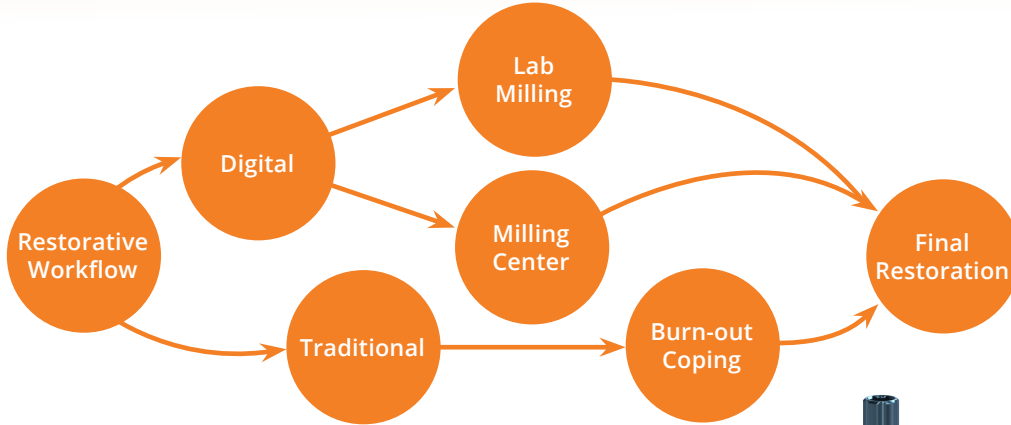




digital or traditional restorations with hybrid base abutments

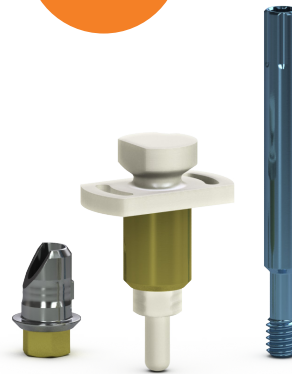
BioHorizons hybrid base abutments are designed for digital and traditional workflows. Available in hexed and non-hexed options for single or multiple-unit, screw-retained and cement-retained restorations. Hybrid base abutments* are compatible with the precision angle driver and screw, allowing the screw channel to be redirected up to 15°.




Digital Workflow

component options

- CAD/CAM system with a BioHorizons library
- Snap Scan Body
- Hybrid base abutment
- Custom block-out screw
- Analog handle



Note:
 Hybrid base abutments packaged with PXMUAS (light blue) abutment screw.

1 | Digitize the impression

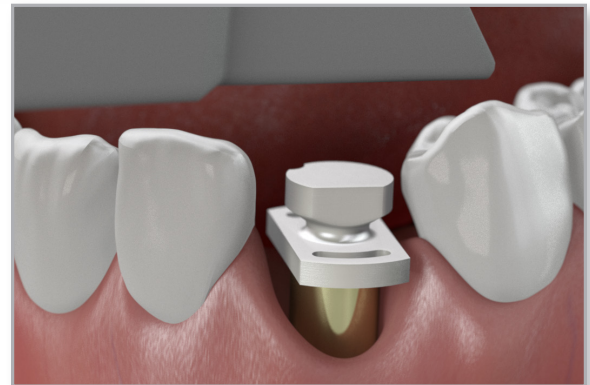
There are two primary ways to create a digital impression.

Option A - The first method is to take an intra-oral digital impression by placing a scan body into the implant and scanning the scan body and surrounding dentition using handheld 3D scanner.

Option B - The second method is to take an implant level impression, pour a stone model, place a software-dependent scan body into the implant analog and scan the model using 3D tabletop digital scanner.



Important: Ensure the lab has the digital library that is compatible with the scan body. BioHorizons digital library can be downloaded from vulcandental.com.



*Excluding 2mm collar height hybrid base abutments



2 Lab Step: Design the crown

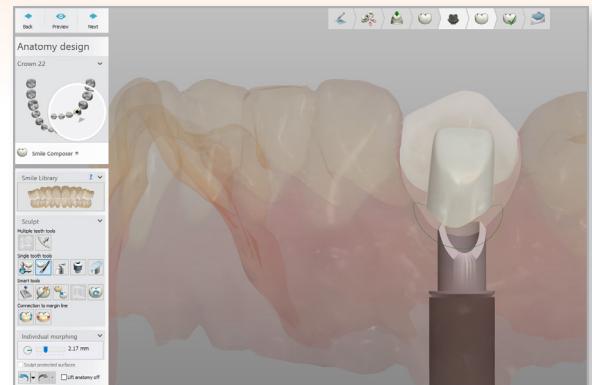
The file that is created during the digital impression is imported into the design software that will be used by the technician to design the crown. The restorative clinician should approve the design before milling the crown.



Note: An angled screw channel restoration could be designed in this step. Refer to the [Precision Angled Screw Restoration Overview](#) manual.



Important: The precision angled screw and driver are compatible with the BioHorizons hybrid base abutments and Tissue-Level hybrid base abutments.



3 Lab Step: Milling

Once the crown is designed send the file to a milling center or in-house milling machine.



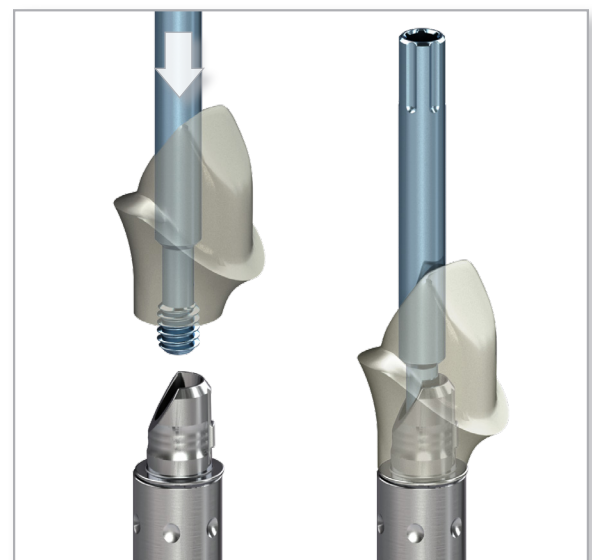
4 Lab Step: Finalization

Clean the surface and bond the restoration to the hybrid base following the cement manufacturer's indications. The cement or bonding material should be indicated for Zirconium dioxide ceramics or PMMA. The customer block-out screw (PXMUASL) should be used to prevent cement entering the screw access channel.

See steps 5-8 for delivering the final restoration.



Note: If an angled screw channel restoration was designed, refer to the [Precision Angled Screw Restoration Overview](#) manual for the final restoration delivery.





Traditional Workflow

component options

- Hybrid base abutment
- Hybrid base abutment waxing sleeve
- Custom block-out screw
- Analog handle

Note:



Hybrid base abutments packaged with PXMUAS (light blue) abutment screw.

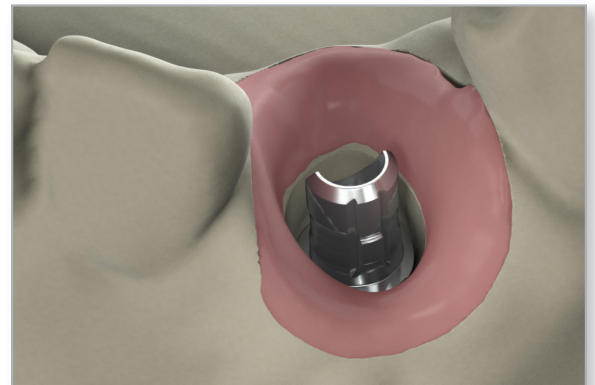


1 Screw hybrid base abutment on model

Position the selected hybrid base abutment to engage the hex of the implant analog with the "L" shaped cut out towards lingual/palatal. Hand tighten the abutment screw with an .050" hex driver.



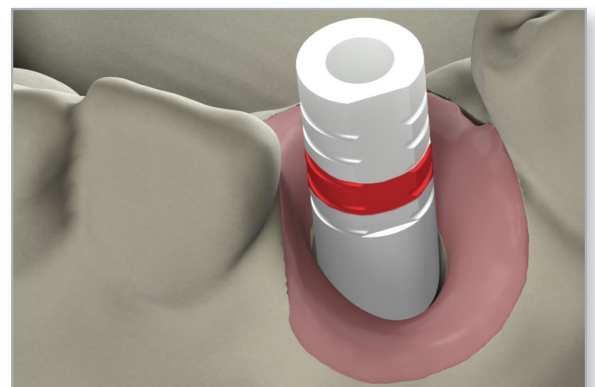
Note: Cement retained restorations are also a restorative option.



2 Lab step: Waxing sleeve preparation

Place the waxing sleeve on the hybrid base abutment, determine modifications needed to provide adequate room for the fabrication of the crown.

Mark the waxing sleeve of the abutment for the required vertical reduction and modify with a cutting disk or an acrylic bur for occlusal clearance.





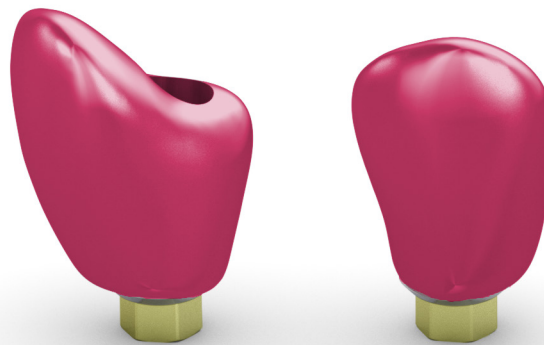
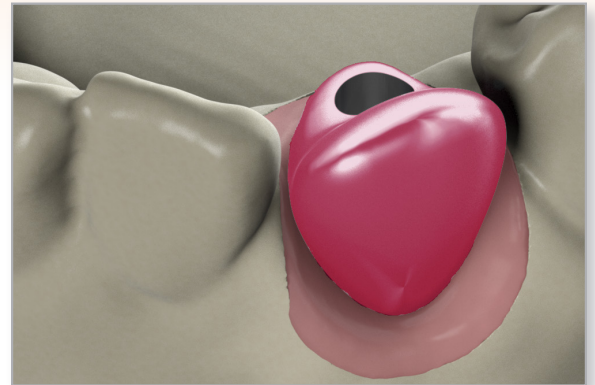
3 Lab step: Wax restoration

Use wax and/or acrylic burnout resin to incorporate the modified waxing sleeve to create a full contour wax-up and follow the standard procedures to press or cast the restoration.



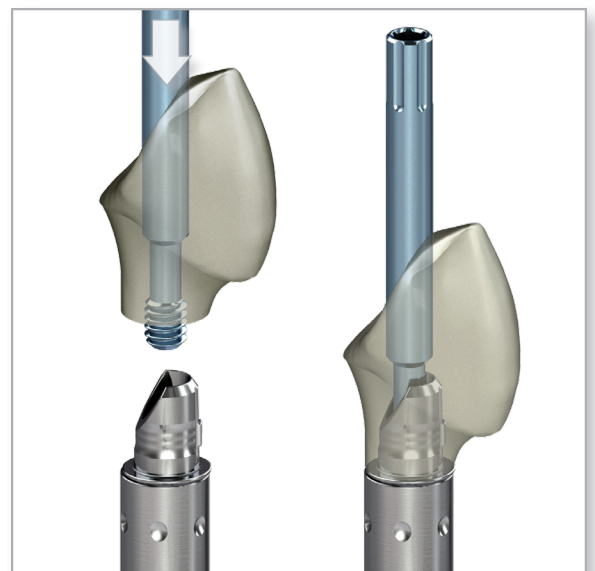
Note:

Depending on the treatment the wax up may be a coping, bridge or full contour crown.



4 Lab step: Finalization

The final contours of the pattern may be built up with crown & bridge wax. Clean the surface and bond the restoration to the hybrid base abutment following the cement manufacturer's indications. The cement and lithium disilicate restorations or bonding material should be indicated for Zirconium dioxide ceramics or PMMA. The customer block-out screw (PXMUASL) should be used to prevent cement entering the screw access channel.





5 Seat the final restoration

Sanitize the finished crown using standard clinical procedure. Remove the healing abutment or temporary prosthesis from the implant with an .050" (1.25mm) hex driver.

Make sure the implant prosthetic platform is free of bone and soft tissue. Irrigate the internally-threaded connection of the implant and dry.

Secure the hybrid base abutment restoration onto the implant using the abutment screw and an .050" (1.25mm) hex driver. Hand tighten.



6 Check and modify the restoration

Check the occlusion and contacts. There should only be light contact in centric occlusion. Modify as necessary and polish after making adjustments.

Take a radiograph along the long axis of the implant to ensure that the restoration is seated completely in the hex of the implant.



Note:

The x-ray tube must be positioned perpendicular to the implant prosthetic platform.



7 Tighten the abutment screw

Tighten the abutment screw to 30 Ncm using an .050" (1.25mm) hex driver and a calibrated torque wrench.



8 Fill the screw access channel

Place a resilient material of choice (gutta-percha, silicone or temporary filling material) into the screw access channel. This allows for easy access to the abutment screw in the future. Fill the remainder of the channel with a composite resin material of choice.

Take as x-ray for final prosthesis delivery records.

