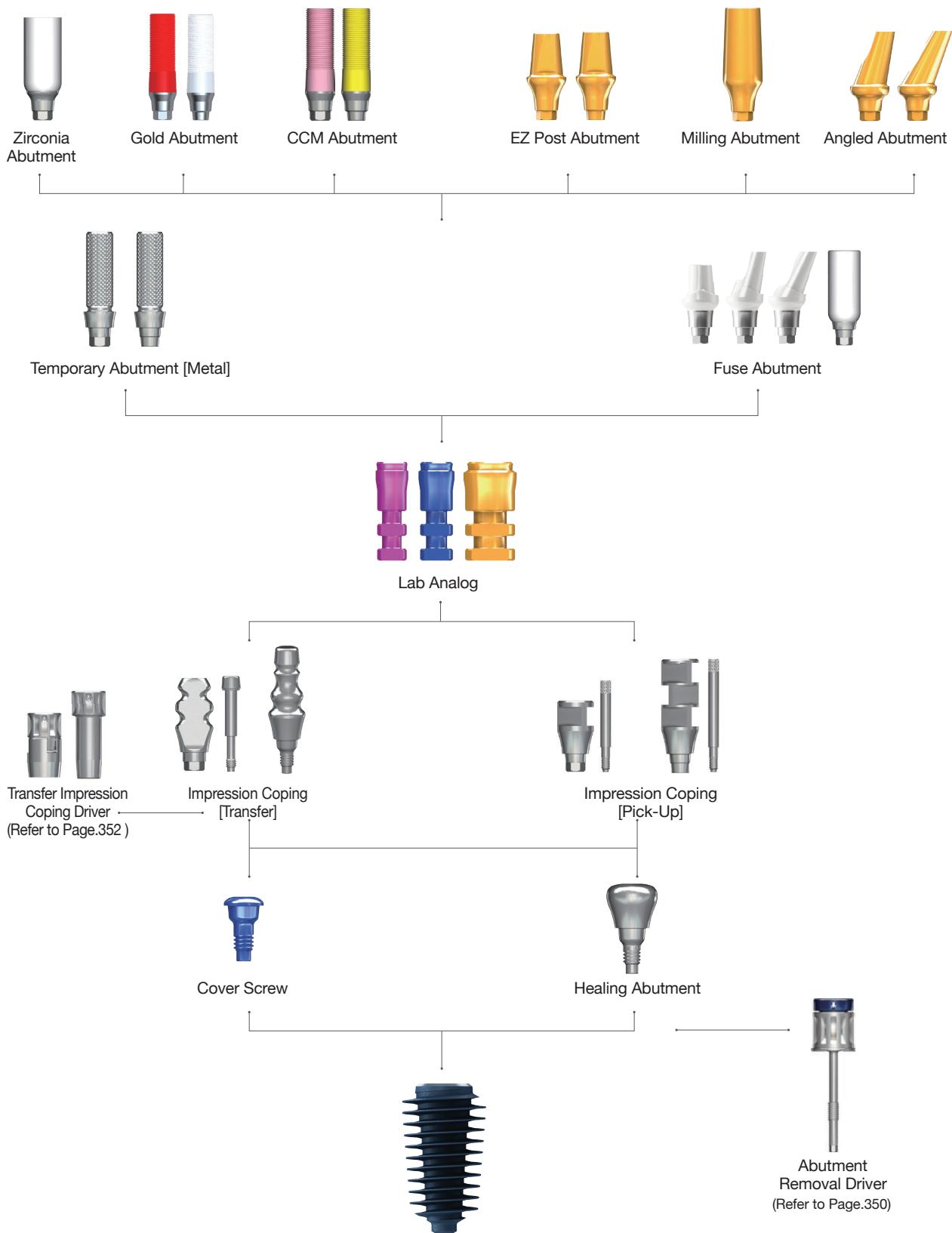


Abutment & Prosthetic Options

I. Fixture Level Prosthesis



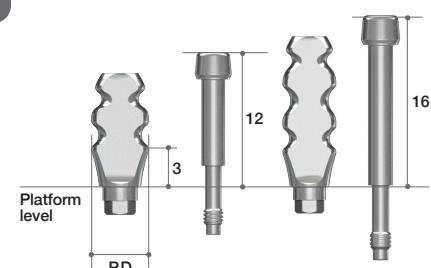
⌚ Impression Copings

Impression Coping

(2-piece, Transfer Type) (For Closed-tray Technique)

- Streamlined shape ; easy to transfer.
- Anti-rotation grooves match with hex structure of fixtures.
- Should be tightened with Impression Driver (Page.352)
- Special impression coping screw which can be used with a 1.2mm hex driver is available on request.

| Profile Diameter | Height (mm) | Type | Ref.C |
|-------------------|-------------|----------------------------------|--------------|
| $\varnothing 4.0$ | 12 | 2-Piece | AANITH4012T |
| | 16 | | AANITH4016T |
| $\varnothing 5.0$ | 12 | | AANITH5012T |
| | 16 | | AANITH5016T |
| $\varnothing 4.0$ | 12 | 2-Piece Hand driver (1.2 Hex) | AANITH4012HT |
| | 16 | | AANITH4016HT |
| $\varnothing 5.0$ | 12 | | AANITH5012HT |
| | 16 | | AANITH5016HT |

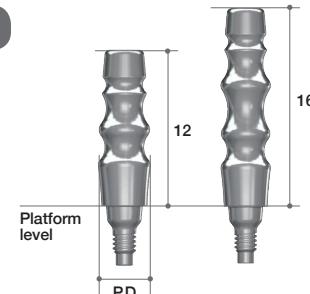


Impression Coping

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

- Should be tightened with Impression Driver (Page.352)
- Special impression coping screw which can be used with a 1.2mm hex driver is available on request.

| Profile Diameter | Height (mm) | Type | Ref.C |
|-------------------|-------------|----------------------------------|-------------|
| $\varnothing 4.0$ | 12 | 1-Piece | AANITN4012 |
| | 16 | | AANITN4016 |
| $\varnothing 5.0$ | 12 | | AANITN5012 |
| | 16 | | AANITN5016 |
| $\varnothing 4.0$ | 12 | 1-Piece Hand driver (1.2 Hex) | AANITN4012H |
| | 16 | | AANITN4016H |
| $\varnothing 5.0$ | 12 | | AANITN5012H |
| | 16 | | AANITN5016H |

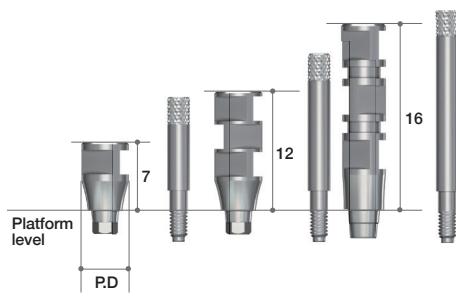


Impression Coping

(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 |
|-------------------|-------------|----------------------------------|-------------|
| $\varnothing 4.0$ | 12 | 2-Piece | AANIPH4012T |
| | 16 | | AANIPH4016T |
| | 12 | | AANIPN4012T |
| | 16 | | AANIPN4016T |
| $\varnothing 5.0$ | 7 | 2-Piece Hand driver (1.2 Hex) | AANIPH5007T |
| | 12 | | AANIPH5012T |
| | 7 | | AANIPN5007T |
| | 12 | | AANIPN5012T |



④ Lab Analog & Temporary Abutments

Lab Analog

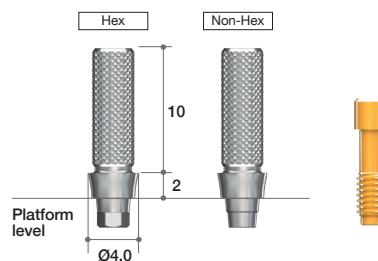
| Profile Diameter | Color | Ref.C |
|------------------|---------|------------|
| Ø3.5 | Magenta | AANLAF35 |
| Ø4.0 ~ Ø5.5 | Blue | AANLAF4055 |
| Ø6.0 ~ Ø8.0 | Yellow | AALLAF6080 |



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 |

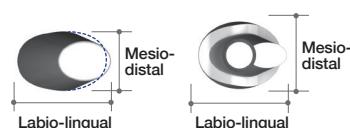
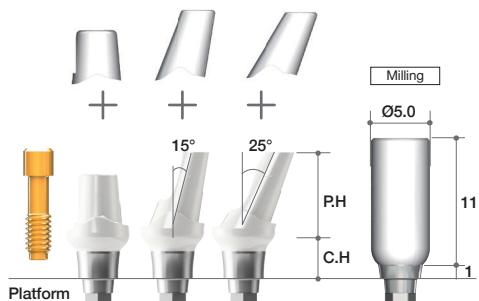


Fuse Abutment

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

| Diameter Labio-lingual | Mesio-distal | C.H (mm) | P.H (mm) | Type | Ref.C |
|---------------------------|--------------|-------------|-------------|-------------|-----------|
| Ø5.5 | 4 | 7 | 5.5 | Straight | AFAP5545P |
| | | | 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?

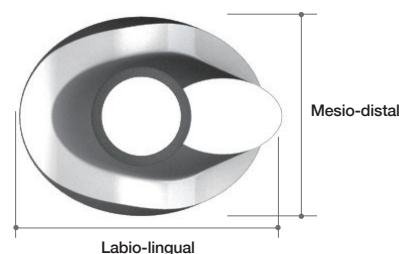
Design concept of Fuse Abutment™



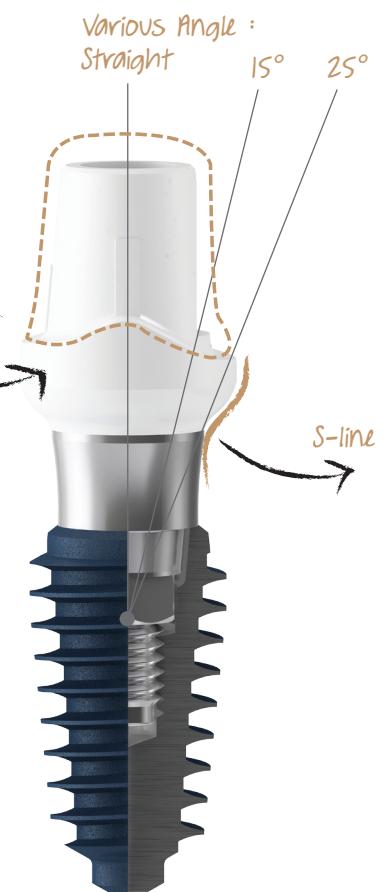
Similar to a customized abutment for excellent esthetics!

Perfect margin fit with a prosthetic cap

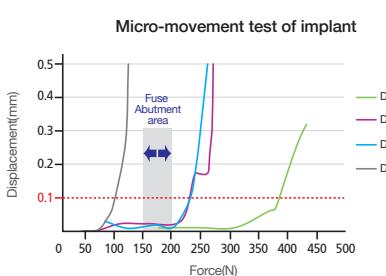
Scalloped outline



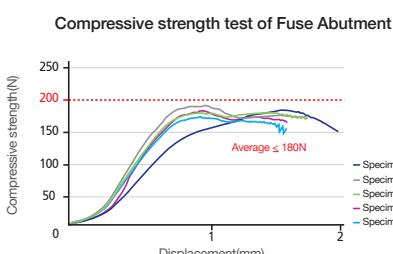
Elliptical Occlusal view like a natural tooth



Rationale of Fuse Abutment™



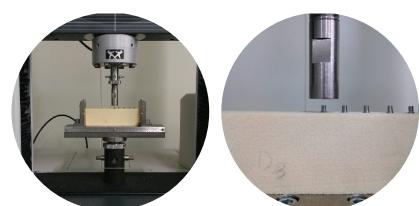
Performed compressive strength test to evaluate the micro movement for bone density using universal testing machine
-R&D center in Megagen Implant Co.,Ltd.(2012)-



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 fibrointergration than osseointegration between bone and implant surface when movements of more than 100um 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 fibrointergration 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.



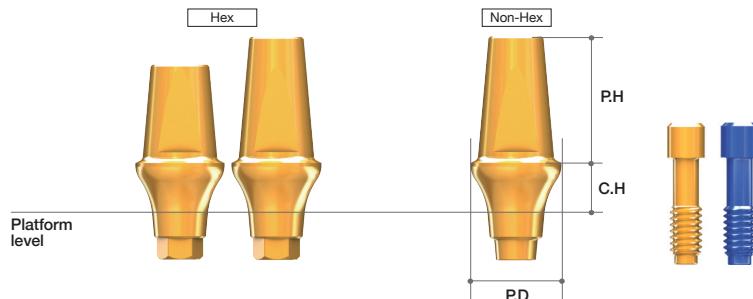
From this experiment, we could develop a special temporary abutment which has lower fracture threshold of less than 200 N (20.4 kgf). It was named as Fuse Abutment. Also it has an anatomic profile to make temporary prosthetics more esthetic.

⇒ 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. (\varnothing 4.0, 5.0, 6.0, 7.0)
- Four different cuff heights. (2.0, 3.0, 4.0, 5.0mm)
- Recommend torque : 35Ncm



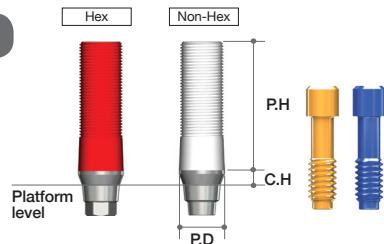
| Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Ref.C | Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Ref.C | | |
|------------------|-----------------|-----------------|---------|--------------|------------------|-----------------|-----------------|---------|--------------|--|--|
| Ø4.0 | 2 | 5.5 | Hex | AANEPAH4025L | Ø6.0 | 2 | 5.5 | Hex | AANEPAH6025L | | |
| | 3 | | | AANEPAH4035L | | 3 | | | AANEPAH6035L | | |
| | 4 | | | AANEPAH4045L | | 4 | | | AANEPAH6045L | | |
| | 5 | | | AANEPAH4055L | | 5 | | | AANEPAH6055L | | |
| | 2 | 7 | | AANEPAH4027L | | 2 | 7 | | AANEPAH6027L | | |
| | 3 | | | AANEPAH4037L | | 3 | | | AANEPAH6037L | | |
| | 4 | | | AANEPAH4047L | | 4 | | | AANEPAH6047L | | |
| | 5 | | | AANEPAH4057L | | 5 | | | AANEPAH6057L | | |
| | 2 | 5.5 | Non-Hex | AANEPN4025L | Ø6.0 | 2 | 5.5 | Non-Hex | AANEPN6025L | | |
| | 3 | | | AANEPN4035L | | 3 | | | AANEPN6035L | | |
| | 4 | | | AANEPN4045L | | 4 | | | AANEPN6045L | | |
| | 5 | | | AANEPN4055L | | 5 | | | AANEPN6055L | | |
| | 2 | | | AANEPN4027L | | 2 | 7 | | AANEPN6027L | | |
| | 3 | | | AANEPN4037L | | 3 | | | AANEPN6037L | | |
| | 4 | | | AANEPN4047L | | 4 | | | AANEPN6047L | | |
| | 5 | | | AANEPN4057L | | 5 | | | AANEPN6057L | | |
| | 2 | 5.5 | Hex | AANEPH5025L | Ø7.0 | 2 | 5.5 | Hex | AANEPH7025L | | |
| | 3 | | | AANEPH5035L | | 3 | | | AANEPH7035L | | |
| | 4 | | | AANEPH5045L | | 4 | | | AANEPH7045L | | |
| | 5 | | | AANEPH5055L | | 5 | | | AANEPH7055L | | |
| | 2 | | | AANEPH5027L | | 2 | 7 | | AANEPH7027L | | |
| | 3 | | | AANEPH5037L | | 3 | | | AANEPH7037L | | |
| | 4 | | | AANEPH5047L | | 4 | | | AANEPH7047L | | |
| | 5 | | | AANEPH5057L | | 5 | | | AANEPH7057L | | |
| | 2 | 5.5 | Non-Hex | AANEPN5025L | Ø7.0 | 2 | 5.5 | Non-Hex | AANEPN7025L | | |
| | 3 | | | AANEPN5035L | | 3 | | | AANEPN7035L | | |
| | 4 | | | AANEPN5045L | | 4 | | | AANEPN7045L | | |
| | 5 | | | AANEPN5055L | | 5 | | | AANEPN7055L | | |
| | 2 | | | AANEPN5027L | | 2 | 7 | | AANEPN7027L | | |
| | 3 | | | AANEPN5037L | | 3 | | | AANEPN7037L | | |
| | 4 | | | AANEPN5047L | | 4 | | | AANEPN7047L | | |
| | 5 | | | AANEPN5057L | | 5 | | | AANEPN7057L | | |

⇒ Abutment Options (Continued)

Gold Abutment

- Multi Post Screw(AANMSF/AANMST) included.
- Useful to make a customized abutment in difficult situations.
- Precious and non-precious alloys.
- Melting point of gold alloy : 1400 - 1450°C
- Threaded sleeves for convenient Resin / Wax-up.
- Recommend torque : 30Ncm

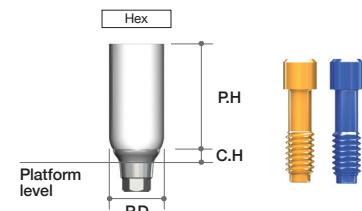
| Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Ref.C |
|------------------|-----------------|-----------------|---------|-------------|
| Ø4.0 | 1 | 11 | Hex | AANGAH4012L |
| | | | Non-Hex | AANGAN4012L |



Zirconia Abutment

- Multi Post Screw(AANMSF/AANMST) included.
- For esthetic use.
- Natural white color with pre-sintered zirconia sleeve.
- Presinpered Zirconia Abutment.
- Preparable at the chair side with a diamond bur.
- Recommend torque : 35Ncm

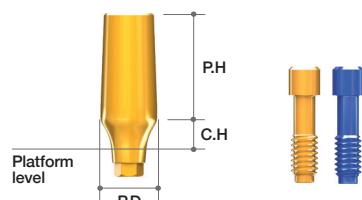
| Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Ref.C |
|------------------|-----------------|-----------------|------|-------------|
| Ø4.0 | 1 | 11 | Hex | AANZAH4012L |
| Ø5.0 | | | | AANZAH5012L |



Milling Abutment

- Multi Post Screw(AANMSF/AANMST) included.
- Long post enables easier customization from milling.
- Recommend torque : 35Ncm

| Profile Diameter | Cuff Height(mm) | Post Height(mm) | Ref.C |
|------------------|-----------------|-----------------|-------------|
| Ø4.0 | 2 | 9 | AANMAH4029L |
| | 3 | | AANMAH4039L |
| | 4 | | AANMAH4049L |
| | 5 | | AANMAH4059L |
| Ø5.0 | 2 | 9 | AANMAH5029L |
| | 3 | | AANMAH5039L |
| | 4 | | AANMAH5049L |
| | 5 | | AANMAH5059L |
| Ø6.0 | 2 | 9 | AANMAH6029L |
| | 3 | | AANMAH6039L |
| | 4 | | AANMAH6049L |
| | 5 | | AANMAH6059L |
| Ø7.0 | 2 | 9 | AANMAH7029L |
| | 3 | | AANMAH7039L |
| | 4 | | AANMAH7049L |
| | 5 | | AANMAH7059L |

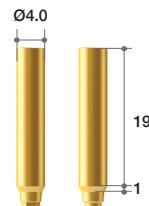


Milling Abutment Type II (BOPT Abutment)

- AnyRidge Internal : Multi Post Screw (AANMSF/AANMST) included.

- Long post enables easier customization from milling.
- Recommend torque : 35Ncm

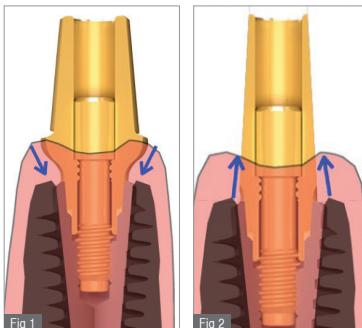
| Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Ref.C |
|------------------|-----------------|-----------------|---------|-------------|
| Ø4.0 | 1 | 19 | Hex | ARBOT4019HL |
| | | | Non-Hex | ARBOT4019NL |



B.O.P.T (Biologically Oriented Preparation Technique)

MegaGen family thanks to MD. Oscar Alonso Gonzalez & Dr. Fabio Galli for the suggestion of B.O.P.T abutment

- To obtain thick, healthy and stable soft tissue around tooth



Characteristics of B.O.P.T

1. Morphology without a finish line.
2. Conical Shape.
3. Prosthetic Platform Switching

Fig 1. With its divergent profile, it tends to stabilize the circular fibers of the connective tissue towards apical.

Fig 2. In the same way as with the teeth, this abutment facilitates the stabilization of the circular fibers of the connective tissue at a more coronal level compared to a standard rehabilitation.

B.O.P.T Clinical Case

- Courtesy of Dr. Fabio Galli

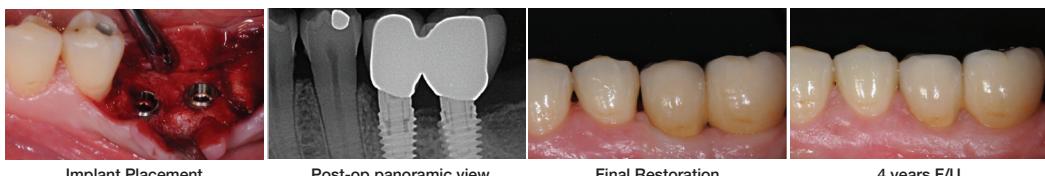
Case 1.



Case 2.



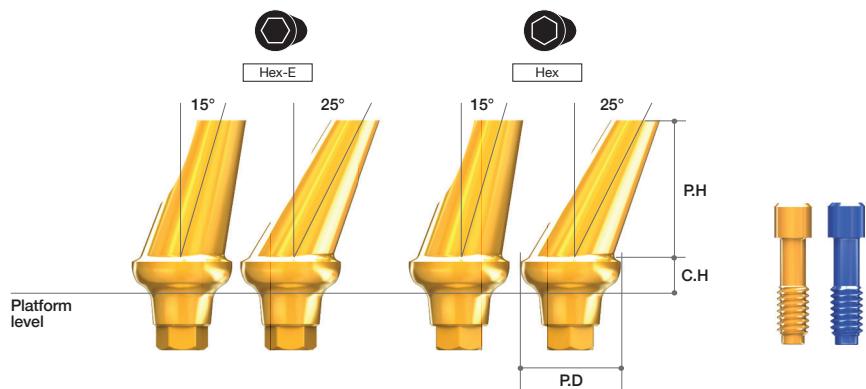
Case 3.



⇒ Abutment Options (Continued)

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 | | Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Angle | Ref.C |
|------|------------------|-----------------|-----------------|-------|-------|-------------|------|------------------|-----------------|-----------------|-------|-------|-------------|
| Ø4.0 | 2 | | | Hex | | AANAAH4215L | Ø6.0 | 2 | | | Hex | | AANAAH6215L |
| | 3 | | | | | AANAAH4315L | | 3 | | | | | AANAAH6315L |
| | 4 | | | | | AANAAH4415L | | 4 | | | | | AANAAH6415L |
| | 5 | | | | | AANAAH4515L | | 5 | | | | | AANAAH6515L |
| | 2 | | | Hex-E | | AANAAE4215L | | 2 | | | | | AANAAE6215L |
| | 3 | | | | | AANAAE4315L | | 3 | | | | | AANAAE6315L |
| | 4 | | | | | AANAAE4415L | | 4 | | | | | AANAAE6415L |
| | 5 | | | | | AANAAE4515L | | 5 | | | | | AANAAE6515L |
| | 2 | | | Hex | | AANAAH4225L | | 2 | | | Hex | | AANAAH6225L |
| | 3 | | | | | AANAAH4325L | | 3 | | | | | AANAAH6325L |
| | 4 | | | | | AANAAH4425L | | 4 | | | | | AANAAH6425L |
| | 5 | | | | | AANAAH4525L | | 5 | | | | | AANAAH6525L |
| | 2 | | | Hex-E | | AANAAE4225L | | 2 | | | Hex-E | | AANAAE6225L |
| | 3 | | | | | AANAAE4325L | | 3 | | | | | AANAAE6325L |
| | 4 | | | | | AANAAE4425L | | 4 | | | | | AANAAE6425L |
| | 5 | | | | | AANAAE4525L | | 5 | | | | | AANAAE6525L |
| Ø5.0 | 2 | | | Hex | | AANAAH5215L | | 2 | | | Hex | | AANAAH7215L |
| | 3 | | | | | AANAAH5315L | | 3 | | | | | AANAAH7315L |
| | 4 | | | | | AANAAH5415L | | 4 | | | | | AANAAH7415L |
| | 5 | | | | | AANAAH5515L | | 5 | | | | | AANAAH7515L |
| | 2 | | | Hex-E | | AANAAE5215L | | 2 | | | Hex-E | | AANAAE7215L |
| | 3 | | | | | AANAAE5315L | | 3 | | | | | AANAAE7315L |
| | 4 | | | | | AANAAE5415L | | 4 | | | | | AANAAE7415L |
| | 5 | | | | | AANAAE5515L | | 5 | | | | | AANAAE7515L |
| | 2 | | | Hex | | AANAAH5225L | | 2 | | | Hex | | AANAAH7225L |
| | 3 | | | | | AANAAH5325L | | 3 | | | | | AANAAH7325L |
| | 4 | | | | | AANAAH5425L | | 4 | | | | | AANAAH7425L |
| | 5 | | | | | AANAAH5525L | | 5 | | | | | AANAAH7525L |
| | 2 | | | Hex-E | | AANAAE5225L | | 2 | | | Hex-E | | AANAAE7225L |
| | 3 | | | | | AANAAE5325L | | 3 | | | | | AANAAE7325L |
| | 4 | | | | | AANAAE5425L | | 4 | | | | | AANAAE7425L |
| | 5 | | | | | AANAAE5525L | | 5 | | | | | AANAAE7525L |

CCM Abutment

- Multi Post Screw(AANMSF/AANMST) included.
- Useful to make a customized abutment in difficult situations.
- Can be casted with non-precious alloys (Ni-Cr, Cr-Co alloys).
- Non-precious melting temperature : Depend on Manufacturer
- Threaded sleeves for convenient Resin / Wax-up.
- Melting temperature of CCM : 1380 - 1420°C
- Recommend torque : 35Ncm

| Profile Diameter | Cuff Height(mm) | Post Height(mm) | Type | Ref.C |
|------------------|-----------------|-----------------|---------|-------------|
| Ø4.0 | 1 | 11 | Hex | AANCAH4012L |
| | | | Non-Hex | AANCAN4012L |

