

ANYRIDGE®

by MEGA'GEN

Minimally
invasive
implant solution



What is the **AnyRidge** way?

For clinicians...

less invasive, fast,
simple, predictable,
& esthetically
superior implant
treatment

AnyRidge – a new design standard on the global stage

Launched in 2009 as a biologically-inspired implant concept,
AnyRidge consistently surpasses clinical benchmarks

Realising the
ONE-DAY Implant™

For patients...

strong new
esthetic &
functional teeth via
painless & rapid
treatment



AnyRidge does it right!

AnyRidge goes FAR BEYOND standard expectations of dental implants...

The key benefits of AnyRidge implants become evident when considering immediate loading...

With the new loading protocol developed based on clinical results with AnyRidge, your patients have new smiles faster than ever....

- Guaranteed excellent stability, even with compromised bone density
- Less reduction & more preservation of cortical bone
- Wider implant possibilities than crestal width
- Clinically proven safety
- Faster & stronger osseointegration
- Esthetic design & varied abutment selection
- Super implant-prosthetic connection
- Innovative R2GATE software for completing implant & prosthesis in ONE DAY

AnyRidge

***Have you made the PARADIGM SHIFT yet?
Do it the AnyRidge Way!***



*Be confident,
you are using a
CLEAN IMPLANT!*



**TRUSTED QUALITY Award 2017-2023
From the CLEAN IMPLANT
FOUNDATION**

MegaGen's mission is to manufacture the highest quality implants,
and this Trusted Quality Award is the confirmation of our commitment.
For more information about the Clean Implant
Foundation, please visit www.cleanimplant.com



Key Advantages

Excellent initial stability even at the compromised bone density

No screw loosening guaranteed!

Unique and valuable ISQ pattern; essential for predictable immediate or early loading.



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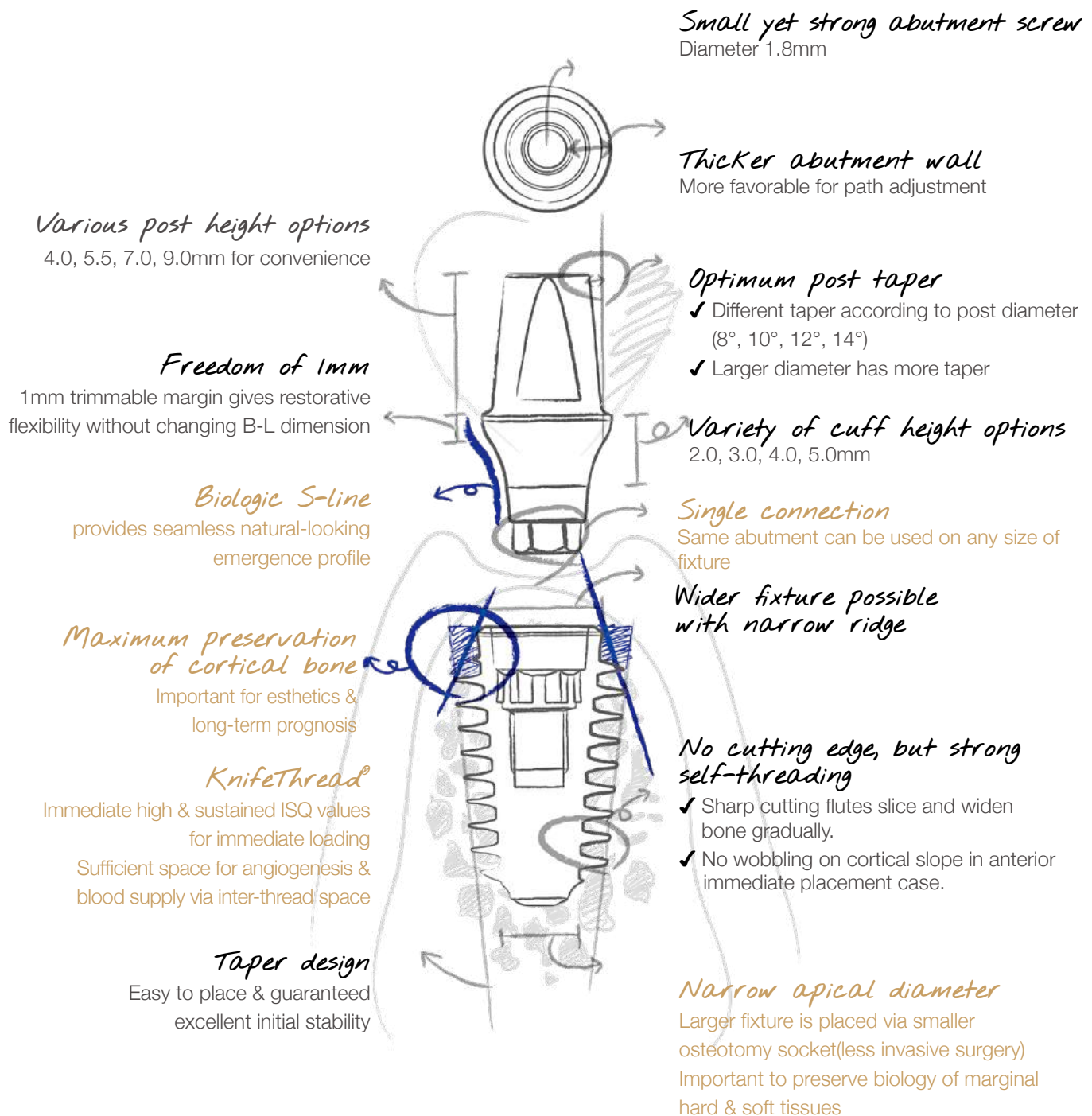
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Characteristics & Advantages

I. Design Concept



AnyRidge Fixture Line Up

Same core diameter, but different thread depth

Core Diameter	Fixture Diameter									
	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5	Ø6.0	Ø6.5	Ø7.0	Ø7.5	Ø8.0
Ø2.8										
Thread Depth	0.3									
Ø3.3										
Thread Depth		0.35	0.6	0.85	1.1					
NEW Ø3.8										
Thread Depth			0.35	0.6	0.85					
Ø4.8										
Thread Depth					0.35	0.6	0.85	1.1	1.35	1.6



Recommended
for molar sites.

II. Surgery

Excellent initial stability, even at compromised bone density.

AnyRidge® Fixture cuts bone smoothly and condenses it simultaneously.

1. Fixture placement

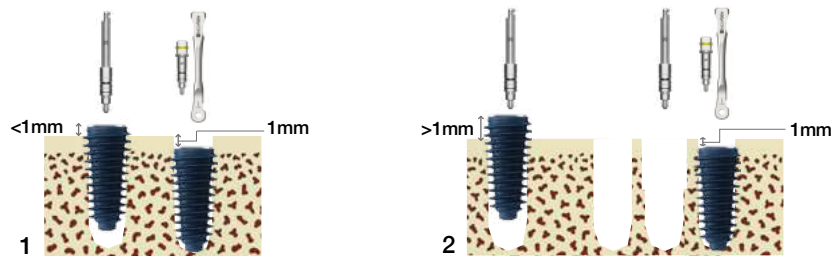
• Soft bone

The super self-tapping threads have a single core diameter that facilitates minimal site preparation by utilizing a smaller osteotomy to place a wider fixture with special threads.

• Hard bone

AnyRidge® Fixture with its super self-tapping thread design is easier than other traditional implants at hard bone.

**Caution! : The osteotomy socket (drilling) size should almost reach the size of fixture to avoid getting stuck in the bone during placement.*



Easy way to avoid stuck in the bone during AnyRidge implant placement

1. Due to extremely strong initial stability of AnyRidge fixture, it can be stuck in the middle during placement especially in mandibular hard bone. Please consider 'One millimeter Rule' to avoid this in the best and easiest way. Clinician can customize the drilling sequence once he fully understand the concept and characteristics of AnyRidge system to get preferred initial stability. 'One millimeter Rule' is simple; if an implant engine (40Ncm) stops leaving one millimeter above the crest, use ratchet wrench to screw it down to preferred position. We recommended to place implant platform 0.5~1.0mm under the crest.

2. If a fixture sticks in the middle leaving more than 1mm above the crest in hard mandibular bone, it is recommended to remove it using a wrench rather than trying to screw it down with excessive torque. Please use a cortical bone drill that is included in a surgical kit, the depth of cortical bone drilling can be adjusted according to the bone condition. Then, place the same fixture into the osteotomy socket.

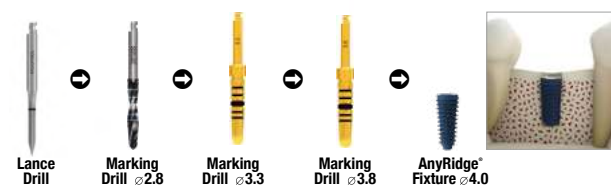
2. Customized drilling Sequence

- AnyRidge® system has no fixed drilling protocol, just make your own protocol based on patient's bone quality to attain preferred initial stability or simply drill an osteotomy socket to given conditions and then decide the diameter of a fixture.

Example 1) Ø5.0mm fixture can be placed 2.8mm osteotomy socket in D4 bone. Excellent initial stability can be attained



Example 2) In hard one, it is highly recommended to make a socket almost same diameter size as a fixture



- Improved drill design has simplified drilling sequence, you can even harvest autogenous bone using these specially designed drills.
(Recommended speed : 50 RPM, 50 Ncm with saline solution irrigation)
- The best way to get ideal initial stability with AnyRidge system is placing a fixture using a surgical engine, leaving one or two treads above the crest; then use ratchet wrench to place the platform at the desired position.

III. Prosthetics

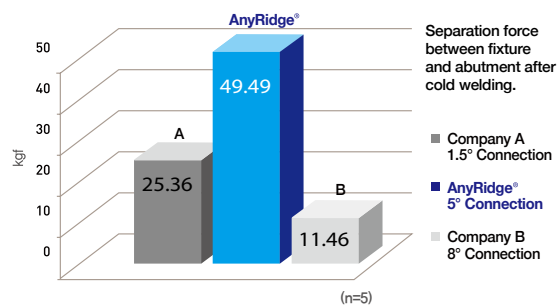
Better esthetic outcomes from wide variety of prosthetic options!

Stop worrying about screw loosening!

1. No screw loosening, less biologic width!

• Magic Five (5° Internal connection)

Now you can be free from screw loosening with our unique connection (5 degree morse taper) which gives perfect hermetic sealing. Biologic width is minimized due to no micro gap, and crestal bone health is well maintained.



Performed Retention Test to evaluate the fixture-abutment retention force using Universal Testing Machine
-R&D center in MegaGen Implant Co.,Ltd.(2009)-

2. Biologic S-line

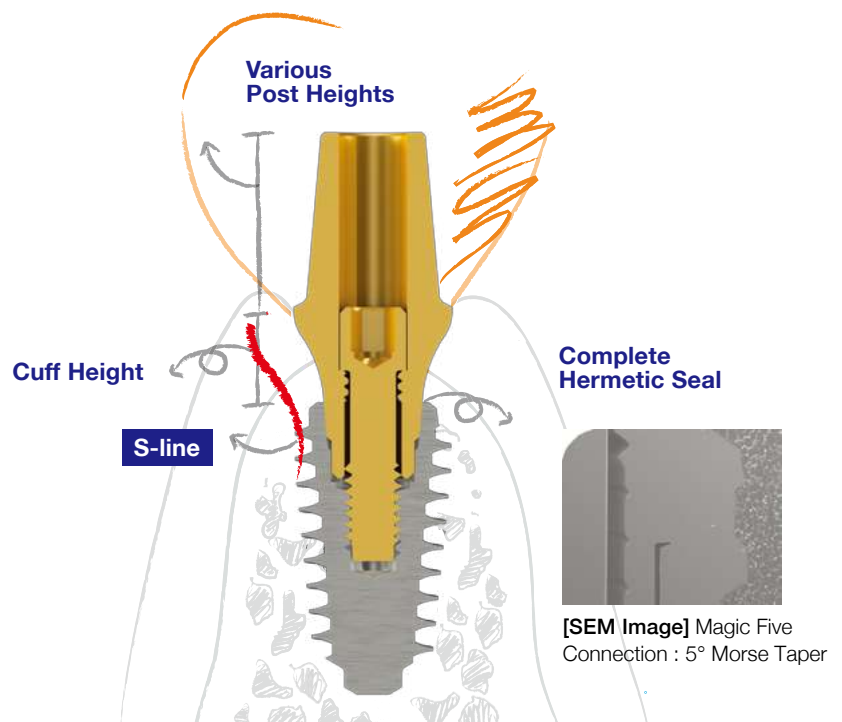
Helps to achieve beautiful, natural-looking esthetics.

3. Optimum hex height

Feel AnyRidge connection. It starts with impression taking and lasts until final restoration.

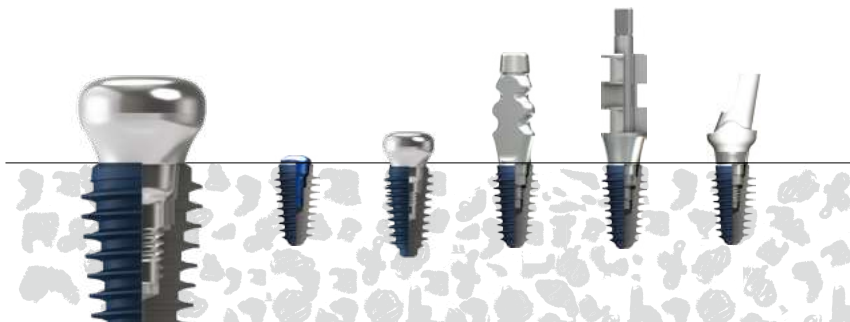
4. All indications, various abutment options

Every case, every shape, every size. Everything was considered to satisfy every need.



►► Two different connections between a fixture & a component

1. All transitional and temporary components have 'Ledges' on the bottom



- Cover Screws, Healing Abutments, Impression Coping (transfer and pick-up type), Temporary Cylinders have ledges on the bottom which prevent from cold welding with a fixture.
- Hand Drivers(1.2 Hex) or Impression Drivers can be used easily to screw these components in and out.

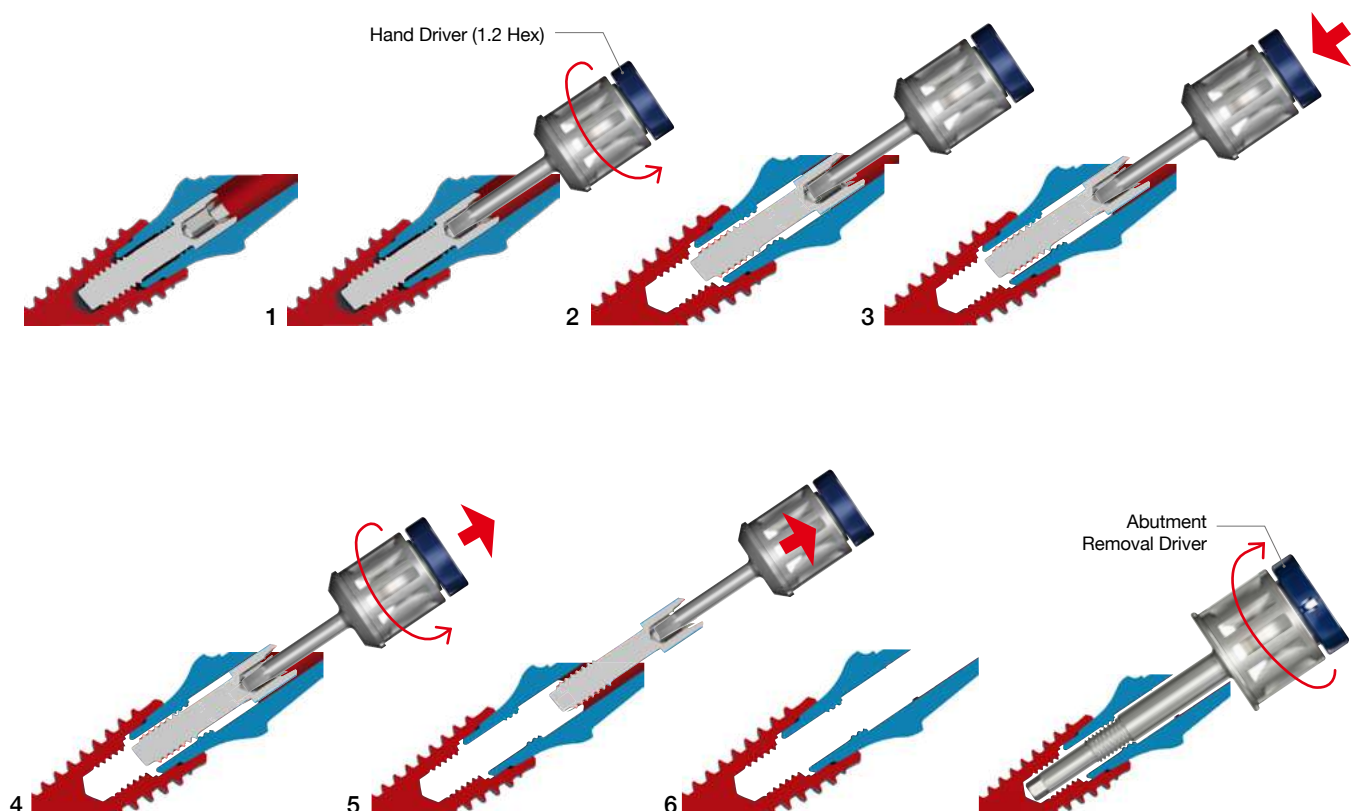
2. All permanent abutments will make strong connections with fixtures, even with finger force!



- 25~35Ncm is recommended to connect a permanent abutment into a fixture.
- A fixed abutment cannot be removed with finger force even after complete removal of Abutment Screw because of perfect cold welding. To remove a permanent abutment, Abutment Removal Driver should be used.

►► How to remove Permanent Abutment from Fixture?

Due to extremely strong connection force, you don't have to worry about screw loosening. Please use our special 'removal driver' when you want to remove an abutment from a fixture.



1. Use a Hand Driver(1.2 Hex) to unscrew Abutment Screw.
2. Continue to turn counter-clockwisely until you feel a click of disengagement.
3. Push down Hand Driver once again to catch and fix Abutment Screw.
4. Lift up Hand Driver lightly and continue to turn counter-clockwisely until Abutment Screw engages with the inner screw of Abutment.
5. Remove Abutment Screw completely from the abutment
6. Insert an 'Abutment Removal Driver' and continue to turn clockwise until the abutment comes out of fixture. You can feel some resistance during screw-down of the Abutment Removal Driver, but don't worry, simple exert is needed disconnect the abutment from the fixture.



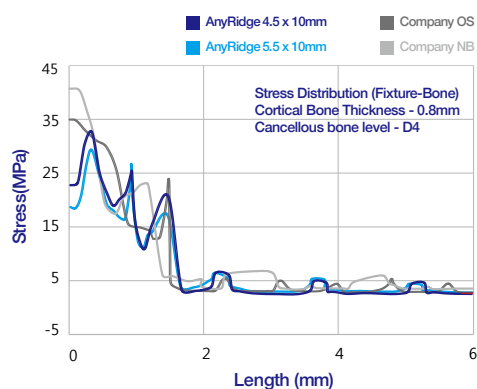
IV. Maintenance

Unique and sturdy design provides long-term stability!

1. Higher cortical bone preservation is guaranteed



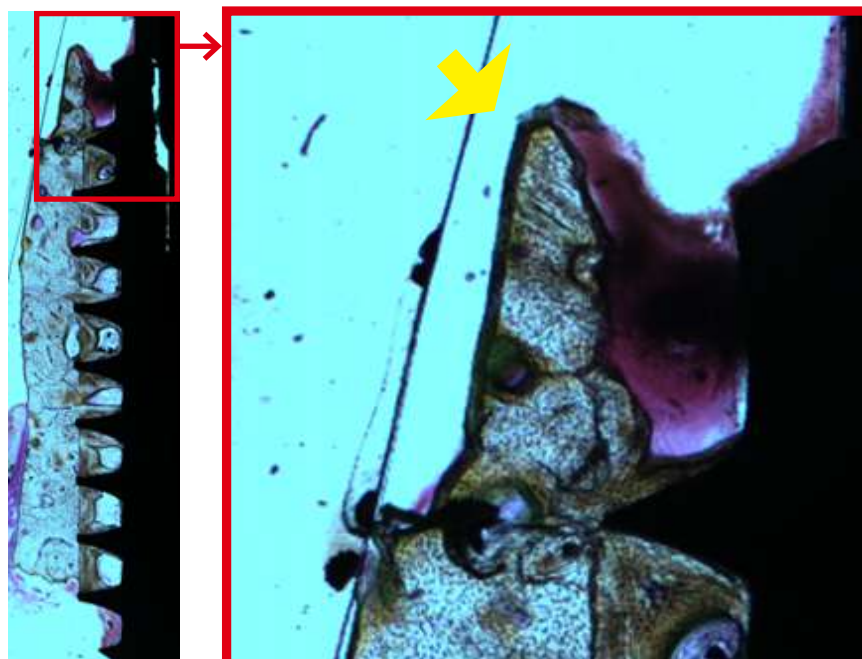
AnyRidge does not depend on cortical bone for initial stability; decreased stress on cortical bone helps to prevent bone resorption after implantation.



- More cortical bone
- = More soft tissue volume
- = Beautiful gingival line

Advanced coronal design allows maximum cortical bone preservation around implants. Beyond osseointegration, AnyRidge can assure beautiful gingival line by preserving and maintaining more cortical bone.

Performed Finite element analysis to evaluate the fixture-bone stress using ABAQUS 6.8 -R&D center in MegaGen Implant Co., Ltd.(2009)-



• A Human Biopsy (2.5 yrs after placement)

The sharp and high alveolar crest (yellow arrow) could be maintained due to biology driven implant design. With this maintenance of alveolar bone, the peri-implant marginal gingiva showed almost no recession during 2.5 years of follow-up, even in the case of limited ridge width.

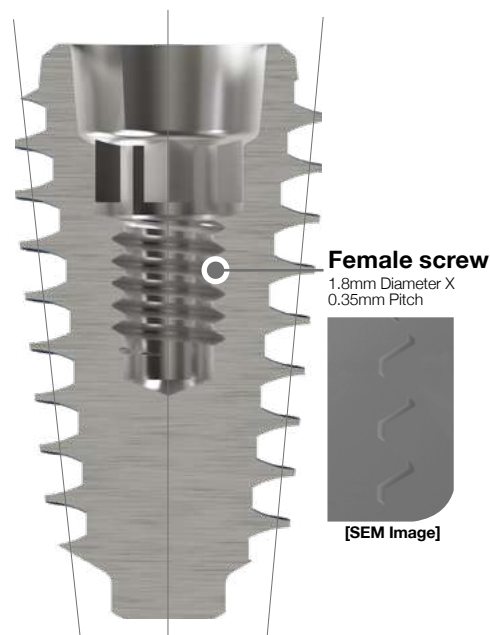
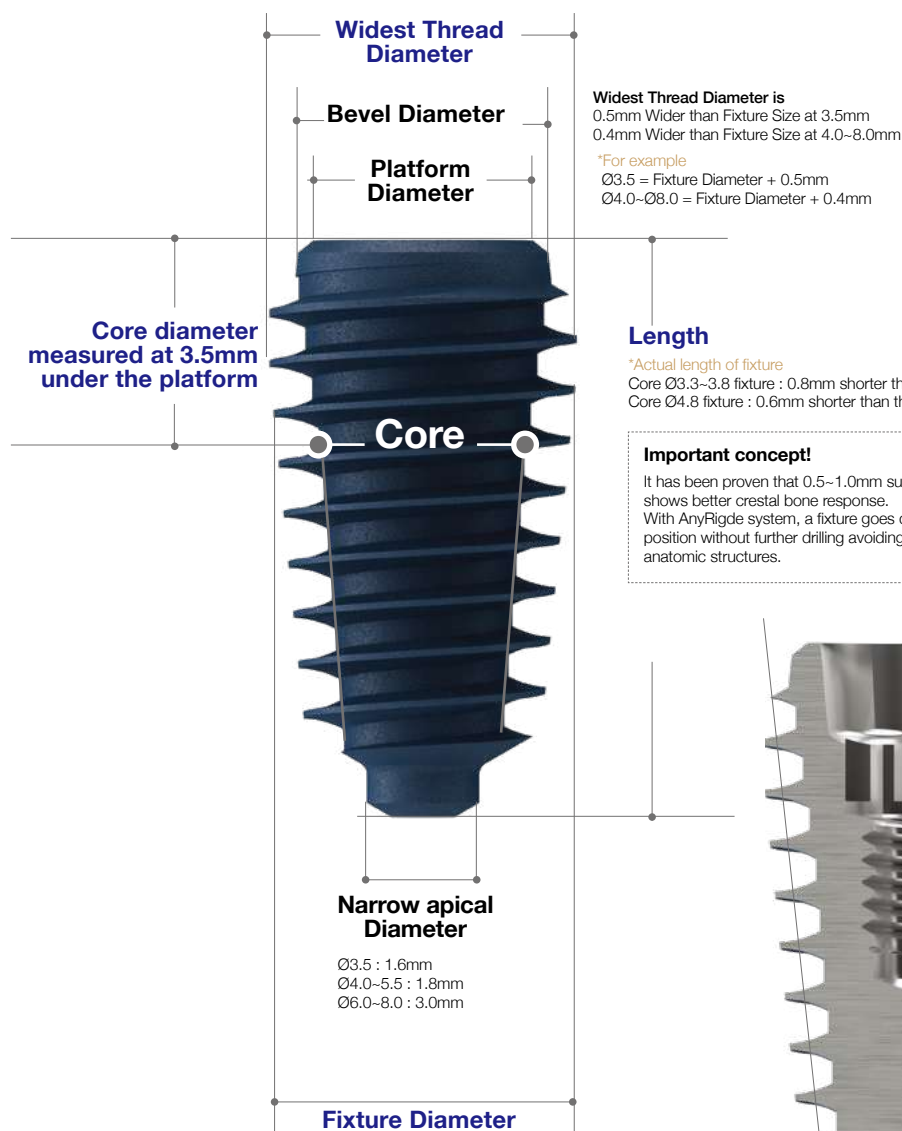


Fixture Product & Packaging

I. Fixture Dimension



Core (mm)	Platform (mm)	Bevel (mm)
Ø3.3	3.5	3.8
		4.0
Ø3.8	4.0	4.5
Ø4.8	5.0	5.5



II. Fixture Size

Small Ø3.5

- Cover Screw included.

- Availability of 7mm product is subject to local approval.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
3.5	2.8	7	FANIH3507C
		8.5	FANIH3508C
		10	FANIH3510C
		11.5	FANIH3511C
		13	FANIH3513C
		15	FANIH3515C



Regular Ø4.0

- Cover Screw included.

- Availability of 7mm product is subject to local approval.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
4.0	3.3	7	FANIH4007C
		8.5	FANIH4008C
		10	FANIH4010C
		11.5	FANIH4011C
		13	FANIH4013C
		15	FANIH4015C

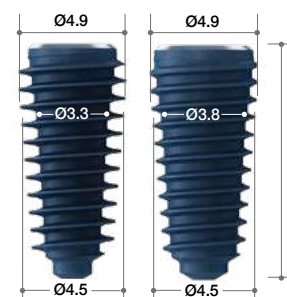


Regular Ø4.5

- Cover Screw included.

- Availability of 7mm product is subject to local approval.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
4.5	3.3	7	FANIH4507C
		8.5	FANIH4508C
		10	FANIH4510C
		11.5	FANIH4511C
		13	FANIH4513C
		15	FANIH4515C
	3.8	7	AR384507C
		8.5	AR384508C
		10	AR384510C
		11.5	AR384511C
		13	AR384513C
		15	AR384515C

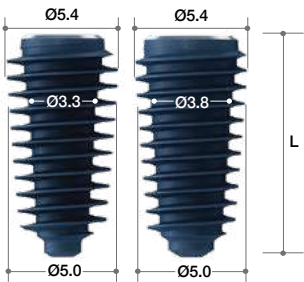


Recommended for molar sites.

➡ Fixture Size

Wide Ø5.0

- Cover Screw included.

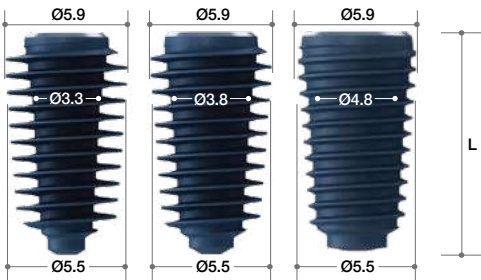


Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
5.0	3.3	7	FANIH5007C
		8.5	FANIH5008C
		10	FANIH5010C
		11.5	FANIH5011C
		13	FANIH5013C
		15	FANIH5015C
	3.8	7	AR385007C
		8.5	AR385008C
		10	AR385010C
		11.5	AR385011C
		13	AR385013C
		15	AR385015C

Recommended for molar sites.

Wide Ø5.5

- Cover Screw included.



Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
5.5	3.3	7	FANIH5507C
		8.5	FANIH5508C
		10	FANIH5510C
		11.5	FANIH5511C
		13	FANIH5513C
		15	FANIH5515C
	3.8	7	AR385507C
		8.5	AR385508C
		10	AR385510C
		11.5	AR385511C
		13	AR385513C
		15	AR385515C
	4.8	7	AR485507C
		8.5	AR485508C
		10	AR485510C
		11.5	AR485511C
		13	AR485513C
		15	AR485515C

Recommended for molar sites.

➔ Fixture Size (Continued)

*Super Wide Ø6.0

- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
6.0	4.8	7	FALHX6007C
		8.5	FALHX6008C
		10	FALHX6010C
		11.5	FALHX6011C
		13	FALHX6013C



*Super Wide Ø6.5

- Cover Screw included.

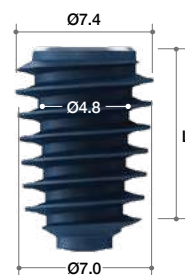
Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
6.5	4.8	7	FALHX6507C
		8.5	FALHX6508C
		10	FALHX6510C
		11.5	FALHX6511C
		13	FALHX6513C



*Super Wide Ø7.0

- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
7.0	4.8	7	FALHX7007C
		8.5	FALHX7008C
		10	FALHX7010C
		11.5	FALHX7011C
		13	FALHX7013C



*Super Wide Ø7.5

- Cover Screw included.

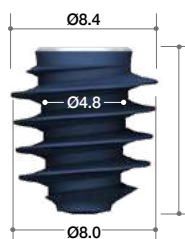
Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
7.5	4.8	7	FALHX7507C
		8.5	FALHX7508C
		10	FALHX7510C
		11.5	FALHX7511C
		13	FALHX7513C



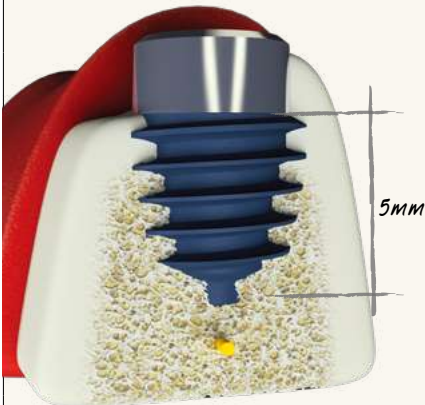
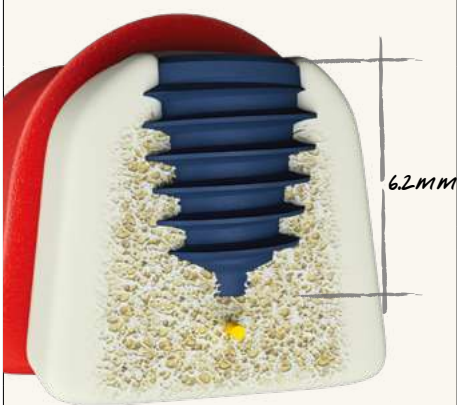
*Super Wide Ø8.0

- Cover Screw included.

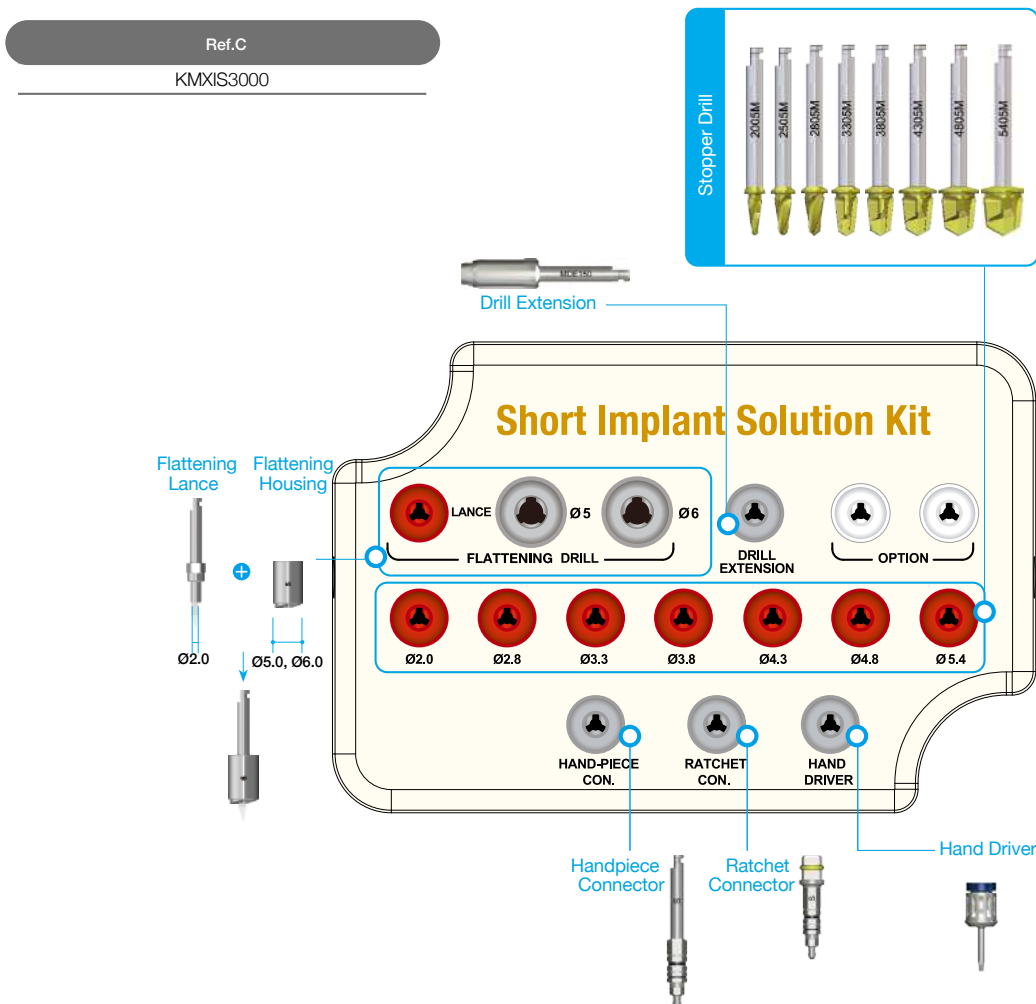
Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
8.0	4.8	7	FALHX8007C
		8.5	FALHX8008C
		10	FALHX8010C
		11.5	FALHX8011C
		13	FALHX8013C



For special use in case of limited vertical dimension (minimum bone depth: 5 / 6mm)

Core Diameter		Fixture Diameter				
		Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5
 5mm	AnyRidge					
		Core 3.3				
						
		Core 3.8				
						
		Core 4.3				
						
		Core 4.8				
						
		Core 3.5				
						
 6.2mm	AnyRidge	Core 4.0				
						
		Core 3.3				
						
		Core 3.8				
						
		Core 4.0				
						
		Core 4.3				
						
		Core 4.8				

Surgical Kit for Short Implant Solution



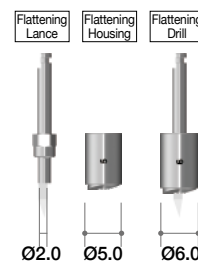
Important!

Flattening Drill

- Flattens irregular bone for accurate stopper drilling
- Designed to engage with flattening lance & housing. 2 kinds of housing to match diameters of different final drills (Ø5.0 & Ø6.0)
- Ø5.0 = Stopper Drill Ø2.0 ~ Ø4.3
- Ø6.0 = Stopper Drill Ø4.8 ~ Ø5.4
- Housing boundary guides drilling position of fixture

Diameter	Length(mm)	Ref.C
Ø5.0 / Ø2.0	3.5	FD5020
Ø6.0 / Ø2.0		*FD6020

(*) Separate sales item



Stopper Drill

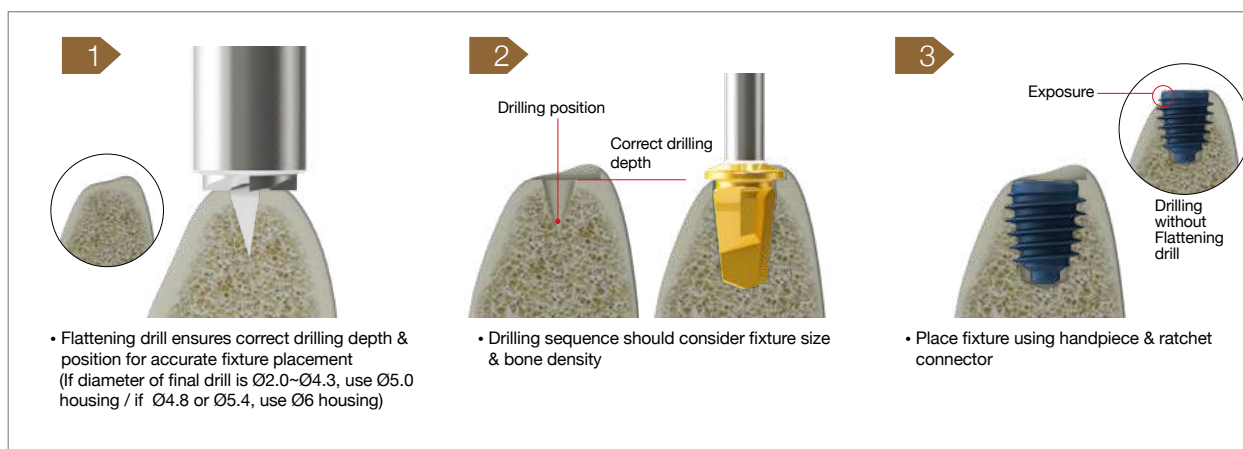
- TiN coated for enhanced corrosion & abrasion resistance

Profile Diameter	Length (mm)	Ref.C
Ø2.0	6.0	MS2005M
Ø2.5		*MS2505M
Ø2.8		MS2805M
Ø3.3		MS3305M
Ø3.8		MS3805M
Ø4.3		MS4305M
Ø4.8		MS4805M
Ø5.4		MS5405M

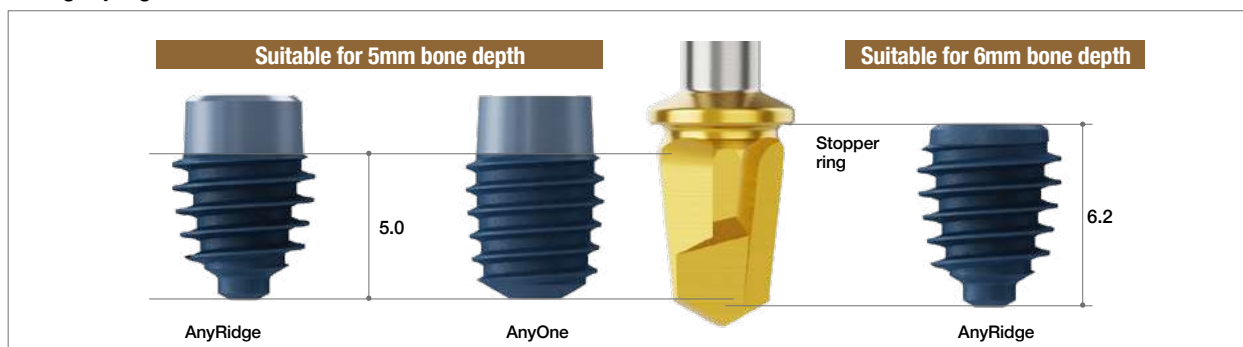
(*) Separate sales item



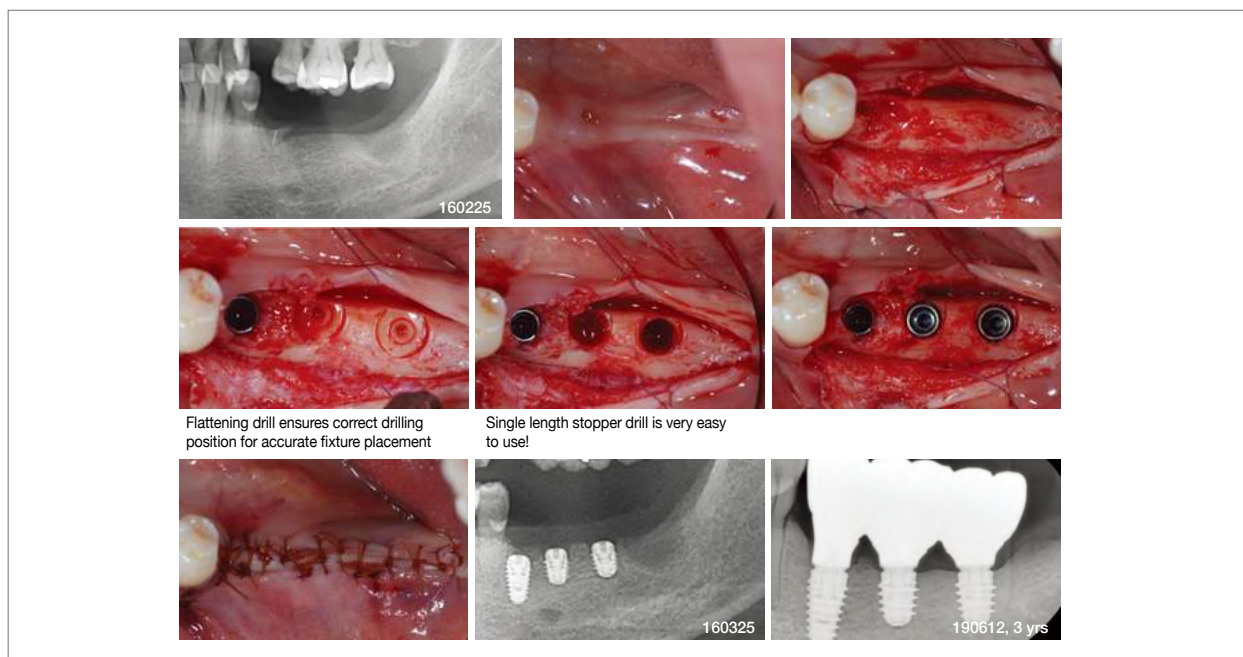
➡ Drilling Protocol



Drilling depth guide



➡ Clinical Case

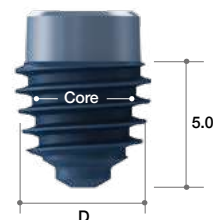


➔ Fixture Size

Short Implant

- Cover Screw included

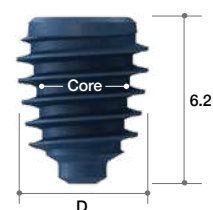
Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
Ø3.5	3.3	5	AR333505C
Ø4.0	3.3		AR334005C
Ø4.5	3.3		AR334505C
	3.8		AR384505C
Ø5.0	3.3		AR335005C
	3.8		AR385005C
	4.3		AR435005C
Ø5.5	3.3		AR335505C
	3.8		AR385505C
	4.3		AR435505C
	4.8		AR485505C



Short Implant

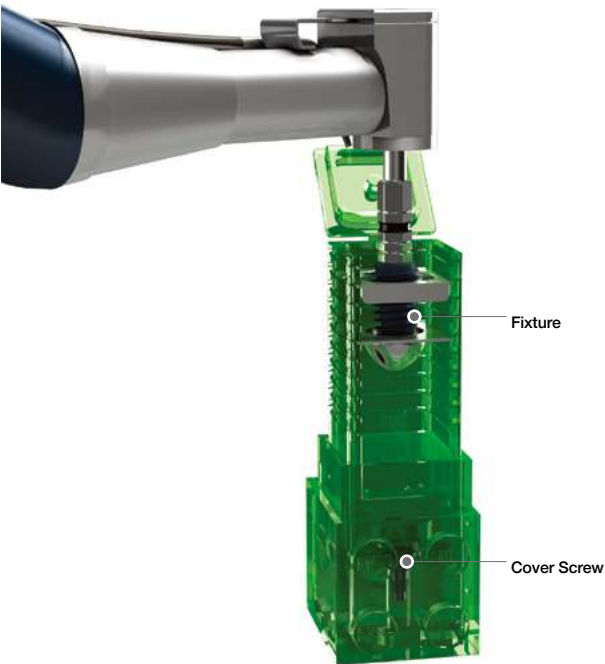
- Cover Screw included

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
Ø5.0	3.3	6.2	FANIH5007C
	3.8		AR385007C
	4.0		FANIH5007SC
	4.3		AR435007C
Ø5.5	3.3		FANIH5507C
	3.8		AR385507C
	4.0		FANIH5507SC
	4.3		AR435507C
	4.8		AR485507C

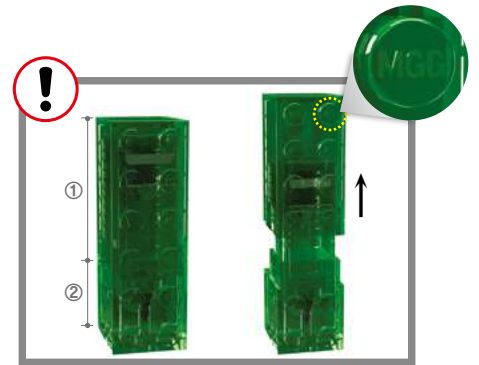


III. Packaging

- Ampule



Peel off cover & remove ampule



Separate top^① & bottom^②, as shown, to reveal inner ampule with fixture



Flip open top to reveal fixture



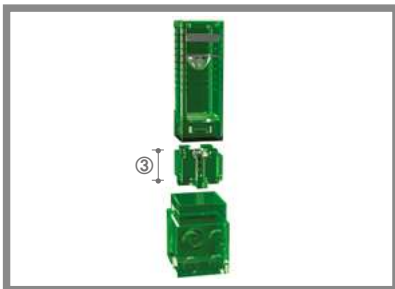
Connect handpiece to fixture



Make sure fixture is fully connected, then remove from ampule



Place fixture according to drilling sequence



Separate fixture ampule from bottom, as shown, to reveal cover screw holder^③



Use hand driver to pick up cover screw



Tighten cover screw to fixture

MegaGen ampule! Re-usable as building block *after cleaning and sterilization! less plastic waste!

Cover Screw & Healing Abutment

Cover Screw

* Included in the fixture package.

- Use with a Hand Driver(1.2 Hex).
- Used for submerged type surgery.
- Protects the inner structure of a fixture.
- Different heights can be chosen according to the position of fixture below the crest.
- 1.6mm and 2.6mm height of Cover Screw can be purchased separately.
- Recommend torque : by hand (5 - 8Ncm)

Profile Diameter	Height (mm)	Ref.C
Ø3.5	0.8	AANCSF3508
	1.6	AANCSF3516
	2.6	AANCSF3526
Ø5.0	0.5	AANCSF5005
Ø6.0	0.5	AANCSF6005



Healing Abutment

- Use with a Hand Driver(1.2 Hex).
- Used for non-submerged type surgery or for two stage surgery.
- Choose appropriate diameter and height of Healing Abutment according to situation.
- Helps to form suitable emergence profile during period of gingival healing.
- Recommend torque : by hand (5 - 8Ncm)



Profile Diameter	Height (mm)	Ref.C
Ø4.0	3	AANHAF0403
	4	AANHAF0404
	5	AANHAF0405
	6	AANHAF0406
	7	AANHAF0407
	8	AANHAF0408
	9	AANHAF0409
Ø5.0	3	AANHAF0503
	4	AANHAF0504
	5	AANHAF0505
	6	AANHAF0506
	7	AANHAF0507
	8	AANHAF0508
	9	AANHAF0509
Ø6.0	3	AANHAF0603
	4	AANHAF0604
	5	AANHAF0605
	6	AANHAF0606
	7	AANHAF0607
	8	AANHAF0608
	9	AANHAF0609

Profile Diameter	Height (mm)	Ref.C
Ø7.0	3	AANHAF0703
	4	AANHAF0704
	5	AANHAF0705
	6	AANHAF0706
	7	AANHAF0707
	8	AANHAF0708
	9	AANHAF0709
Ø8.0	3	AANHAF0803
	4	AANHAF0804
	5	AANHAF0805
	6	AANHAF0806
	7	AANHAF0807
	8	AANHAF0808
	9	AANHAF0809
Ø10.0	3	AANHAF1003
	4	AANHAF1004
	5	AANHAF1005
	6	AANHAF1006
	7	AANHAF1007
	8	AANHAF1008
	9	AANHAF1009



Healing Abutment

(Anatomic type)

- Use with a Hand Driver(1.2 Hex).
- Abutment Screw included.H=4 ARHAS1804/
H=5 ARHAS1805/ H=7 ARHAS1807
- Used for non-submerged type surgery or for two stage surgery.
- Choose appropriate diameter and height of Healing Abutment according to situation.
- Helps to form suitable emergence profile during period of gingival healing.
- Recommend torque : by hand (5 - 8Ncm)

Type	MD (mm)	LL (mm)	Height (mm)	Connection	Ref.C
Incisor	4.0	5.0	4	Hex	ARHI40504T
			5		ARHI40505T
			7		ARHI40507T
	4.5	4.5	4		ARHI45454T
			5		ARHI45455T
			7		ARHI45457T
	6.0	5.0	4		ARHI60504T
			5		ARHI60505T
			7		ARHI60507T
	7.0	6.0	4		ARHI70604T
			5		ARHI70605T
			7		ARHI70607T
	4.0	5.0	4	Non-Hex	ARHI40504NT
			5		ARHI40505NT
			7		ARHI40507NT
	4.5	4.5	4		ARHI45454NT
			5		ARHI45455NT
			7		ARHI45457NT
	6.0	5.0	4		ARHI60504NT
			5		ARHI60505NT
			7		ARHI60507NT
	7.0	6.0	4		ARHI70604NT
			5		ARHI70605NT
			7		ARHI70607NT



Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Canine	5.0	6.5	4	Hex	ARHC50654T
			5		ARHC50655T
			7		ARHC50657T
	5.0	6.5	4	Non-Hex	ARHC50654NT
			5		ARHC50655NT
			7		ARHC50657NT



Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Pre-Molar	4.5	6.0	4	Hex	ARHM45604T
			5		ARHM45605T
			7		ARHM45607T
	5.0	7.0	4		ARHM50704T
			5		ARHM50705T
			7		ARHM50707T
	4.5	6.0	4	Non-Hex	ARHM45604NT
			5		ARHM45605NT
			7		ARHM45607NT
	5.0	7.0	4		ARHM50704NT
			5		ARHM50705NT
			7		ARHM50707NT

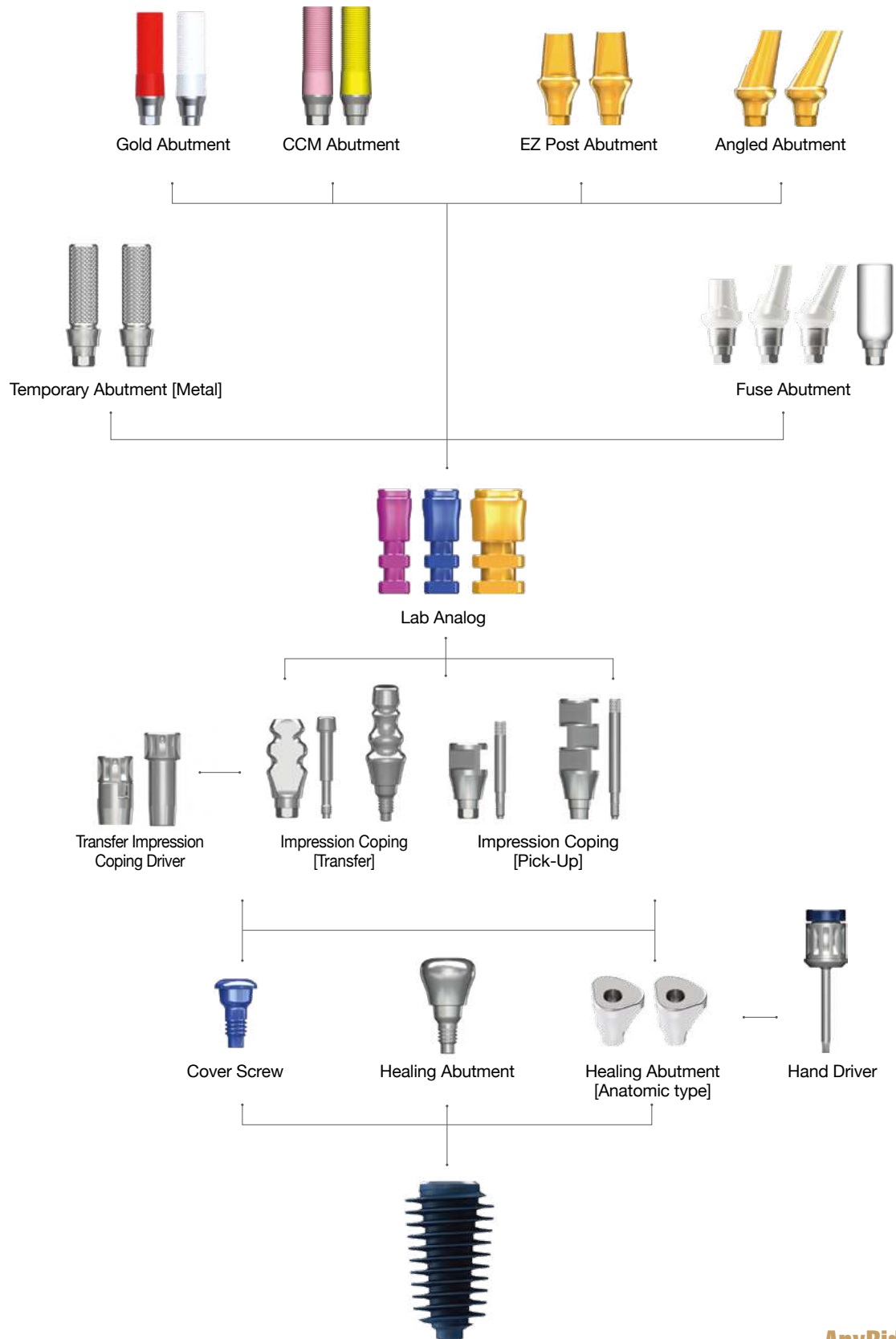


Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Molar	6.0	7.0	4	Hex	ARHM60704T
			5		ARHM60705T
			7		ARHM60707T
	6.0	8.0	4		ARHM60804T
			5		ARHM60805T
			7		ARHM60807T
	6.0	9.0	4		ARHM60904T
			5		ARHM60905T
			7		ARHM60907T
	7.0	8.0	4		ARHM70804T
			5		ARHM70805T
			7		ARHM70807T
	7.0	9.0	4		ARHM70904T
			5		ARHM70905T
			7		ARHM70907T
	7.0	10.0	4		ARHM70104T
			5		ARHM70105T
			7		ARHM70107T
	8.0	9.0	4		ARHM80904T
			5		ARHM80905T
			7		ARHM80907T
	8.0	10.0	4		ARHM80104T
			5		ARHM80105T
			7		ARHM80107T
	6.0	7.0	4	Non-Hex	ARHM60704NT
			5		ARHM60705NT
			7		ARHM60707NT
	6.0	8.0	4		ARHM60804NT
			5		ARHM60805NT
			7		ARHM60807NT
	6.0	9.0	4		ARHM60904NT
			5		ARHM60905NT
			7		ARHM60907NT
	7.0	8.0	4		ARHM70804NT
			5		ARHM70805NT
			7		ARHM70807NT
	7.0	9.0	4		ARHM70904NT
			5		ARHM70905NT
			7		ARHM70907NT
	7.0	10.0	4		ARHM70104NT
			5		ARHM70105NT
			7		ARHM70107NT
	8.0	9.0	4		ARHM80904NT
			5		ARHM80905NT
			7		ARHM80907NT
	8.0	10.0	4		ARHM80104NT
			5		ARHM80105NT
			7		ARHM80107NT

Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Special	4.5	6.0	4	Hex	ARHS45604T
			5		ARHS45605T
			7		ARHS45607T
	5.0	6.5	4		ARHS50654T
			5		ARHS50655T
			7		ARHS50657T
	5.0	7.0	4		ARHS50704T
			5		ARHS50705T
			7		ARHS50707T
	6.0	7.0	4		ARHS60704T
			5		ARHS60705T
			7		ARHS60707T
	6.0	8.0	4		ARHS60804T
			5		ARHS60805T
			7		ARHS60807T
	6.0	9.0	4		ARHS60904T
			5		ARHS60905T
			7		ARHS60907T
	7.0	8.0	4		ARHS70804T
			5		ARHS70805T
			7		ARHS70807T
	7.0	9.0	4		ARHS70904T
			5		ARHS70905T
			7		ARHS70907T
	7.0	10.0	4		ARHS70104T
			5		ARHS70105T
			7		ARHS70107T
	8.0	9.0	4		ARHS80904T
			5		ARHS80905T
			7		ARHS80907T
	8.0	10.0	4		ARHS80104T
			5		ARHS80105T
			7		ARHS80107T
	4.5	6.0	4	Non-Hex	ARHS45604NT
			5		ARHS45605NT
			7		ARHS45607NT
	5.0	6.5	4		ARHS50654NT
			5		ARHS50655NT
			7		ARHS50657NT
	5.0	7.0	4		ARHS50704NT
			5		ARHS50705NT
			7		ARHS50707NT
	6.0	7.0	4		ARHS60704NT
			5		ARHS60705NT
			7		ARHS60707NT
	6.0	8.0	4		ARHS60804NT
			5		ARHS60805NT
			7		ARHS60807NT
	6.0	9.0	4		ARHS60904NT
			5		ARHS60905NT
			7		ARHS60907NT
	7.0	8.0	4		ARHS70804NT
			5		ARHS70805NT
			7		ARHS70807NT
	7.0	9.0	4		ARHS70904NT
			5		ARHS70905NT
			7		ARHS70907NT
	7.0	10.0	4		ARHS70104NT
			5		ARHS70105NT
			7		ARHS70107NT
	8.0	9.0	4		ARHS80904NT
			5		ARHS80905NT
			7		ARHS80907NT
	8.0	10.0	4		ARHS80104NT
			5		ARHS80105NT
			7		ARHS80107NT

Abutment & Prosthetic Options

I. Fixture Level Prosthesis



➔ Impression Copings

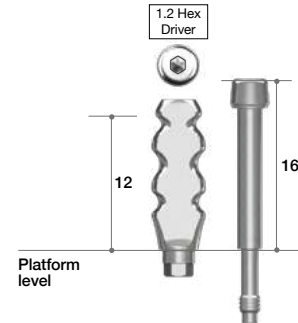
Impression Coping

(2-Piece, Transfer Type) (For Closed-Tray Technique)

- Guide Pins : AANGPT/AANGPT12H/AANGPT16/
AANGPT16H)

- Streamlined shape ; easy to transfer.
- Anti-rotation grooves match with hex structure of fixtures.
- Should be tightened with Impression Driver (Page.394)
- Impression Coping Driver and Hand Driver(1.2Hex) should be used to ensure Impression Coping is properly tightened.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	12	2-Piece Hand driver (1.2 Hex)	AANITH4012HT
	16		AANITH4016HT
Ø5.0	12		AANITH5012HT
	16		AANITH5016HT
Ø6.0	12		AANITH6012HT
Ø7.0	12		AANITH7012HT

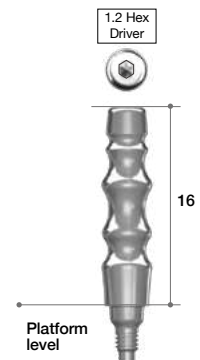


Impression Coping

(1-piece, Transfer Type) (For Closed-Tray Technique)

- Should be tightened with Impression Driver (Page.394)
- Impression Coping Driver and Hand Driver(1.2Hex) should be used to ensure Impression Coping is properly tightened.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	12	1-Piece Hand driver (1.2 Hex)	AANITN4012H
	16		AANITN4016H
Ø5.0	12		AANITN5012H
	16		AANITN5016H
Ø6.0	12		AANITN6012H
Ø7.0	12		AANITN7012H



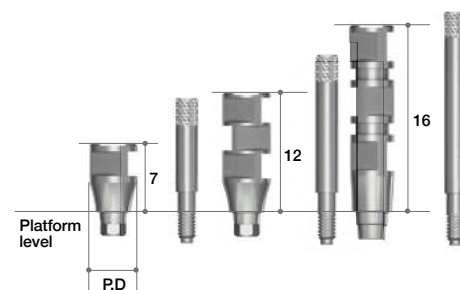
Impression Coping

(2-piece, Pick-up Type) (For Open-tray Technique)

- Guide Pins : AANGPP0010 (7mm : Short)
AANGPP0015 (12mm : Long)
AANGPP0020 (20mm : Extra-long)

- Square structure ; strong anti - rotation function.
- Designed for easy and accurate pick-up impression.
- Extra-long guide pin can be purchased separately.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	7	Hex	AANIPH4007T
	12		AANIPH4012T
	16		AANIPH4016T
	7	Non-Hex	AANIPN4007T
	12		AANIPN4012T
	16		AANIPN4016T
Ø5.0	7	Hex	AANIPH5007T
	12		AANIPH5012T
	7	Non-Hex	AANIPN5007T
	12		AANIPN5012T
Ø6.0	7	Hex	AANIPH6007T
	12		AANIPH6012T
	7	Non-Hex	AANIPN6007T
	12		AANIPN6012T
Ø7.0	7	Hex	AANIPH7007T
	12		AANIPH7012T
	7	Non-Hex	AANIPN7007T
	12		AANIPN7012T



➡ Lab Analog & Temporary Abutment

Lab Analog

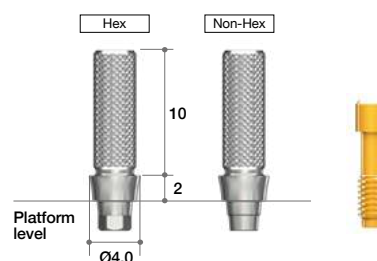
Profile Diameter	Color	Ref.C
Ø4.0 ~ Ø5.5	Blue	AANLAF4055



Temporary Abutment (Titanium)

- Multi Post Screw(AANMSF) included.
- For making provisional restoration.
- Grooved on the post allows strong resin adherence.
- Recommend torque : 25Ncm

Profile Diameter	Cuff Height (mm)	Type	Ref.C
Ø4.0	2	Hex	AANTMH4012T
		Non-Hex	AANTMN4012T

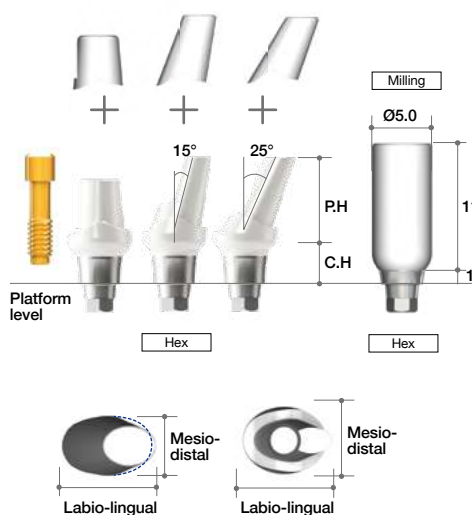


Fuse Abutment

- Straight, 15°, 25° ; Multi Post Screw(AANMSF) included + Fuse Cap included.
- Milling ; Multi Post Screw(AANMSF) included.
- Recommend torque : 25Ncm

Diameter	C.H (mm)		P.H (mm)	Type	Ref.C
	Labio-lingual	Mesio-distal			
Ø5.5	Ø5.5	4	5.5	Straight	AFAP5545P
	Ø4.5	7	15°		AFAA5415P
			25°		AFAA5425P
Ø5.0	1	11	Milling		AANTAH5012T

NEW : 4mm cuff height available
 → Adequate for deeply placed implants
 or thick gingival cases



►► Fuse Abutment™



Why is the 'Fuse Abutment' essential partner for a temporary crown?

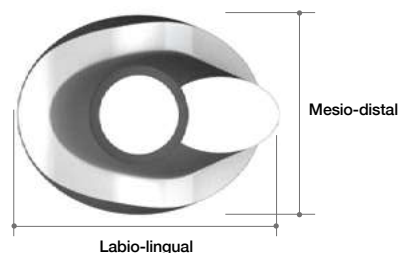
Design concept of Fuse Abutment™



Similar to a customized abutment for excellent esthetics!

Perfect margin fit with a prosthetic cap

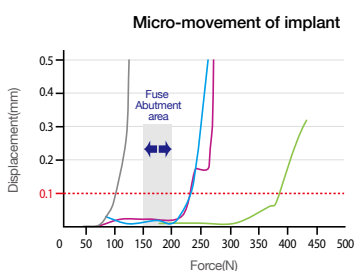
Scalloped outline



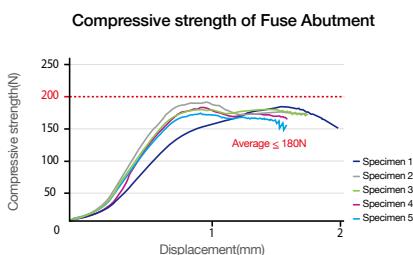
Elliptical Occlusal view like a natural tooth



Rationale of Fuse Abutment™



Performed compressive strength test to evaluate the micro movement for bone density using universal testing machine
-R&D center in Megagen Implant Co.,Ltd.(2012)-



Performed compressive strength test to evaluate the yield strength for Fuse Abutment using universal testing machine
-R&D center in Megagen Implant Co.,Ltd.(2012)-

In 1992, Brunski JB. reported that the implant may have a higher possibility of fibrointegration than osseointegration between bone and implant surface when movements of more than 100µm occur on the fixture during osseointegration period. (John B. Brunski, Biomechanical factors affecting the bone-dental implant interface. Clinical Materials, Vol. 10, 153-201) Therefore, the implant was needed to be protected not to move when immediate loading is carried out. However, it is not easy to manage loading on the fixture, even when we used a resin temporarily with a titanium cylinder. It was thought that it was partly because of the metal component of temporary cylinder, which can deliver excessive forces to the fixture. This was one of the reasons which made clinicians hesitate the immediate loading procedure. So it was necessary to develop a special temporary cylinder. It should have been broken under the force which could lead fibrointegration or failure of osseointegration to protect the fixture. and it would be preferred if it was easy to make a temporary crown on this particular temporary cylinder. We tried to measure the force causing movement

of 100µm on a fixture which was placed securely into adequate density of bone without defect. First, AnyRidge implants were placed into the internationally recognized standard bone block with more 40Ncm torque force and an abutment was connected on each implant. Instron equipment was used to measure the force to move a fixture 100µm. The average force was 220N (22.4 kgf). Therefore, if the new temporary abutment can be fractured under this force, it might protect the fixture from movement or failure.



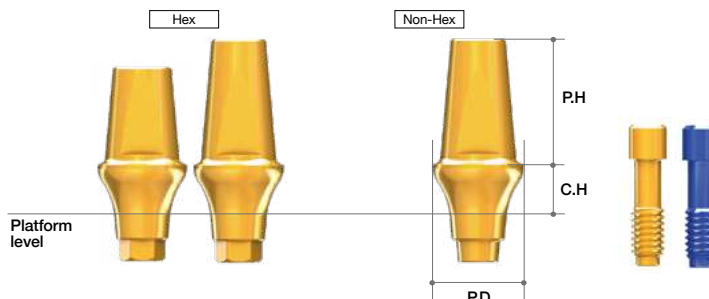
From this experiment, we could develop a special temporary abutment which has a lower fracture threshold of less than 200 N (20.4 kgf). It was named as Fuse Abutment. Also it has an anatomic profiles to make temporary prosthetics more esthetic.

➔ Abutment Options (Continued)

EZ Post Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Use with a Hand Driver (1.2 Hex).
- Esthetic gold coloring.
- Two different post heights. (5.5, 7.0mm)
- Four different profile diameters. (Ø4.0, 5.0, 6.0, 7.0)
- Four different cuff heights. (2.0, 3.0, 4.0, 5.0mm)
- Recommend torque : 35Ncm



Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø4.0	2	5.5	Hex	AANEPH4025L
	3			AANEPH4035L
	4			AANEPH4045L
	5			AANEPH4055L
	2	7		AANEPH4027L
	3			AANEPH4037L
	4			AANEPH4047L
	5			AANEPH4057L
Ø4.0	2	5.5	Non-Hex	AANEPN4025L
	3			AANEPN4035L
	4			AANEPN4045L
	5			AANEPN4055L
	2	7		AANEPN4027L
	3			AANEPN4037L
	4			AANEPN4047L
	5			AANEPN4057L
Ø5.0	2	5.5	Hex	AANEPH5025L
	3			AANEPH5035L
	4			AANEPH5045L
	5			AANEPH5055L
	2	7		AANEPH5027L
	3			AANEPH5037L
	4			AANEPH5047L
	5			AANEPH5057L
Ø5.0	2	5.5	Non-Hex	AANEPN5025L
	3			AANEPN5035L
	4			AANEPN5045L
	5			AANEPN5055L
	2	7		AANEPN5027L
	3			AANEPN5037L
	4			AANEPN5047L
	5			AANEPN5057L

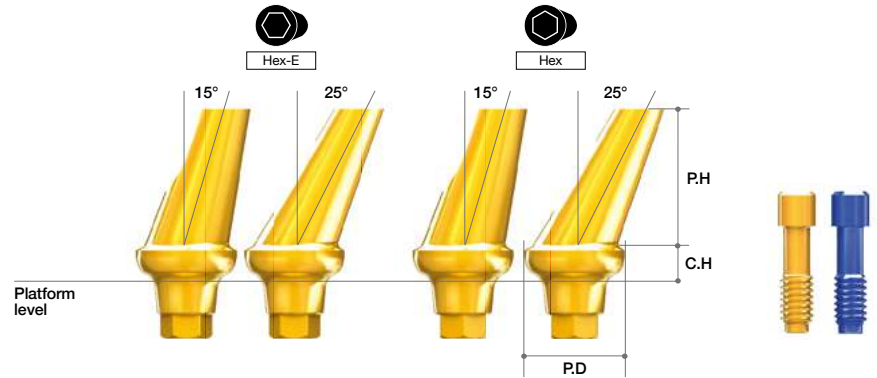
Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø6.0	2	5.5	Hex	AANEPH6025L
	3			AANEPH6035L
	4			AANEPH6045L
	5			AANEPH6055L
	2	7		AANEPH6027L
	3			AANEPH6037L
	4			AANEPH6047L
	5			AANEPH6057L
Ø6.0	2	5.5	Non-Hex	AANEPN6025L
	3			AANEPN6035L
	4			AANEPN6045L
	5			AANEPN6055L
	2	7		AANEPN6027L
	3			AANEPN6037L
	4			AANEPN6047L
	5			AANEPN6057L
Ø7.0	2	5.5	Hex	AANEPH7025L
	3			AANEPH7035L
	4			AANEPH7045L
	5			AANEPH7055L
	2	7		AANEPH7027L
	3			AANEPH7037L
	4			AANEPH7047L
	5			AANEPH7057L
Ø7.0	2	5.5	Non-Hex	AANEPN7025L
	3			AANEPN7035L
	4			AANEPN7045L
	5			AANEPN7055L
	2	7		AANEPN7027L
	3			AANEPN7037L
	4			AANEPN7047L
	5			AANEPN7057L

➔ Abutment Options

Angled Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Two different angulations. (15°, 25°)
- Four different profile diameters.
(Ø4.0, 5.0, 6.0, 7.0)
- Four different cuff heights. (2, 3, 4, 5mm)
- Can cover 12 different directions.
[six to the surface(Hex), six to the edge of hex(Hex-E)]
- Esthetic gold coloring.
- Minimized screw head length needs minimum height to prevent milling problems.
- Recommend torque : 35Ncm



Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Angle	Ref.C
Ø4.0	2	7	Hex	15°	AANAAH4215L
	3				AANAAH4315L
	4				AANAAH4415L
	5				AANAAH4515L
	2		Hex-E		AANAAE4215L
	3				AANAAE4315L
	4				AANAAE4415L
	5				AANAAE4515L
	2		Hex	25°	AANAAH4225L
	3				AANAAH4325L
	4				AANAAH4425L
	5				AANAAH4525L
	2		Hex-E		AANAAE4225L
	3				AANAAE4325L
	4				AANAAE4425L
	5				AANAAE4525L
Ø5.0	2	7	Hex	15°	AANAAH5215L
	3				AANAAH5315L
	4				AANAAH5415L
	5				AANAAH5515L
	2		Hex-E		AANAAE5215L
	3				AANAAE5315L
	4				AANAAE5415L
	5				AANAAE5515L
	2		Hex	25°	AANAAH5225L
	3				AANAAH5325L
	4				AANAAH5425L
	5				AANAAH5525L
	2		Hex-E		AANAAE5225L
	3				AANAAE5325L
	4				AANAAE5425L
	5				AANAAE5525L

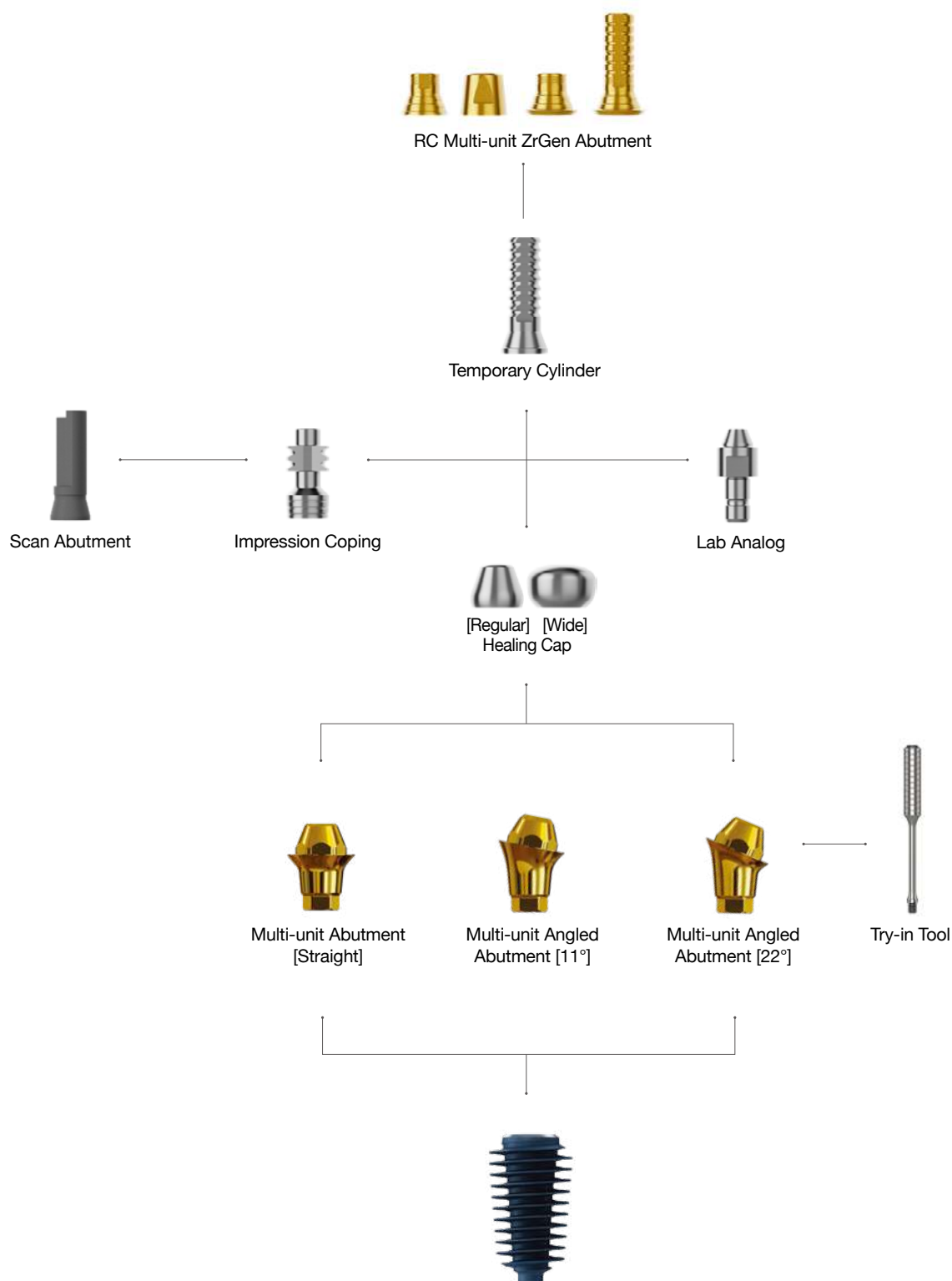
Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Angle	Ref.C
Ø6.0	2	7	Hex	15°	AANAAH6215L
	3				AANAAH6315L
	4				AANAAH6415L
	5				AANAAH6515L
	2		Hex-E		AANAAE6215L
	3				AANAAE6315L
	4				AANAAE6415L
	5				AANAAE6515L
	2		Hex	25°	AANAAH6225L
	3				AANAAH6325L
	4				AANAAH6425L
	5				AANAAH6525L
	2		Hex-E		AANAAE6225L
	3				AANAAE6325L
	4				AANAAE6425L
	5				AANAAE6525L
Ø7.0	2	7	Hex	15°	AANAAH7215L
	3				AANAAH7315L
	4				AANAAH7415L
	5				AANAAH7515L
	2		Hex-E		AANAAE7215L
	3				AANAAE7315L
	4				AANAAE7415L
	5				AANAAE7515L
	2		Hex	25°	AANAAH7225L
	3				AANAAH7325L
	4				AANAAH7425L
	5				AANAAH7525L
	2		Hex-E		AANAAE7225L
	3				AANAAE7325L
	4				AANAAE7425L
	5				AANAAE7525L

NEW

II. Abutment Level Prosthesis

1. RC-Multi-unit Abutment & Components

(All-on-4) (D.P_System)





➔ RC-Multi-unit Abutment

Multi-unit Abutment (Straight)

- MEDTEOR DP-Screw (MTO-D2T5-60)
- Recommended tightening torque: 15Ncm
- Use with Screw Driver(MTO-DIT5-FW)

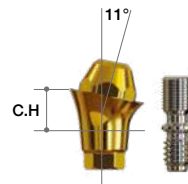
Cuff Height (Labial) (mm)	Ref.C
1.5 (1.6)	MA35-M0015
2.5 (2.6)	MA35-M0025
3.5 (3.6)	MA35-M0035
4.5 (4.6)	MA35-M0045



Multi-unit Angled Abutment (11°)

- MEDTEOR DP-Screw (MTO-D2T5-60)
- Recommended tightening torque: 15Ncm
- Use with Screw Driver(MTO-DIT5-FW)

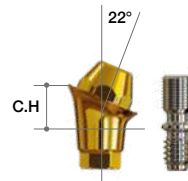
Cuff Height (Labial/Lingual) (mm)	Ref.C
2.5 (2.75/1.8)	MA35-M1125
3.5 (3.7/ 2.8)	MA35-M1135
4.5 (4.7/ 3.8)	MA35-M1145



Multi-unit Angled Abutment (22°)

- MEDTEOR DP-Screw (MTO-D2T5-60)
- Recommended tightening torque: 15Ncm
- Use with Screw Driver (MTO-DIT5-FW)

Cuff Height (Labial/Lingual) (mm)	Ref.C
2.5 (3.0/1.2)	MA35-M2225
3.5 (3.9/2.1)	MA35-M2235
4.5 (4.95/3.15)	MA35-M2245



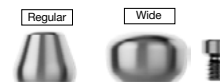
➡ RC-Multi-unit Abutment components

Healing Cap

- MUA prosthetics Screw (MTO-S18T5-34) included

- For use with MTO-S18T5-34 Diameter 1.8mm
- Improved emergence profile with an expected coronal tissue growth
- Recommended tightening torque: 15Ncm
- Use with Screw Driver (MTO-DIT5-FW)

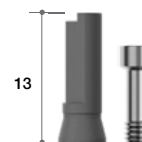
Type	Ref.C
Regular	MTO-GMUB-TS
Wide	MTO-GMUB-TW



Scan Abutment

- MUA Scan Abutment Screw (D18T5-SB70) included

Profile Diameter	Length (mm)	Ref.C
Ø4.0	13	MTO-MSB

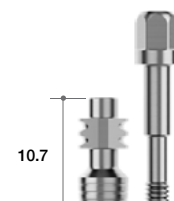


Impression Coping (Pick-up)

- MUA Pin Screw (MTO-S18T5-IC) included

- Conical design for improved emergence profile with depth indicators.

Profile Diameter	Connection	Ref.C
Ø4.8	Non-hex	MTO-MICT

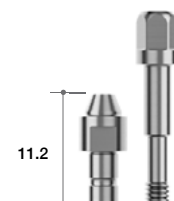


Lab Analog

- MUA Pin Screw (MTO-S18T5-IC) included

- Use to duplicate the Multi-unit abutment in the working model.
- Available to use as a RP Analog for 3D printed working model.
- For Chariside/Lapside
- Supporting Dental CAD
 - 3Shape / exocad / Dental wings

Head form	Ref.C
Multi unit abutment (D.P System)	MTO-MLAD



Temporary Cylinder

- MUA prosthetics Screw (MTO-D2T5-34) included

- Use for fabricating acrylic provisional restoration.
- Reduced margin height for better esthetics.
- Improved mechanical stability due to higher wall thickness at same outer diameter.
- Anti-Rotation planes even in shortest geometry.
- Recommend torque : 25Ncm

Profile Diameter	Connection	Ref.C
Ø4.8	Non-hex	MTO-MTCL0



ZrGEN Abutment

- 2 x MUA prosthetics Screw (MTO-D2T5-34) included (backup screw).

- Minimized wall thickness for improved esthetics
- Flattened connecting planes for the ceramics without wedge effect
- Undercuts for improved retention and enlarged adhesive film
- 40° connecting angle following MUA profile
- Recommend torque : 25Ncm
- Supporting Dental CAD
 - 3Shape / exocad / Dental wings

Profile Diameter	Post Height (mm)	Ref.C
Ø4.8	4.3	MTO-ZR-0480-H043
	4.3	MTO-ZROCT-0480-H043
Ø5.5	4.3	MTO-ZR-0555-H043
	10.5	MTO-ZR-0555-H105



DP Screw

- Double-Pitch Screw
- Recommend torque : 15Ncm

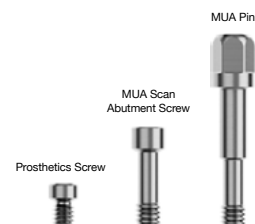
Torx	Ref.C
T5	MTO-D2T5



MUA Screw

- Recommend torque : 25Ncm

Torx	Length (mm)	Ref.C
T5	3.4	MTO-S18T5-34
	8.7	D18T5-SB70
	13.8	MTO-S18T5-138



Screw Driver

- Fracture torque : 35Ncm
- Torx T5

Torx	Length (mm)	Ref.C
T5	30	MTO-DIT5-FW-BOX



Try-in Tool

- Used to move RC-Base abutment to fixture

Type	Length (mm)	Ref.C
M1.8	30	MTO-DT-BOX



Right Angle Adapter

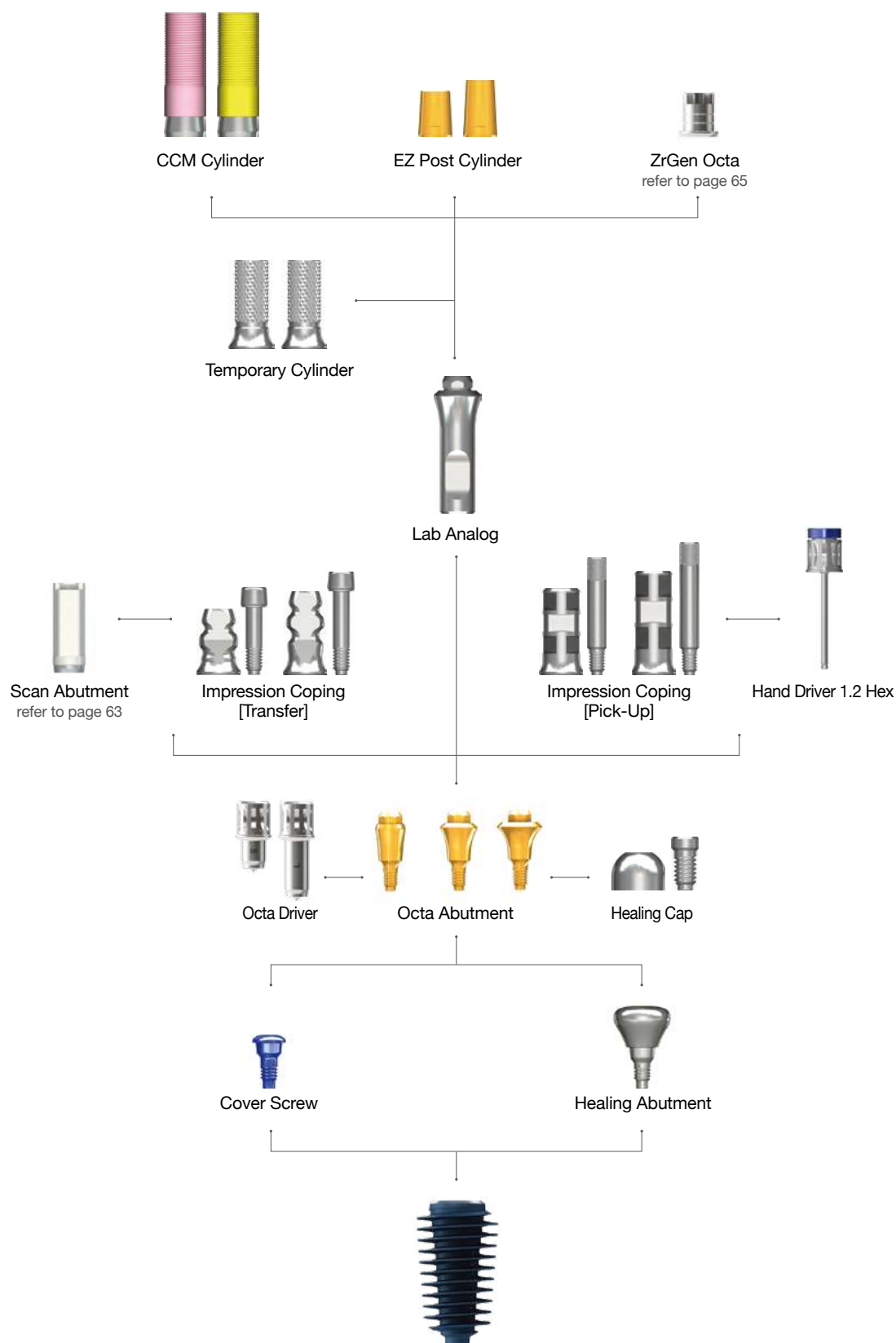
- Connect to Screw Driver(MTO-DIT5-FW) for use with Torque Wrench

Type	Ref.C
Handpiece type	TTAI100



II. Abutment Level Prosthesis

2. Octa Abutment & Components

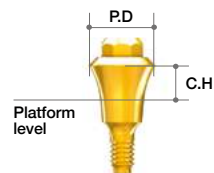


➡ Components for Octa Abutment (Continued)

Octa Abutment

- Used in manufacturing multiple screw-retained prosthetics.
- Recommend torque : 35Ncm

Profile Diameter	Cuff Height (mm)	Ref.C
Ø3.8	1	AANOAF4010
	2	AANOAF4020
	3	AANOAF4030
	4	AANOAF4040
	5	AANOAF4050
Ø4.8	1	AANOAF0010
	2	AANOAF0020
	3	AANOAF0030
	4	AANOAF0040
	5	AANOAF0050
Ø5.8	1	AANOAF6010
	2	AANOAF6020
	3	AANOAF6030
	4	AANOAF6040
	5	AANOAF6050



Healing Cap

- Cylinder Screw(IRCS200) included.
- Protects Octa Abutment and minimizes irritation to tongue and oral mucosa.

Profile Diameter	Ref.C
Ø4.0	AANOHC4000T
Ø5.0	IHC400T
Ø6.0	AANOHC6000T



➔ Components for Octa Abutment (Continued)

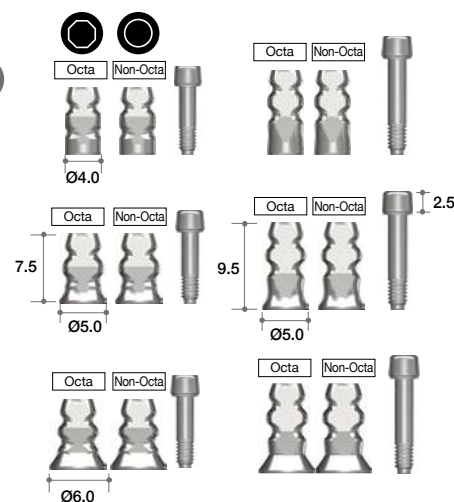
Impression Coping

(Transfer)

- Guide Pin(AAOTGP10 / AAOTGP12) included.

- Should be tightened with Impression Coping Driver (Page.394)

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	7.5	Octa	AAOITO4010T
		Non-Octa	AAOITN4010T
	9.5	Octa	AAOITO4012T
		Non-Octa	AAOITN4012T
Ø5.0	7.5	Octa	AAOITO5010T
		Non-Octa	AAOITN5010T
	9.5	Octa	AAOITO5012T
		Non-Octa	AAOITN5012T
Ø6.0	7.5	Octa	AAOITO6010T
		Non-Octa	AAOITN6010T
	9.5	Octa	AAOITO6012T
		Non-Octa	AAOITN6012T

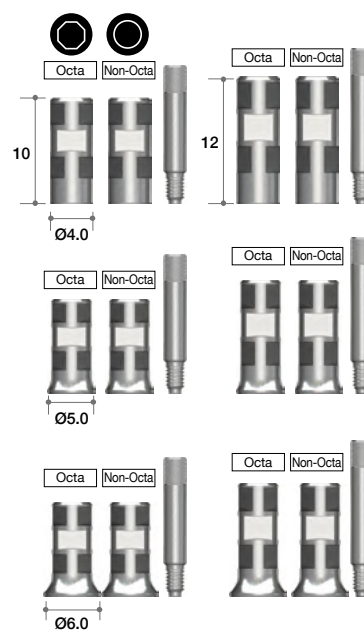


Impression Coping

(Pick-Up)

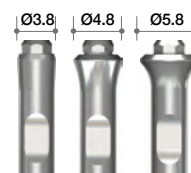
- Guide Pin(AAOPGP10 / AAOPGP12) included.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	10.0	Octa	AAOIPO4010T
		Non-Octa	AAOIPN4010T
	12.0	Octa	AAOIPO4012T
		Non-Octa	AAOIPN4012T
Ø5.0	10.0	Octa	AAOIPO5010T
		Non-Octa	AAOIPN5010T
	12.0	Octa	AAOIPO5012T
		Non-Octa	AAOIPN5012T
Ø6.0	10.0	Octa	AAOIPO6010T
		Non-Octa	AAOIPN6010T
	12.0	Octa	AAOIPO6012T
		Non-Octa	AAOIPN6012T



Lab Analog

Profile Diameter	Ref.C
Ø3.8	AANOLA4000
Ø4.8	IOA300
Ø5.8	AANOLA6000

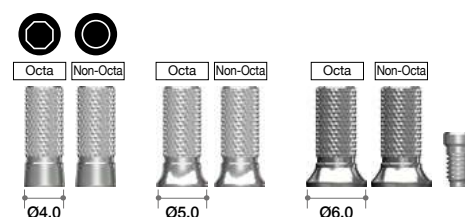


Temporary Cylinder

- Cylinder Screw(IRCS200) included.

- Recommend torque : 25Ncm

Profile Diameter	Type	Ref.C
Ø4.0	Octa	AANOTCO4010T
	Non-Octa	AANOTCN4010T
Ø5.0	Octa	AANOTCO5010T
	Non-Octa	AANOTCN5010T
Ø6.0	Octa	AANOTCO6010T
	Non-Octa	AANOTCN6010T

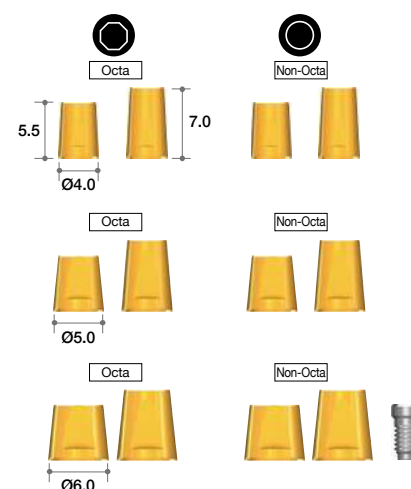


EZ Post Cylinder

- Cylinder Screw(IRCS200) included.

- Recommend torque : 35Ncm

Profile Diameter	Post Height(mm)	Type	Ref.C
Ø4.0	5.5	Octa	AAOECO4005T
	7.0		AAOECO4007T
	5.5	Non-Octa	AAOECN4005T
	7.0		AAOECN4007T
Ø5.0	5.5	Octa	AAOECO5005T
	7.0		AAOECO5007T
	5.5	Non-Octa	AAOECN5005T
	7.0		AAOECN5007T
Ø6.0	5.5	Octa	AAOECO6005T
	7.0		AAOECO6007T
	5.5	Non-Octa	AAOECN6005T
	7.0		AAOECN6007T



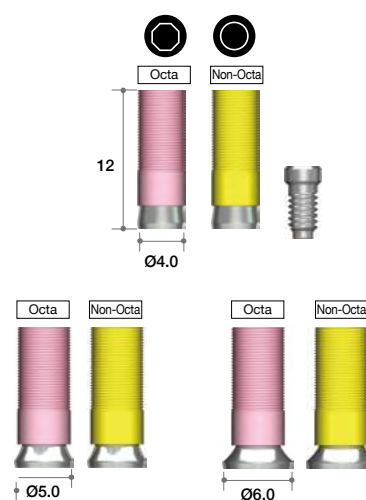
➡ Components for Octa Abutment

CCM Cylinder

- Cylinder Screw(IRCS200) included.

- Threaded sleeves allow a better retention of resin or wax.
- Available in both octa (pink) and non-octa (yellow) and three diameters (Ø4.0, 5.0, 6.0).
- Recommend torque : 30Ncm
- Melting temperature of CCM : 1300~1400°C
- Can be casted with non-precious alloys (Ni-Cr, Cr-Co alloys).

Profile Diameter	Type	Ref.C
Ø4.0	Octa	AANCCO4000T
	Non-Octa	AANCCN4000T
Ø5.0	Octa	AANCCO5000T
	Non-Octa	AANCCN5000T
Ø6.0	Octa	AANCCO6000T
	Non-Octa	AANCCN6000T



Octa Driver

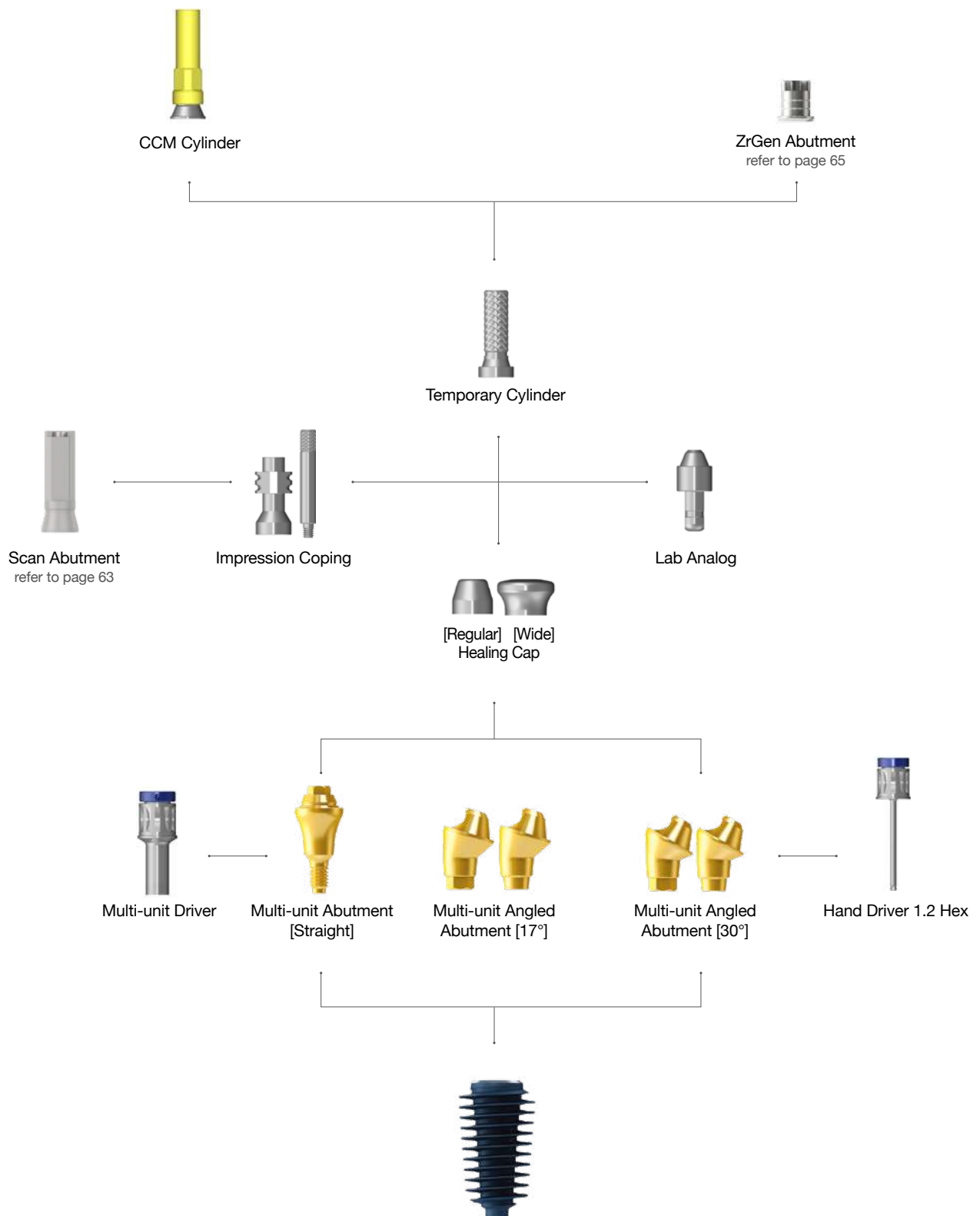
- For seating of the Octa Abutment into the fixture.
- Can also be connected to Torque Wrench.

Length(mm)	Ref.C
7	MOD300S
13	MOD300L



II. Abutment Level Prosthesis

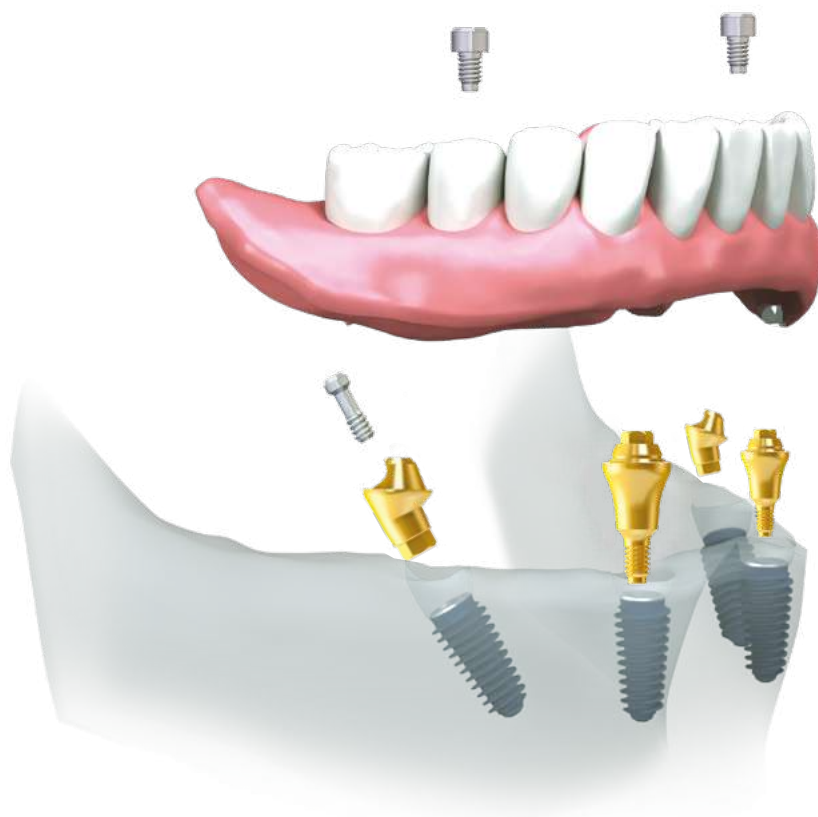
3. Multi-unit Abutment & Components (All-on-4) (N_Type)



►► Multi-unit Abutment™

Multi-unit Abutment Design Concept

MegaGen Implant develops the special abutment named as Multi-unit Abutment, which can be the solution for the edentulous patients. With 4 fixtures placed into patient's ridge and a hybrid denture on those four fixtures, a patient can recover his or her dental condition almost completely. In most cases, Multi-unit Abutments work in a set of 2 x straight type abutment for anterior position and 2 x angled type abutment on posterior position.



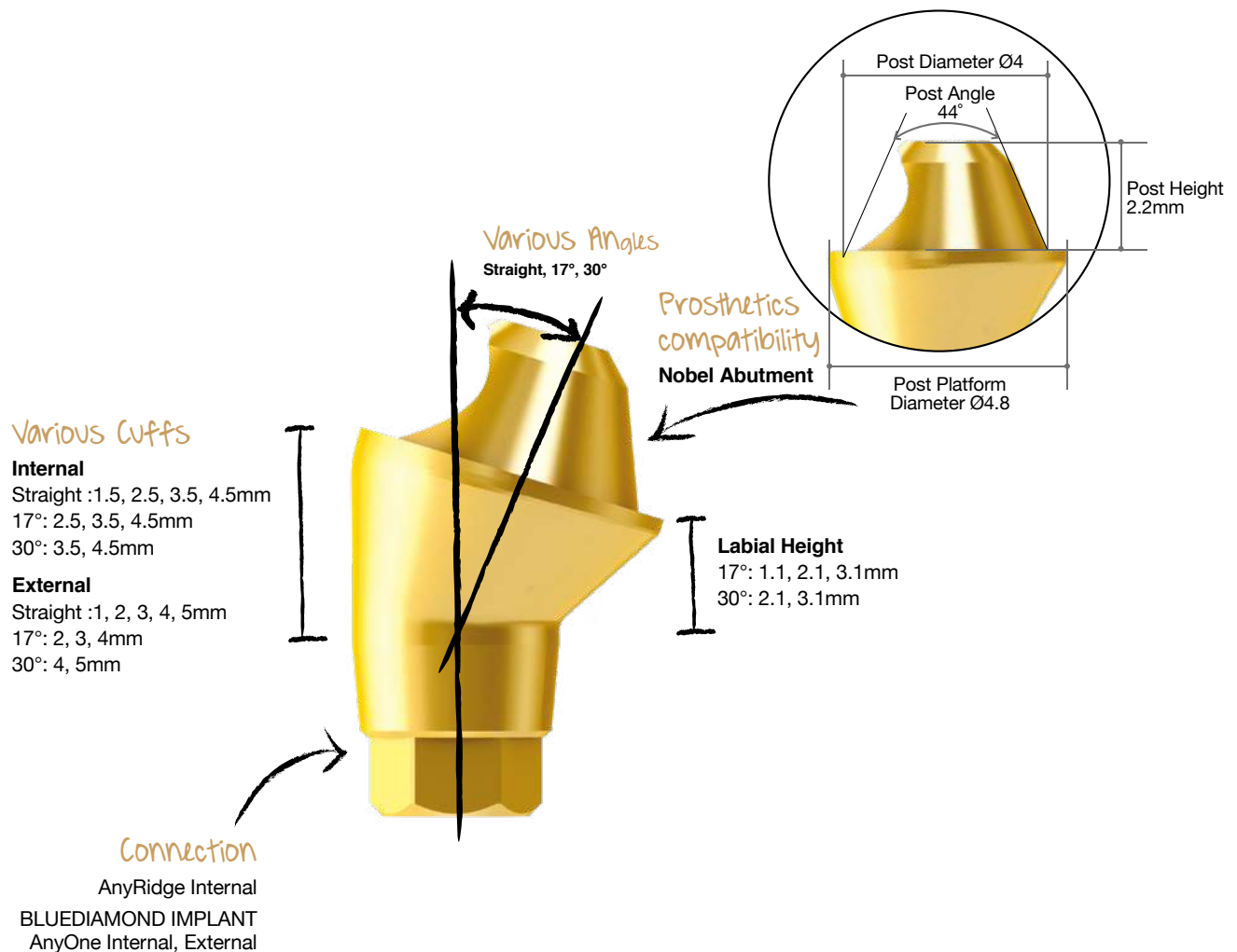
Features

You could see how Multi-unit Abutment functions and what benefits you could get from Multi-unit Abutment are as the followings:

- 2 fixtures which are slantly implanted on posterior position are osseointegrated with cancellous bone. These fixtures function as dispersing vertical load on alveolar bone.
- Multi-unit Abutment is only 4 fixtures + 4 abutments. It means that dental surgeon has enough places for surgery. Therefore, it will be easy to find and place 4 fixtures into ridge where abundant cancellous bone exists.
- A doctor can use graft bone material if a patient doesn't have enough alveolar bone. However, the slantly placed fixtures can overcome the patient's insufficient bone by getting good holding strength with this angulation.
- In addition, these angulated fixtures can avoid touching important anatomies, such as mandibular nerve and maxillary sinus.
- All on 4 technique is also possible to do guided surgery using R2GATE Guide with a diagnosis from R2GATE.

►► Multi-unit Abutment N Type

The solution for the edentulous patients



Benefit

1. Easy and economical treatment solution for compromised edentulous cases.
2. Expensive and time consuming bone graft may not be necessary.
3. Multiple angles (0°, 17°, 30°) support different implant insertion paths.
4. Universally compatible with other Multi-unit systems.

Available Implant System

- AnyRidge Internal
- BLUEDIAMOND implant
- AnyOne Internal
- AnyOne External

Compatibility with others' Multi-unit level prosthetic components

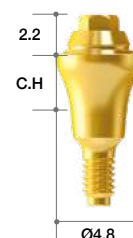
- ✓ Post Height
- ✓ Post Diameter
- ✓ Post Angle
- ✓ Abutment Angle
- ✓ Cuff Height

Multi-unit Abutment

Multi-unit Abutment [AR] - Straight

- MUA Straight Carrier (MUASC) included
- Recommend torque : 35Ncm

Cuff Height (mm)	Type	Ref.C
1.5	1-piece (M1.8)	MUAARN0015C
2.5		MUAARN0025C
3.5		MUAARN0035C
4.5		MUAARN0045C



Multi-unit Angled Abutment [AR] - 17°

- MUA Screw (MUAARS) included
- MUA Angled Carrier (MUAAC) included
- Recommend torque : 25Ncm

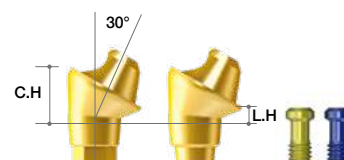
Cuff Height (Labial) (mm)	Type	Ref.C
2.5 (1.1)	Hex	MUAARH1725LC
3.5 (2.1)		MUAARH1735LC
4.5 (3.1)		MUAARH1745LC
2.5 (1.1)	Non-Hex	MUAARN1725LC
3.5 (2.1)		MUAARN1735LC
4.5 (3.1)		MUAARN1745LC



Multi-unit Angled Abutment [AR] - 30°

- MUA Screw (MUAARS) included
- MUA Angled Carrier (MUAAC) included
- Recommend torque : 25Ncm

Cuff Height (Labial) (mm)	Type	Ref.C
3.5 (1.1)	Hex	MUAARH3035LC
4.5 (2.1)		MUAARH3045LC
3.5 (1.1)	Non-Hex	MUAARN3035LC
4.5 (2.1)		MUAARN3045LC

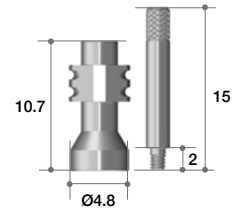


➡ Components for Multi-unit Abutment (Continued)

Impression coping (Pick-up)

- Guide pin (MUAGP) included
- Use to take an impression at the abutment level.

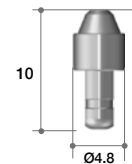
Connection	Ref.C
Non-Hex	MUAICT



Lab Analog

- Use to duplicate the Multi-unit abutment in the working model.
- Available to use as a RP Analog for 3D printed working model.

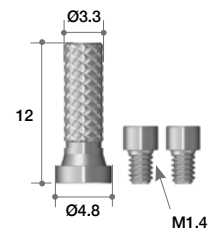
Head form	Ref.C
Multi-unit Abutment(Nobel)	MUALA



Temporary Cylinder

- Cylinder Screw (MUAS) 2EA included
- Use for fabricating acrylic provisional restoration.
- Grooves on the post cylinder allow storing resin adhesion.
- Back-up screw is included.
- Recommend torque : 15Ncm

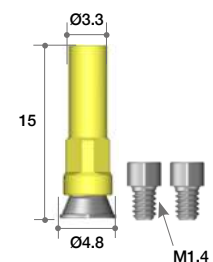
Connection	Ref.C
Non-Hex	MUATCL



CCM Cylinder

- Cylinder Screw (MUAS) 2EA included
- Use for fabricating screw retained prostheses with metal reinforced or bar structured overdentures.
- Available to cast with non-precious dental alloys (Ni-Cr, Cr-Co alloys)
- Melting temperature of CCM base: 1300~1400°C
- Back-up screw is included.
- Recommend torque : 15Ncm

Connection	Ref.C
Non-Hex	MUACCML

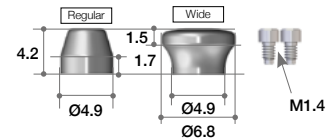


➡ Components for Multi-unit Abutment

Healing Cap

- Cylinder Screw (MUAS) 2ea included
- The size of healing cap can be selected depending on soft tissue volume or type of restorations.

Type	Ref.C
Regular	MUAHCL
Wide	MUAHCWL



Healing Cap Set Reference Code

Order code : Available by changing to 'P' instead of 'L' from current Ref.C

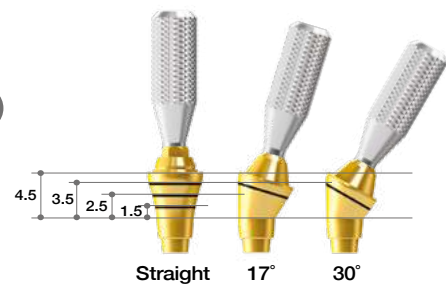
Ex) MUAHCL → MUAHCP



Try-in Abutment

- Cuff height is indicated with laser markings
- Straight 17°, 30°
- Non-hex type

Angle	Cuff Marking	Ref.C
Straight	1.5 / 2.5 / 3.5 / 4.5	MUTIAAR00C
17°	2.5 / 3.5 / 4.5	MUTIAAR17C
30°	3.5 / 4.5	MUTIAAR30C



Try-in Abutment Set reference code

Order code : MUTIAAR00CP



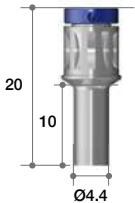
* Kit contains Straight, 17° and 30° type of Try-in Abutments (1 each)



Multi-unit Driver

- Use to torque straight type Multi-unit Abutments.
- Use with a torque wrench (ref code: **MTW300A**)

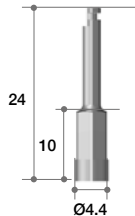
Hex	Length	Ref.C
2.0	10	MUD10



Right Angle Driver

- Use to torque straight type Multi-unit Abutments.
- Use with latch-type handpiece.
- Use with Meg-TORQ (ref code: **MEG_TORQ**)

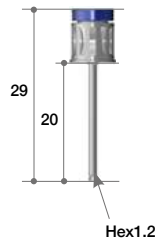
Hex	Length	Ref.C
2.0	10	MURAD10



Hand Driver

- Use for abutment screw with 1.2 hex hole.
- Use up to 15° divergent.
- It should use under 30Ncm torque.

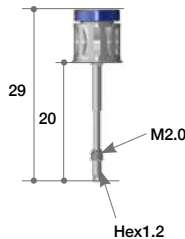
Hex	Length	Ref.C
1.2	20	MUHD1220



Removal Driver

- Use for abutment screw with 1.2 hex hole.
- Use up to 15° divergent.
- Exclusively for AnyRidge system.
- It should use under 30Ncm torque.

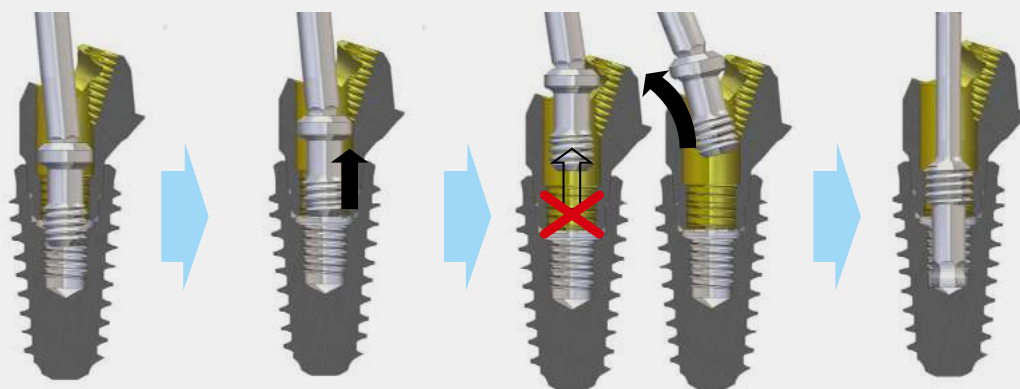
Hex	Length	Ref.C
1.2	20	MUARD20



►► Screw & Abutment Tightening Torque Guide

- Abutment Screw (M1.8 & M2.0) : 25Ncm
- Cylinder Screw (M1.4) : 15Ncm
- Straight Abutment (M1.8 & M2.0) : 35Ncm

Instruction for removing abutment screw from Multi-unit abutment [Exclusively for AnyRidge system]



1. Completely unscrew abutment screw by rotating it counterclock wise (approximately 4 rotations are required). It should sue with a Hand Driver (ref code: MUHD1220)
2. Pull the Hand Driver up straight until it is visible through abutment crew hole. Shaking left and right may be required if the screw becomes stuck inside of the abutment hole.
3. Slightly rotate the screw to the main access hole. Otherwise the screw could fall back into the screw hole due to distur bance of abutment structure.
4. Remove abutment with the Removal Driver (ref code: MUARD20) by rotating it clockwise.

Driver Tightening Torque Guide

1. Multi-unit Abutment Remover Driver



2. Multi-unit Hand Driver



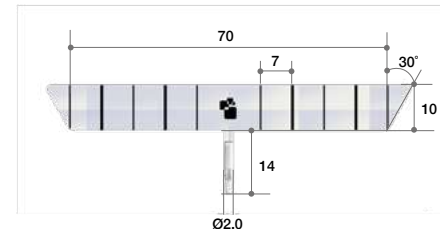
- Excessive torque more than 30Ncm may cause fracturing of the driver.
- Straight type Multi-unit abutment needs to use the Multi-unit Driver that is provided in the starting package. (ref code: MUD10)
- Strongly recommended to pick up the abutment screw by pressing the Hand Driver to remove the abutment screw from the Multi-unit abutment.

➡ Components for Multi-unit Abutment

Surgical Guide

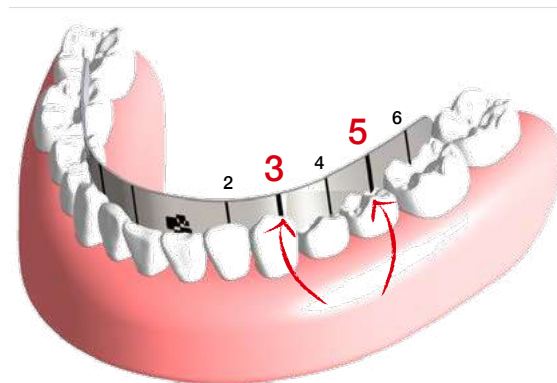
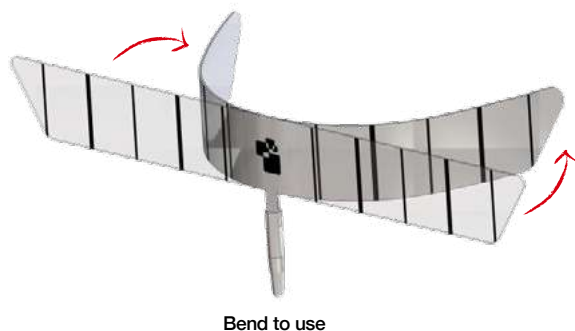
- The distance between the lines is 7mm
- Put center pin after initial drilling at the centric of arch.

Angle	Marking Length (mm)	Ref.C
30°	7	MUSG70



►► How to use Surgical Guide

- * As Canine and second premolar are most commonly used, the surgical guide has thicker lines for easier identification.
- * The surgical guide is able to use for first molar depending on surgical plan.



►► Multi-unit Abutment Set Contents

Multi-unit Abutment Healing cap type Set reference code

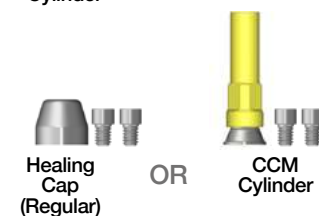
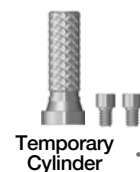
Order code : Available by changing to 'HP' instead of 'C' or 'LC' from current Ref.C

Ex) MUAARH1725LC → MUAARH1725 **HP**

Multi-unit Abutment CCM type Set reference code

Order code : Available by changing to 'P' instead of 'C' or 'LC' from current Ref.C

Ex) MUAARH1725LC → MUAARH1725 **P**



▶▶ Starting Package Contents



	Type	Ref.C
Healing Cap	Hex	SKARHN3000H
	Non Hex	SKARNN3000H
CCM Abutment	Hex	SKARHN3000
	Non Hex	SKARNN3000

Straight 8set
(2set x 4kind of cuff)

Angle 17° 6set
(2set x 3kind of cuff)

Angle 30° 4set
(2set x 2kind of cuff)

Multi-unit Abutment with *carrier
* MUA carrier is used to pick-up an abutment to the patient's mouth, and check its insertion angle.

Healing Cap (Regular) or CCM Cylinder
Temporary Cylinder
Lab Analog
Impression Coping

Surgical Instrument

Multi-unit Driver Right Angle Driver Hand Driver Removal Driver

Healing Cap 2set

Regular
Wide

Try-in Abutment 1set
(Straight, 17°, 30° each 1ea)

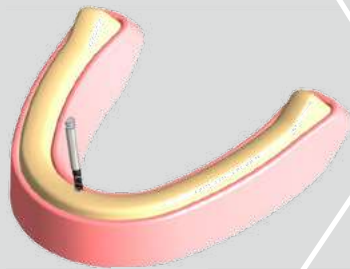
Surgical Guide 2ea

►► Surgical Protocol

Conventional Surgery

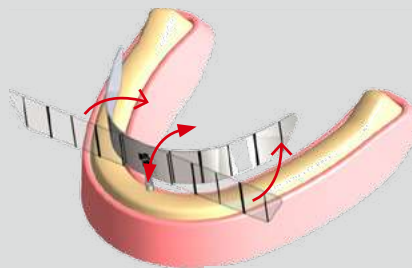
1. Initial drilling

For placement of center pin after initial drilling in the centric of the arch. The drilling hole should be in lingual area of the arch to ensure the best result.



2. Guide Bending & Position

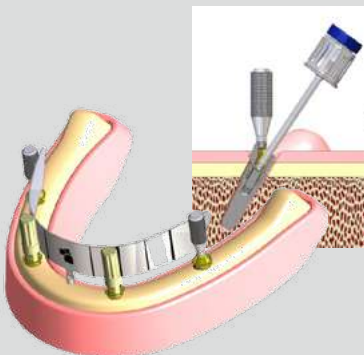
Bend according to the patient's arch.



7. Tightening the Abutment

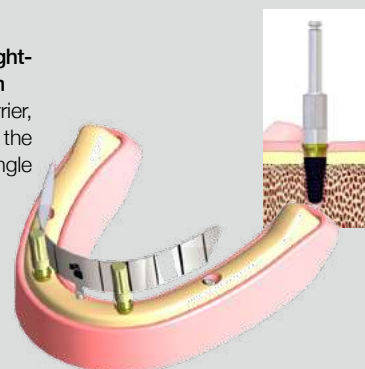
Abutment Screw tightening Torque : 25Ncm

After connecting Abutment Screw, remove Carrier from Abutment. For 17° abutment, you need to tighten it by tilting Driver about 5°. Connect Abutment and check the path using Carrier.



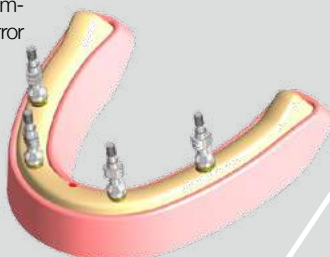
Straight Abutment tightening Torque : 35Ncm

After removing Carrier, connect Abutment to the Fixture using Right Angle Driver or MUA Driver.



8. Impression

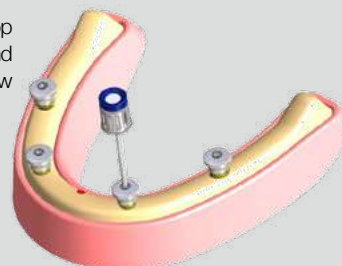
Take an impression with an individual tray. (Open tray method is strongly recommended to avoid any error in the future.)



9. Healing Cap

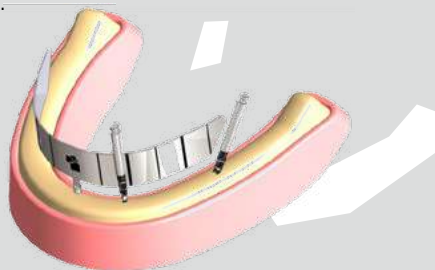
Cylinder Screw tightening Torque : 15Ncm

Place Healing Cap on top of Multi-unit abutment, and connect Cylinder Screw with the Hand Driver.



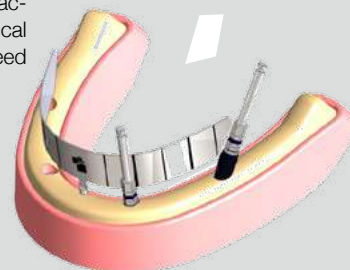
3. Drilling

Drill according to the surgical plan.



4. The fixture is implanted

Place implant fixtures according to the surgical plan and do not exceed torque value (60Ncm)



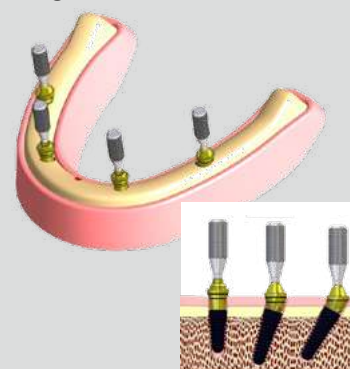
6. Abutment Selection

Select the appropriate set after checking the angulation and cuff height that were measured with the Try-in abutment. Connect the abutment onto the fixture and check the angulation and the cuff height.



5. Try-in Abutment

Using the laser marking on the Try-in abutment, select the appropriate cuff height and angulation of Multi-unit abutments.



10. Suture

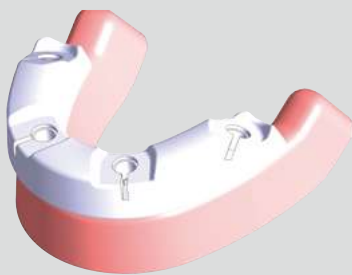


►► Surgical Protocol

Guided Surgery

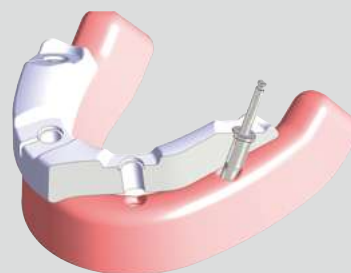
1. Guide

Place a R2 Guide.



2. Narrow Crest Drill

For the cases with narrow ridge or placing a fixture slanted on the lingual side, you can flatten the surface and drill stably without slipping



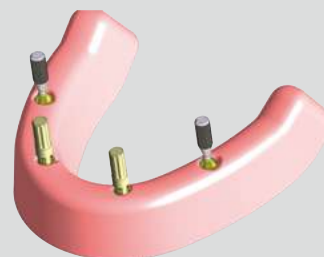
8. Setting Temporary and Denture

Reline the temporary denture with resin to fill the space around the Temporary Cylinder.



7. Connect Temporary Cylinder in the front

Connect the Temporary Cylinders in the front. Make sure that holes in the denture are free from any contact with the Temporary Cylinder. Adjust the holes until there is no contact between the denture and the Temporary Cylinder.
*If the Temporary Cylinder is fixed using Guide Pin, resin flow into access hole will be prevented.



9. Connect Temporary Cylinder in the back

Connect rest of the Temporary Cylinders in the back, make sure that the holes in the denture are free from any contact with the Temporary Cylinder. Adjust the holes until there is no contact between the denture and the Temporary Cylinder.



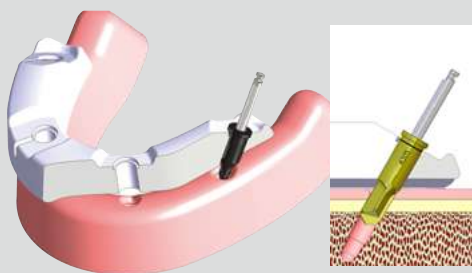
10. Setting Temporary and Denture

All temporary cylinders are picked up in the denture with resin.

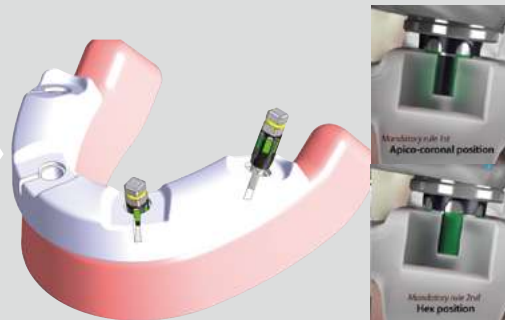


3. Drilling

Drill according to the drilling sequence.



4. Fixture Placement



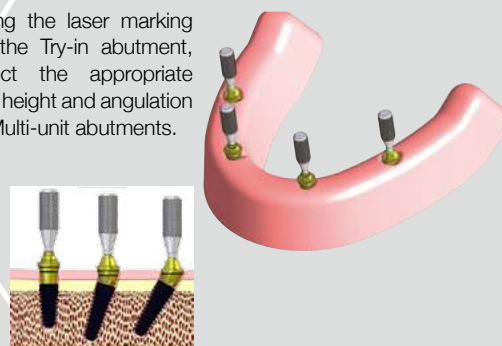
6. Abutment Selection

Select the appropriate set after checking the angulation and cuff height that were measured with the Try-in abutment. Connect the abutment onto the fixture and check the angulation and the cuff height.



5. Try-in Abutment

Using the laser marking on the Try-in abutment, select the appropriate cuff height and angulation of Multi-unit abutments.



11. Temporary Fixation

Remove Denture and fill up the bottom and other non-resin filled parts with resin and completely fix Temporary Cylinder.



12. Tighten the Denture

Cylinder Screw tightening Torque : 15Ncm
Set Denture onto Multi-unit Abutment and tighten cylinder



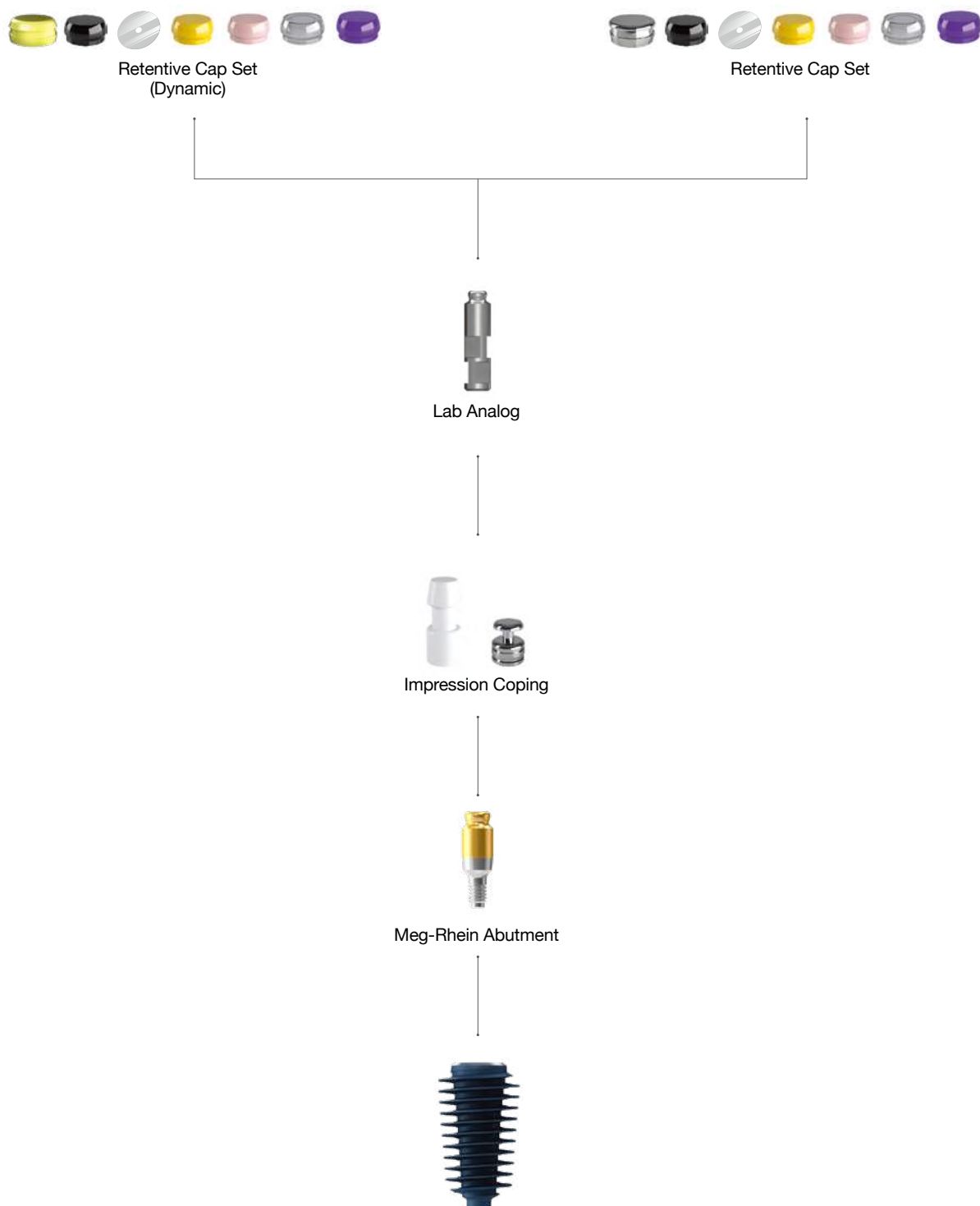
13. Finish

Close Hole using EZ Seal and finalize the surgery.



III. Overdenture Prosthesis

Meg-Rhein Abutment & Components



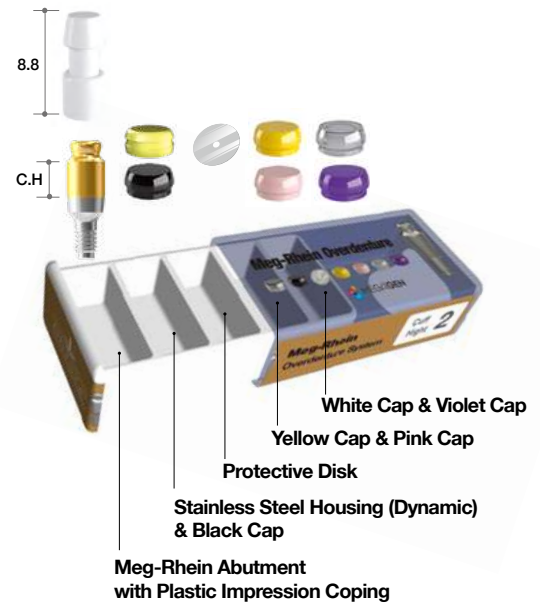
➔ Meg-Rhein Overdenture System

Meg-Rhein Overdenture System (Dynamic)

- 1 Meg-Rhein Abutment
- 1 Plastic Impression Coping
- 1 Stainless Steel Housing (Dynamic) & Black-Lab
- 1 Protective Disk
- 4 Retentive Caps
(Yellow-0.6kgf, Pink-1.2kgf, White-1.8kgf, Violet-2.7kgf)

- Perfect compatibility with the Rhein83 from Italy.
- Recommend torque : 35Ncm.

Cuff Height (mm)	Ref.C
0	ADR00PA
1.0	ADR01PA
2.0	ADR02PA
3.0	ADR03PA
4.0	ADR04PA
5.0	ADR05PA
6.0	ADR06PA



Meg-Rhein Overdenture System

- 1 Meg-Rhein Abutment
- 1 Plastic Impression Coping
- 1 Stainless Steel Housing
- 1 Protective Disk
- 5 Retentive Caps
(Black-Lab, Yellow-0.6kgf, Pink-1.2kgf, White-1.8kgf, Violet-2.7kgf)

- Perfect compatibility with the Rhein83 from Italy.
- Recommend torque : 35Ncm.

Cuff Height (mm)	Ref.C
0	ADR00P
1.0	ADR01P
2.0	ADR02P
3.0	ADR03P
4.0	ADR04P
5.0	ADR05P
6.0	ADR06P



►► Overdenture System

Advantages

Small & Easy-to-Use Housing System 

Tilting Angle

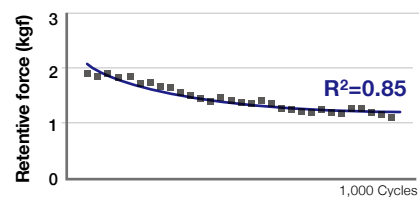
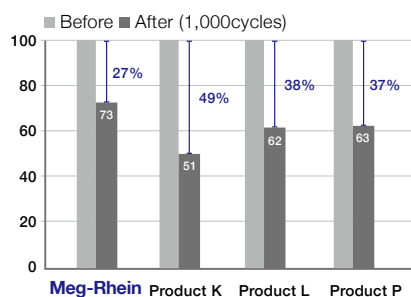
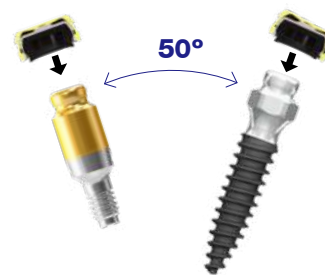
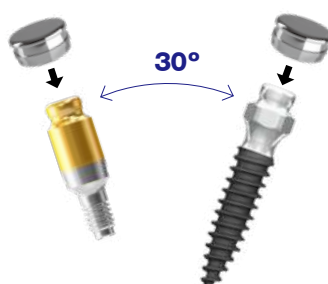
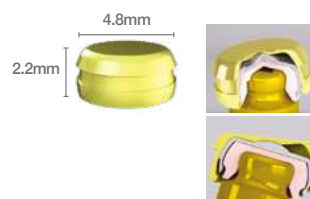
Various Retentive Caps of the Meg-Rhein

Low Reduction Rate & Uniform Variance of Retentive Force

Normal



Dynamic



R^2 (Coefficient of determination) becomes more reliable when it is close to "1".

➡ Components for Meg-Rhein Abutment (Continued)

Stainless Steel Housing

- 5ea/pack

Ref.C

MHP



Stainless Steel Housing

(Dynamic)

- 5ea/pack

Ref.C

THP



Retentive Caps (White)

- White cap(1.8kgf) - For refill (5ea/pack).
- Can be used for more retentive force following pink cap(1.2kgf).

Ref.C

RCWP



Retentive Caps (Violet)

- Violet cap(2.7kgf) - For refill (5ea/pack).
- Can be used for more retentive force following white cap(1.8kgf).

Ref.C

RCVP



Retentive Caps (Pink)

- Pink cap(1.2kgf) - For refill (5ea/pack).

Ref.C

RCPP



Retentive Caps (Yellow)

- Yellow cap(0.6kgf) - For refill (5ea/pack).

Ref.C

RCYP



Retentive Caps (Black)

- For laboratory

Ref.C

RCBP



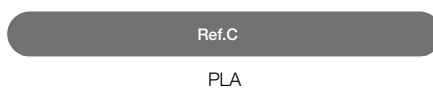
➡ Components for Meg-Rhein Abutment

Stainless Impression Coping (Pick-Up)

- 2ea/pack.
- Italy - Rhein 83 products.
- For accurate (pick-up type) impression.
- Metal with groove design to prevent from swaying.

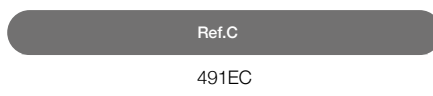


Lab Analog



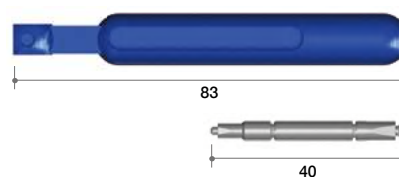
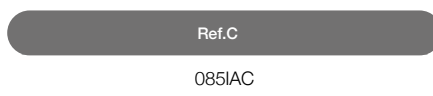
Caps and Clips Extractor tool

- Retentive Cap removal tool.



Retentive Cap Insertion Tool

- Retentive Cap insertion tool.



Digital Material

I. ZrGEN®

ZrGEN® is the brand name of MegaGen's 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.

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.

Variety of ZrGEN®



ZrGEN Coping



PMMA Provisional Crown



ZrGEN Monolithic



ZrGEN Crown



ZrGEN Bridge



ZrGEN Coping for PFZ

ZrGEN® Sub Structure



ZrGEN Abutment



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

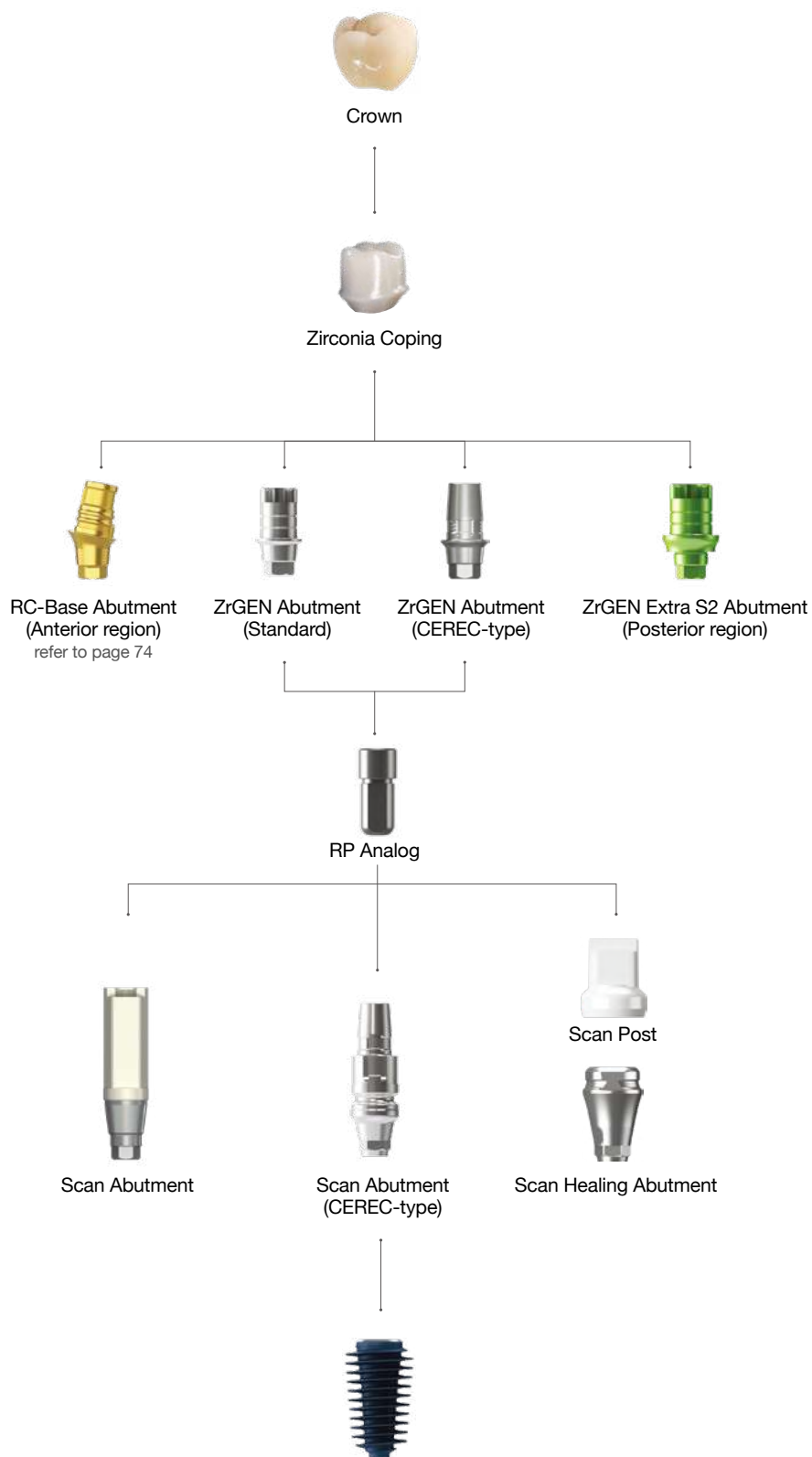


Minimized Ti-connection

Clinical Application



➡ ZrGEN[®] Prosthesis



➡ Scan Abutment Option

Scan Abutment

- Abutment Screw included.
 - AnyRidge (AANMSF)
 - Octa Level (IRCS200)
 - Multi-unit Abutment (MUAS)
- For Chairside/ Labside
- Included spare Abutment Screw
- Supporting Dental CAD
 - 3Shape
 - exocad
 - Dental Wings

System	Profile Diameter	Length (mm)	Type	Ref. C
AnyRidge	4.0	9	-	AANISR4009T
		13	-	AANISR4013T
Octa Level	4.0	11	-	AOCESC4011T
MUA Level (N-Type)	4.0	13	-	AMUASR4013T



Scan Abutment (CEREC-Type)

- Abutment Screw included.
 - AnyRidge (AANMSF)
- Scan Post for Sirona Cerec users → CEREC
- In in Lab CAD Software, compatible with Xive Library

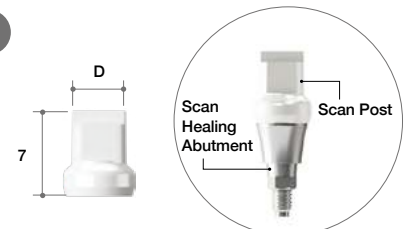
System	Profile Diameter	Cuff Height	Post Size	Ref. C
AnyRidge	Ø3.9	0.5	Small	ARICSS3405T
		1		ARICSS3410T
		2		ARICSS3420T
	Ø4.3	0.5		ARICSS3805T
		1		ARICSS3810T
		2		ARICSS3820T
	Ø5.5	0.5	Large	ARICSL4505T
		1		ARICSL4510T
		2		ARICSL4520T



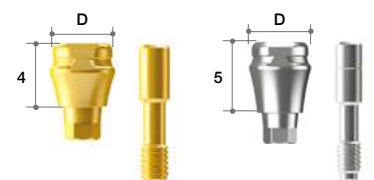
Scan Healing Abutment & Scan Post

- Abutment Screw included.
 - AnyRidge (ARIHS1804/ARIHS1805/ARIHS1807)
 - 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)	Core Ø3.3 SP5007.MTN	4	ARNSH5004T
			5	ARNSH5005T
			7	ARNSH5007T
	Ø6.0 (Extra Type)	Core Ø3.3 SP6007.MTN	4	ARNSH6004T
			5	ARNSH6005T
			7	ARNSH6007T

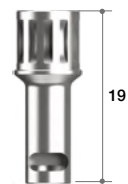


* If Scan Healing Abutment is exposed more than 2.5mm, it may unbalance a fixture and results in fixture failure.



Scan Post Carrier

System	Length	Ref.C
Common	19	SPC16

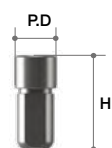


➡ RP Analog Option

RP Analog

- For Chairsides/ Labsides
- Included spare Abutment Screw
- Supporting Dental CAD
 - 3Shape
 - exocad

System	Profile Diameter	Length (mm)	Type	Ref. C
AnyRidge	4.0	9	-	CANIAR4009
Octa Level	3.8	9	Small	OCTARA4
	4.8		Regular	OCTARA5
	5.8		Wide	OCTARA6
MUA Level (N-Type)	4.8	9	-	MUALA



➔ ZrGEN[®] Abutment Option

ZrGEN[®] Abutment

- Abutment Screw included.

- AnyRidge (AANMSF)
- Octa Level (IRCS200)
- MUA Level (MUAS)

- Titanium Base
- 1 Set consists of 10 Abutments.
 - 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
 - Post Height : 4.5mm → Groove number: 2ea
 - Post Height : 5mm → Groove number: 3ea
 - Post Height : 6mm → Groove number: 4ea
 - Post Height : 8mm → Groove number: 6ea



Standard

System	Profile Diameter	Cuff Height (mm)	Post Height (mm)	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

Octa Level & Multi-Unit Level

System	Profile Diameter	Cuff Height (mm)	Post Height (mm)	Type	Ref.C
Octa Level	Small	Ø5.0	5	Octa	AOCEPS5015.MTN
			6		AOCEPS5016.MTN
			8		AOCEPS5018.MTN
		Ø5.5	5	Non-Octa	ANOEPS5015.MTN
			6		ANOEPS5016.MTN
			8		ANOEPS5018.MTN
	Regular	Ø5.5	5	Octa	AOCEPR5515.MTN
			6		AOCEPR5516.MTN
			8		AOCEPR5518.MTN
		Ø6.5	5	Non-Octa	ANOEPW6515.MTN
			6		ANOEPW6516.MTN
			8		ANOEPW6518.MTN
	Wide	Ø6.5	5	Octa	AOCEPW6515.MTN
			6		AOCEPW6516.MTN
			8		AOCEPW6518.MTN
		Ø7.5	5	Non-Octa	ANOEPW7515.MTN
			6		ANOEPW7516.MTN
			8		ANOEPW7518.MTN
MUA Level		Ø5.5	5	N Type	AMUAPR5515N.MTN
			6		AMUAPR5516N.MTN
			8		AMUAPR5518N.MTN

S2 Option for successful 'second molar implant'

AnyRidge challenges to the HIGH SURVIVAL RATE even at the second molar

Second molar implants have a much lower success rate than other implants

1) Simple Literature Review:

General implant success rate

99.7% 10-year survival rate

- van Velzen FJ et al. (2014)

95.6%, 94.4%, 96.1%, 100%, 90.6%, 95.7% - CSR of 759 implants in single-tooth prostheses, cantilever fixed, partial prostheses, fixed partial prostheses, fixed complete prostheses, implant/tooth-connected prostheses, and overdentures - Romeo E et al. (2004)

Second molar implant success rate

89.0% CSR for 392 implants in posterior mandible for 6 yrs

- Parein et al. (1997)

91.1% 2nd molar survival rate for 2 yrs - YK kim et al. (2010)

82.9%, 91.5% Prospective study on 282 implants placed in Mx and Mn molar positions (6 years cumulative study) Becker et al. (1999)

8.16% failure in the Mx, 4.93% failure in Mn - Moy et al (2005)

Problem

2) Why less success rate at the Second Molar?

Handicaps of the Second Molar Implant ;

1. Less quality & quantity of alveolar bone

- Maxillary 2nd Molar site usually show less quality (Type IV or worse) and/or limited height due to Sinus pneumatization.
- Mandible 2nd Molar site usually show less blood supply which is important for adequate alveolar bone metabolism. And limited height of bone due to the inferior mandibular nerve.

2. Strong Occlusal force

Due to special joint system at TMJ, the Second Molar usually endure strong occlusal force during mastication.

3. Hygiene Problem

Due to remote position, it's very difficult to maintain hygiene at the second Molar, especially at the distal area, So easy to get peri-implantitis than others.

Solution

3) How to overcome less success rate?

Possible solution

- We need an implant system which can provide **excellent initial stability**^① even at the loose bone and limited height of bone.
- We need an implant system which can provide **enough surface area**^② for osseointegration, even at the limited height of bone.
- We need to provide **enough space for angiogenesis and blood supply**^③ for more active bone remodeling.

We need **stronger implant fixture and abutment connection**^④ to withstand occlusal forces and lateral movement.

We need to choose **adequate material**^⑤ for abutment and crown, which retains much less plaque, even with less accessibility and hygiene skills.

4) MegaGen's suggestion for the second molar implant

"S2 Option" strongly recommended by KOLs of MegaGen.

① Excellent initial stability at loose bone

② Enough surface area for osseointegration

Already well-know advantages of AnyRidge Implant System.



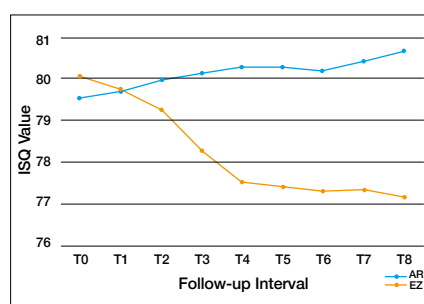
"S2 Option"
1. Less quality & quantity of alveolar bone

thread	length (mm)	S.D. Area (mm ²)	S.S. Area (mm ²)
1 st	1.0	15.739	15.739
2 nd	1.8	41.299	45.013
3 rd	2.6	72.262	84.771
4 th	3.4	102.739	123.85
5 th	4.2	132.213	164.097
6 th	5.0	160.362	197.971
7 th	5.8	187.153	232.633
8 th	6.6	212.613	265.709
9 th	7.2	230.851	289.492
10 th	8.0	253.937	319.185
Apex	8.8	265.953	331.263

EZ plus surface area (mm²)

04.0 X 7	170.84
04.0 X 8	170.84
04.0 X 10	170.84
05.0 X 7	170.84
05.0 X 8	170.84
05.0 X 10	170.84

[Surface area comparison between AnyRidge and EZ plus]



[ISQ value comparison between AnyRidge and EZ plus]



Second molar implants have a much lower success rate than other implants

2nd molar immediate placement case



Fig.1 After extraction



Fig.2 Immediate placement



Fig.3 Final restoration



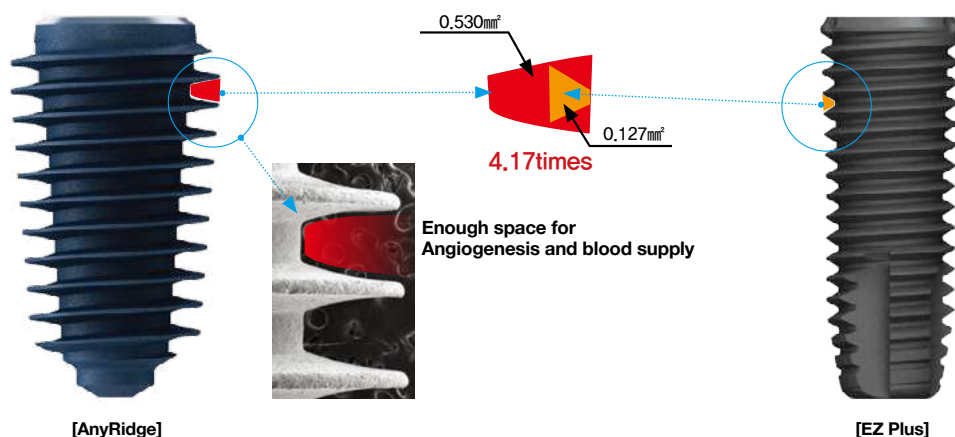
Fig.4 7yr F/U

- 4.8 core diameter and deep thread AnyRidge implant will create very strong and satisfactory initial stability at the large extraction socket of second molar.

- Courtesy of Dr. Kwang Bum Park

③ Enough space for angiogenesis and blood supply through the inter-thread space

- Knife thread design of AnyRidge implant creates the maximum space for blood supply



④ Stronger fixture and abutment connection

Fixture selection

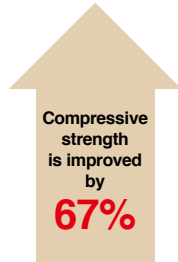
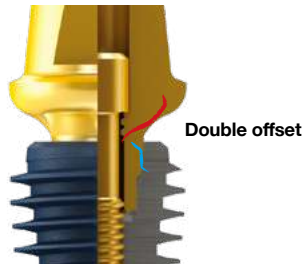
- As minimum, **use the 3.8mm core diameter AnyRidge implant**
- If enough bone width, **use the 4.8mm core diameter AnyRidge implant**
- For large extraction socket, **use the 4.8mm core diameter & deep thread AnyRidge implant**

Core Diameter	Fixture Diameter									
	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5	Ø6.0	Ø6.5	Ø7.0	Ø7.5	Ø8.0
Ø2.8										
Thread depth	0.3									\$2 Option
Ø3.3										
Thread depth		0.35	0.6	0.85	1.1					
Ø3.8										
Thread depth			0.35	0.6	0.85					
Ø4.8										
Thread depth					0.35	0.6	0.85	1.1	1.35	1.6

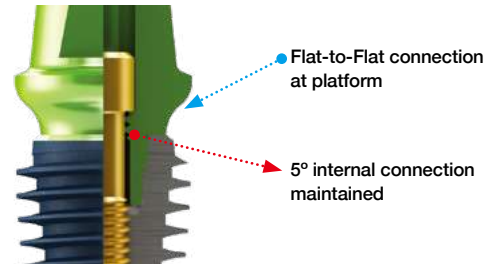
Abutment selection

- 5° AnyRidge connection is really strong & shows almost no biological width
- Double offset (implant switching & abutment switching) is very helpful to improve soft tissue esthetics & health
- However, for second molar implant, strength against lateral occlusal force is more critical than esthetics
- So, for second molar abutment, **use Extra EZ Connection**

[Normal connection]



★ [S2 Option : Double connection]



This 'Double connection' has double advantages.

1. Strong resistance to lateral occlusal forces
2. No sinking of prosthetics
 - Most of internal connection shows 30~50 μ m of sinking following delivery of crown
 - S2 Option will not show sinking phenomenon, while maintaining the 5° internal connection

⑤ Adequate material for hygiene

Our KOLs recommend zirconia customized abutment and/or zirconia monolithic crown for the second molar implant.

Bioinert Bioaffinity



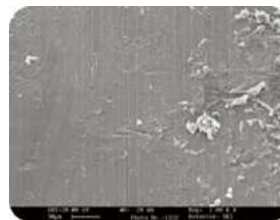
ZrGEN is the brand name of MegaGen Titanium Base. The strength of ZrGEN frees you from the chipping to conventional PPM prosthesis. Monolithic zirconia crowns have no metal substructure, **enhancing better survival rate!**

Bacterial Adhesion on Commercially Pure Titanium and Zirconium Oxide Disks: An In Vivo Human Study

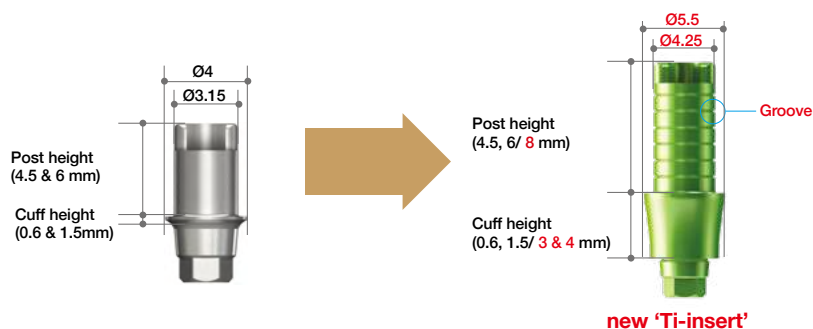
Antonio Scarano, Maurizio Piattelli, Sergio Caputi, Gian Antonio Favero, and Adriano Piattelli JP 2004

The mucosal barrier at implant abutments of different materials

Maria Welander, Ingemar Abrahamsson, Tord Berglundh COIR19, 2008; 635-641



- However, the Zirconia customized abutment has limitations on strength which leads fracture of zirconia and/or cement-break between ti-insert and Zirconia abutment.
- So MegaGen developed **new 'Ti-insert'** for the stronger customized abutment!



S2 Option with AnyRidge Clinical Case

➡ Clinical Case 1

- Courtesy of Dr. Seung Yeup Lee

S2 Option Line-up with AnyRidge implant can be the best solution in posterior zone

Fig 1. Initial Photo

Fig 2. Harvest Autogenous Bone

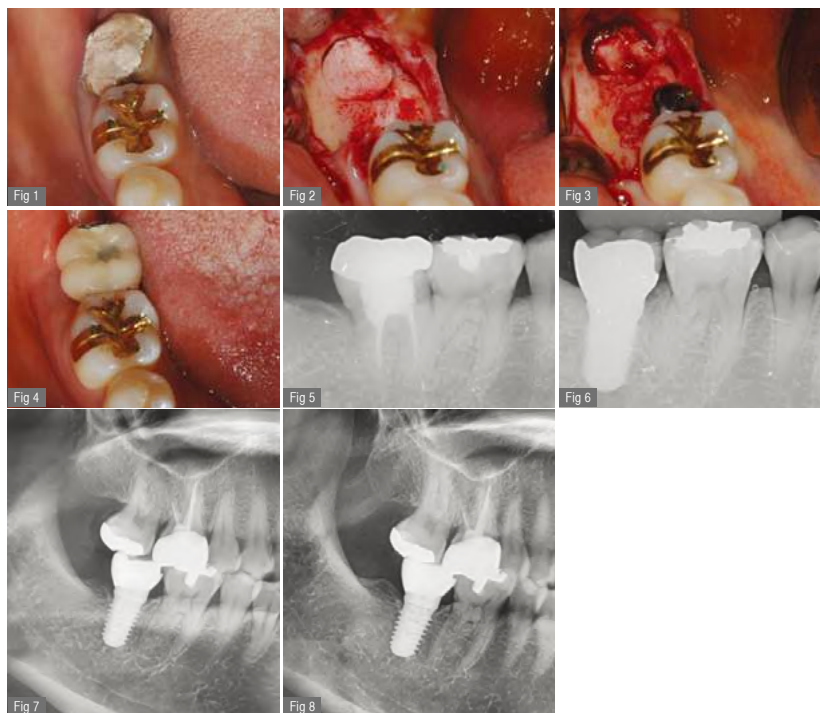
Fig 3. Implant placement

Fig 4. Provisionalization

Fig 5, 6. Before / After Surgery

Fig 7. Final Delivery

Fig 8. 6 yrs F/U



➡ Clinical Case 2

- Courtesy of Dr. Seung Yeup Lee

S2 Option Line-up with AnyRidge implant can be the best solution in posterior zone

Fig 1. Intra Oral before surgery

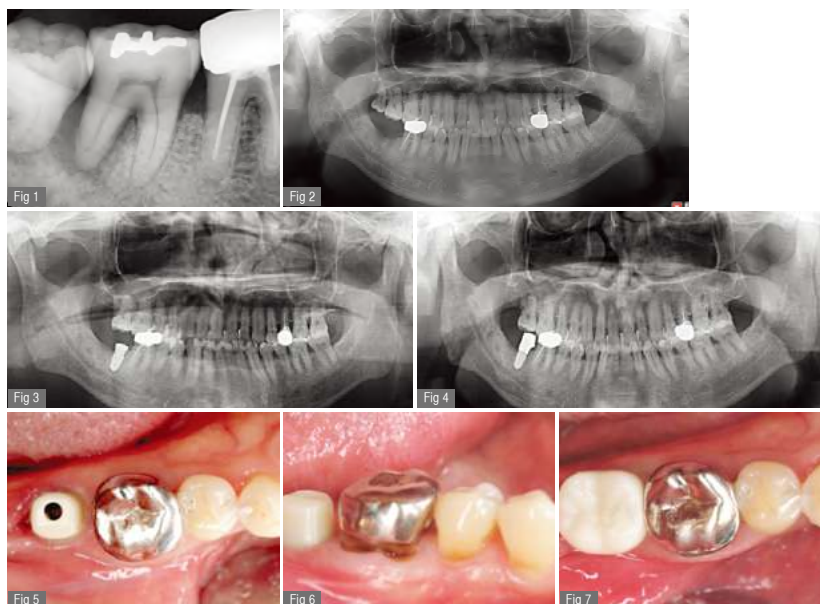
Fig 2. Panorama view

Fig 3. After Implant Placement

Fig 4. Connect Extra EZ-Post

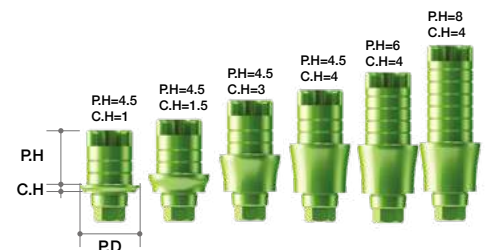
Fig 5. Zirconia Customized Abutment using ZrGen

Fig 6, 7. Connect PMMA



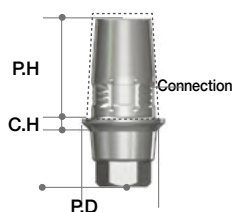
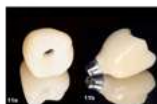
Extra ZrGEN - S2 Option

System	Fixture Core Diameter	Profile Diameter	Cuff Height (mm)	Post Height (mm)	Type	Ref. C
AnyRidge	Ø3.3	Ø4.5	0.6	4.5	Hex	ARZXM4515.MTN
				6		ARZXM4516.MTN
				8		ARZXM4518.MTN
			1.5	4.5		ARZXM4525.MTN
				6		ARZXM4526.MTN
				8		ARZXM4528.MTN
			3.0	4.5		ARZXM4535.MTN
				6		ARZXM4536.MTN
				8		ARZXM4538.MTN
			4.0	4.5		ARZXM4545.MTN
				6		ARZXM4546.MTN
				8		ARZXM4548.MTN
			0.6	4.5	Non-Hex	ARZXM4515N.MTN
				6		ARZXM4516N.MTN
				8		ARZXM4518N.MTN
			1.5	4.5		ARZXM4525N.MTN
				6		ARZXM4526N.MTN
				8		ARZXM4528N.MTN
			3.0	4.5		ARZXM4535N.MTN
				6		ARZXM4536N.MTN
				8		ARZXM4538N.MTN
			4.0	4.5		ARZXM4545N.MTN
				6		ARZXM4546N.MTN
				8		ARZXM4548N.MTN
	Ø3.8	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	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
AnyRidge	Ø4.8	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	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



ZrGEN[®] Abutment (CEREC-Type)

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



C-Type

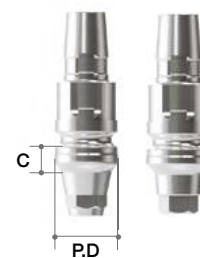
System	Profile Diameter	Cuff Height	Post Height	Post Size	Ref. C
AnyRidge	Ø3.9	0.5	4.7	Small	ARCS3405.MTN
		1			ARCS3410.MTN
		2			ARCS3420.MTN
	Ø4.3	0.5			ARCS3805.MTN
		1			ARCS3810.MTN
		2			ARCS3820.MTN
	Ø5.5	0.5		Large	ARCL4505.MTN
		1			ARCL4510.MTN
		2			ARCL4520.MTN

Scan Abutment (CEREC-Type)

- Abutment Screw included.
- AnyRidge (AANMSF)

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

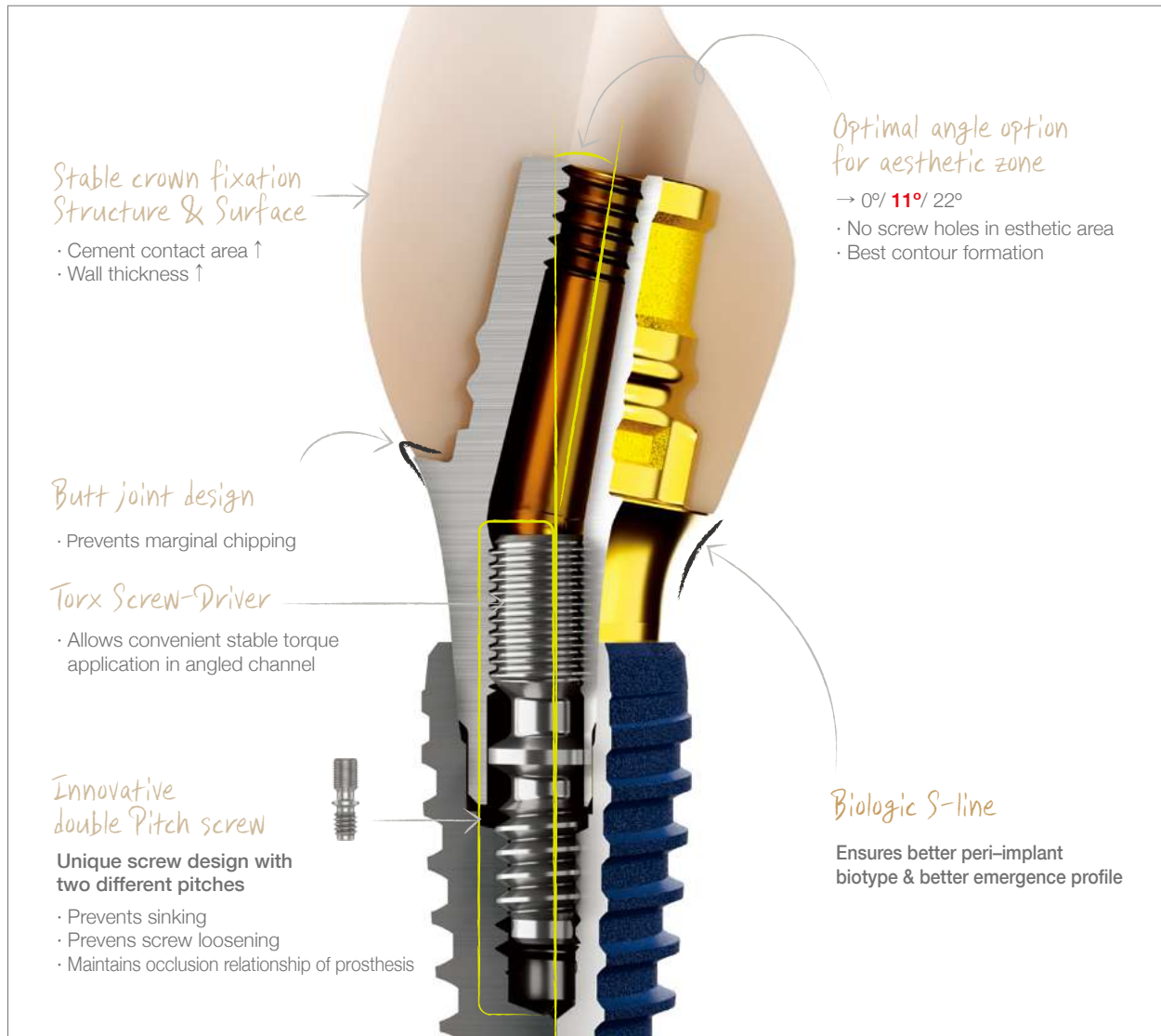
System	Profile Diameter	Cuff Height	Post Size	Ref. C
AnyRidge	Ø3.9	0.5	Small	ARICSS3405T
		1		ARICSS3410T
		2		ARICSS3420T
	Ø4.3	0.5		ARICSS3805T
		1		ARICSS3810T
		2		ARICSS3820T
	Ø5.5	0.5	Large	ARICSL4505T
		1		ARICSL4510T
		2		ARICSL4520T



NEW

II. RC-BASE Abutment

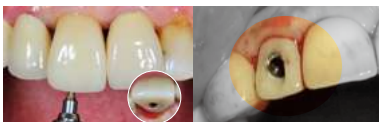
Another innovation in AnyRidge prosthetics for anterior aesthetics



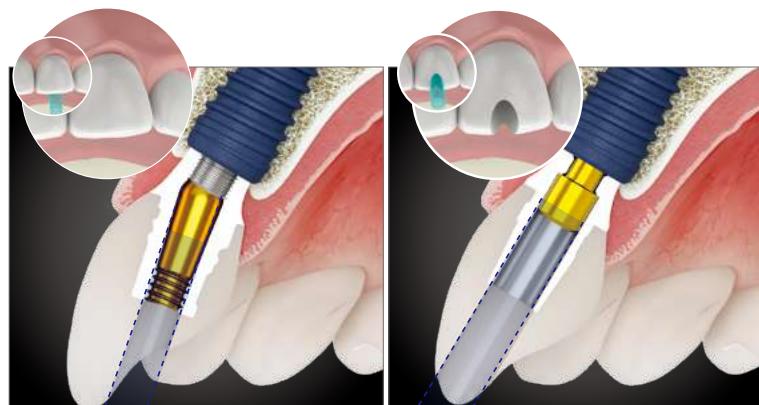
Ideal angled screw channel

No screw hole in aesthetic area ensures best aesthetic result.

Perfect surgery and ideal implant position but...



RC-Base abutment™ Conventional abutment



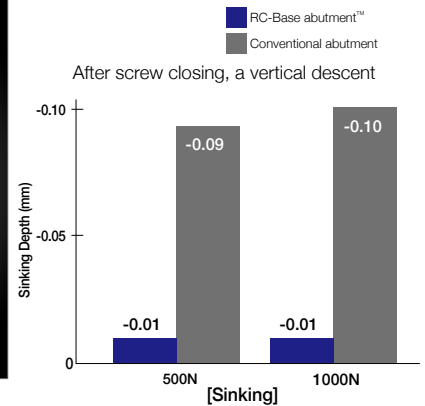
RC-Base abutment™

Conventional abutment

- The angled tool channel allows the screw hole to be removed from the aesthetic area.
- The access channel for a screw-retained prosthesis can interfere with the aesthetics if the implant is angled too far labially. In such cases, a cemented type of retention is the usual choice.

Innovative DP Screw™ (Double-Pitch Screw)

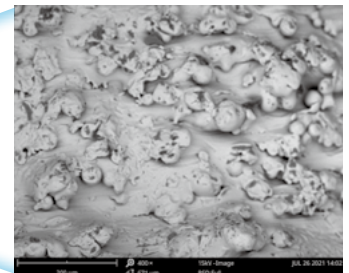
Structured to minimize sinking, which is a key disadvantage of all internal fixtures



Stronger cementation force with zirconia custom

Maximized contact surface area

- The surface roughness of the RC-Base abutment™ is created by sandblasting.
- This maximizes the contact surface area with cement.
- Prevents cement overflow close to the screw channel and near the platform to the basal face.



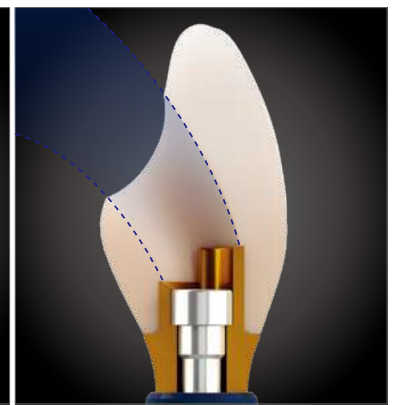
Retentive surface

Wider zirconia wall thickness due to better & easier screw driver access

- Better wall thickness is secured via angled tool channel.
- Abutment is provided with screw already attached, so no space needed for screw head.



RC-Base abutment™



Angled screw channel of crown

No side effects from residual cement

Complications from residual cement include:

- Peri-implantitis, periodontitis
- Bone loss → implant failure



① Final crown is cemented outside oral cavity



② All excess cement is removed from final prosthesis

RC-Base can solve your worries about ...

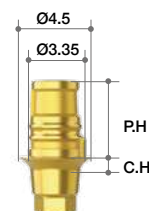
- If you want to make a zirconia custom abutment with CAM equipment
- If you are concerned about a screw hole in the aesthetic area
- If you are worried that the contour formation will not work properly
- If you are concerned about the strength of your zirconia custom abutment
- If you are concerned about screw loosening due to excessive mastication
- If there is a risk of inflammation due to residual cement in the case of deep placement

➡ RC-Base Abutment option

RC-Base Abutment (Straight)

- DP Screw(1-MTO-D2T5) included
- Use with Screw Driver(MTO-DIT5-FW)
- Various cuff heights (2/ 3/ 4mm)
- Recommended tightening torque: 25Ncm

Diameter	Angle	Post Height (mm)	Cuff Height (Labial/Lingual) (mm)	Ref.C
Ø4.5	0°	4.7	2 (1.1)	D-MA35-C0G2-AS
			3 (1.9)	D-MA35-C0G3-AS
			4 (2.8)	D-MA35-C0G4-AS



RC-Base Abutment (11°)

- DP Screw(1-MTO-D2T5) included
- Use with Screw Driver(MTO-DIT5-FW).
- Various cuff heights (2/ 3/ 4mm)
- Recommended tightening torque: 25Ncm

Diameter	Angle	Post Height (mm)	Cuff Height (Labial/Lingual) (mm)	Ref.C
Ø4.5	11°	4.7	2 (1.9/1.1)	D-MA35-C1G2-AS
			3 (2.7/1.9)	D-MA35-C1G3-AS
			4 (3.6/2.7)	D-MA35-C1G4-AS



RC-Base Abutment (22°)

- DP Screw(1-MTO-D2T5) included
- Use with Screw Driver(MTO-DIT5-FW)
- Various cuff heights (2/ 3/ 4mm)
- Recommended tightening torque: 15Ncm

Diameter	Angle	Post Height (mm)	Cuff Height (Labial/Lingual) (mm)	Ref.C
Ø4.5	22°	4.7	2 (2.8/1.1)	D-MA35-C2G2-AS
			3 (3.5/1.9)	D-MA35-C2G3-AS
			4 (4.4/2.7)	D-MA35-C2G4-AS



DP Screw

- Double-Pitch Screw

Torx	Ref.C
T5	1-MTO-D2T5



Screw Driver

- Fracture torque : 35Ncm
- Trox T5

Torx	Length (mm)	Ref.C
T5	30	MTO-DIT5-FW-BOX



Try-In Tool

- Used to move RC-Base abutment to fixture

Type	Length (mm)	Ref.C
M1.8	30	MTO-DT-BOX



Right Angle Adapter

- Connect to Screw Driver(MTO-DIT5-FW) for use with Torque Wrench

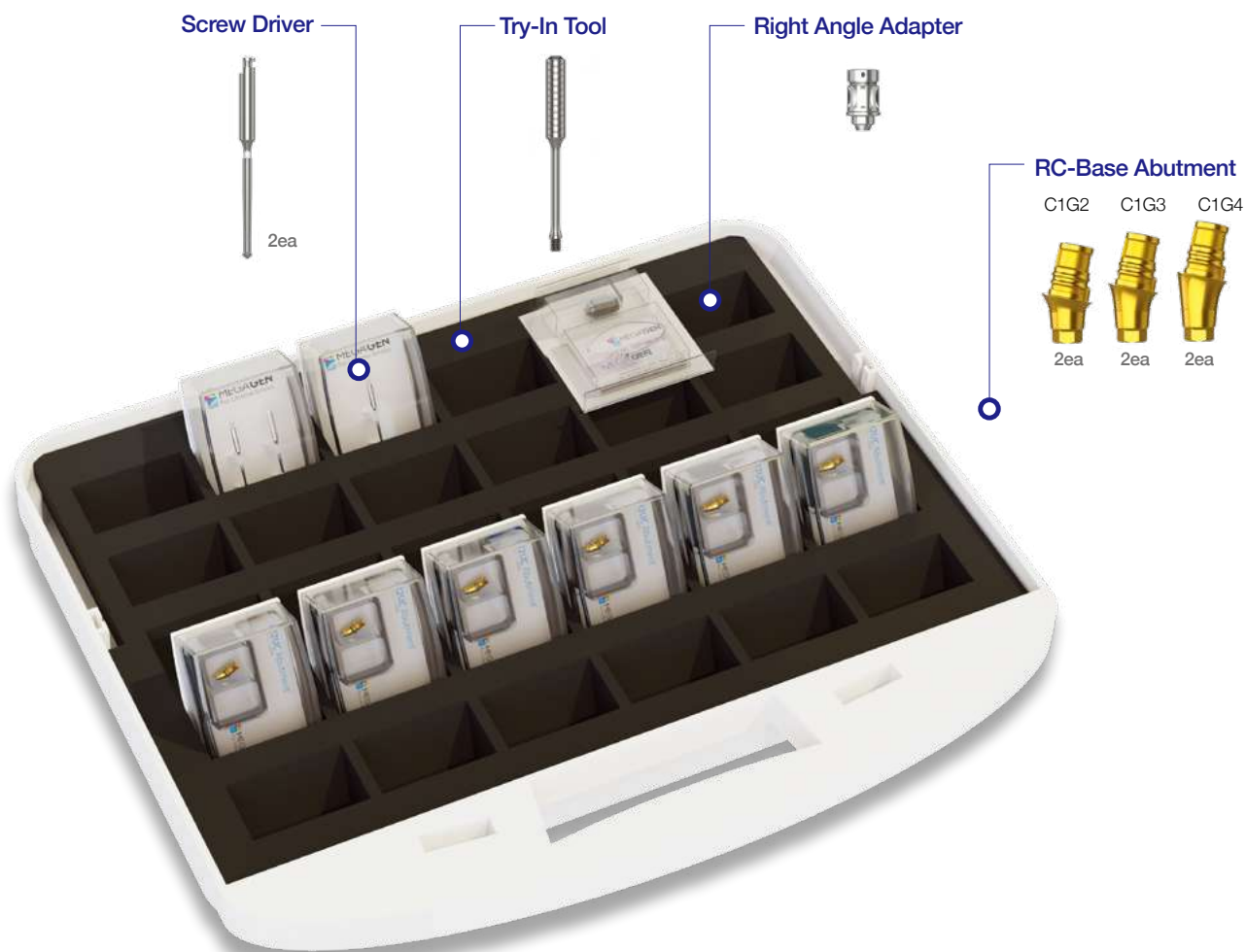
Type	Ref.C
Handpiece type	TTAI100



➡ Components of Trial Intro Set

Ref.C

MA35-Set-16



Clinical Case

- Courtesy of Dr. Sam Omar



Pre-op clinical view



Immediate load occlusal view



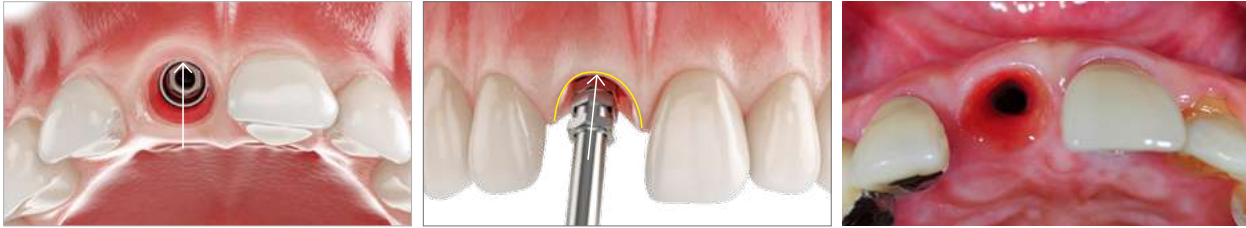
#13 C0G2, #22 C1G3 rc_base was used



Final prosthesis clinical view

► RC-Base Clinical Workflow

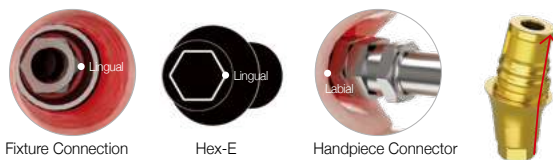
- Courtesy of Dr. Seung Yeup Lee



Fixture Positioning Guide

For the angled-type RC-Base abutment™, the post is inclined toward the edge of the connection, so the edge direction should be in the labial (Lingual) direction when installing the fixture.

※ The hex structure of the handpiece connector allows the hex direction of the fixture connector to be adjusted according to the implant placement.



Optional flow



Oral scan using scan abutment

Insert the scan abutment in accordance with the hex direction of the inner surface of the fixture, and connect the abutment screw.

Check that the scan abutment is completely connected to the inner surface of the fixture, then perform oral scan.

Try-In Tool

After separating the scan abutment, use the Try-In Tool to check the cuff height and angulation of the RC-Base abutment™. Use the Try-In Tool for easy pick-up and connection. Connect the screw tip of the Try-In Tool to the inner thread of the top part of the RC-Base abutment in a clockwise direction.



RC-Base Try-In

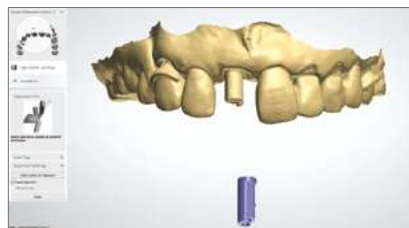
Check the cuff height and the position of the screw hole by connecting the RC-Base abutment™ attached to the Try-In Tool to the implanted fixture.

The position of the screw hole can be adjusted in 6 directions based on the hex structure of the RC-Base abutment. Try to position the direction of the screw hole on the lingual side. For the accurate prosthetic work, take a photo of the screw hole direction at this time, or use the anti-rotation structure of the post to remember the direction.



CAD Order Sheet and Library Selection

After running the CAD (exocad, 3Shape) program, create an order sheet for the design work. While the order sheet format will differ according to the program (exocad, 3Shape), a screw-retained crown is the normal selection. Select the RC-Base library that matches the cuff height and angulation determined at the Try-In. Download and install the exocad or 3Shape library from the MedTEOR website or R2GATE website. CAD works well with the 2019 version or a later version.

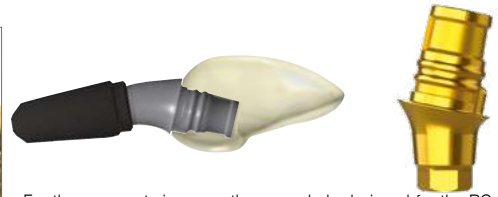
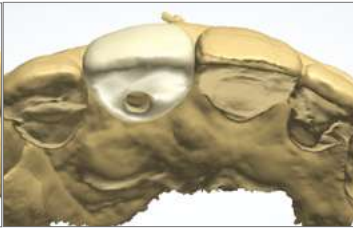


Matching

After importing the scan data, start the normal matching process. As matching references, use the flat surface of the Scan Abutment and flat surface of the Scan Abutment in the scan data.

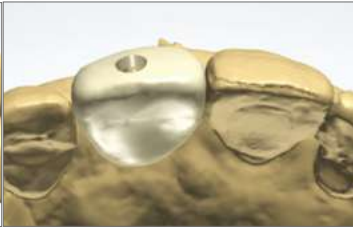
After matching, check the degree of precision using the recommended function in respective CAD software.

RC-Base Abutment™



For the same anterior case, the screw hole designed for the RC-Base abutment™ is located on the lingual side, which results in an aesthetic and clean look on the labial surface.

Conventional Ti-base Abutment



For the same anterior case, the screw hole designed for a regular Ti-base abutment is located on the labial side, which makes it difficult to ensure a good aesthetic result.

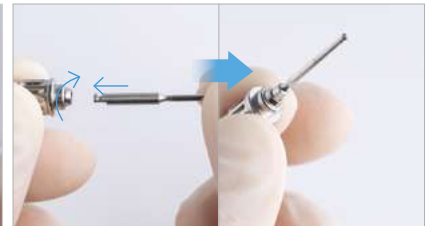
After milling



Baking



Cementing



Sintering Zirconia

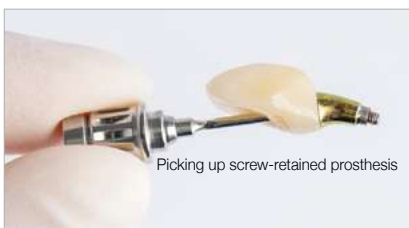
Sinter the finished zirconia crown according to the recommendations for the zirconia block. Post-process as normal and dye, if required.

Cement Bonding - Prosthesis & RC-Base

Before cementing, combine the prosthesis and RC-Base and check the gap. Rework if the prosthesis is not properly coupled or it rotates due to excessive clearance. According to the cement manufacturer's instructions, apply the recommended amount of cement to the post of the RC-Base, then slowly attach it to the prosthesis. Remove any excess cement overflow using a sculpting tool. To complete, light-cure or self-cure according to the cement manufacturer's instructions.

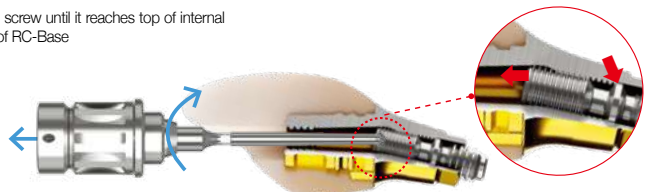
Assembly using Screw Driver

To fasten the prosthesis, connect the Right Angle Adapter to the Screw Driver or just use a Right Angle Driver.



Picking up screw-retained prosthesis

Rotate & pull up screw until it reaches top of internal screw channel of RC-Base



Picking up the Prosthesis

Pick up the prosthesis by connecting the Screw Driver to the DP Screw™.

Initialize Position of DP Screw™

To fasten the RC-Base to the fixture, rotate and pull up the DP Screw™ in a counter clockwise direction until the stopper of the DP Screw™ touches the lower part of the inner thread of the RC-Base.

※ Although the position of the DP Screw™ of the RC-Base is set at the top, it can move during the delivery stage or for other reasons. So, be sure to check the position of the DP Screw™ to achieve a complete connection with the fixture.



Transport of Prosthesis

Move the prosthesis using the Screw Driver.



Delivery of Prosthesis

According to the connection direction of the fixture and the adjacent teeth, turn the DP Screw™ in a clockwise direction to fasten the prosthesis to the fixture.

※ If it feels too tight initially, this is probably because the DP Screw™ is in contact with the internal thread of the RC-Base when fastening the RC-Base to the fixture. No problem, just rotate in a clockwise direction to release the stress.

※ Recommended torque: 25N(0/11)/ 15N(22)

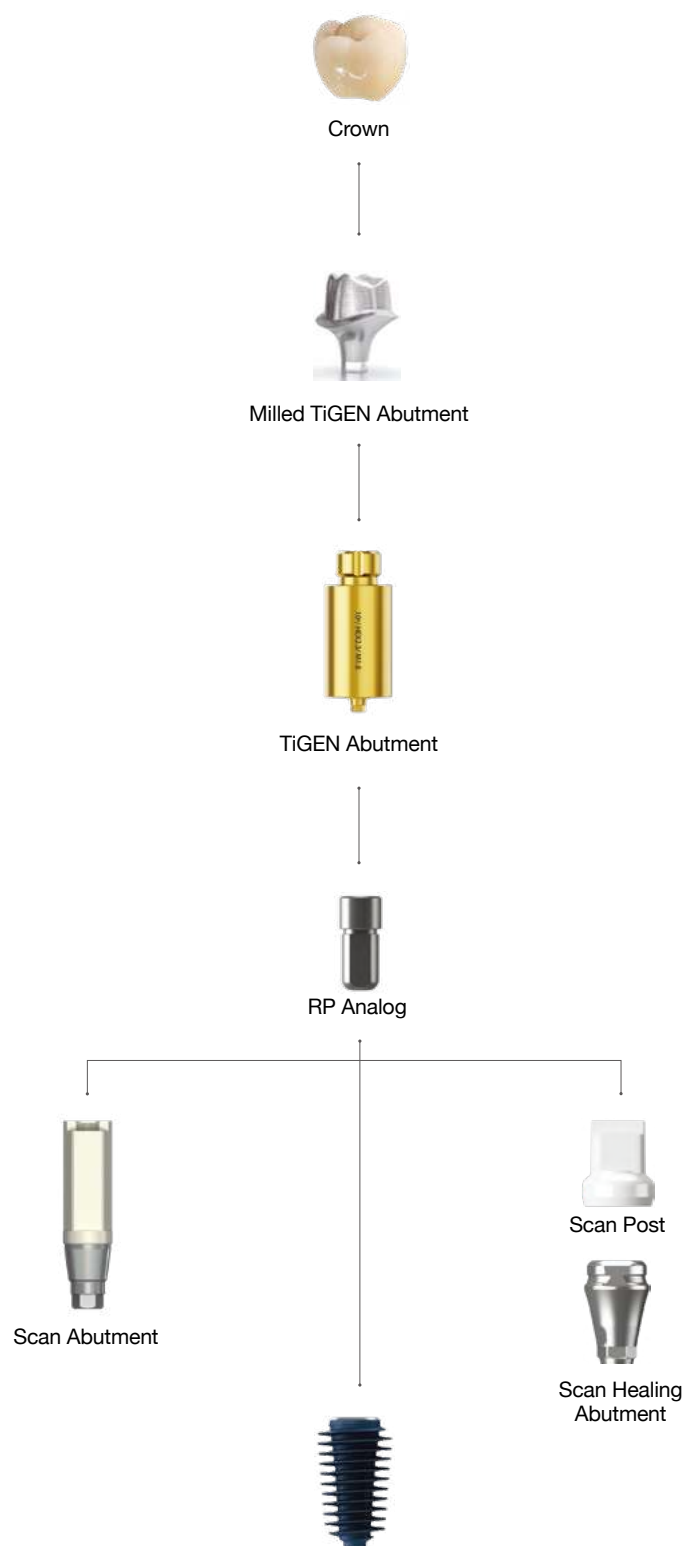


Final prosthesis is complete, and since the screw hole is on the lingual side, this creates a better aesthetic result.

III. TiGEN®



TiGEN® is the brand name of MegaGen's Pre-milled Abutment. It promises outstanding durability and simplified dental implant prosthesis. Ready-made connection part provides a strong and precise connection with the implant fixture.



➡ TiGEN Abutment Option

TiGEN Abutment

- Abutment Screw included

• AnyRidge (AANMSF)

• Octa Level (IRCS200)

• Pre-milled Abutment

• 1 set consists of 10 Abutments

- included spare Abutment Screw

• Supporting DentalCAD

- 3 Shape

- exocad

- Dental Wings

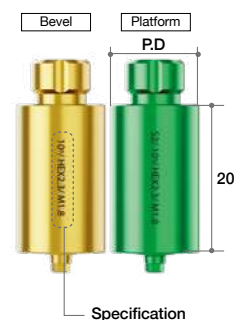
Standard

System		Color	Profile Diameter	Height (mm)	Type	Ref. C
AnyRidge		Gold	Ø10	20	Hex	ARTR1020.MTN
					Non-Hex	ARTR1020N.MTN
			Ø12		Hex	ARTR1220.MTN
					Non-Hex	ARTR1220N.MTN
Octa Level	Small	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

System	Color	Fixture Core Diameter	Profile Diameter	Height (mm)	Type	Ref. C
AnyRidge	Bevel (Gold)	Ø3.3	Ø10	20	Hex	ARTXN1020.MTN
			Ø12		Non-Hex	ARTXN1020N.MTN
		Ø10			Hex	ARTXN1220.MTN
			Ø12		Non-Hex	ARTXN1220N.MTN
	Platform (Light green)	Ø4.8			Ø10	Hex
			Ø12		Non-Hex	ARTXL1020N.MTN
		Ø10			Hex	ARTXL1220.MTN
			Ø12		Non-Hex	ARTXL1220N.MTN

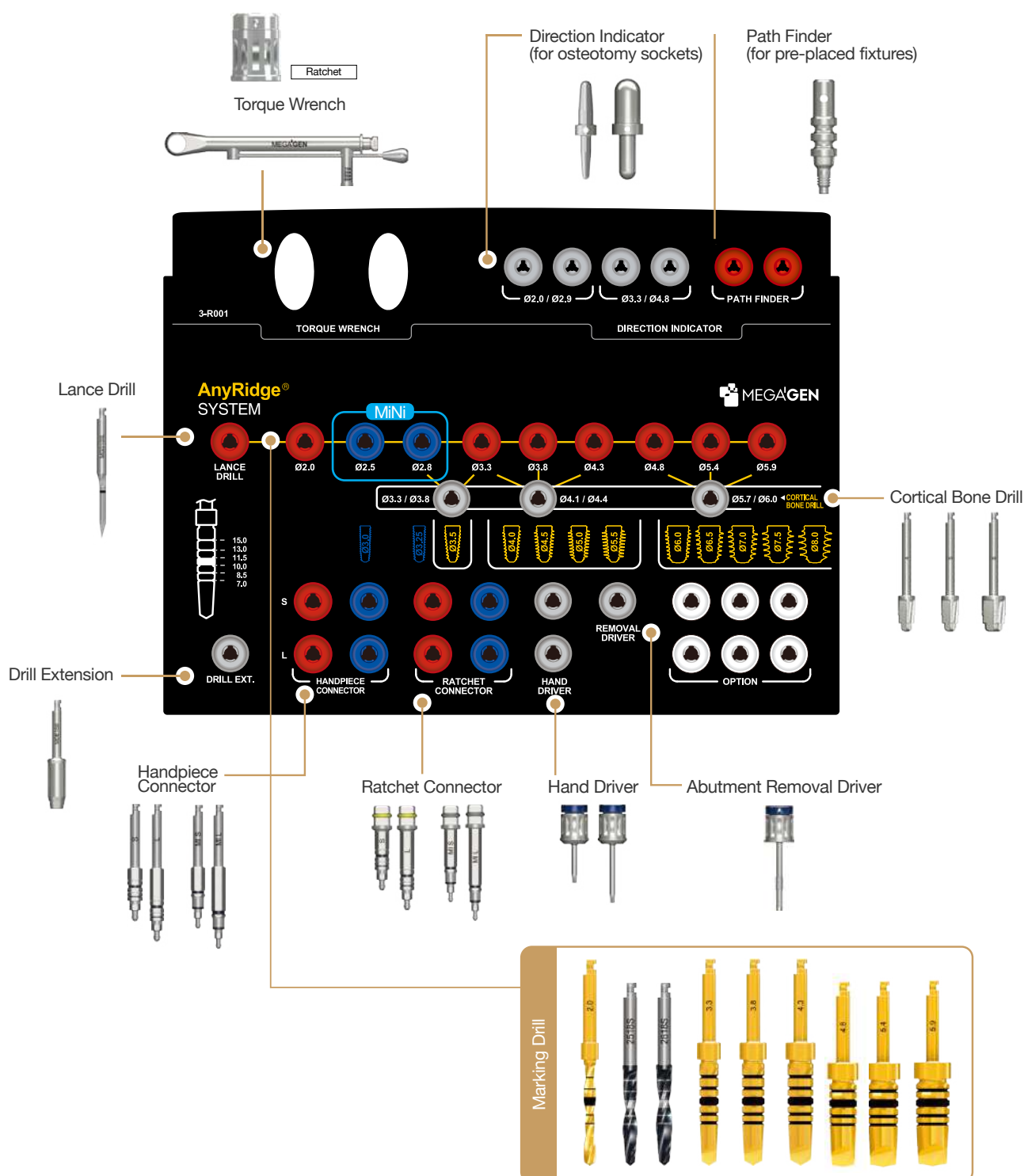


AnyRidge Kit

I. AnyRidge Surgical Kit : Standard Type

Ref.C

KARIN3003



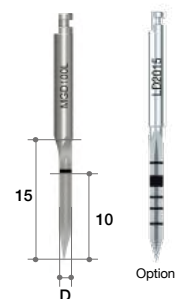
➔ Surgical Kit Components

Lance Drill

- Useful to make an indentation on cortical bone to confirm the exact drilling location.

Diameter	Type	Ref.C
Ø2.0	Long	MGD100L
	Short	*LD2015
	Long	*LD2025
	Ultra-Long	*LD2030

(*) Separate sales item.



Marking Drill

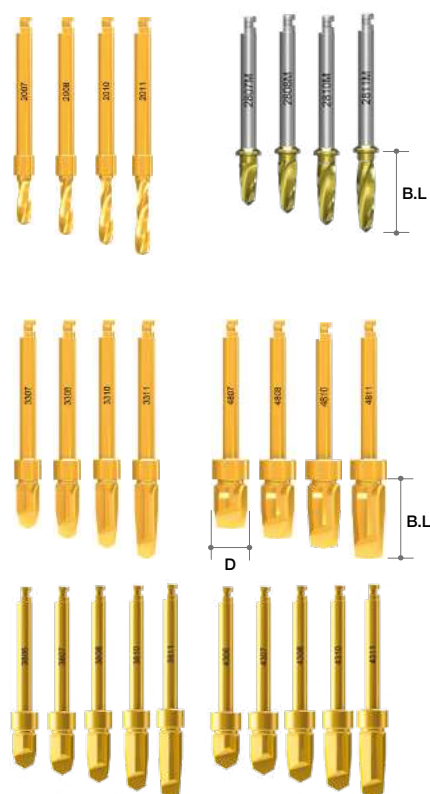
- Each drill has calibrations from 7.0 to 18.0mm. (TANSDF4815, TANSDF5415, TANSDF5915 have calibrations up to 15.0mm)
- Easy to recognize by dual marking systems. (Groove and laser marking)

Diameter	Blade Length (mm)	Ref.C
Ø2.0	18	TANTDF2018
Ø2.5		SD2518S
Ø2.8		SD2818S
Ø3.3		TANSDF3318
Ø3.8		TANSDF3818
Ø4.3	15	TANSDF4318
Ø4.8		TANSDF4815
Ø5.4		TANSDF5415
Ø5.9		TANSDF5915



Stopper Drill

Diameter	Blade Length (mm)	Ref.C
Ø2.0	7	TANTDF2007
	8.5	TANTDF2008
	10	TANTDF2010
	11.5	TANTDF2011
Ø2.8	7	SD2807M
	8.5	SD2808M
	10	SD2810M
	11.5	SD2811M
Ø3.3	7	TANSDF3307
	8.5	TANSDF3308
	10	TANSDF3310
	11.5	TANSDF3311
Ø3.8	7	TANSDF3807
	8.5	TANSDF3808
	10	TANSDF3810
	11.5	TANSDF3811
Ø4.3	7	TANSDF4307
	8.5	TANSDF4308
	10	TANSDF4310
	11.5	TANSDF4311
Ø4.8	7	TANSDF4807
	8.5	TANSDF4808
	10	TANSDF4810
	11.5	TANSDF4811



Point Trephine Bur

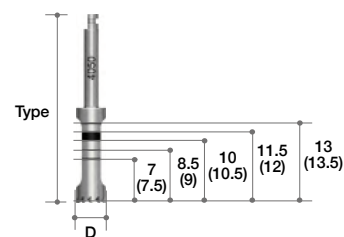
Diameter	Ref.C
Ø5.0 (In.Ø4.0)	SPTB4050



Trephine Bur

- Minimizes the drilling steps needed, especially for wider fixtures.
- Helpful for collecting autogenous bone.
- Useful for removing failed and fractured fixtures.
- Depth markings are 7, 8.5, 10, 11.5, 13mm, same depths as fixtures. (No Y dimension so markings are actual length).
- Markings on the drill shaft represent the inside / outside diameter of Trephine Burs.

Diameter	Type	Ref.C
Ø3.5 (in Ø2.5)	Short (32mm)	TANTBL2535
Ø5.0 (in Ø4.0)		TANTBL4050
Ø6.0 (in Ø5.0)		*TANTBL5060
Ø7.0 (in Ø6.0)		*TANTBL6070
Ø3.5 (in Ø2.5)	Long (38mm)	*TANTBE2535
Ø5.0 (in Ø4.0)		*TANTBE4050
Ø6.0 (in Ø5.0)		*TANTBE5060
Ø7.0 (in Ø6.0)		*TANTBE6070



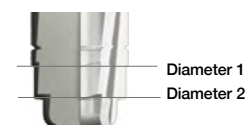
(*) Separate sales item.

Ø3.5, 5.0 Trephine Bur are included in Surgical kit.

Cortical Bone Drill

- Removes cortical bone and enlarges osteotomy socket especially at hard bone.
- Similar function with countersink drill of other systems.
- Each drill has two steps of diameter for convenience.

Diameter	Ref.C
Ø3.5	TANCDL3500
Ø4.0~ Ø5.5	TANCDL4055
Ø6.0~ Ø8.0	TANCDL6080



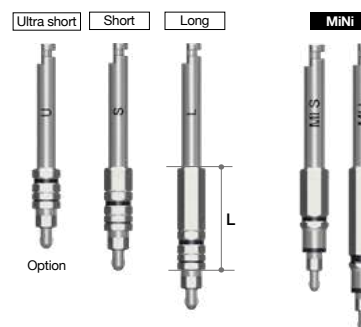
➔ Surgical Kit Components (Continued)

Handpiece Connector

- Delivers torque for the placement of a fixture with a handpiece.
- Easy and secure pick-up and delivery.
- Used to place an implant without a mount.
- Marks on the shaft can indicate the position of fixture platform, especially in flapless surgery.

Length(mm)	Type	Ref.C
5	*Ultra short	TANHCU
10	Short	TANHCS
15	Long	TANHCL
10	Short (MiNi)	HCS17
15	Long (MiNi)	HCL17

(*) Separate sales item.

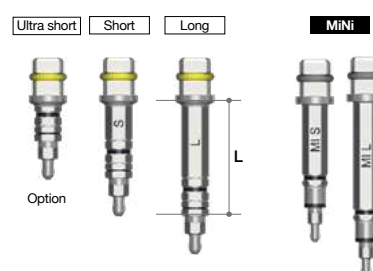


Ratchet Connector

- Delivers torque for the placement or removal of a fixture with a Ratchet Wrench.
- Secure a Ratchet Extension or Torque Wrench to a fixture before exerting force.
- Too much torque force can result a damage to the hex of a fixture.
- Marks on the shaft can indicate the position of fixture platform, especially for flapless surgery.

Length(mm)	Type	Ref.C
6	*Ultra short	TANREU
10	Short	TANRES
15	Long	TANREL
15	Short(MiNi)	RCS17
20	Long (MiNi)	RCL17

(*) Separate sales item.



Hand Driver (1.2 Hex)

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

Length(mm)	Type	Ref.C
5	*Ultra-short	TCMH DU1200
10	Short	TCMH DS1200
15	Long	TCMH DL1200
20	*Extra-long	TCMH DE1200

(*) Separate sales item.



Abutment Removal Driver

- Used to remove final abutment ; use after removing Abutment Screw.
- Insert straight into the abutment and rotate clockwise.
- Long Abutment Removal Driver is for disconnecting an abutment with a cemented crown.

Length(mm)	Ref.C
17.5	TANMRD18
25.0	*TANMRD25

(*) Separate sales item.



Drill Extension

- Extends drills & other handpiece tools.
- No more than 45Ncm torque : Can be distorted when too much force is applied.

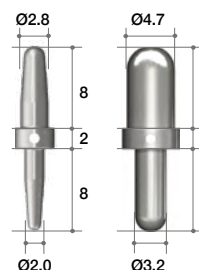
Ref.C
MDE150



Direction Indicator

- Confirms drilling direction and location during drilling.
- Checks drilling position.

Length(mm)	Ref.C
Ø2.0 / Ø2.8	MDI100
Ø3.2 / Ø4.7	MDI3348



Path Finder

- After placing a fixture, a Path Finder can be connected to guide parallel for the next implant.
- Gingival depth can be measured with the grooves especially for flapless surgeries.

Length(mm)	Ref.C
10	TANPFF3580

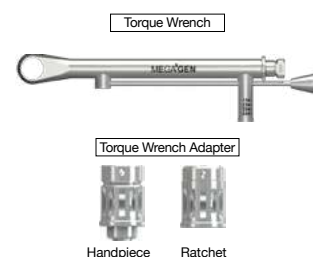


Torque Wrench & Adapter

- 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	MTW300AT
*Torque Wrench Adapter(Handpiece)	TTAI100
Torque Wrench Adapter(Ratchet)	TTAR100

(*) Separate sales item.



II. AnyRidge Prosthetic Kit

A kit with all kinds of driver that are needed for prosthetics.

Ref.C

KANPK3000

Hand Driver

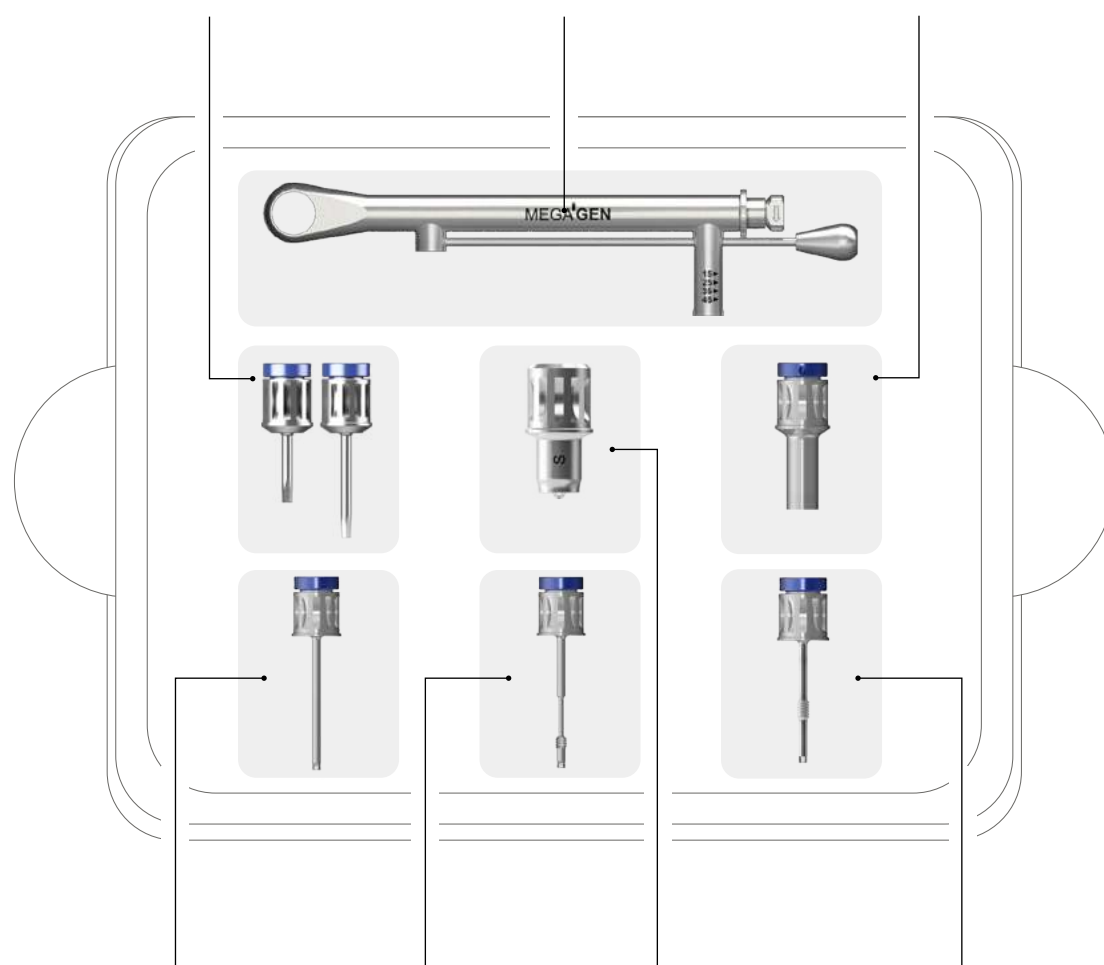
TCMHDS1200 & TCMHDL1200
refer to pg. 85

Torque Wrench

MTW300AT
refer to pg. 86

Multi-unit Driver

MUD10
refer to pg. 53



Hand Driver

MUHD1220
refer to pg. 53

Removal Driver

MUARD20
refer to pg. 53

Octa Driver

MOD300S

Abutment Removal Driver

TANMRD18
refer to pg. 86

Octa Driver

- For seating of the Octa Abutment into the fixture.
- Can also be connected to Torque Wrench.

Length(mm)

Ref.C

7

MOD300S



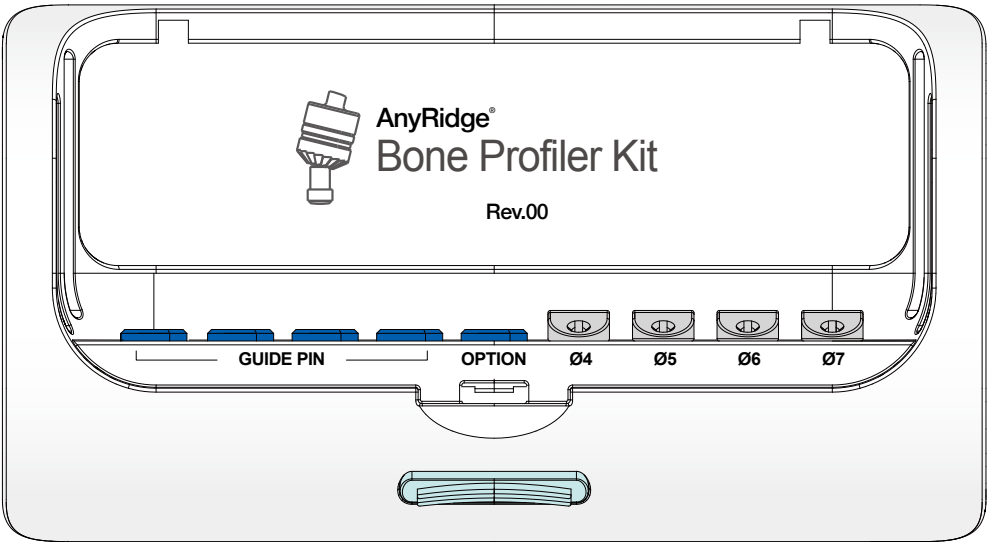
III. AnyRidge Bone Profiler Kit

Ref.C

KARBP3000

Removes the overhanged bone around a fixture to allow adequate seating of a Healing Abutment or a Prosthetic Abutment.

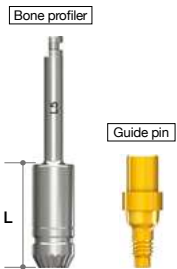
- Place a Guide Pin into a fixture and choose a Bone Profiler which fits with the situation.
- Four different sizes of bone profiler and four guide pins are included in the kit.



Bone Profiler

- Guide Pin(TANPGF3305)included.
- Each bone profiler can be purchased separately for refill.
- Each package includes a bone profiler and a guide pin.

Profile Diameter	Length(mm)	Ref.C
Ø4	13	TANBPL40G
Ø5		TANBPL50G
Ø6	8	TANBPS60G
Ø7		TANBPS70G



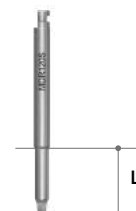
IV. Optional components

- not included in the surgical kit
- can be purchased separately and placed into the 'option' spaces provided in the surgical kit

Right Angle Driver Tip

- Used for all Cover Screws, all abutment screws and all Healing Abutments.
- Hex tip can withstand 35-45Ncm of torque without distorting.

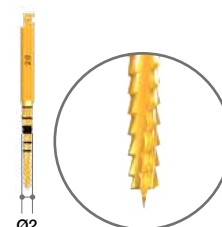
Length(mm)	Type	Ref.C
4	Ultra-short	MDR120SS
10	Short	MDR120S
15	Long	MDR120L
20	Extra Long	MDR120EL



Lindermann Drill

- Cross cut on the drill.
- Can correct the path during drilling.

Diameter	Ref.C
Ø2	TEEL200M



Insert Driver

- Used for all Cover Screws, all abutment screws and all Healing Abutments.
- Hex tip can withstand 35-45Ncm of torque without distorting.

Length(mm)	Type	Ref.C
10	Short	MID120S
15	Long	MID120L



Hand Tap

- Useful when the internal screw of a fixture is damaged.
- Retapping damaged threads.
- Need to be patient and force-controlled.

Type	Ref.C
M1.8	THT180L



Multi-unit Driver (2.0 Hex) (For Multi-unit Abutment)

- For the seating & tightening of multi-unit Abutment (Straight type)

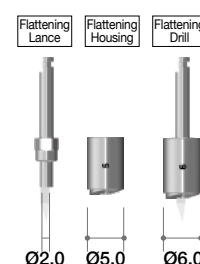
Length(mm)	Type	Ref.C
10	Short	TCMMUDS20
15	Long	TCMMUDL20



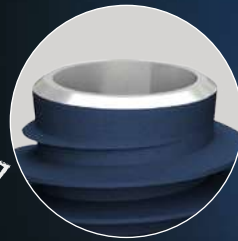
Flattening Drill

- In the case of irregular bone, stopper drill can be drilled in precise depth by flattening the bone.
- Flattening Lance and Housing are connected together. Two types of Housing diameters (Ø5.0 & Ø6.0) are composed in accordance with the size of final drill diameter.
- Ø5.0 = Stopper Drill Ø2.0~ Ø4.3
- Ø6.0 = Stopper Drill Ø4.8~ Ø5.4
- Formation of boundary through housing will guide the next drilling location of fixture.

Diameter	Length(mm)	Ref.C
Ø5.0 / Ø2.0	3.5	FD5020
Ø6.0 / Ø2.0		FD6020



Why will AnyRidge work in any ridge?



Wider fixture in
narrow crest

maximizes long-term
implant survival

Narrow upper diameter

maximizes preservation
by minimizing stress
on cortical bone

Knife threads

- for smooth insertion &
stronger primary stability
- no cutting edge for minimum invasion
ideal for soft bone

Narrow apical diameter

for easier fixture insertion into
narrow ridge split incision



- for faster, stronger
osseointegration
- new surface technology
incorporating Ca^{2+}
ions on the SLA-treated surface
- 100% elimination of
any remaining acid from
conventional SLA process

Tapered body

excellent for simple installation
& immediate loading

AnyRidge Clinical Case

➡ Clinical Case 1

- Courtesy of Dr. Kwang-Bum Park

AnyRidge implant has excellent surface treatment which can be osseointegrated at this extreme case of bone defect.

Fig 1. This patient was 56 years old male patient and had a chief complaint of chewing difficulty on the left first mandibular molar due to periodontitis. On the panoramic radiograph, the tooth was floated with complete bone loss to the apex, and there was not enough bone to get initial stability for implant placement at the apex above mandibular nerve. So I decided to extract the tooth and wait for 4 months for regeneration of the socket.



Fig 2. The patient came back to my office after 4 months. Healing appeared good enough clinically, but the panoramic view still showed large socket defect. In many cases like this, we can expect some amount of bone filled in the socket which can allow minimal initial stability for implant placement.

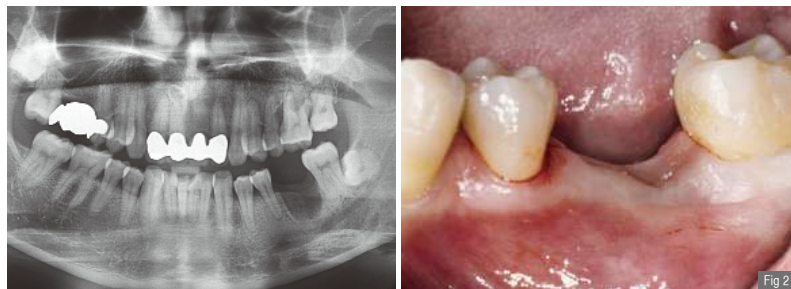


Fig 3. When the flap was opened, I was very embarrassed that bone regeneration did not occur in the socket. None of remaining bone could be used for implant fixation.

Fig 4. A widest AnyRidge implant 8.0mm was placed on the mesial wall of extraction socket, but there was no initial stability. This trial was quite heroic treatment, but there was no other option except this because he spent many hours for this surgery.



Fig 5. The mixture of Allograft (Mega-Oss) and Synthetic bone (Bone Plus) was placed into the remaining socket defect and a collagen membrane was covered. Then primary closure was made with incision release on the periosteum.

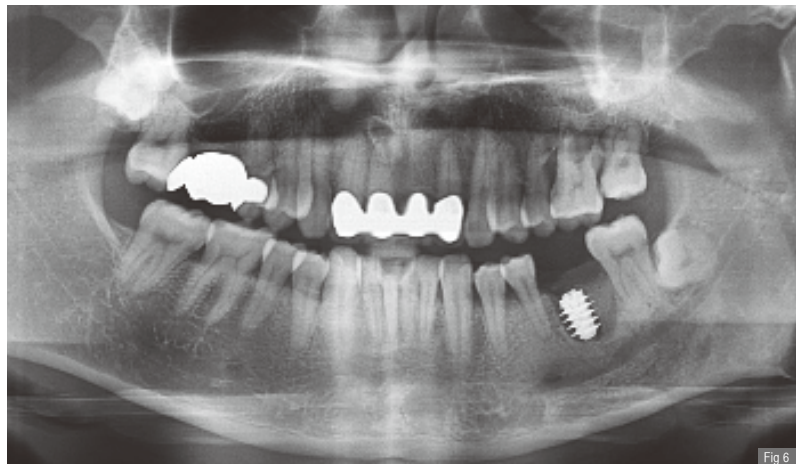


Fig 6. On the panoramic view after surgery, we could find that none of the fixture was engaged with remaining bone, so it had more than 1.6mm gap from the tip to the depth of knife threads. I worried about the bone filling and success of the osseointegration on this fixture.

Fig 7. However, I was surprised with the hard cortical bone regeneration over the cover screw when I did the second stage surgery with the Biolaser.

Fig 8. On the intraoral radiograph taken several weeks after second surgery, we could see the fully regenerated bone into the bottom of thread depth.

Fig 9. The patient came back to our office to get one more implant on the maxillary upper molar after 2 years from the first implant surgery. The regenerated bone was matured and showed very stable crestal bone on the intraoral radiograph.



➔ Clinical Case 2

- Courtesy of Dr. Kwang-Bum Park

Advantage of fuse abutment with AnyRidge implant for immediate loading in upper fully edentulous case

Fig 1. An 80-year-old female patient presented with discomfort related to her upper teeth. About 10 years previously she underwent implant surgery in the mandible and received temporary teeth immediately as the bone density was sufficient for immediate loading. The patient requested a treatment plan for the upper arch that would give her immediate teeth.

Fig 2. Clinical photos before surgery. The patient had no discomfort or complaints related to her mandibular implants. Plus her hygiene control was very good for maintaining healthy peri-implant tissue.

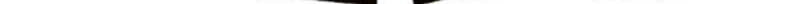
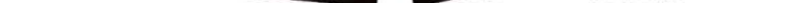
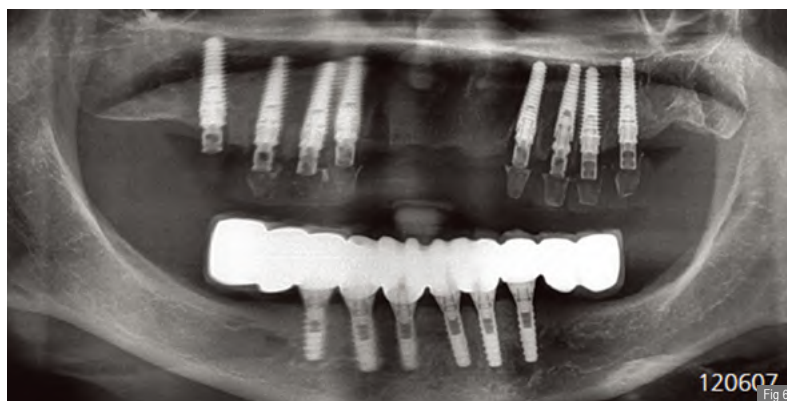
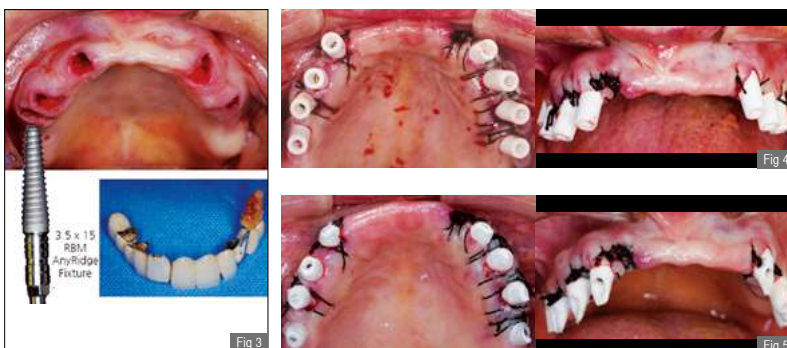
Fig 3. All the remaining teeth were extracted. As shown, some teeth had severe periodontitis and some had decay at the cervix of the tooth. Drilling up to 2.9 mm was conducted at each implant site and eight 3.5×15mm implant fixtures were placed using a minimal flap design. All the fixtures showed excellent initial fixation, and the immediately-placed implants only had small socket defects.

Fig 4. Eight fuse abutments were connected and the flaps were sutured to create a tight sealing against the fuse abutments

Fig 5. The fuse abutments were prepared using a high speed handpiece for a temporary bridge that was already made before the implant surgery

Fig 6. Panoramic scan taken immediately after surgery. The first premolar implant showed some mis-fit between the crown and the ratio.

Fig 7. Intraoral scans taken 2 months after surgery. Shadows of the extraction socket can still be seen, but regenerated bone has started to fill the socket defects. The fuse abutments are functioning well without any problem. An impression was taken for customized zirconia abutments



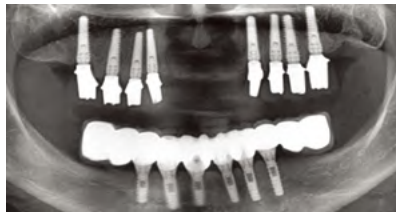


Fig 8. Panoramic & intraoral scans taken 3 months after surgery. Zirconia customized abutments were connected to each fixture. The socket defects are completely filled with regenerated bone even in the case of immediate loading on the immediately placed implants.



Fig 9. Clinical photos of zirconia customized abutments and PMMA temporary bridge made using CAD/CAM technique. A zirconia abutment is excellent for both esthetics and hygiene maintenance. It has less than 1/10 bacterial accumulation on the surface compared with metals including titanium. PMMA provisional bridge is stronger than tooth resin, especially at the margin, so much beneficial for functional and occlusal tests.



Fig 10. A full zirconia one-piece bridge was made and delivered. The patient was very satisfied with the results, and thankful that she was provided with 'teeth' from the beginning to the end.

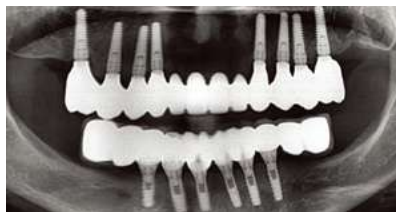


Fig 11. Panoramic scan of final restorations on day of delivery

Fig 12. Panoramic scans at 7 years follow-up

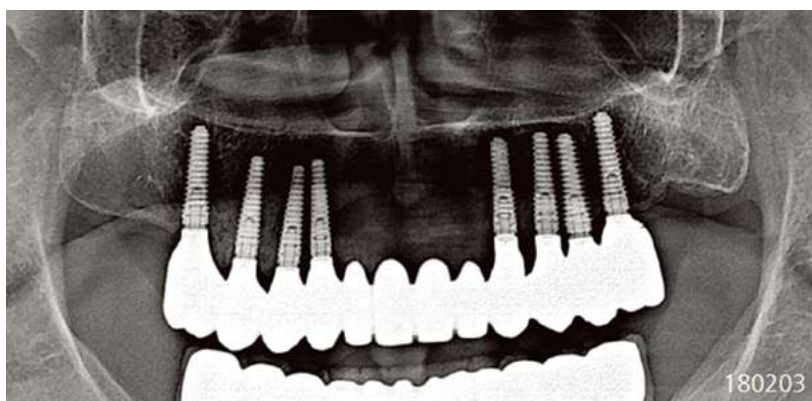


Fig 12

➔ Clinical Case 3

- Courtesy of Dr. Soheil Bechara

Simultaneous sinus lift and implant placement

Fig 1. The patient presented with huge bony defects around residual roots in the upper jaw. The treatment plan was to perform immediate implant placement and extract all decayed roots during one surgical session, as the patient had only one week to stay in the country.

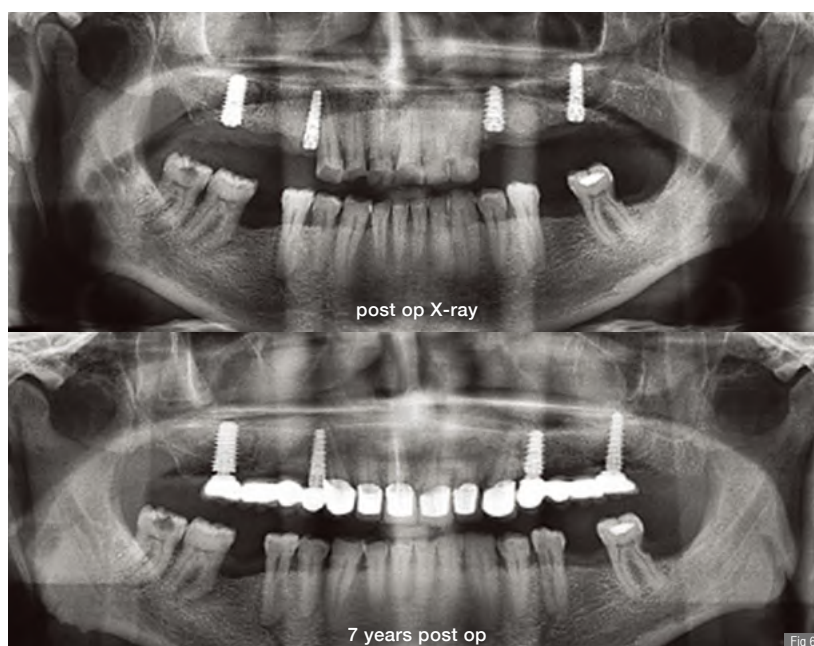
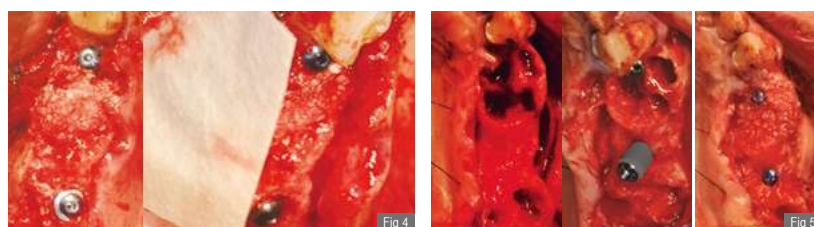
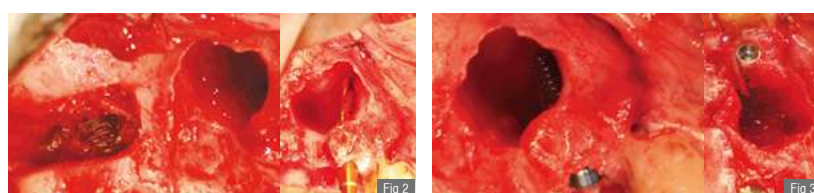
Fig 2. Lateral window sinus lifting was performed on the right side with simultaneous implant placement in tooth area 17. In area 14 we can observe a huge bony defect which was thoroughly debrided until the margins of healthy bone. The Osteotomy was prepared with a 2mm final drill to place a 3.5x15mm Anyridge implant.

Fig 3. 3.5x15mm Anyridge implant was placed having only 2mm contact with the bone in the coronal part achieving 25 Ncm of initial torque.

Fig 4. The bony defect was filled with a Xenograft and covered with a collagen membrane. Although the defect is huge but it is still considered as an intra-bony defect with a good potential of bone regeneration.

Fig 5. On the left side two Anyridge implants were placed, immediate implant placement in area 24. Sinus lift with simultaneous implant placement in area 27.

Fig 6. No marginal bone loss, successful aesthetic and functional outcome.

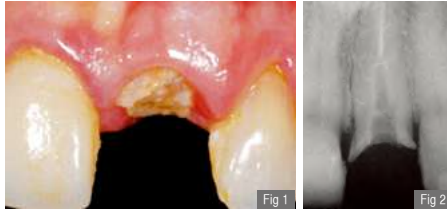


➡ Clinical Case 4

- Courtesy of Prof. Giuseppe Luongo

Immediate post-extraction insertion of implant and immediate loading.

Before Surgery

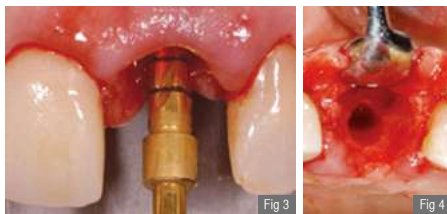


Fracture of #21 tooth. Good stability of the hard and soft tissues suggests immediate post-extraction insertion of implant and immediate loading.

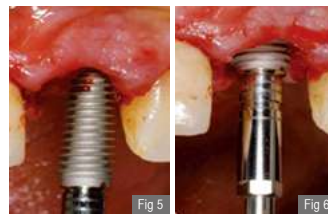
Fig 1. Clinical photos.

Fig 2. Intraoral scan.

Surgery



To protect the esthetic outcome of the procedure, the implant site was prepared via slightly palatal alveolar access.



A 4.5x11mm Anyridge was placed in the prepared site.

Fig 3, 4. Clinical photos of 1st surgery.

Fig 5, 6. Clinical photos of implant positioning.

Fig 7, 8. Clinical photo & scan of surgery.

Fig 9, 10. Clinical photos of immediate temporary crown in place.

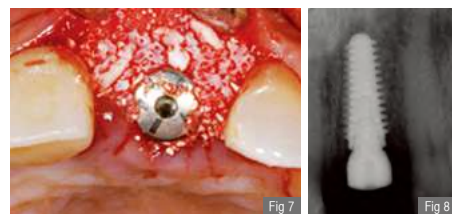
Fig 11, 12. Clinical photos of healing and final abutment in place.

Fig 13. Clinical photo of zirconia framework in place.

Fig 14, 15. Clinical photo & intraoral scan of final crown at time of placement.

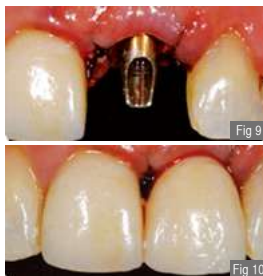
Fig 16, 17. Clinical photo & intraoral scan of final crown at 1-yr follow-up.

Fig 18, 19. Clinical photo & intraoral scan of final crown at 5-yr follow-up.



Biomaterial was added to the vestibular aspect to improve the stability of the esthetic outcome.

Temporary Prosthesis



A temporary crown was immediately placed.

12 Weeks after surgery



Tissue was ready to proceed with final abutment and crown.

Final Prosthesis



The implant position was in harmony with the surrounding tissue and a prosthodontist completed the case using a zirconia framework.



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