Multi-unit abutment hybrid or fixed-detachable screw-retained restoration

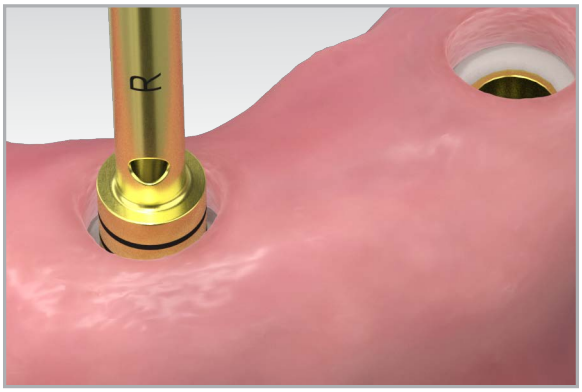
Use this technique for the fabrication of a multiple unit implant-supported, screw-retained hybrid in a partially or fully edentulous patient.

component options

- Conical multi-unit abutment (angled and straight)
- .050" (1.25mm) hex driver
- Torque wrench
- Multi-unit direct pick-up impression copings

1 Select the abutments

Measure the tissue depth from the top of the implant to the top of the tissue at its highest point. Select a conical Multi-unit abutment with a collar height which is 1-2mm taller than what is measured and matches the platform size and angulation needed for proper coping position.



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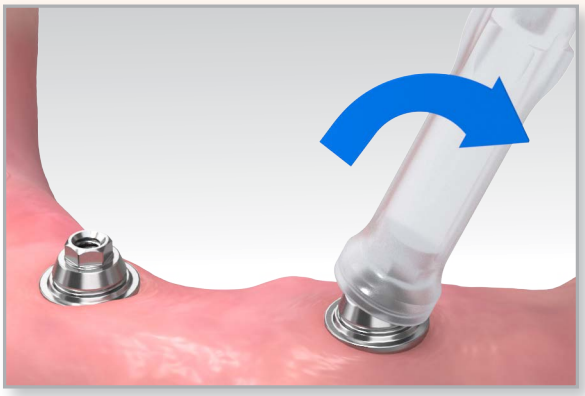
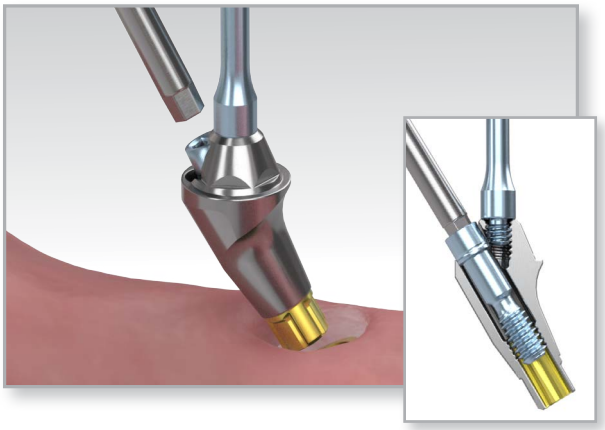
2 Place the abutments

Remove the healing abutments using an .050" (1.25mm) hex driver.
Straight abutments: Seat each straight abutment using the carrier, threading it clockwise onto the implant body. Bend the carrier to release it from the abutment.
Hand tighten the abutment using the manual Multi-unit hex adapter.
Angled abutments: Transfer the MUA to the mouth using the attached delivery handle. The abutment screw may be tightened without removal of the delivery handle. Once the abutment is secured in place, the delivery handle should be removed and discarded.



Important:
When placing an angled Multi-unit abutment, rotate the abutment and choose one of the six positions that best corrects the implant angle.

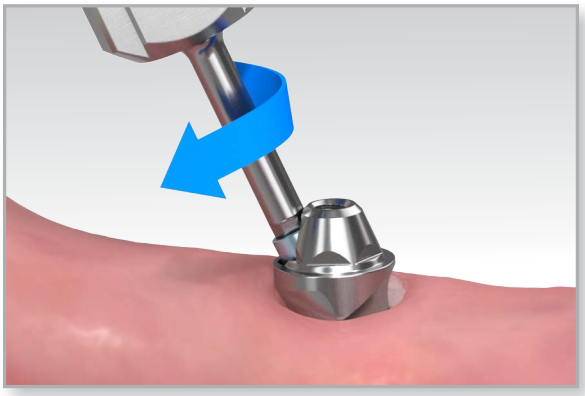
Take a radiograph along the long axis of the implants to ensure that the Multi-unit abutments are seated completely.



Note:
The X-ray tube must be positioned perpendicular to the implant prosthetic platform.

Straight abutments: Tighten the abutments to 20 Ncm using a calibrated torque wrench and the 4mm square hex adapter. The Multi-unit handpiece hex adapter can be used with a compatible torque wrench.

Angled abutments: Tighten the abutment screw to 20 Ncm using a calibrated torque wrench and an .050" (1.25) hex driver.



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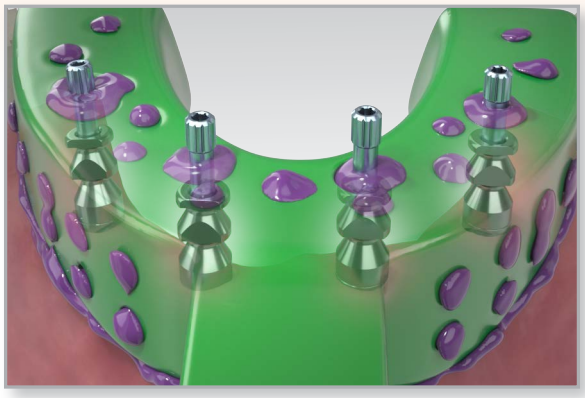
3 Make an abutment-level impression

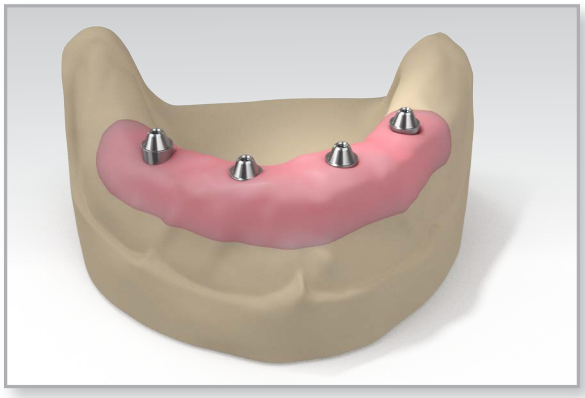
Create an abutment-level impression.

Important:
The fabrication of a verification jig is recommended to ensure the accuracy of the master stone model.



4 Lab step - Fabricate working model

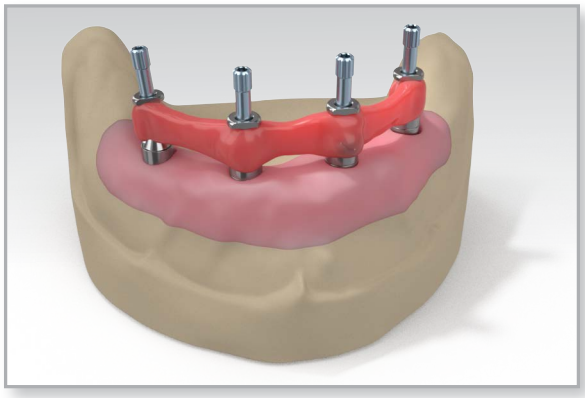
Fabricate a working model following conventional laboratory procedures. A soft tissue model is recommended whenever the margins are subgingival.



5 Lab step - Fabricate verification jig

Using multi-unit direct pick-up copings or titanium copings, fabricate a verification jig to verify the accuracy of the working model.

Send the completed verification jig to the clinician for try-in.



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6 Try-in the verification jig

Remove the healing caps from the Multi-unit abutments using an .050" (1.25mm) hex driver. Confirm the prosthetic platform is free of any debris or soft tissue.

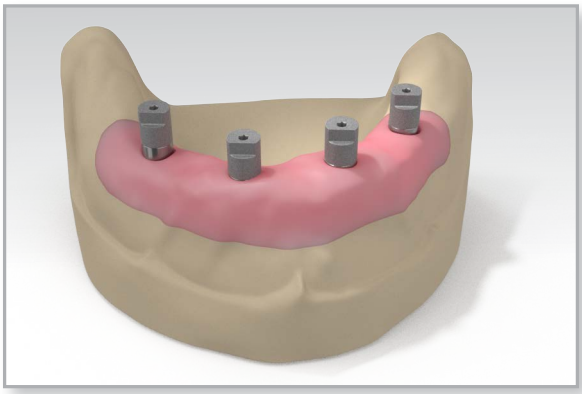
Place the verification jig and confirm that it seats passively. Beginning with the most distal implant, place the first abutment screw. Hand tighten the screw and make sure the prosthetic interface on all the remaining implants are completely seated.

Note: Visually or with a radiograph, always ensure the verification jig is completely seated onto the implants or the abutments.
Continue placing the abutment screws. Verify the fit each time a screw is placed.

7 Lab Step - Digital conversion

Once the accuracy of the working model has been verified, place Multi-unit titanium scan bodies on the analogs using an .050" (1.25mm) hex driver.

Conduct the scan according to the scanner manufacturer's instructions. Then, using the relevant digital library, align the scan body by selecting identifiable reference points.



8 Lab step - Mill restoration

Send the scan files to a BioHorizons validated milling center.

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