



Multi-Use Abutment System Dental Implant System

Bone Level and Bone Level Tapered

Product Introduction



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Multi-Use Abutment System

Biodenta offers multi-use abutments as an alternative and reliable concept to enable screw retained bridge solutions directly on Biodenta bone level and bone level tapered implants. This solution can also be considered if the implants are not placed parallel. The angled abutments can be obtained with angles of 18° and 30° and in different gingiva heights (GH). There is a side wall taper of 10 degrees in each multi-use abutment, so the overall abutment alignment may deviate by as much as 20 degrees.

Characteristic of Multi-Use Abutments:

Synchronized balance for diverging implant axes.

Screw retained solutions for partial bridges.

Internal hex connection with angle correction.

Higher range of insertion path way.

Fatigue test approved.

Step by Step instruction:

1. Remove the healing abutment and ensure the top of the implant is clear of any soft or hard tissue.



2. Select the multi-use abutment with appropriate gingiva height.



3a. Place the straight multi-use abutment:

The pre-mounted plastic carrier will assist and guide to place the one piece abutment connection to the implant, hand tighten.

Once in place remove the plastic carrier with a slight bending movement.

Utilizing the multi-use abutment driver, tighten the multi-use abutment to 35Ncm of torque.

3b. Place the angled multi-use abutment:

The pre-mounted plastic carrier will assist and guide to place the two piece abutment connection to the implant, hand tighten.

Once in place remove the plastic carrier with a slight bending movement.

Utilizing the hex driver tighten the multi-use abutment to 35Ncm of torque.









4a. Abutment level impression - open tray:

Place impression post with guide pin onto the abutment and tighten.

inject around the impression post and fill the impression tray ensuring the guide pin head is clearly visible.

Using a medium to heavy body impression material,

After the impression material has set, clear out the extra impression material or impression tray. Loosen or remove the guide pin and remove the tray with the impression post. Verify the impression post is securely positioned in the impression material.

Connect the impression post with guide pin and abutment analog together with hex driver, ensure the seating is correct and tighten by hand.



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4b. Abutment level impression - closed tray:

Place impression post with guide pin onto the abutment and tighten.

Using a medium to heavy body impression material, inject around the impression post and fill the impression tray.

Seat the impression tray. Once the impression material has set, remove the impression tray from the patient's mouth.

Unscrew and remove the guide pin and impression post.

Connect impression post with guide pin to the abutment analog with the hex driver, ensure the seating is correct and hand tightened.

Re-insert the impression post back into the impression tray.











6. Process of the Non-Hexed cylinder:

The cylinder is used for bridge restorations.

There are three different materials of cylinders available to the lab technician, full burnout cylinder (plastic), semi burnout cylinder (gold alloy) and titanium cylinder (titanium alloy). They are utilized for the final fabrication of the restoration.

The recommended minimum height of the cylinder is $4.0 \ \mathrm{mm}.$

 \triangle No additional angular correction may be fabricated into the design of the casts.

7. Proceed with wax up model for the prosthesis on the cylinder:

For optimal esthetic result, a diagnostic wax up should be performed. A silicone or PVS impression should be made over the wax up. There should be adequate room for sufficient thickness of wax between the abutment and impression. This is especially important in the region of the margin.



8. Casting and trimming the cylinder:

The casting alloy to be used in combination with the multi-use abutment shall have at least following mechanical properties. Tensile strength: 700 MPa

Yield strength: 565 MPa

Care must be taken during the trimming of semi cylinder. If the casting is trimmed where the gold alloy basement is exposed, the surface cannot be covered with ceramic. It is a non-oxidizing alloy and porcelain will not adhere to it.



9. Delivering the final restoration:

The restoration is delivered to the dentist with the prosthesis on the master cast. Remove the prosthesis from the abutment analog by using the hex driver. Try in the prosthetics with the bridge screw in the patient's mouth by using the hex driver. Tighten the bridge screw with torque wrench to 20Ncm.





Torque Guide

The following table shows which torque should be applied to related procedures.

Procedure	Torque
Screwing in implants with B0 platform	max. 35 Ncm
Screwing in implants with NP or B1 platform	max. 50 Ncm
Screwing in implants with RP, WP or B2 platform	max. 70 Ncm
Connecting healing cap / abutment or closure screw with the implant	Hand Force
Connecting temporary abutments with the implant	20 Ncm
Connecting B0 profile 15° / straight / ball / LOCATOR $^{\mbox{\tiny B}}$ abutments with the implant	20 Ncm
Connecting angled / straight / solid / gold / ball / LOCATOR $^{\circ}$ / swift /multi-use / hybrid sleeve / bar abutments with the implant	35 Ncm
Connecting bridge screw with multi-use abutment	20 Ncm
Connecting prosthetic screw with hybrid sleeve	20 Ncm

 \triangle Please ensure the hex driver is fully engaged into the head of the prosthetic screw.

 \triangle If it is necessary to reverse a torque tightened abutment screw, we suggest to **replace the abutment screw** once the torque is reversed, in order to maintain the full torque capacity of the abutment screw.



Notes







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