



# Handling procedures

for Atlantis™ abutment, zirconia



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*Atlantis™ abutment is a two-piece component for cement-retained restorations. The abutment is individually designed from the final tooth shape and precision machined to provide optimal function and esthetics. Atlantis™ abutments are available in titanium, gold-shaded titanium (TiN-coated) and different shades of zirconia. This guideline emphasizes the laboratory and clinical handling procedures utilizing Atlantis™ abutment, zirconia.*



## 1. Abutment mask

When applying stain or porcelain, use a mask to protect the interface surface. Incorrect application of the stain or porcelain can compromise the fit and/or the strength of the connection.



## 2. Abutment inspection

Examine the abutment to make sure it is free from debris, porcelain, hand finishing marks, or any other damages to the interface features. Abutments with such conditions should not be delivered to the clinician.

## Atlantis™ abutment handling

Atlantis™ abutments are designed and produced to provide optimal function and esthetics and further modifications are not needed.

Any modification (e.g. grinding) of the Atlantis™ abutment, zirconia may influence the mechanical strength as well as change the material properties.

**Note: Do not modify, grind, polish, deburr or otherwise retouch the abutment. Any modifications may invalidate the product warranty.**

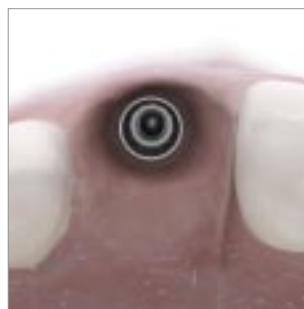
Do not mark or label the Atlantis™ abutment, zirconia using a grinding or etching process. Touching the abutment with metal implements may leave harmless non-removable marks.



## 3. Atlantis™ abutment screw

Make sure the Atlantis™ abutment screw is cleaned, preferably in an ultrasonic bath with instrument detergent concentrate and water.

**Note:** Use only the Atlantis™ abutment screw provided with the abutment. The screw cannot be replaced with an implant manufacturer's screw.



## 4. Interface preparation

Remove the cover screw or healing abutment from the implant to expose the implant seating surface. Make sure the interface is clean by irrigating the interface with saline solution.

The soft tissue can be sculptured during the healing process by using a customized healing abutment, to ensure a better end result.

## Cleaning and sterilization procedures

The Atlantis™ abutment, zirconia should be cleaned, preferably in an ultrasonic bath with instrument detergent concentrate and water. Dry heat sterilization or liquid chemical sterilization/ high

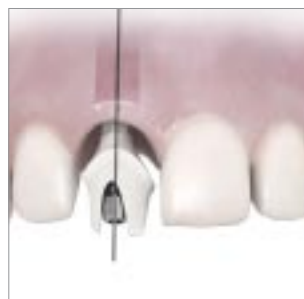
level disinfection procedures are the only acceptable methods of sterilization for the abutment. Do not steam autoclave the abutment as the process can affect the mechanical properties of the zirconia.



## 5. Abutment installation

Make sure the buccal surface of the abutment is identified and in the correct orientation prior to abutment installation.

To reduce the risk of zirconia fracture during installation, eliminate any possible screw interference. To do so, keep the abutment screw in a position where the screw is not coming out through the apical hex portion of the abutment.



## 6. Abutment alignment

To ensure the correct path of insertion and to avoid bending forces, it is important to properly align the abutment cone (screw direction) to the implant long axis.

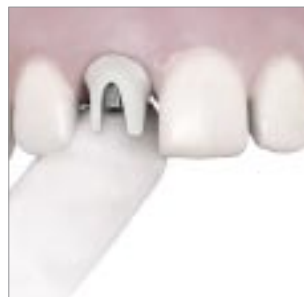
It is crucial to maintain this alignment. Do not insert the screwdriver before the abutment is correctly and fully seated.



## 7. Abutment positioning

Seat the abutment in the implant.

If needed, gently rotate the abutment circumferentially around the long axis of the implant only. Do not push, rock or rotate the abutment with extreme force. Apply light downward pressure on the abutment core. You should be able to feel the abutment drop into the correct position.



## 8. Maintaining abutment placement

Once the abutment is properly seated, it is important to maintain a constant, light pressure on the abutment to make sure it remains in place during screw tightening.

The Atlantis™ abutment screw provided with the Atlantis™ abutment must be used and cannot be replaced with the implant manufacturer's screw.



## 9. Abutment screw tightening

Tighten the Atlantis™ abutment screw with light finger force.

If correct seating cannot be confirmed clinically, the use of a radiograph is ideal. Applicable implant manufacturer's recommendations regarding the use of radiographs should be followed.



## 10. Final tightening

Tighten the abutment screw using an appropriate torque device to the implant manufacturer's torque specifications.

If the soft tissue creates hard resistance and blanches during seating, it is recommended to wait a few minutes before final torque.



## 11. Cover the screw head

Cover the screw head with silicone or provisional cement before the screw access hole is filled with a suitable composite or cement material.



## 12. Cementation

Cement the final restoration to the abutment.

The cementation technique should be adapted to the restoration of choice according to the instructions from the manufacturer.

Since zirconia cannot be etched, and hence no cement bonding can be established, the Atlantis™ abutment is designed for optimized mechanical cement retention.



## Optional support

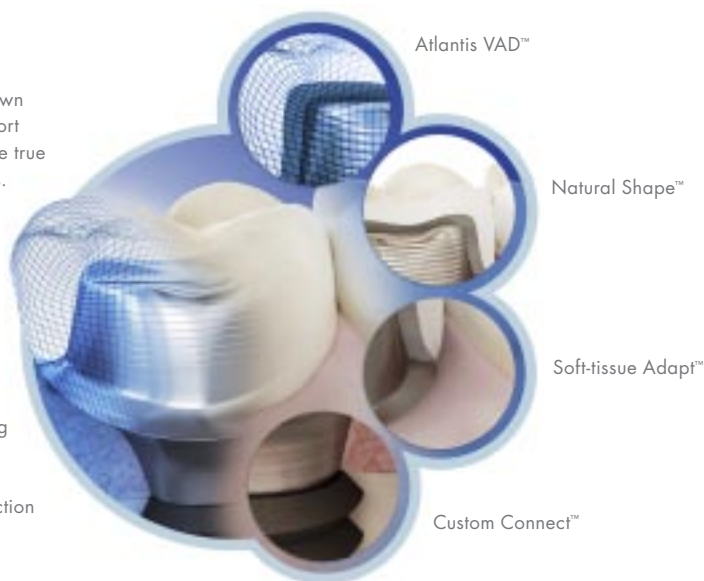
The use of a laboratory-made insertion guide can be extremely helpful in ensuring proper alignment and position during placement.

If more than one abutment is being installed, the use of an insertion guide is highly recommended.

# Atlantis BioDesign Matrix™

Atlantis™ is comprised of a unique combination of four key features, known as the Atlantis BioDesign Matrix™. These features work together to support soft tissue management for ideal functional and esthetic result. This is the true value of Atlantis™ for dental laboratories, clinicians and implant patients.

- **Atlantis VAD™** – designed from the final tooth shape and the individual patient anatomy.
- **Natural Shape™** – shape and emergence profile based on individual patient anatomy
- **Soft-tissue Adapt™** – optimal support for soft tissue sculpturing and adaptation to the finished crown.
- **Custom Connect™** – strong and stable fit – customized connection for all major implant systems.



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