide™ using a resin or other tools.
2. Please use the Pin that R2GATE® program selected, and place that Pin on the Driver Tip.
3. Insert the Pin into the R2GATE Guide™ that the patient is biting, and turn it into clockwise to fix the R2GATE Guide™ to bone.

*Make a hole on the Guide using Ø2.0 Drill if a density of the bone is high. Then, insert the Anchor Pin into the hole.

Case 3.

- When it is necessary to re-implant a fixture after separating the R2GATE Guide™.
- When the stability of the R2GATE Guide™ is weak even though all planned Anchor Pins are used (This is only for the cases with edentulous jaws and implantations of three or more fixtures).



*** Cases for re-implant a fixture after failure**

1. Check the condition of an implanted fixture after a separation of a R2GATE Guide™. Evulse the fixture when the implantation is considered as a failure for lack of stability or a path is inaccurate.
2. Replace the R2GATE Guide™. Insert the R2GATE Guide™ Anchor to the R2GATE Guide™ Hole of the neighboring fixture, and place the R2GATE Guide™ by turning it into clockwise.

*** When it is hard to get stability of the R2GATE Guide™ by an Anchor Pin only**

1. When the stability of a fixture by an Anchor Pin only is low, start an implantation from molar areas. Then, connect the R2GATE Guide™ Anchor with an installed fixture to increase stability.

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MegaGen Digital Solution

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MEGAGEN DIGITAL WORK FLOW

MegaGen Provides CAD*less* Solution!

Just send a scan data. MegaGen R2 Digital Center will take care of the design.
The designed file will be sent to you within an hour.

• Digital Equipment

3D Imaging

R2 STUDIO
Refer to Page. 450

Intra-Oral Scanner

NEXT Unit chair

Transformer

• Materials

R2TRAY

SCAN Abutment

• Consumer value

PDF Compressor Free Version

Tx.planning & Design

R2GATE

In-lab Equipments

Meg Printer II

Ti CAM - PRO

WHITE CAM - PRO

Surgical KIT

R2 Package

Resin

TiGEN

ZrGEN

Blocks

R2GATE Guide surgery
& One-Day Implant

R2GATE Guide

Provisional

Ti. CUSTUM

Zr. CUSTUM

Prosthesis

PDF Compression, Free Version

Digital Equipment
I. Intra-Oral Scanner

Carestream CS 3600
DENTAL

(Ref.C : CAREDENT-CS3500)

Technical Specifications	
Sensor technology	1/2 inch CMOS
Illumination	LED, Amber, Blue, Green
Field of view	13x13mm
Depth of field	-2 to +12mm
Anti-fogging technology	Actively heated tip, guaranteed non-fogging operation when used intraorally
Cable length	2.7m (1.8m+0.9m)
Digital Connection	USB 2.0 High Speed
Dimensions without cable	220x38x58mm for normal and side tips
Weight	325g (excluding power box)
Handpiece	Input 12V 2A
Power Box	75x21x21mm 12V 2A 12V 2A
Weight	100-240V~50/60Hz, 600mA 12V 2A

Faster, Smarter!

Choosing an appropriate intra-oral scanner begins the pragmatic digital treatment

- Reasonable price
- No annual fee
- Various compatibility with open STL
- Continuous scanning function NEW
- Smart matching system NEW
- Time-machine function NEW
- Full HD 3D color
- Easy to operate, high precision
- Side Tip is provided NEW

Product coordinator : r2.tech1@imegagen.com

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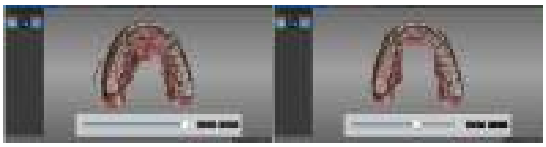
Evolutionary scanning technology, Smart Matching System

- Continuous scanning
- Smart matching system
- Time machine function

Smart matching system


Time machine function

- CS3600 scanner is a high-speed image streaming type oral scanner. It provides faster scanning speed than the any other competitive scanners.
- It provides stitching function (quickly pasting omitted scan information), and merging function (finding the point even if you change the buccolingual scanning region).
- We provide time machine function that allows to re-scan from the specific point to minimize unnecessary scanning.

Full HD 3D color

We provide improved quality scan image with clearer color and effect

Provide various solutions that are based on the complete open STL files

R2GATE Guide / Model

t is possible to fabricate a surgical guide and dental model for prosthetic/ orthodontic system by linking the program with Meg-Printer

Crown/In-Lay/On-Lay/Veneer/Custom-ized Abutment

Various prosthetics, temporary shell/crown, and etc., can be fabricated by linking the sys-tem with White-CAM/ Ti-CAM

3D Ortho

3D set up model can be used as a counseling material for transparent orthodontic system.

2 Types of tips

- Regular tip and side tip easily scan buccolingual region.
- You can simply autoclave more than 20 times


Side Tip Regular Tip

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II. Model Scanner

TRANSFORMER® HD / TRANSFORMER® UHD

Begin your digital scanning with Transformer,
the fast and precise Full HD 3D model scanner.

Equipment Specifications (TRANSFORMER HD/TRANSFORMER UHD)	
Axis	2 Axis
Light Source	White Light LED/ STRUCTURED
Camera	2.0 MP (Twin Cameras) / 2.0 MP
Output	stl, ojb
Accruacy	10㎛
Spec	W330 x D430 x H495 mm Weight : 15kg

- More powerful than ever.
- 2.0MP HD cameras & USB 3.0 interface
- More precise and faster scan in a min.
- Big scan chamber for articulator
- R2GATE SCAN protocol installed.


IMPLANT SCAN


IMPRESSION SCAN


ALL IN ONE SCAN


ORTHODONTIC SCAN

PDF Compressor Free Version

Clearer margin line, 3D imaging taking

Now, you can get much clearer and precise scan data from our 2.0 Megapixel Camera.

Big Time Saver

Shorter scanning period with support of USB 3.0

3 steps into 1! All-in-one Scan

Transformer has a large scanning place

You can put an articulator with a model (Artex, KaVo, SAM) into the machine and scan them together

Because the machine scans a model with a camera moving system without fixed zig, there is no need to set up a zig every time you scan.

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III. Auto - CAM Lab Solution
1. MEG-PRINTER II

MEG-PRINTER II SPECIFICATIONS	
Printing Method	DLP (Digital Light Processing)
Build Size	100 x 60 x 70mm
Build thickness	25㎛ ~ 100㎛
Light Lamp	LED
Printing Materials	Light Curing Resin
Spec	W310 x D210 x H350mm Weight : 10kg

Pragmatical 3D-Printer for Clinic

- Simple procedures.
- Fast modeling time.
- Accurate result.
- Cost-effective & User friendly.
- Build time (25min)

Variety types of indications

- Magnetic Printing Head
- Catridge change type

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III. Auto - CAM Lab Solution
2. Ti-CAM PRO

Ti-CAM PRO SPECIFICATIONS	
Axis/ Speed	4 Aixs / S-servo 42,500 RPM
Materials	Titanium Preformed abutment
Tooling	1.5 / 2.5mm
Operation	Built-in PC
Milling time	25 min / 45min
Spec	W600 x D600 x H840mm/ 145Kg

Born to Customized Abutment

- Simple but powerful function.
- Born to Ti-customized abutment.
- Strong & precise milling ability.
- Faster milling time (25min).

· Dual Jig Holder
· Auto support cutting
· 3 Pre-milled abutment loading

TiGEN Abutment

PDF Compressor Free Version

III. Auto - CAM Lab Solution

3. WHITE-CAM PRO

WHITE-CAM PRO SPECIFICATIONS	
Axis	5 Aixs
Spindle	500W, 42,500 RPM
Tooling	0.6 / 1.0 / 2.0, 7ea Auto change
Operation	Built-in PC
Milling time	25 min for single crown
Spec	W600 x D600 x H840 mm Weight : 145kg/ Dry milling

Precise 5 Axis Milling Machine

- High-End 5 axis milling machine.
- All Dry milling materials.
  : PMMA, Zirconia, Wax, Ultimate
- Full arch restoration
- Denture
- Customized abutment

PMMA BLOCK

ZIRCONIA

Wax Block

PDF Compressor Free Version

III. Auto - CAM Lab Solution

4. WHITE-CAM WET

WHITE-CAM WET SPECIFICATIONS	
Axis/ Speed	4 Aixs / sycotec 80,000 RPM
Materials	PMMA, Wax, Glass ceramic, Hybrid ceramic
Tooling	0.6 / 1.0 / 2.0, 8ea Auto change
Operation	Built-in PC
Milling time	25 min for single crown
Spec	W400 x D400 x H520 mm Weight : 40kg/ Wet milling

Pragmatical 4 Axis Milling Machine

- Simple but powerful function.
- All White milling materials.
  ; PMMA, Wax, Hybrid Ceramic, Glass Ceramic
- Ø0.6, Ø1.0, Ø2.0mm drill
- Faster milling time (25min/ single)

PMMA BLOCK | Wax Block | Glass Ceramic | Composite Resin

Digital Material

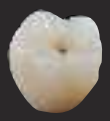
PDF Compressed Trial Version

I. ZrGEN®

ZrGEN® is the brand name of MegaGen Titanium Base. ZrGEN provides an aesthetic outcome and simplified dental implant prosthesis. A ZrGEN® crown and monolithic crown connected to a ZrGEN® Abutment provide strong and precise connection with the implant fixture.

Variety of ZrGEN®


ZrGEN Coping


PMMA Provisional Crown


ZrGEN Monolithic


ZrGEN Crown


ZrGEN Bridge


ZrGEN Coping for PFZ

ZrGEN® Sub Structure


ZrGEN


Zirconia customized body


Zirconia Final Crown

ZrGEN®

The strength of ZrGEN® frees you from the chipping of conventional PFM prosthesis. Monolithic zirconia crowns have no metal substructure, ensuring more aesthetic results. ZrGEN® crown and bridge are a superior substitutes for all conventional dental materials.

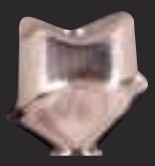

Tooth shade cuff area


Minimized Ti-connection

Clinical Application

II. TiGEN®

TiGEN® is the brand name of MegaGen Titanium customized abutment. It promises outstanding durability and simplified dental implant prosthesis. Ready-made connection part provides a strong and precise connection with the implant fixture.



Product coordinator : Jung Ho Nam, rnd_implant1@imegagen.com

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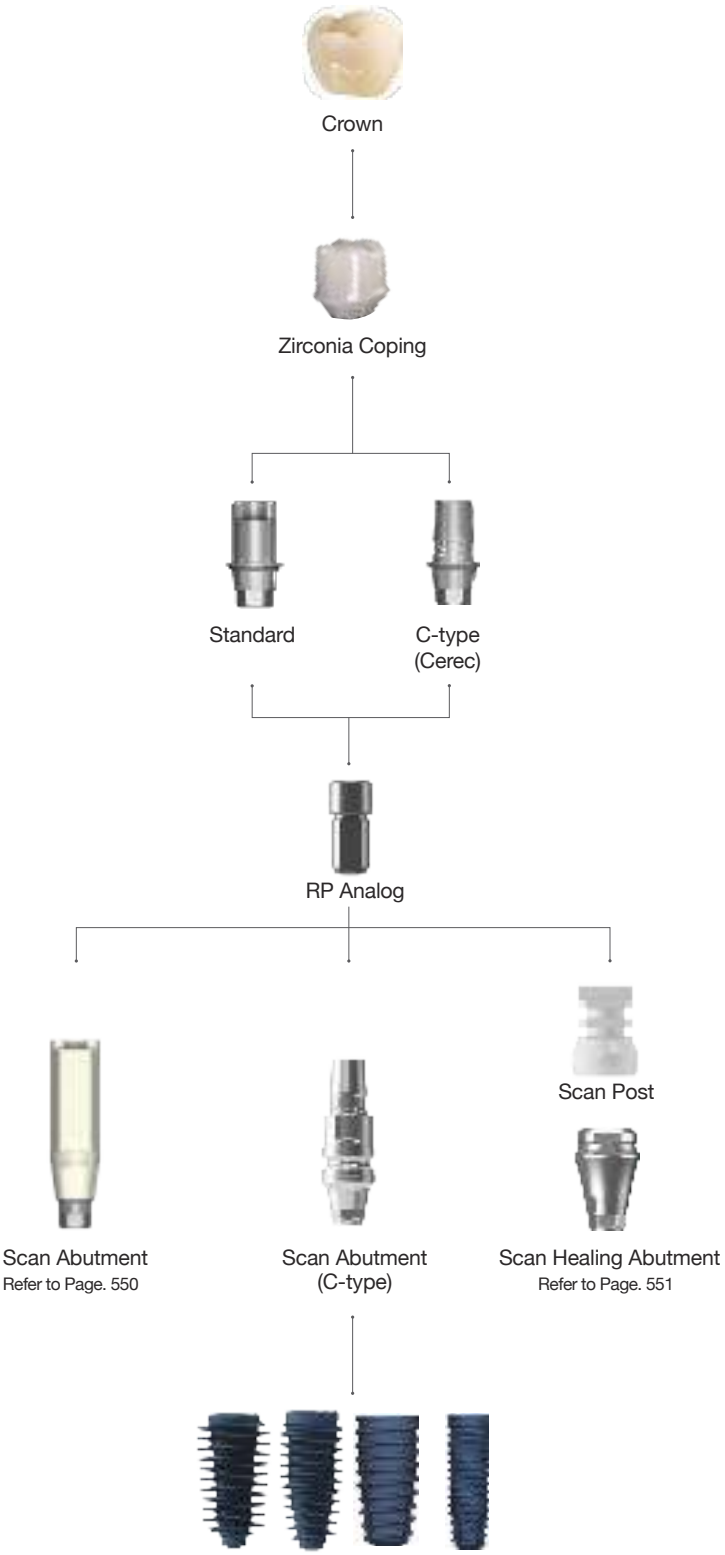
ZrGEN® Prosthesis

ZrGEN® Abutment

ZrGEN® Abutment provides a strong and precise connection with the implant fixture. With Zirconia® coping, crown margins can be placed supragingivally since zirconia material matches with the color of natural teeth. Residual cement problems are no longer an issue.



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Scan Abutment Option

Scan Abutment

- Abutment Screw included.
  . AnyRidge (AANMSF)
  . AnyRidge Octa 1 (AROAS16B/ AROAS16)
  . AnyOne Internal (AS20)
  . AnyOne Exeternal (SCS160/ RCS200)
  . AnyOne OneStage (EXIMS100)
  . MiNi (MIAS14)
  . Octa Level (IRCS200)
  . Multi-unit Abutment (MUAS)

- For Chairside/ Labside
- Included spare Abutment Screw
- Surpporting Dental CAD
  - 3 Shape
  - Exocad
  - Dental Wings

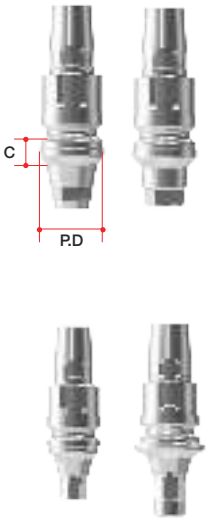
System	Profile Diameter	Length (mm)	Type	Ref.C
AnyRidge	Ø4.0	9	-	AANISR4009T
		13	-	AANISR4013T
AnyRidge Octa 1	Ø4.0	13	NC	AROSANT
			RC	AROSART
AnyOne Internal	Ø4.0	9	-	AAOISR4009T
		13	-	AAOISR4013T
AnyOne External		9	Small	AEXESS4009T
		13		AEXESS4013T
		9	Regular	AEXESR4009T
		13		AEXESR4013T
AnyOne OneStage	Ø4.0	10	Cuff 1.8	AEXISR4010T
MiNi	3.5	9	-	MISS3509T
		13	-	MISS3513T
Octa Level	Ø4.0	11	-	AOCESC4011T
MUA Level (N-Type)	Ø4.0	13	-	AMUASR4013T

Scan Abutmet (C-type)

- Abutment Screw included.
  . AnyRidge (AANMSF)
  . AnyOne (AS20)
  . AnyRidge Octa 1(AROAS16B/ AROAS16)

- Scan Post for Sirona Cerec users → CEREC
- In Lab CAD Software, compatible with Xive Library

System		Profile Diameter	Cuff Height	Post Size	Ref.C
AnyRidge		Ø3.9	0.5	Small	ARICSS3405T
			1		ARICSS3410T
			2		ARICSS3420T
		Ø4.3	0.5		ARICSS3805T
			1		ARICSS3810T
			2		ARICSS3820T
		Ø5.5	0.5	Large	ARICSL4505T
			1		ARICSL4510T
			2		ARICSL4520T
AnyRidge Octa 1	NC	Ø3.9	0.5	Small	AROCSS3405NT
			1		AROCSS3410NT
			2		AROCSS3420NT
		Ø4.3	0.5		AROCSS3805NT
			1		AROCSS3810NT
			2		AROCSS3820NT
	RC	Ø3.9	0.5	Small	AROCSS3405RT
			1		AROCSS3410RT
			2		AROCSS3420RT
		Ø4.3	0.5		AROCSS3805RT
			1		AROCSS3810RT
			2		AROCSS3820RT
		Ø5.5	0.5	Large	AROCSL4505RT
			1		AROCSL4510RT
			2		AROCSL4520RT
AnyOne		Ø3.9	0.5	Small	AOICSS3405T
			1		AOICSS3410T
			2		AOICSS3420T
		Ø4.3	0.5		AOICSS3805T
			1		AOICSS3810T
			2		AOICSS3820T
		Ø5.5	0.5	Large	AOICSL4505T
			1		AOICSL4510T
			2		AOICSL4520T



PDF Compressor Free Version

Scan Healing Abutment & Scan Post

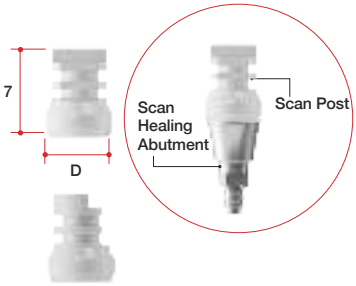
- Abutment Screw included.
  - AnyRidge (ARIHS1804/ARIHS1805/ ARIHS1807)
  - AnyOne (AOIHS2004/AOIHS2005/ AOIHS2007)
  - AnyRidge Octa 1(AROHS1604/ AROHS1605/ AROHS1607)

- Can get scan data without removing Scan Healing Abutment from Scan Post
- Different colors depend on the cuff size
- Scan healing abutment should be exposed 2.0mm on the surgical site for accurate scanning

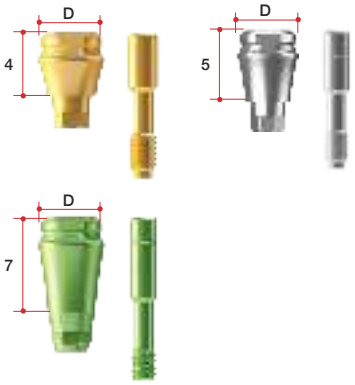
---

- Scan Healing Abutment should be exposed 2.0mm from the surgical site for accurate scanning. Scanning would be much easier if you connect Scan Post when scanning seems difficult due to less exposure of Scan Healing Abutment or other conditions.
- Select Scan Post based on the diameter of Scan Healing Abutment
- Scan Post is a disposable product and sold separately in batch of 10EA. for each package

System		Profile Diameter	Scan Post	Height (mm)	Ref.C
AnyRidge		Ø4.0	SP4007.MTN	4	ARISH4004T
				5	ARISH4005T
				7	ARISH4007T
		Ø5.0	SP5007.MTN	4	ARISH5004T
				5	ARISH5005T
				7	ARISH5007T
		Ø6.0	SP6007.MTN	4	ARISH6004T
				5	ARISH6005T
				7	ARISH6007T
		Ø7.0	SP7007.MTN	4	ARISH7004T
				5	ARISH7005T
				7	ARISH7007T
		Ø5.0 (Extra type)	SP5007.MTN	4	ARNSH5004T
				5	ARNSH5005T
				7	ARNSH5007T
		Ø6.0 (Extra type)	SP6007.MTN	4	ARNSH6004T
				5	ARNSH6005T
				7	ARNSH6007T
AnyRidge Octa 1	NC	Ø4.0	SP4007.MTN	4	AROISHN4004T
				5	AROISHN4005T
				7	AROISHN4007T
		Ø5.0	SP5007.MTN	4	AROISHN5004T
				5	AROISHN5005T
				7	AROISHN5007T
	RC	Ø4.0	SP4007.MTN	4	AROISHR4004T
				5	AROISHR4005T
				7	AROISHR4007T
		Ø5.0	SP5007.MTN	4	AROISHR5004T
				5	AROISHR5005T
				7	AROISHR5007T
		Ø6.0	SP6007.MTN	4	AROISHR6004T
				5	AROISHR6005T
				7	AROISHR6007T
		Ø7.0	SP7007.MTN	4	AROISHR7004T
				5	AROISHR7005T
				7	AROISHR7007T
AnyOne		Ø4.0	SP4007.MTN	4	AOISH4004T
				5	AOISH4005T
				7	AOISH4007T
		Ø4.5	SP5007.MTN	4	AOISH4504T
				5	AOISH4505T
				7	AOISH4507T
		Ø5.5	SP6007.MTN	4	AOISH5504T
				5	AOISH5505T
				7	AOISH5507T
		Ø6.5	SP7007.MTN	4	AOISH6504T
				5	AOISH6505T
				7	AOISH6507T

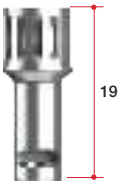


* If Scan Healing Abutment is exposed more than 2.5mm, it may unstablize a fixture and results in fixture failure.



Scan Post Carrier

System	Length	Ref.C
Commom	19	SPC16



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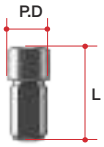
RP Analog Option

RP Analog

- For Chairside/ Labside
- Included spare Abutment Screw
- Surpporting Dental CAD
  - 3 Shape
  - Exocad

System	Profile Diameter	Length (mm)	Type	Ref.C
AnyRidge	Ø4.0	9	-	CANIAR4009
AnyRidge Octa 1	Ø3.3	10	NC	AROLAN
	Ø4.1		RC	AROLAR
AnyOne Internal	Ø4.0	9	Only Ø3.5	CAOIAS3509
			-	CAOIAR4009
AnyOne External	Ø3.5	9	Small	CEXEAS3509
	Ø4.1		Regular	CEXEAR4109
	Ø5.0		Wide	CEXEAW5009
AnyOne OneStage	Ø4.8	9	Cuff 1.8	OSRA18
MiNi	Ø3.0	9	-	CMIIAN3009
Octa Level	Ø3.8	9	Small	OCTARA4
	Ø4.8		Regular	OCTARA5
	Ø5.8		Wide	OCTARA6
MUA Level (N-Type)	Ø4.8	9	-	MUALA



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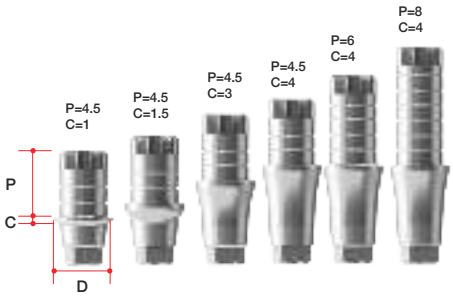
NEW!!

ZrGEN Abutment Option

ZrGEN Abutment

- Abutment Screw included.
  . AnyRidge (AANMSF)
  . AnyOne Internal (AS20)
  . AnyOne Exeternal(SCS160/ RCS200)
  . AnyOne Stage
  . MiNi (MIAZ1410)
  . Octa Level(IRCS200)
  . AnyRidge Octa 1(AROAS16B/ AROAS16)

- Titanium Base
- 1Set(=Abutment 10ea)
  - included spare Abutment Screw
  - MiNi ZrGEN has special ZrGEN Screw
- Supporting DentalCAD
  - 3 Shape
  - Exocad
  - Dental Wing
- Different groove number depend on the post size
  -P=4.5 ▶ groove number : 2ea
  -P=5 ▶ groove number : 3ea
  -P=6 ▶ groove number : 4ea
  -P=8 ▶ groove number : 6ea



Standard

System	Diameter	Cuff Height	Post Height	Type	Ref.C
AnyRidge	Ø4.0	0.6	4.5	Hex	AANIPR4015.MTN
			6		AANIPR4016.MTN
			8		AANIPR4018.MTN
		1.5	4.5		AANIPR4025.MTN
			6		AANIPR4026.MTN
			8		AANIPR4028.MTN
		3.0	4.5		AANIPR4035.MTN
			6		AANIPR4036.MTN
			8		AANIPR4038.MTN
		4.0	4.5		AANIPR4045.MTN
			6		AANIPR4046.MTN
			8		AANIPR4048.MTN
		0.6	4.5	Non-Hex	AANIPR4015N.MTN
			6		AANIPR4016N.MTN
			8		AANIPR4018N.MTN
		1.5	4.5		AANIPR4025N.MTN
			6		AANIPR4026N.MTN
			8		AANIPR4028N.MTN
		3.0	4.5		AANIPR4035N.MTN
			6		AANIPR4036N.MTN
			8		AANIPR4038N.MTN
		4.0	4.5		AANIPR4045N.MTN
			6		AANIPR4046N.MTN
			8		AANIPR4048N.MTN
	Ø4.5	0.6	4.5	Hex	AANIPR4515.MTN
			6		AANIPR4516.MTN
			8		AANIPR4518.MTN
		1.5	4.5		AANIPR4525.MTN
			6		AANIPR4526.MTN
			8		AANIPR4528.MTN
		3.0	4.5		AANIPR4535.MTN
			6		AANIPR4536.MTN
			8		AANIPR4538.MTN
		4.0	4.5		AANIPR4545.MTN
			6		AANIPR4546.MTN
			8		AANIPR4548.MTN
		0.6	4.5	Non-Hex	AANIPR4515N.MTN
			6		AANIPR4516N.MTN
			8		AANIPR4518N.MTN
		1.5	4.5		AANIPR4525N.MTN
			6		AANIPR4526N.MTN
			8		AANIPR4528N.MTN
		3.0	4.5		AANIPR4535N.MTN
			6		AANIPR4536N.MTN
			8		AANIPR4538N.MTN
		4.0	4.5		AANIPR4545N.MTN
			6		AANIPR4546N.MTN
			8		AANIPR4548N.MTN

System		Diameter	Cuff Height	Post Height	Type	Ref.C
AnyRidge Octa 1	NC	Ø4.0	0.6	4.5	Octa	AROZGN4015.MTN
			1.5			AROZGN4025.MTN
			3.0			AROZGN4035.MTN
			4.0			AROZGN4045.MTN
			0.6	6.0		AROZGN4016.MTN
			1.5			AROZGN4026.MTN
			3.0			AROZGN4036.MTN
			4.0			AROZGN4046.MTN
			0.6	8.0		AROZGN4018.MTN
			1.5			AROZGN4028.MTN
			3.0			AROZGN4038.MTN
			4.0			AROZGN4048.MTN
	RC	Ø4.5	0.6	4.5		AROZGR4515.MTN
			1.5			AROZGR4525.MTN
			3.0			AROZGR4535.MTN
			4.0			AROZGR4545.MTN
			0.6	6.0		AROZGR4516.MTN
			1.5			AROZGR4526.MTN
			3.0			AROZGR4536.MTN
			4.0			AROZGR4546.MTN
			0.6	8.0		AROZGR4518.MTN
			1.5			AROZGR4528.MTN
			3.0			AROZGR4538.MTN
			4. 0			AROZGR4548.MTN
MUA Level		Ø5.5	0.8	5	N-Type (Nobel)	AMUAPR5515N.MTN
				6		AMUAPR5516N.MTN
				8		AMUAPR5518N.MTN

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Standard

System	Diameter	Cuff Height	Post Height	Type	Ref.C
AnyOne Internal	Ø4.0	0.6	4.5	Hex	AAOIPR4015.MTN
			6		AAOIPR4016.MTN
			8		AAOIPR4018.MTN
		1.5	4.5		AAOIPR4025.MTN
			6		AAOIPR4026.MTN
			8		AAOIPR4028.MTN
		3.0	4.5		AAOIPR4035.MTN
			6		AAOIPR4036.MTN
			8		AAOIPR4038.MTN
		4.0	4.5		AAOIPR4045.MTN
			6		AAOIPR4046.MTN
			8		AAOIPR4048.MTN
		0.6	4.5	Non-Hex	AAOIPR4015N.MTN
			6		AAOIPR4016N.MTN
			8		AAOIPR4018N.MTN
		1.5	4.5		AAOIPR4025N.MTN
			6		AAOIPR4026N.MTN
			8		AAOIPR4028N.MTN
		3.0	4.5		AAOIPR4035N.MTN
			6		AAOIPR4036N.MTN
			8		AAOIPR4038N.MTN
		4.0	4.5		AAOIPR4045N.MTN
			6		AAOIPR4046N.MTN
			8		AAOIPR4048N.MTN
	Ø4.5	0.6	4.5	Hex	AAOIPR4515.MTN
			6		AAOIPR4516.MTN
			8		AAOIPR4518.MTN
		1.5	4.5		AAOIPR4525.MTN
			6		AAOIPR4526.MTN
			8		AAOIPR4528.MTN
		3.0	4.5		AAOIPR4535.MTN
			6		AAOIPR4536.MTN
			8		AAOIPR4538.MTN
		4.0	4.5		AAOIPR4545.MTN
			6		AAOIPR4546.MTN
			8		AAOIPR4548.MTN
		0.6	4.5	Non-Hex	AAOIPR4515N.MTN
			6		AAOIPR4516N.MTN
			8		AAOIPR4518N.MTN
		1.5	4.5		AAOIPR4525N.MTN
			6		AAOIPR4526N.MTN
			8		AAOIPR4528N.MTN
		3.0	4.5		AAOIPR4535N.MTN
			6		AAOIPR4536N.MTN
			8		AAOIPR4538N.MTN
		4.0	4.5		AAOIPR4545N.MTN
			6		AAOIPR4546N.MTN
			8		AAOIPR4548N.MTN

System	Diameter	Cuff Height	Post Height	Type	Ref.C
AnyOne External	Small	0.6	4.5	Hex	AEXEPS4015.MTN
	Ø4.2		6		AEXEPS4016.MTN
			8		AEXEPS4018.MTN
		1.5	4.5		AEXEPS4025.MTN
			6		AEXEPS4026.MTN
			8		AEXEPS4028.MTN
		3.0	4.5		AEXEPS4035.MTN
			6		AEXEPS4036.MTN
			8		AEXEPS4038.MTN
		4.0	4.5		AEXEPS4045.MTN
			6		AEXEPS4046.MTN
			8		AEXEPS4048.MTN
	Ø4.5	0.6	4.5		AEXEPS4515.MTN
			6		AEXEPS4516.MTN
			8		AEXEPS4518.MTN
		1.5	4.5		AEXEPS4525.MTN
			6		AEXEPS4526.MTN
			8		AEXEPS4528.MTN
		3.0	4.5		AEXEPS4535.MTN
			6		AEXEPS4536.MTN
			8		AEXEPS4538.MTN
		4.0	4.5		AEXEPS4545.MTN
			6		AEXEPS4546.MTN
			8		AEXEPS4548.MTN
	Regular	0.6	4.5		AEXEPR4515.MTN
	Ø4.5		6		AEXEPR4516.MTN
			8		AEXEPR4518.MTN
		1.5	4.5		AEXEPR4525.MTN
			6		AEXEPR4526.MTN
			8		AEXEPR4528.MTN
		3.0	4.5		AEXEPR4535.MTN
			6		AEXEPR4536.MTN
			8		AEXEPR4538.MTN
		4.0	4.5		AEXEPR4545.MTN
			6		AEXEPR4546.MTN
			8		AEXEPR4548.MTN
	Wide	0.6	4.5		AEXEPW5515.MTN
	Ø5.5		6		AEXEPW5516.MTN
			8		AEXEPW5518.MTN
		1.5	4.5		AEXEPW5525.MTN
			6		AEXEPW5526.MTN
			8		AEXEPW5528.MTN
		3.0	4.5		AEXEPW5535.MTN
			6		AEXEPW5536.MTN
			8		AEXEPW5538.MTN
		4.0	4.5		AEXEPW5545.MTN
			6		AEXEPW5546.MTN
			8		AEXEPW5548.MTN
AnyOne OneStage	Ø4.8	0.6	4.5	Octa	AEXIPR5015.MTN
			6		AEXIPR5016.MTN
			8		AEXIPR5018.MTN
		1.5	4.5		AEXIPR5025.MTN
			6		AEXIPR5026.MTN
			8		AEXIPR5028.MTN
		3.0	4.5		AEXIPR5035.MTN
			6		AEXIPR5036.MTN
			8		AEXIPR5038.MTN
		4.0	4.5		AEXIPR5045.MTN
			6		AEXIPR5046.MTN
			8		AEXIPR5048.MTN

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Standard

System		Diameter	Cuff Height	Post Height	Type	Ref.C
MiNi		Ø3.0	0.6	2.5	Hex	MIPN3013.MTN
				2.5	Non-Hex	MIPN3013N.MTN
Octa Level	Small	Ø5.0	0.8	5	Octa	AOCEPS5015.MTN
				6		AOCEPS5016.MTN
				8		AOCEPS5018.MTN
			0.8	5	Non-Octa	ANOEPS5015.MTN
				6		ANOEPS5016.MTN
				8		ANOEPS5018.MTN
	Regular	Ø5.5	0.8	5	Octa	AOCEPR5515.MTN
				6		AOCEPR5516.MTN
				8		AOCEPR5518.MTN
			0.8	5	Non-Octa	ANOEPR5515.MTN
				6		ANOEPR5516.MTN
				8		ANOEPR5518.MTN
	Wide	Ø6.5	0.8	5	Octa	AOCEPW6515.MTN
				6		AOCEPW6516.MTN
				8		AOCEPW6518.MTN
			0.8	5	Non-Octa	ANOEPW6515.MTN
				6		ANOEPW6516.MTN
				8		ANOEPW6518.MTN

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Extra

System	Fixture Core	Diameter	Cuff Height	Post Height	Type	Ref.C
AnyRidge	Core 3.3	Ø4.5	0.6	4.5	Hex	ARZXN4515.MTN
				6		ARZXN4516.MTN
				8		ARZXN4518.MTN
			1.5	4.5		ARZXN4525.MTN
				6		ARZXN4526 .MTN
				8		ARZXN4528 .MTN
			3.0	4.5		ARZXN4535.MTN
				6		ARZXN4536.MTN
				8		ARZXN4538.MTN
			4.0	4.5		ARZXN4545.MTN
				6		ARZXN4546 .MTN
				8		ARZXN4548 .MTN
			0.6	4.5	Non -Hex	ARZXN4515N.MTN
				6		ARZXN4516N.MTN
				8		ARZXN4518N.MTN
			1.5	4.5		ARZXN4525N.MTN
				6		ARZXN4526N.MTN
				8		ARZXN4528N.MTN
			3.0	4.5		ARZXN4535N.MTN
				6		ARZXN4536N.MTN
				8		ARZXN4538N.MTN
			4.0	4.5		ARZXN4545N.MTN
				6		ARZXN4546N.MTN
				8		ARZXN4548N.MTN
	Core3.8	Ø5.0	0.6	4.5	Hex	ARZXM503815.MTN
				6		ARZXM503816.MTN
				8		ARZXM503818.MTN
			1.5	4.5		ARZXM503825.MTN
				6		ARZXM503826.MTN
				8		ARZXM503828.MTN
			3.0	4.5		ARZXM503835.MTN
				6		ARZXM503836.MTN
				8		ARZXM503838.MTN
			4.0	4.5		ARZXM503845.MTN
				6		ARZXM503846.MTN
				8		ARZXM503848.MTN
			0.6	4.5	Non -Hex	ARZXM503815N.MTN
				6		ARZXM503816N.MTN
				8		ARZXM503818N.MTN
			1.5	4.5		ARZXM503825N.MTN
				6		ARZXM503826N.MTN
				8		ARZXM503828N.MTN
			3.0	4.5		ARZXM503835N.MTN
				6		ARZXM503836N.MTN
				8		ARZXM503838N.MTN
			4.0	4.5		ARZXM503845N.MTN
				6		ARZXM503846N.MTN
				8		ARZXM503848N.MTN
		Ø5.5	0.6	4.5	Hex	ARZXM553815.MTN
				6		ARZXM553816.MTN
				8		ARZXM553818.MTN
			1.5	4.5		ARZXM553825.MTN
				6		ARZXM553826.MTN
				8		ARZXM553828.MTN
			3.0	4.5		ARZXM553835.MTN
				6		ARZXM553836.MTN
				8		ARZXM553838.MTN
			4.0	4.5		ARZXM553845.MTN
				6		ARZXM553846.MTN
				8		ARZXM553848.MTN
			0.6	4.5	Non -Hex	ARZXM553815N.MTN
				6		ARZXM553816N.MTN
				8		ARZXM553818N.MTN
			1.5	4.5		ARZXM553825N.MTN
				6		ARZXM553826N.MTN
				8		ARZXM553828N.MTN
			3.0	4.5		ARZXM553835N.MTN
				6		ARZXM553836N.MTN
				8		ARZXM553838N.MTN
			4.0	4.5		ARZXM553845N.MTN
				6		ARZXM553846N.MTN
				8		ARZXM553848N.MTN

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Extra

System	Fixture Core	Diameter	Cuff Height	Post Height	Type	Ref.C
AnyRidge	Core4.0	Ø5.0	0.6	4.5	Hex	ARZXM5015.MTN
				6		ARZXM5016.MTN
				8		ARZXM5018.MTN
			1.5	4.5		ARZXM5025.MTN
				6		ARZXM5026.MTN
				8		ARZXM5028.MTN
			3.0	4.5		ARZXM5035.MTN
				6		ARZXM5036.MTN
				8		ARZXM5038.MTN
			4.0	4.5		ARZXM5045.MTN
				6		ARZXM5046.MTN
				8		ARZXM5048.MTN
			0.6	4.5	Non -Hex	ARZXM5015N.MTN
				6		ARZXM5016N.MTN
				8		ARZXM5018N.MTN
			1.5	4.5		ARZXM5025N.MTN
				6		ARZXM5026N.MTN
				8		ARZXM5028N.MTN
			3.0	4.5		ARZXM5035N.MTN
				6		ARZXM5036N.MTN
				8		ARZXM5038N.MTN
			4.0	4.5		ARZXM5045N.MTN
				6		ARZXM5046N.MTN
				8		ARZXM5048N.MTN
		Ø5.5	0.6	4.5	Hex	ARZXM5515.MTN
				6		ARZXM5516.MTN
				8		ARZXM5518.MTN
			1.5	4.5		ARZXM5525.MTN
				6		ARZXM5526.MTN
				8		ARZXM5528.MTN
			3.0	4.5		ARZXM5535.MTN
				6		ARZXM5536.MTN
				8		ARZXM5538.MTN
			4.0	4.5		ARZXM5545.MTN
				6		ARZXM5546.MTN
				8		ARZXM5548.MTN
			0.6	4.5	Non -Hex	ARZXM5515N.MTN
				6		ARZXM5516N.MTN
				8		ARZXM5518N.MTN
			1.5	4.5		ARZXM5525N.MTN
				6		ARZXM5526N.MTN
				8		ARZXM5528N.MTN
			3.0	4.5		ARZXM5535N.MTN
				6		ARZXM5536N.MTN
				8		ARZXM5538N.MTN
			4.0	4.5		ARZXM5545N.MTN
				6		ARZXM5546N.MTN
				8		ARZXM5548N.MTN

System	Fixture Core	Diameter	Cuff Height	Post Height	Type	Ref.C
AnyRidge	Core 4.8	Ø5.5	0.6	4.5	Hex	ARZXL5515.MTN
				6		ARZXL5516 .MTN
				8		ARZXL5518 .MTN
			1.5	4.5		ARZXL5525.MTN
				6		ARZXL5526 .MTN
				8		ARZXL5528 .MTN
			3.0	4.5		ARZXL5535.MTN
				6		ARZXL5536 .MTN
				8		ARZXL5538 .MTN
			4.0	4.5		ARZXL5545.MTN
				6		ARZXL5546 .MTN
				8		ARZXL5548 .MTN
			0.6	4.5	Non -Hex	ARZXL5515N.MTN
				6		ARZXL5516N.MTN
				8		ARZXL5518N.MTN
			1.5	4.5		ARZXL5525N.MTN
				6		ARZXL5526N.MTN
				8		ARZXL5528N.MTN
			3.0	4.5		ARZXL5535N.MTN
				6		ARZXL5536N.MTN
				8		ARZXL5538N.MTN
			4.0	4.5		ARZXL5545N.MTN
				6		ARZXL5546N.MTN
				8		ARZXL5548N.MTN
		Ø6.0	0.6	4.5	Hex	ARZXL6015.MTN
				6		ARZXL6016.MTN
				8		ARZXL6018.MTN
			1.5	4.5		ARZXL6025.MTN
				6		ARZXL6026.MTN
				8		ARZXL6028.MTN
			3.0	4.5		ARZXL6035.MTN
				6		ARZXL6036.MTN
				8		ARZXL6038.MTN
			4.0	4.5		ARZXL6045.MTN
				6		ARZXL6046.MTN
				8		ARZXL6048.MTN
			0.6	4.5	Non -Hex	ARZXL6015N.MTN
				6		ARZXL6016N.MTN
				8		ARZXL6018N.MTN
			1.5	4.5		ARZXL6025N.MTN
				6		ARZXL6026N.MTN
				8		ARZXL6028N.MTN
			3.0	4.5		ARZXL6035N.MTN
				6		ARZXL6036N.MTN
				8		ARZXL6038N.MTN
			4.0	4.5		ARZXL6045N.MTN
				6		ARZXL6046N.MTN
				8		ARZXL6048N.MTN

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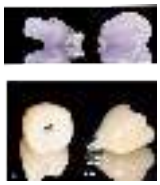
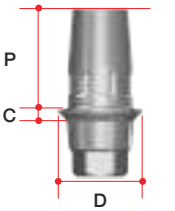
- ZrGEN Abutment

- Ti-base for Sirona Cerec users → CEREC
- In in Lab CAD Software, compatible with Xive Library





C-Type

System		Diameter	Cuff Height	Post Height	Post Size	Ref.C
AnyRidge		Ø3.9	0.5	4.7	Small	ARCS3405.MTN
			1			ARCS3410.MTN
			2			ARCS3420.MTN
		Ø4.3	0.5			ARCS3805.MTN
			1			ARCS3810.MTN
			2			ARCS3820.MTN
		Ø5.5	0.5		Large	ARCL4505.MTN
			1			ARCL4510.MTN
			2			ARCL4520.MTN
AnyRidge Octa 1	NC	Ø3.9	0.5	4.7	Small	AROCSN3405.MTN
			1.0			AROCSN3410.MTN
			2.0			AROCSN3420.MTN
		Ø4.3	0.5			AROCSN3805.MTN
			1.0			AROCSN3810.MTN
			2.0			AROCSN3820.MTN
	RC	Ø3.9	0.5		Small	AROCSR3405.MTN
			1.0			AROCSR3410.MTN
			2.0			AROCSR3420.MTN
		Ø4.3	0.5			AROCSR3805.MTN
			1.0			AROCSR3810.MTN
			2.0			AROCSR3820.MTN
		Ø5.5	0.5		Large	AROCLR4505.MTN
			1.0			AROCLR4510.MTN
			2.0			AROCLR4520.MTN
AnyOne		Ø3.9	0.5	4.7	Small	AOCS3405.MTN
			1			AOCS3410.MTN
			2			AOCS3420.MTN
		Ø4.3	0.5			AOCS3805.MTN
			1			AOCS3810.MTN
			2			AOCS3820.MTN
		Ø5.5	0.5		Large	AOCL4505.MTN
			1			AOCL4510.MTN
			2			AOCL4520.MTN

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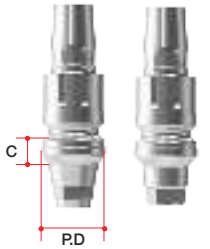
Scan Abutmet (C-type)

- Abutment Screw included.
  . AnyRidge (AANMSF)
  . AnyOne (AS20)
  . AnyRidge Octa 1(AROAS16B/ AROAS16)

- Scan Post for Sirona Cerec users → CEREC
- In in Lab CAD Software, compatible with Xive Library

System		Profile Diameter	Cuff Height	Post Size	Ref.C
AnyRidge		Ø3.9	0.5	Small	ARICSS3405T
			1		ARICSS3410T
			2		ARICSS3420T
		Ø4.3	0.5		ARICSS3805T
			1		ARICSS3810T
			2		ARICSS3820T
		Ø5.5	0.5	Large	ARICSL4505T
			1		ARICSL4510T
			2		ARICSL4520T
AnyRidge Octa 1	NC	Ø3.9	0.5	Small	AROCSS3405NT
			1		AROCSS3410NT
			2		AROCSS3420NT
		Ø4.3	0.5		AROCSS3805NT
			1		AROCSS3810NT
			2		AROCSS3820NT
	RC	Ø3.9	0.5	Small	AROCSS3405RT
			1		AROCSS3410RT
			2		AROCSS3420RT
		Ø4.3	0.5		AROCSS3805RT
			1		AROCSS3810RT
			2		AROCSS3820RT
		Ø5.5	0.5	Large	AROCSL4505RT
			1		AROCSL4510RT
			2		AROCSL4520RT
AnyOne		Ø3.9	0.5	Small	AOICSS3405T
			1		AOICSS3410T
			2		AOICSS3420T
		Ø4.3	0.5		AOICSS3805T
			1		AOICSS3810T
			2		AOICSS3820T
		Ø5.5	0.5	Large	AOICSL4505T
			1		AOICSL4510T
			2		AOICSL4520T



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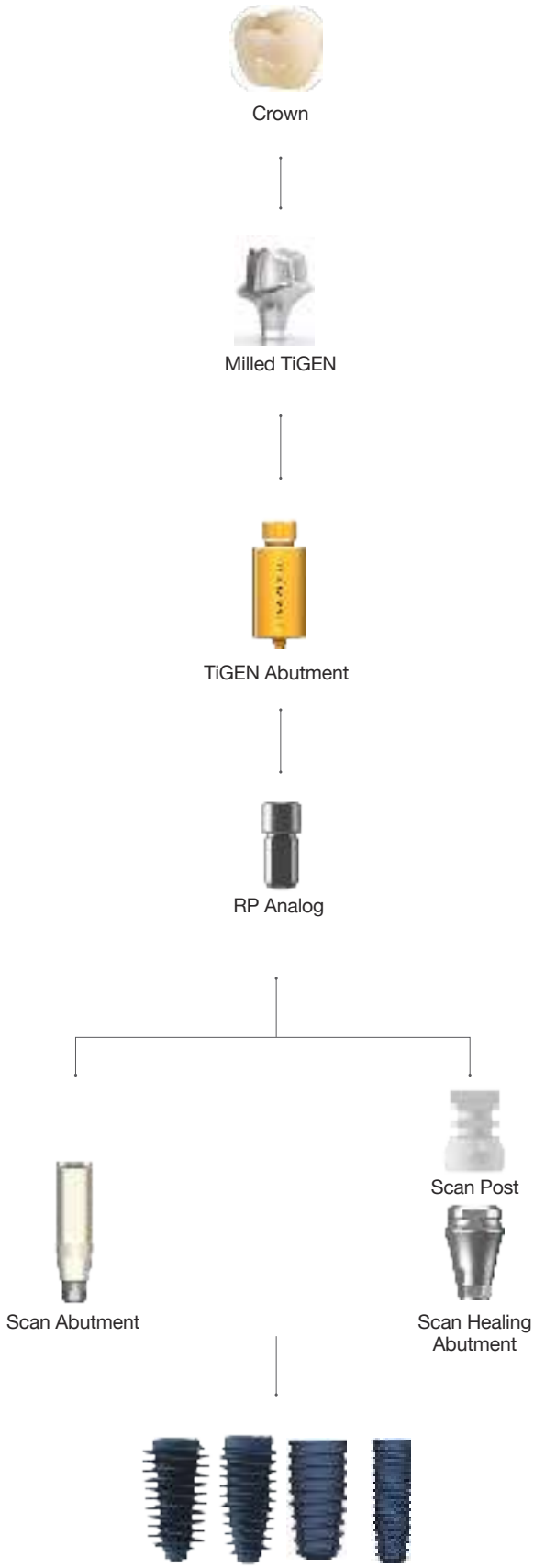
TiGEN Prosthesis



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TiGEN Abutment Option

TiGEN Abutment

- Abutment Screw included.
  . AnyRidge (AANMSF)
  . AnyOne Internal (AS20)
  . AnyOne Exeternal(SCS160/ RCS200)
  . AnyOne Stage
  . MiNi (MIAZ1410)
  . Octa Level(IRCS200)
  . AnyRidge Octa 1(AROAS16B/ AROAS16)

- Pre-milled Abutment
- 1Set(=Abutment 10ea)
  - included spare Abutment Screw
- Supporting DentalCAD
  - 3Shape
  - Exocad
  - Dental Wings

Standard

System		Color	Diameter	Length	Type	Ref.C
AnyRidge		Gold	Ø10	20	Hex	ARTR1020.MTN
					Non-Hex	ARTR1020N.MTN
			Ø12		Hex	ARTR1220.MTN
					Non-Hex	ARTR1220N.MTN
AnyRidge Octa 1	NC	Gold	Ø10		Octa	AROTGN1020.MTN
			Ø12		Octa	AROTGN1220.MTN
	RC	Silver	Ø10		Octa	AROTGR1020.MTN
			Ø12		Octa	AROTGR1220.MTN
AnyOne Internal		Pink	Ø10		Hex	AOTR1020.MTN
					Non-Hex	AOTR1020N.MTN
			Ø12		Hex	AOTR1220.MTN
					Non-Hex	AOTR1220N.MTN
AnyOne External		N/A	Ø12		Hex	AETS1220.MTN
						AETR1220.MTN
						AETW1220.MTN
MiNi		N/A	Ø10		Hex	MITN1020.MTN
					Non-Hex	MITN1020N.MTN
Octa Level	Small	N/A	Ø10		Octa	OCTS1020.MTN
					Non-Octa	NOTS1020.MTN
			Ø12		Octa	OCTS1220.MTN
					Non-Octa	NOTS1220.MTN
	Regular		Ø10		Octa	OCTR1020.MTN
					Non-Octa	NOTR1020.MTN
			Ø12		Octa	OCTR1220.MTN
					Non-Octa	NOTR1220.MTN
	Wide		Ø10		Octa	OCTW1020.MTN
					Non-Octa	NOTW1020.MTN
			Ø12		Octa	OCTW1220.MTN
					Non-Octa	NOTW1220.MTN

Extra EZ Connection

System	Color	Fixture Core	Diameter	Length	Type	Ref.C
AnyRidge	Gold	3.3	Ø10	20	Hex	ARTXN1020.MTN
					Non-Hex	ARTXN1020N.MTN
			Ø12		Hex	ARTXN1220.MTN
					Non-Hex	ARTXN1220N.MTN
		4.0	Ø10		Hex	ARTXM1020.MTN
					Non-Hex	ARTXM1020N.MTN
			Ø12		Hex	ARTXM1220.MTN
					Non-Hex	ARTXM1220N.MTN
		4.8	Ø10		Hex	ARTXL1020.MTN
					Non-Hex	ARTXL1020N.MTN
			Ø12		Hex	ARTXL1220.MTN
					Non-Hex	ARTXL1220N.MTN

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