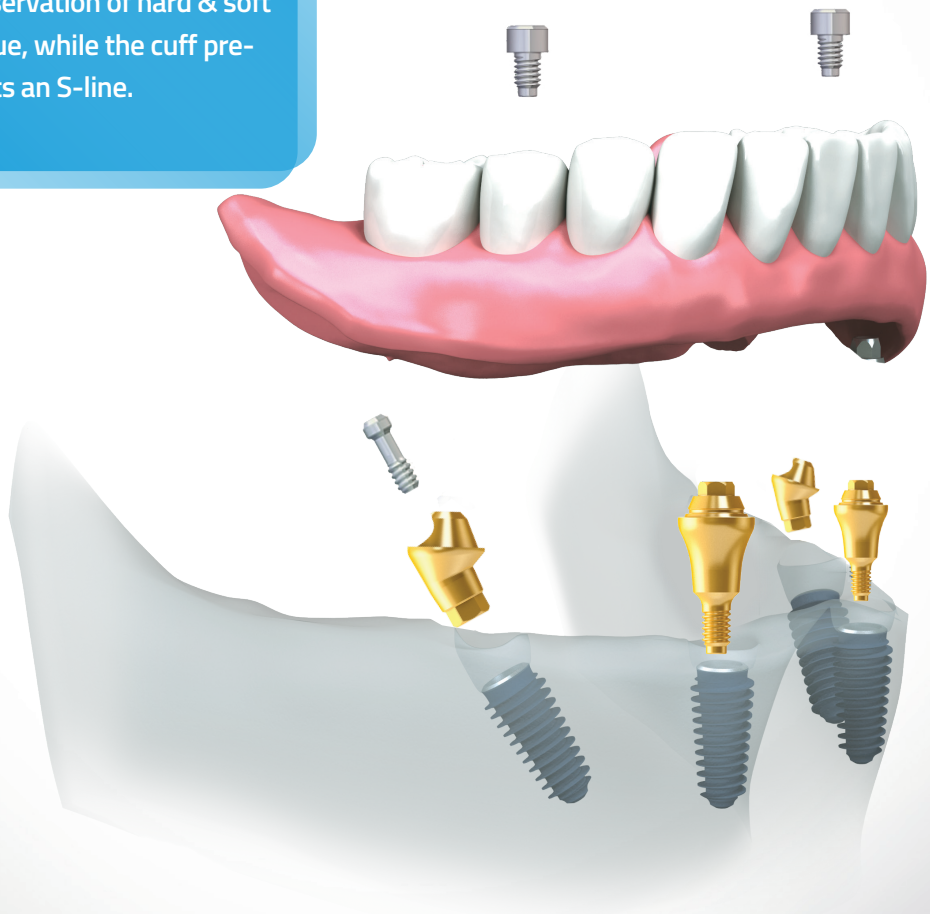
Multi-unit Abutment

by MEGA'GEN

The exterior profile is minimized so as to maximize the preservation of hard & soft tissue, while the cuff presents an S-line.



MEGA'GEN AMERICA

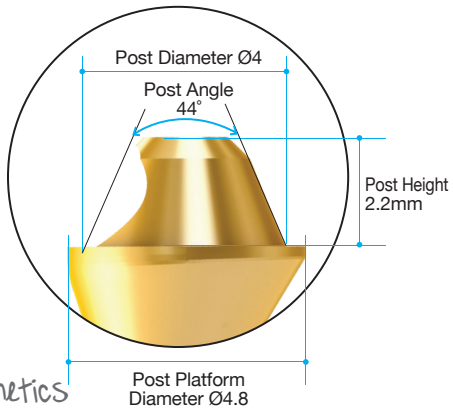
Multi-unit Abutment

by MEGAGEN

Contents

Multi-unit Abutment N Type

The solution for the edentulous patients



Various Angles
Straight, 17°, 30°

Prosthetics compatibility
Nobel Abutment

Various Cuffs

Internal
Straight :1.5, 2.5, 3.5, 4.5mm
17°: 2.5, 3.5mm
30°: 3.5, 4.5mm

External
Straight :1, 2, 3, 4, 5mm
17°: 2, 3, 4mm
30°: 4, 5mm

Labial Height
17°: 1.1, 2.1, 3.1mm
30°: 2.1, 3.1mm

Connection

AnyRidge Internal
BLUEDIAMOND® implants
AnyOne Internal, External

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® implants
- AnyOne Internal
- AnyOne External

Compatibility with others' Multi-unit level prosthetic components

✓ **Post Height**
✓ **Post Diameter**
✓ **Post Angle**
✓ **Abutment Angle**
✓ **Cuff Height**

2. Starting Package Contents

Starting Package N-type (Compati

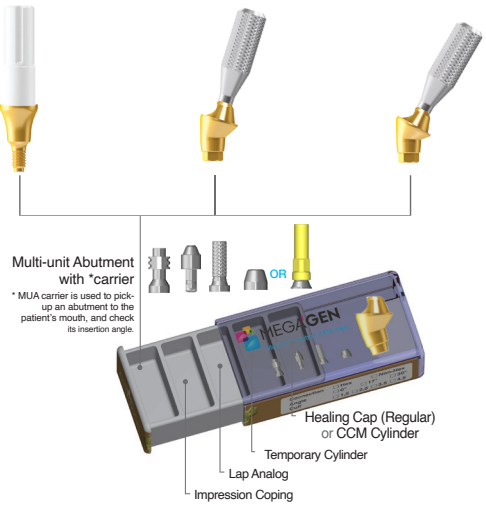
System	Type		Ref.C
AnyRidge	Healing Cap	Hex	SKARHN3000H
		Non Hex	SKARNN3000H
	CCM Abutment	Hex	SKARHN3000
		Non Hex	SKARNN3000
BLUE-DIAMOND implant	Healing Cap	NC Octa	SKARONO3000H
		NC Non Octa	SKARONN3000H
	CCM Abutment	NC Octa	SKARONO3000
		NC Non Octa	SKARONN3000
	Healing Cap	RC Octa	SKARORO3000H
		RC Non Octa	SKARORN3000H
	CCM Abutment	RC Octa	SKARORO3000
		RC Non Octa	SKARORN3000
AnyOne Int.	Healing Cap	Hex	SKAOHN3000H
		Non Hex	SKAONN3000H
	CCM Abutment	Hex	SKAOHN3000
		Non Hex	SKAONN3000
AnyOne Ext.	Healing Cap	Hex	SKAEHN3000H
		Non Hex	SKAENN3000H
	CCM Abutment	Hex	SKAEHN3000
		Non Hex	SKAENN3000

ble with Nobel)

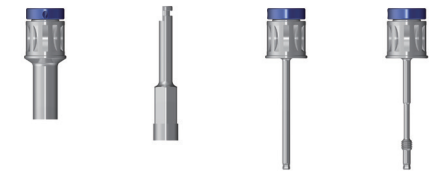
Straight 8set
(2set x 4kind of cuff)

Angle 17° 6set
(2set x 3kind of cuff)

Angle 30° 4set
(2set x 2kind of cuff)



Surgical Instrument

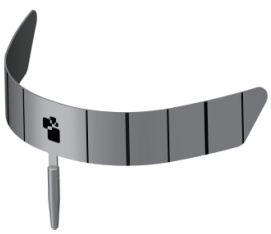


Multi-unit Driver | Right Angle Driver | Hand Driver | Removed Driver

Healing Cap 2set

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

Surgical Guide 2ea



3. MUA Set Contents

Multi-unit Abutment Healing cap type Set reference code

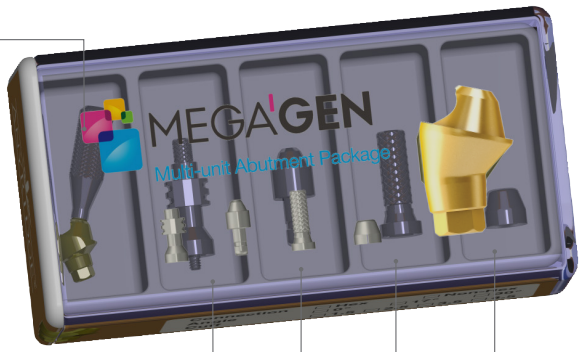
Order code : Add "HP" after the existing reference code

Ex) MUAARH1725LC → MUAARH1725 **HP**

Multi-unit Abutment CCM type Set reference code

Order code : Add "P" after the existing reference code

Ex) MUAARH1725LC → MUAARH1725 **P**



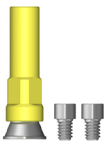
Impression Coping

Lab Analog

Temporary Cylinder

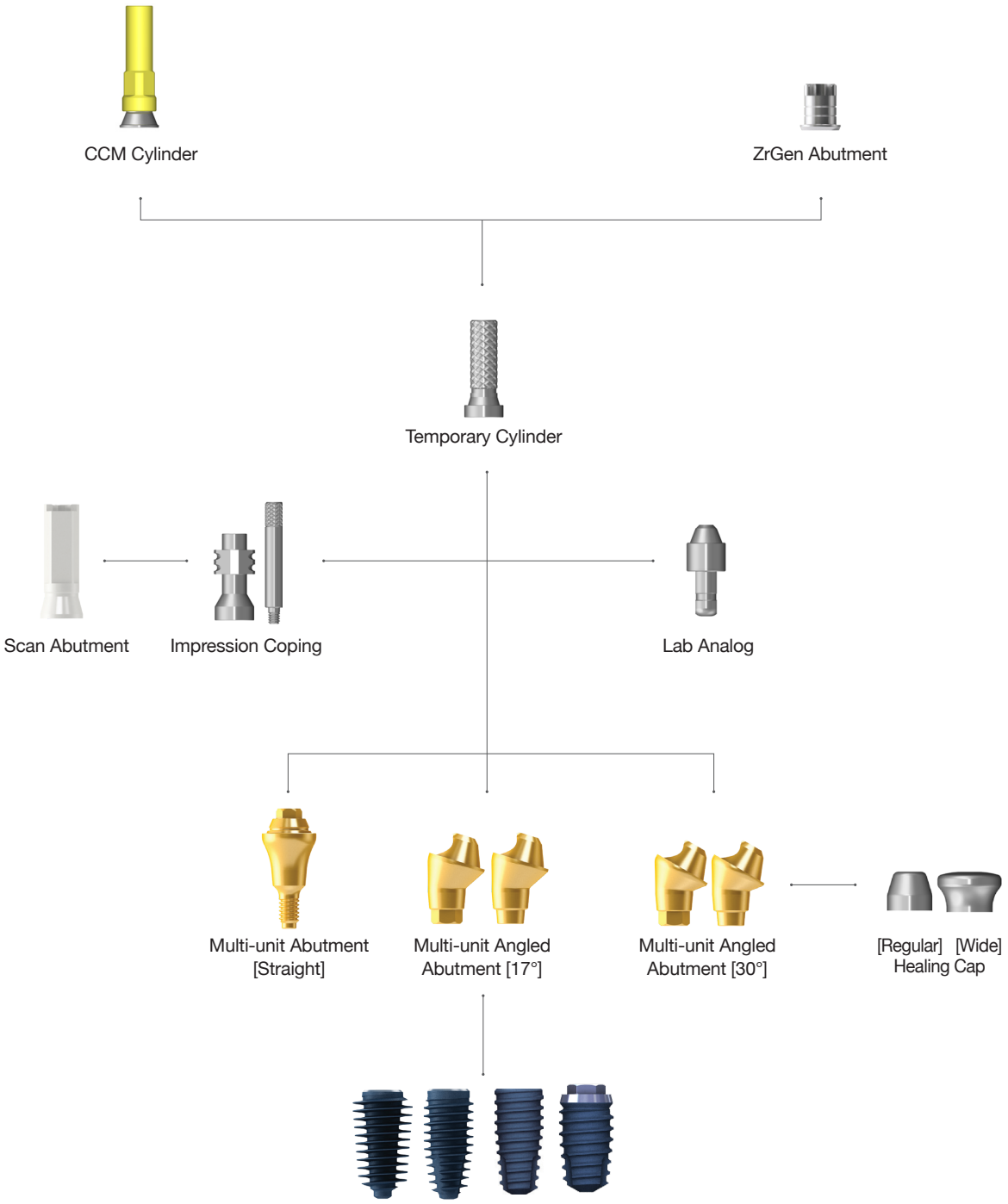
Healing Cap (Regular)

OR



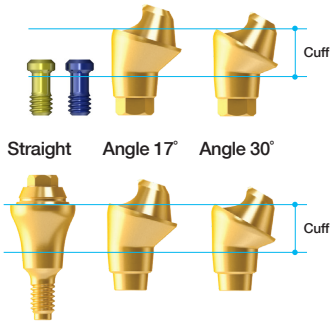
CCM Cylinder

4. Multi-unit Abutments

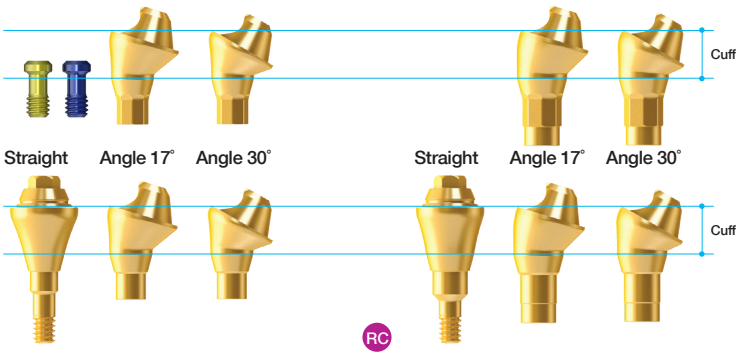


For AnyRidge

Angle	Cuff (mm)	Type	Ref.C
Straight	1.5	1-piece (M1.8)	MUAARN0015C
	2.5		MUAARN0025C
	3.5		MUAARN0035C
	4.5		MUAARN0045C
17°	2.5	Hex	MUAARH1725LC
	3.5		MUAARH1735LC
	4.5		MUAARH1745LC
	2.5	Non-Hex	MUAARN1725LC
	3.5		MUAARN1735LC
	4.5		MUAARN1745LC
30°	3.5	Hex	MUAARH3035LC
	4.5		MUAARH3045LC
	3.5	Non-Hex	MUAARN3035LC
	4.5		MUAARN3045LC



For BLUEDIAMOND implant



NC

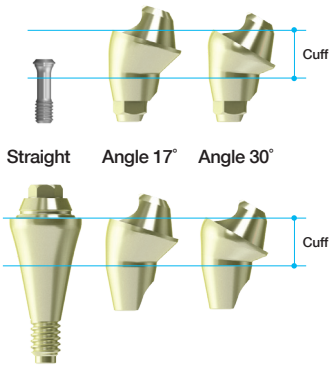
Angle	Cuff (mm)	Type	Ref.C
Straight	1.5	1-piece (M1.6)	MUAARONN0015C
	2.5		MUAARONN0025C
	3.5		MUAARONN0035C
	4.5		MUAARONN0045C
17°	2.5	Octa	MUAARONO1725TC
	3.5		MUAARONO1735TC
	4.5		MUAARONO1745TC
	2.5	Non-Octa	MUAARONN1725TC
	3.5		MUAARONN1735TC
	4.5		MUAARONN1745TC
30°	3.5	Octa	MUAARONO3035TC
	4.5		MUAARONO3045TC
	3.5	Non-Octa	MUAARONN3035TC
	4.5		MUAARONN3045TC

RC

Angle	Cuff (mm)	Type	Ref.C
Straight	1.5	1-piece (M1.6)	MUAARORN0015C
	2.5		MUAARORN0025C
	3.5		MUAARORN0035C
	4.5		MUAARORN0045C
17°	2.5	Octa	MUAARORO1725TC
	3.5		MUAARORO1735TC
	4.5		MUAARORO1745TC
	2.5	Non-Octa	MUAARORN1725TC
	3.5		MUAARORN1735TC
	4.5		MUAARORN1745TC
30°	3.5	Octa	MUAARORO3035TC
	4.5		MUAARORO3045TC
	3.5	Non-Octa	MUAARORN3035TC
	4.5		MUAARORN3045TC

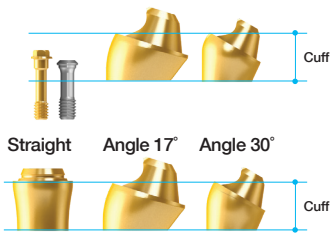
For AnyOne Internal

Angle	Cuff (mm)	Type	Ref.C
Straight	1.5	1-piece (M2)	MUAAON0015C
	2.5		MUAAON0025C
	3.5		MUAAON0035C
	4.5		MUAAON0045C
17°	2.5	Hex	MUAAOH1725TC
	3.5		MUAAOH1735TC
	4.5		MUAAOH1745TC
	2.5	Non-Hex	MUAAON1725TC
	3.5		MUAAON1735TC
	4.5		MUAAON1745TC
30°	3.5	Hex	MUAAOH3035TC
	4.5		MUAAOH3035TC
	3.5	Non-Hex	MUAAON3035TC
	4.5		MUAAON3045TC



For AnyOne External

Angle	Cuff (mm)	Type	Ref.C
Straight	1	Non-Hex	MUAAEN0010T
	2		MUAAEN0020T
	3		MUAAEN0030T
	4		MUAAEN0040T
17°	3	Hex	MUAAEH1720TC
	4		MUAAEH1730TC
	5		MUAAEH1740TC
	3	Non-Hex	MUAAEN1720TC
	4		MUAAEN1730TC
	5		MUAAEN1740TC
30°	4	Hex	MUAAEH3040TC
	5		MUAAEH3050TC
	4	Non-Hex	MUAAEN3040TC
	5		MUAAEN3050TC



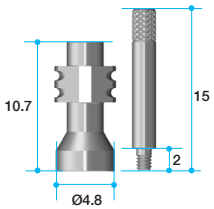
5. Multi-unit Components

Impression Coping (Pick-up)

- Guide pin (MUAGP) included

- Use to take an impression at the abutment level.
- Open tray method.

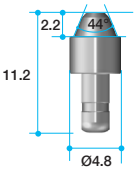
Connection	Ref.C
Non-Hex	MUAICT



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

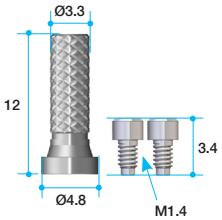


Temporary Cylinder

- Cylinder Screw (MUAS) 2ea included

- Use for fabricating acrylic provisional restoration.
- Grooves on the post cylinder allow storing resin adhension.
- Back-up screw is included.
- Recommend torque : 15Ncm

Connection	Ref.C
Non-Hex	MUATCL

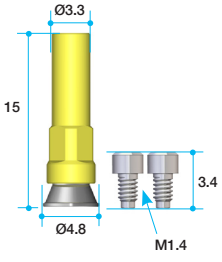


CCM Cylinder

- 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

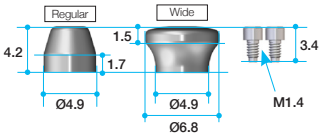


Healing Cap

- 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 : Add "P" after the existing reference code

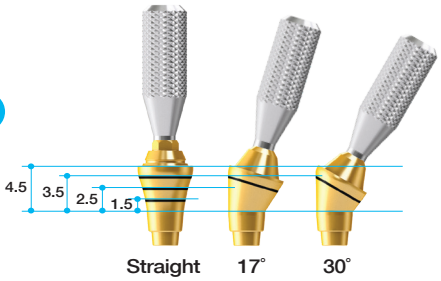
Ex) MUAHCL → MUAHCL **P**

6. Try-in Abutments

for AnyRidge

- 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



for BLUEDIAMOND implant

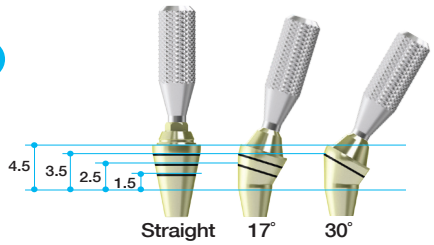
- Cuff height is indicated with laser markings
- Straight, 17˚, 30˚
- Non-hex type

Angle	Cuff Marking	Ref.C
Straight	1.5 / 2.5 / 3.5 / 4.5	MUTIAAROR00C
		MUTIAARON00C
17˚	2.5 / 3.5 / 4.5	MUTIAAROR17C
		MUTIAARON17C
30˚	3.5 / 4.5	MUTIAAROR30C
		MUTIAARON30C

for AnyOne Internal

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

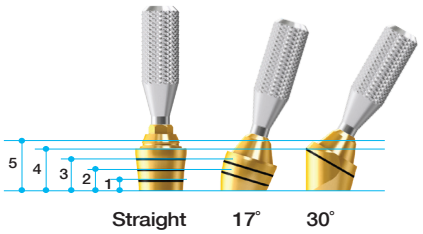
Angle	Cuff Marking	Ref.C
Straight	1.5 / 2.5 / 3.5 / 4.5	MUTIAAO00C
17˚	2.5 / 3.5 / 4.5	MUTIAAO17C
30˚	3.5 / 4.5	MUTIAAO30C



for AnyOne External

- 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	MUTIAAE00C
17˚	2.5 / 3.5 / 4.5	MUTIAAE17C
30˚	3.5 / 4.5	MUTIAAE30C



Try-in Abutment Set reference code

Order code : Add “P” after the existing reference code

Ex) MUTIAAO00C → MUTIAAO00C**P**

※ Available Systems : AnyRidge, AnyRidge Octa 1, AnyOne Internal, AnyOne External

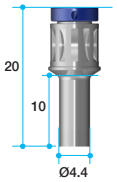
※ Kit contains Straight, 17˚ and 30˚ type of Try-in Abutments (1 each)

7. Multi-unit Instruments

Multi-unit Driver

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

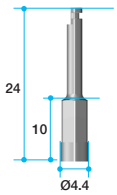
Hex	Length	Ref.C
2.0	10	MUD10



Right Angle Driver

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

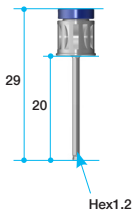
Hex	Length	Ref.C
2.0	10	MURAD10



Hand Driver

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

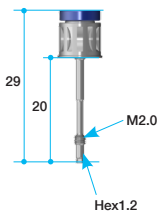
Hex	Length	Ref.C
1.2	20	MUHD1220



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.

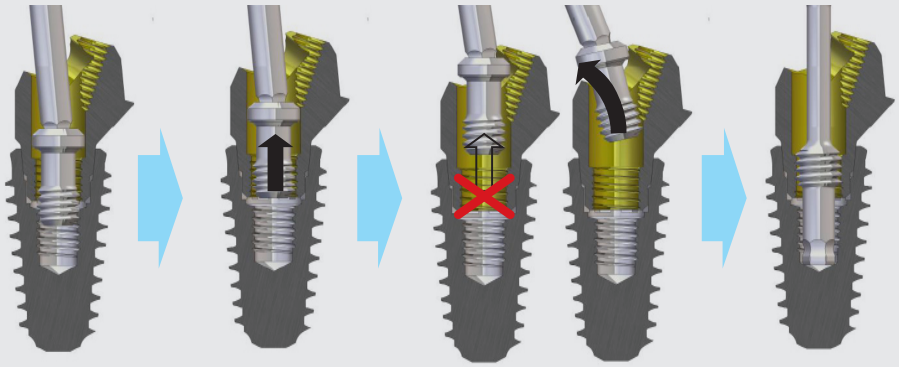
Hex	Length	Ref.C
1.2	20	MUARD20



Screw & Abutment Tightening Torque Guide

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

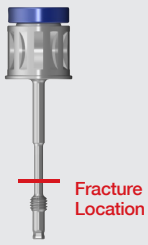
Instruction for removing abutment screw from Multi-unit abutment [Exclusively for AnyRidge system]



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 disturbance 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



< 30Ncm

2. Multi-unit Hand Driver

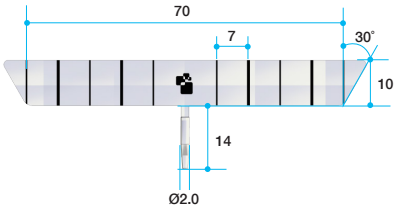
< 30Ncm

- 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.

Surgical Guide

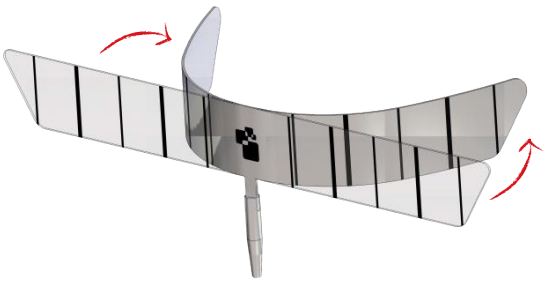
- The distance between the lines is 7mm
- Put center pin after initial drilling at the centric of arch. (Refer to the surgical protocol on next page)

Angle	Marking Length	Ref.C
30	7	MUSG70

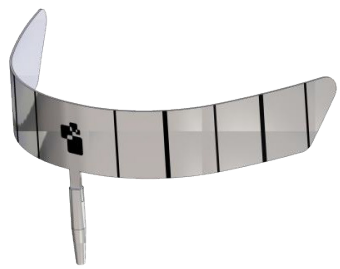


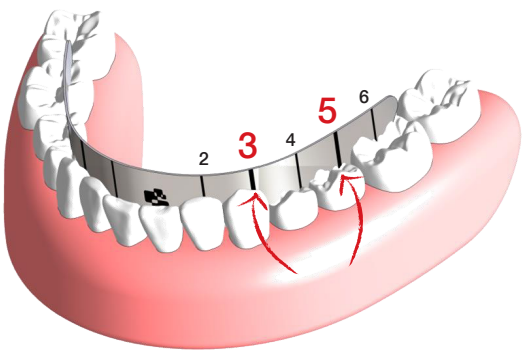
How to use Surgical Guide

※ 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.



Bend to use



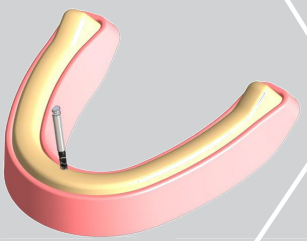


[Packing]

8. Surgical Protocol
_Conventional Surgery

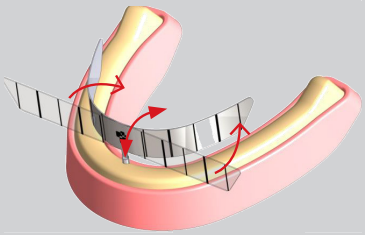
1. Initial drilling

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.



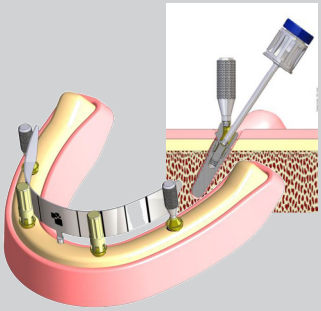
2. Guide Bending & Position

Bend according to the patient's arch.

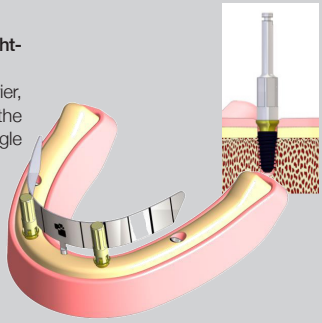


7. Tightening the Abutment

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.

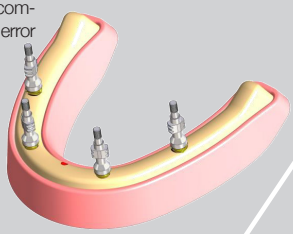


Straight Abutment tightening Torque : 35Ncm
After removing Carrier, connect Abutment to the Fixture using Right Angle Driver or MUA Driver.



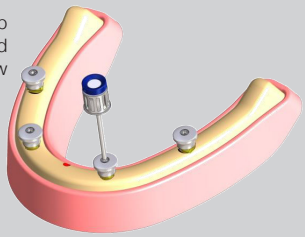
8. Impression

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



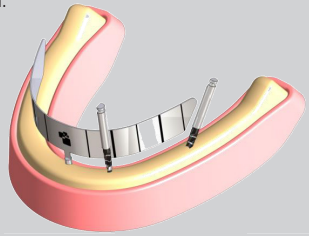
9. Healing Cap

Cylinder Screw tightening Torque : 15Ncm
Place Healing Cap on top of Multi-unit abutment, and connect Cylinder Screw with the Hand Driver.



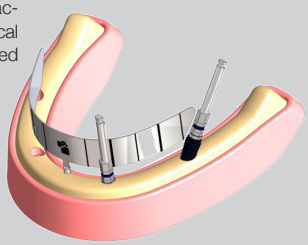
3. Drilling

Drill according to the surgical plan.



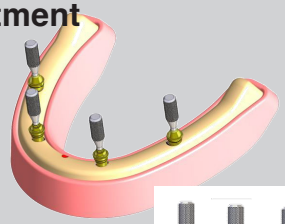
4. The fixture is implanted

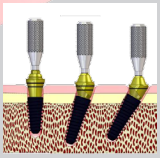
Place implant fixtures according to the surgical plan and do not exceed torque value (60Ncm)



5. Try-in Abutment

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

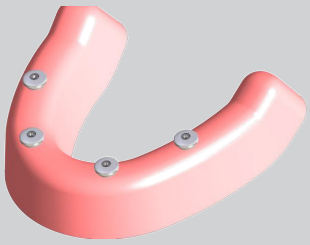




6. Abutment Selection

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.

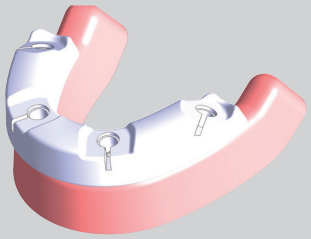
10. Suture



8. Surgical Protocol
_Guided Surgery

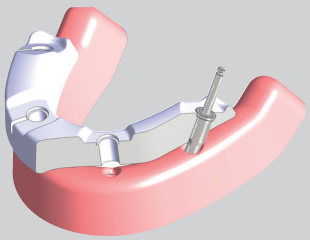
1. Guide

Place a R2GATE Guide.



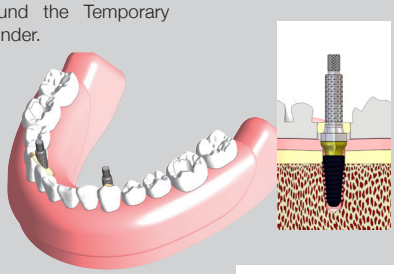
2. Narrow Crest Drill

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



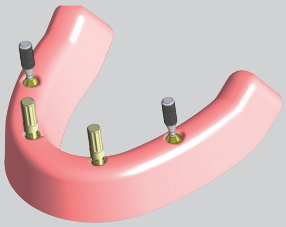
8. Setting Temporary and Denture

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



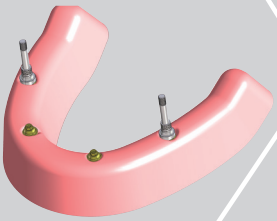
7. Connect Temporary Cylinder in the front

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.



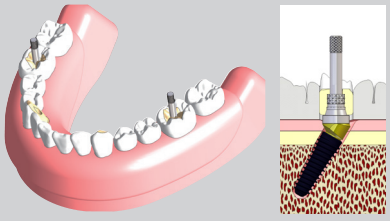
9. Connect Temporary Cylinder in the back

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.



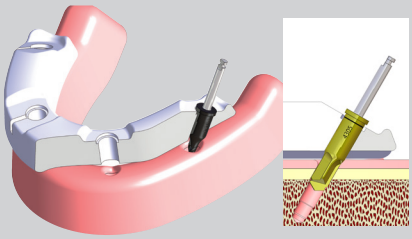
10. Setting Temporary and Denture

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

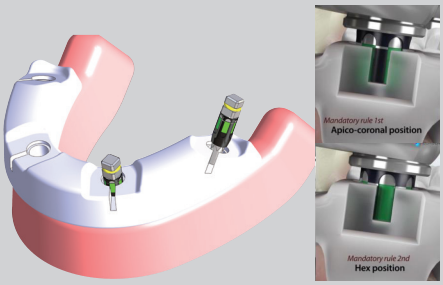


3. Drilling

Drill according to the drilling sequence.



4. Fixture Placement

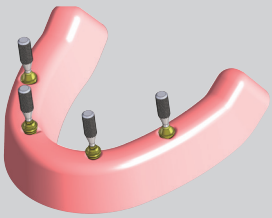


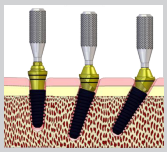
6. Abutment Selection

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.



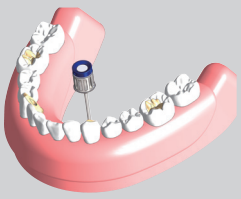


11. Temporary Fixation

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

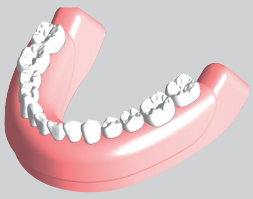
12. Tighten the Denture

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.



9. Cautions

CE 2460 CE conformity marking

REF Catalogue number

SN Serial number

LOT Batch code

Date of manufacture

Use by date

STERILE R Radiation sterilization

Do not re-use

Do not re-sterilize

NON STERILE Non-sterile

Caution, consult accompanying documents

Consult instructions for use

Temperature limitation

Do not use if package is damaged

Manufacturer

EC REP Authorized representative in European

Rx Only Caution: Federal law(USA) restricts this device to sale by or on the order of a licensed dentist

1) Product Summary

To recover lost masticatory function, we need an artificial root that will be placed into patient's alveolar bone as functioning as a root, and an abutment that will be placed on top of an artificial root and be exposed outside of gingival, and support to fix tooth-shaped prosthetics. This package includes c omponents that are needed to manufacture prosthetics using Multi-unit Abutment to provide similar masticatory function and aesthetics as natural teet h via a dental implant surgery.

2) Indication for use

Multi-unit Abutment is used to manufacture prosthetics of an artificial root that is placed into patient's alveolar bone to recover the masticatory function . It is very useful to recover dental conditions with 4~6 dental implant place placement to edentulous patients. We have increased the convenience by making this package with items that are essential to manufacture prosthetics using Multi-unit Abutment.

3) Product Composition

- For soft tissue healing and formation: Healing Cap
- For final prosthetics manufacturing: CCM Abutment
- For temporary prosthetics manufacturing: Temporary Abutment
- For impression taking: Impression Coping
- For compatibility of prosthetics: Multi Unit Abutment, Abutment Screw, Cylinder Screw
- For connecting prosthetics: Right Angle Driver, Multi unit Driver, Hand Driver, Removal Driver
- For gaging: Try-n Abutment, Surgical Guide

4) Contraindication

For stable and precise implant surgery, there are minimum requirement conditions: insufficient amount of bone, poor quality of bone, bad hygiene condition, excessive smoking habit, blood disease, diabetes, or other medical disease, may lead to failure of osseointegration or treatment.

5) Warnings

To use Multi-unit Abutment in safer and more efficient way, we strongly recommend the followings.

- User must be competent who fully understands and mastered advanced surgery techniques that are equired when performing implant surgery
- User must fully understand and know instructions and cautions of the product before usage
- User must perform surgery in a surgery room, that can maintain sterilized environment, with properly dressed with sterilized gown
- Unqualified patient condition and surgical technique may be to surgery failure and damage the supporting bone
- Dangers of re-using one-time use surgical instrument: the re-usage of a one-time use surgical instrument is not verified. The re-usage of a one-time use surgical instrument may cause serious contagion of dieses or malfunctioning of medical equipment

6) Precaution

Through pre-examination of a patient and checking of a product must be done before every implant surgery

- Visible examinations such as panoramic images and periapical radiographs are most important, which allow visualization of many anatomical feature, status of occlusion, periodontal status, and suitability of bone. Side cephalometric image, CT image, and fault images are useful
- After tearing the package, check whether the product is damaged or polluted with foreign substances
- Use must explain and let patient fully know that excessive occlusal force must not be put during treatment

7) Adverse Effects

Low initial stability of an implant, failure of osseointegration, and unfit prosthetics can be occurred even after the surgery. Insufficient amount of remaining bone, poor quality of bone, poor hygiene condition

of oral cavity or incorporation of a patient, or general medical conditions (diabetes and etc.) can be the cause of failure

8) Surgical Complications

- The procedure of implant treatment (surgery) could be dangerous and after treatment the following could be found ; swelling of a specific part, rupture, temporary palpate sensitiveness, an edema, hematoma, and bleeding
- Insensibility of lower lip and some side effects relating to the chin from lower jaw treatment or some tissue around the nose from upper jaw treatment may occur. That is mostly temporary, but rarely permanent paralysis could appear.
- A gum membrane ulcer, or a cell tissue reaction infection could happen which is an accompanied reaction according to a local treatment

9) Handling

- Non-sterilized products should go though high pressure steam sterilization for over 15 minutes at temperatures 132-134°C (269.6- 273.2°F) before use.
- Plastic material products may deform in process of high pressure steam sterilization, therefore should not give temperatures above 160°C or pressure of 0.45MPa.
- After applying the burying material, cool the burying material slowly for coagulation to avoid the delicate shrinking or expansion deformation.

10) Caution

- As this product is sterilized by radiation, it should not be used under a ny circumstances if it is open.
- During the treatment if the product is contaminated by the operator's m istake, it should not be used.
- Every product is disposable. It should not be reused.

Multi – unit Abutment Package

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EC REP

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IFU-ISPH-R03

Multi-unit Abutment

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