

Atlantis™ 3D Viewer/Editor

User guide

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Atlantis™ 3D Viewer/Editor

Atlantis™ 3D Viewer

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This manual is designed as a guide for users of Atlantis™ WebOrder.

Atlantis™ 3D Viewer/Editor

Atlantis™ 3D Viewer/Editor is an interactive, web-based feature within Atlantis™ WebOrder that provides you with a 3-dimensional image of your Atlantis™ abutment designs, which you can review from any angle.

System requirements

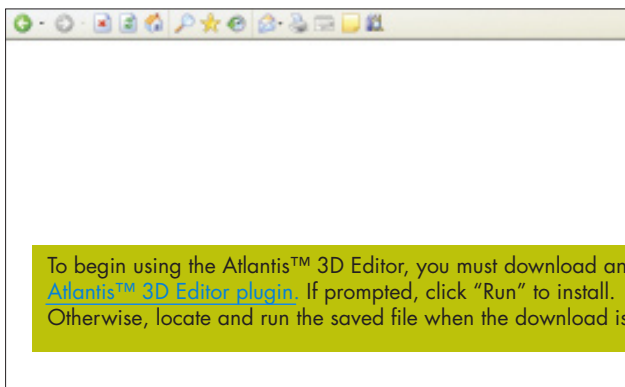
The minimum system requirements for running Atlantis™ 3D Viewer/Editor are:

- A PC running Windows XP Service Pack 1 or higher
- A 3D-capable graphics card
- Microsoft Internet Explorer 5 or higher or Mozilla Firefox

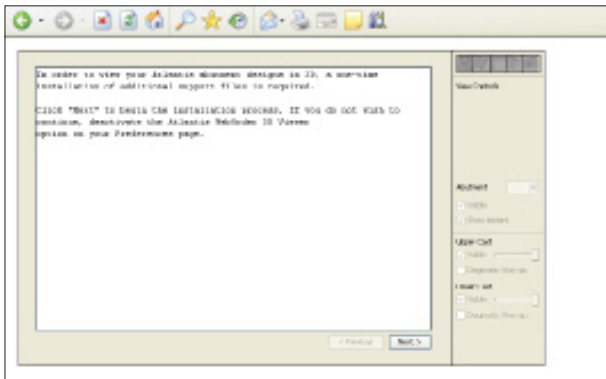
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Installation

When you first open a case for review, you will be given the following window to install the Atlantis™ 3D Viewer/Editor.

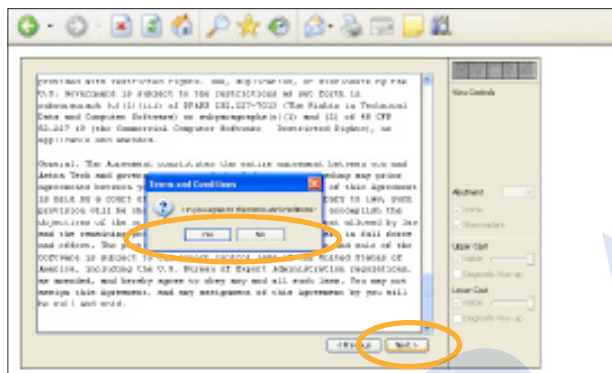


If you do not wish to install the 3D Viewer/Editor, ignore this install message and review the case as normal. To make this message go away for future case pages, deactivate the Atlantis™ WebOrder 3D Viewer option on your **Preferences** page.

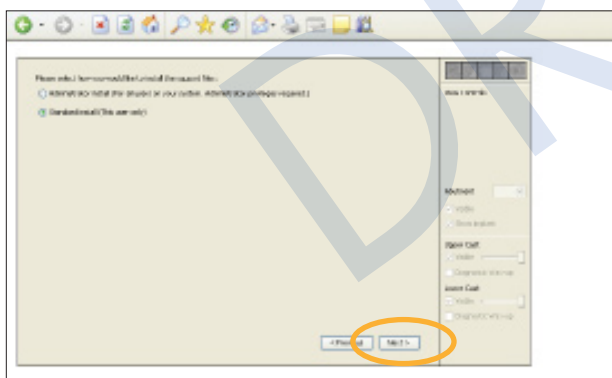


In order to view your Atlantis™ abutment designs in 3D, a one-time installation of additional support files is required. Click **Next** to begin the installation process.

If you do not wish to continue, deactivate the Atlantis™ 3D Viewer/Editor option on your **Preferences** page.

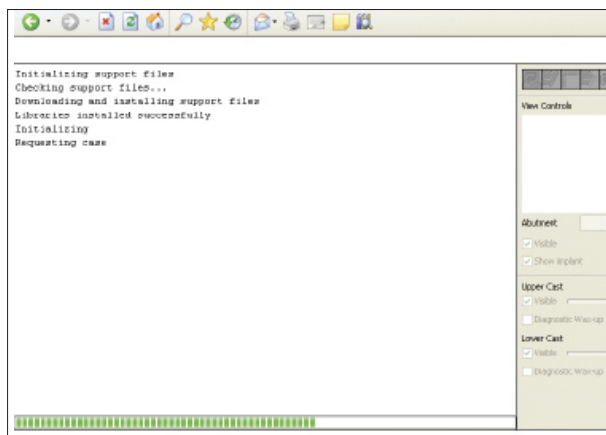


Once you have read the Terms and Conditions disclaimer, press **Yes** to agree and **Next** to proceed.



Choose the appropriate installation option and press the **Next** button to continue.

- Standard install (This user only)
- Administrator install (For all users on your system. Administrator privileges required.)



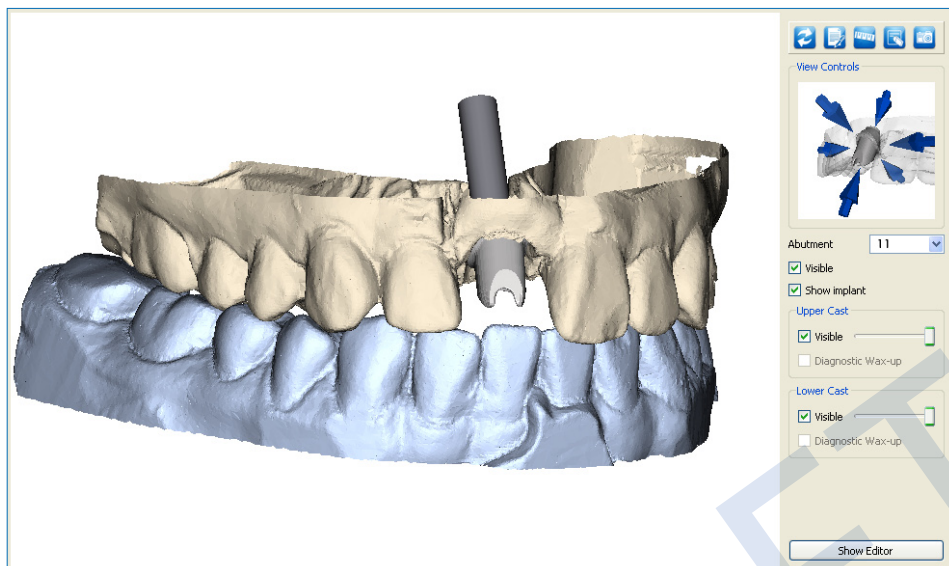
A progress bar will be displayed as the support files are downloaded and installed.

Once installation is complete, the Atlantis™ 3D Viewer will begin to load your case image.

Note: Downloading of case images may take several minutes, or longer, if you are on a slow internet connection.

A broadband connection is recommended.

Getting started



Once you have installed the support files for the Atlantis™ 3D Viewer, you are ready to begin. The initial view of Atlantis™ 3D Viewer/Editor is in “Viewer” mode. It will show your Atlantis™ abutments in the cast.

View options

- **To rotate** cast, left click mouse and hold
- **To pan** (left/right/up/down), right click mouse and hold
- **To zoom** (in and out), scroll wheel on mouse

Toolbar



Reset: Reset view to default



Notes: Allows you to insert a reference point for a note anywhere on the main window (on/around the image).



Ruler: Displays measurement, in millimeters, between any two points. Click on the two points to be measured.

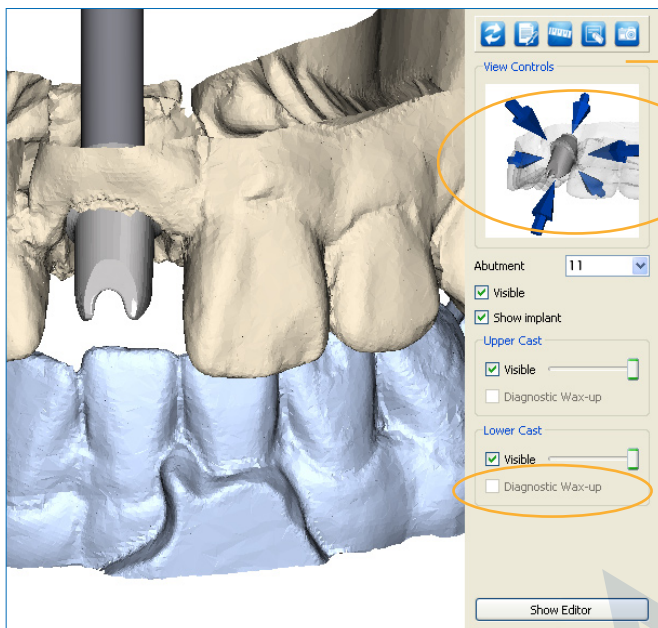


Eraser: Clears all note reference points and measurements.



Camera: Takes a screenshot to be sent to the technician working on your order. Use with Notes or Ruler to send an image with reference points or measurements. Use also to save images to your computer.

Controls



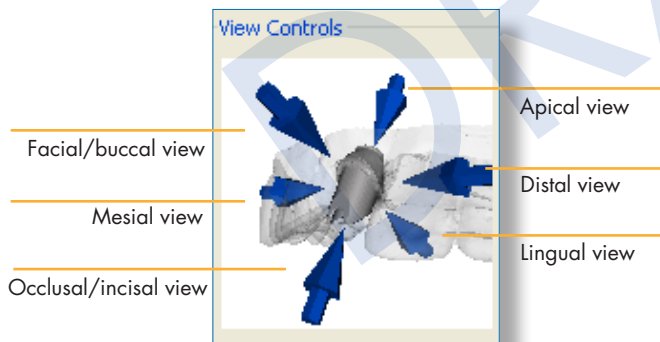
Toolbar

Abutment selection and controls. Click on the arrows to view the abutment from any direction.

Abutment visibility controls whether the currently selected abutment and its associated implant are visible. This can be changed on a per abutment basis.

Cast visibility allows upper and lower casts to be turned on and off, or made partially translucent with the sliders. If you sent a diagnostic wax-up with your order, it can also be viewed.

Enable the Atlantis™ 3D Editor

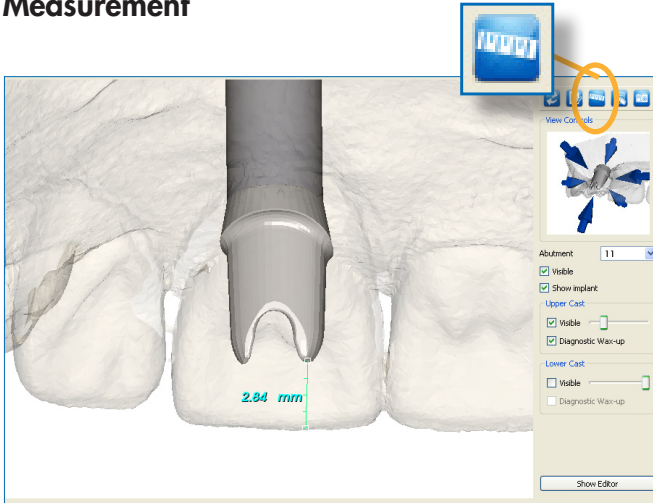


Mesial and distal views will show a cutaway view of the cast so you can see how the abutment interfaces with the surrounding tissue.

You may change the selected abutment via the dropdown menu below this view or by simply clicking on the desired abutment in the main window.

Click on the abutment itself to reset the cast views that have been cut-away by the mesial/distal views.

Measurement

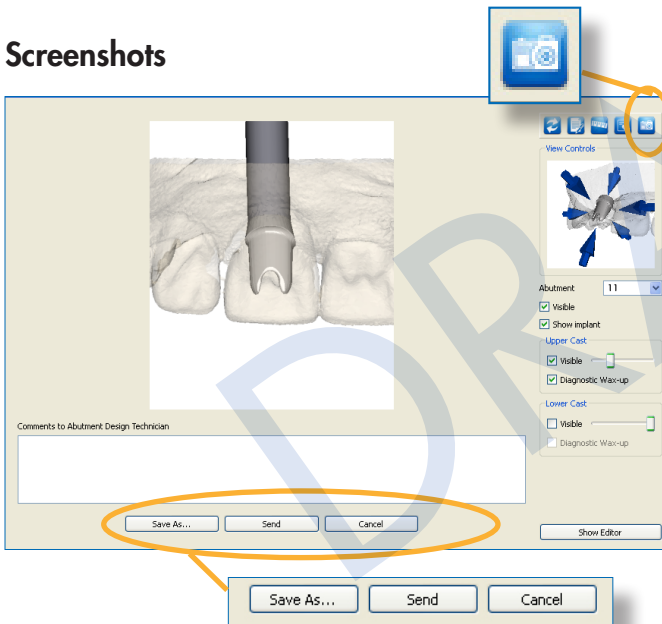


Use **Ruler** button to take a measurement between two locations on the main view.

Click on the first point you want to measure, then the second. Measurement will be displayed in millimeters.

You may then take a screenshot of this image to send or save the image described in the **Screenshot** section.

Screenshots



To provide feedback, click on the **Camera** button to capture the image and activate the comment box.

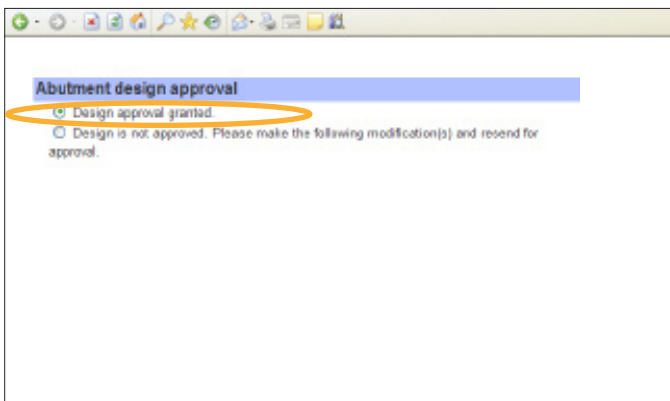
The image displayed will be the current view you have selected in the main view area. Enter any additional comments you may have regarding your design in the **Comments to abutment Design Technician** field provided.

Click **Send Comment** to send your screenshot and comments to the technician.

You will receive an e-mail when they have responded.

Click **Save As...** to save the screenshot to your local machine.

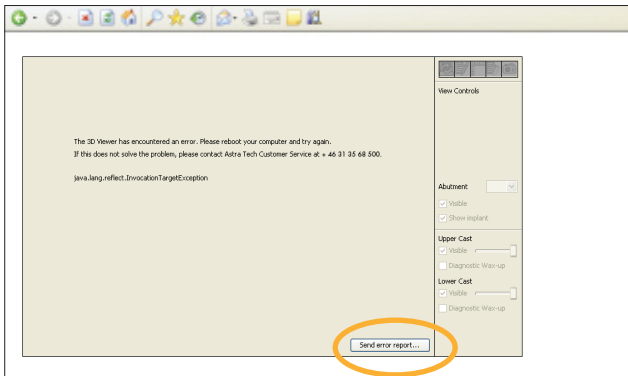
Design approval



To indicate your approval for production, click the box next to **Design approval granted**.

Atlantis™ 3D Viewer troubleshooting

If you encounter difficulty viewing images, please close all browser windows (Internet Explorer or Firefox) and try again.

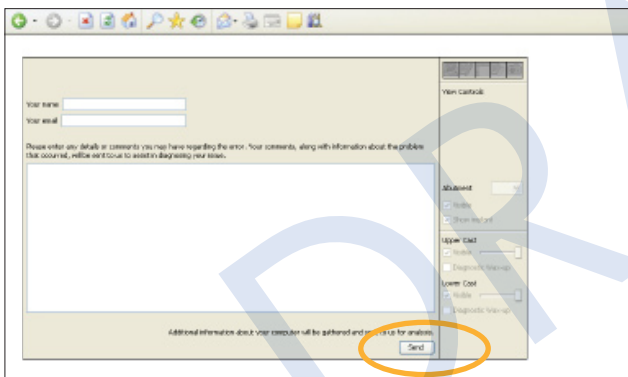


If the images still do not load, you should restart your computer.

Click the **Start** menu, select **Shutdown**, and then choose **Restart**.

Once your computer has rebooted, please try again.

If this does not solve the problem, please contact your local Customer Service.



Please enter your name and email address in the spaces provided.

In the text box, enter any details or comments you may have regarding the error.

Click the **Send** button to transmit this information to us.

If you experience other issues not covered here, or need further assistance, please contact your local Astra Tech Customer Service.

Atlantis™ 3D Editor

Atlantis™ 3D Editor is an enhancement of the Atlantis™ 3D Viewer functionality that allows the possibility to both view and make limited changes to the proposed abutment design, which can be visualized in real-time.

A proposed abutment design, whether approved or further modified via Atlantis 3D Editor is then processed directly for manufacturing, which can further minimize the turnaround time for the case.

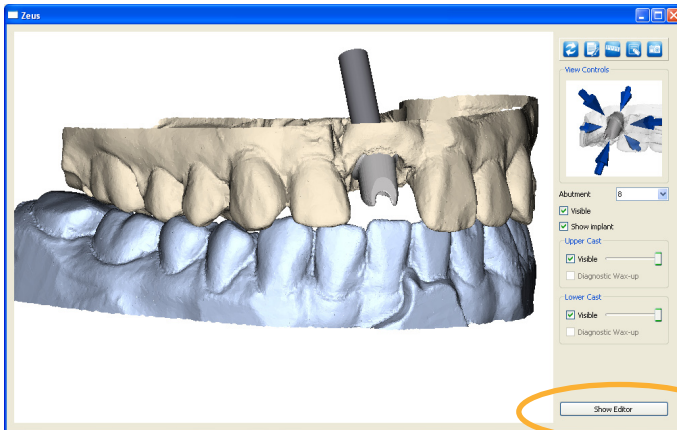
Atlantis 3D Editor will not allow for changes in the abutment design that could compromise the functional integrity and/or producibility of the product. If changes are made outside of acceptable design requirements, the abutment will turn red to indicate that it cannot be accepted for production.

The Atlantis 3D Viewer also allows for changes for the most common and basic design aspects. If desired changes cannot be made within the Atlantis 3D Editor functionality, a request can be sent to Astra Tech so an Atlantis Abutment Design Technician can make the change(s) for you. In this case, an updated abutment design will be sent to you for review and approval for production.

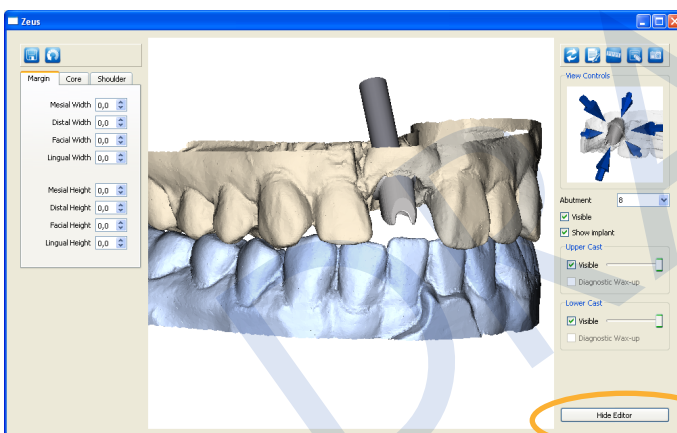
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Getting started

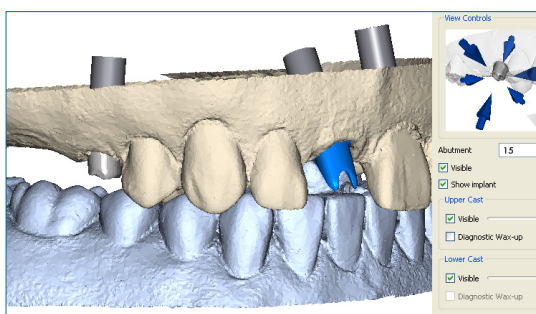
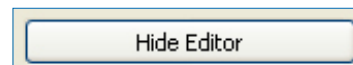
Go from Atlantis™ 3D Viewer to the 3D Editor, by pressing the button "Show Editor".



Press Show Editor button and the Atlantis 3D Editor panel below appear.



Press Hide Editor button to return to the Atlantis 3D Viewer.











Color codes

Abutments are displayed in same color as chosen material.

Inactive abutment is blue.

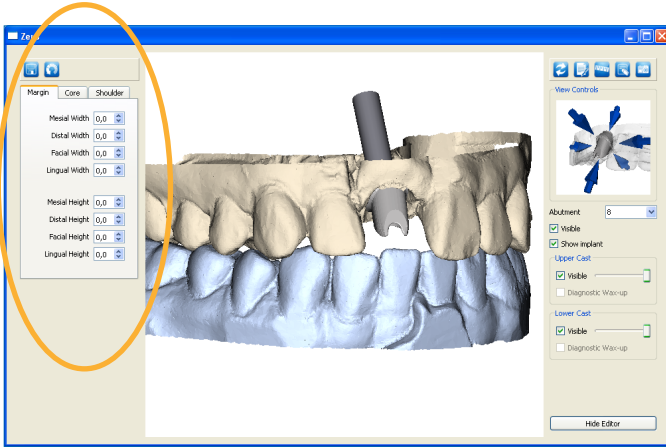
Different color on upper and lower model.

See table below.

Atlantis™ 3D Editor - Color codes				
Model Upper Lower	Titanium	Gold-shaded titanium	Zirconia shades 00, 10, 20, 30	Inactive abutment
 			  	

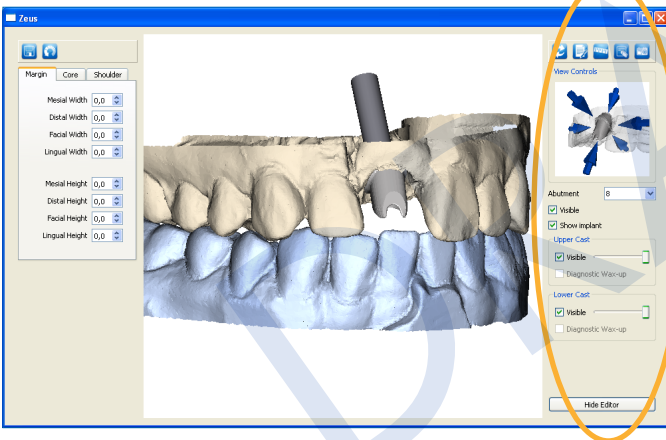
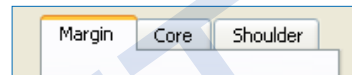
Toolbar

When open a new case, the values are set to zero, equal to the original design.
Changing values displays in 1/10 mm.



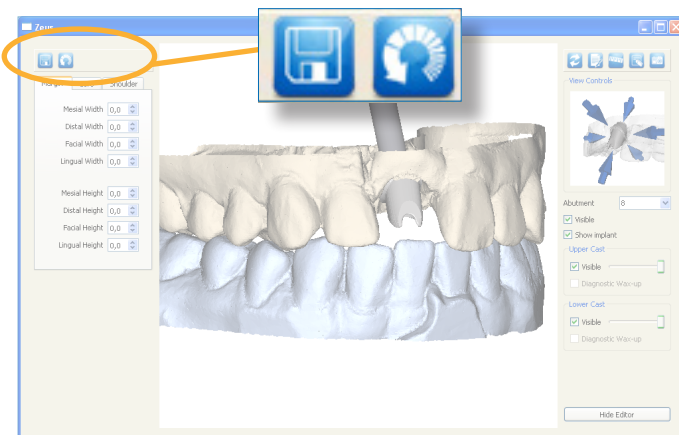
3D Editor panel (left)

Margin widths and heights
Core elements
Shoulder widths



3D Viewer panel (right)

The 3D Viewer panel is also available, so you can use the panel to hide/show abutment, implant and casts, diagnostic wax-up (if scanned), create a note to the Atlantis Design Technician, make screenshot and all other features as you normally do.



Save your work

It is possible to save your work at any time with the save button. (upper corner to the left)
Next time you open the case, the shape will be as you saved it.

Once you press the save button, your changes are registered with Astra Tech.

If you like to you contact us, we will see the progress you've made up to that point.

Revert button

You can revert to the last design version you saved by clicking the Revert button/Last Saved.

To revert to the original design sent by Astra Tech, click Revert/Original design button.

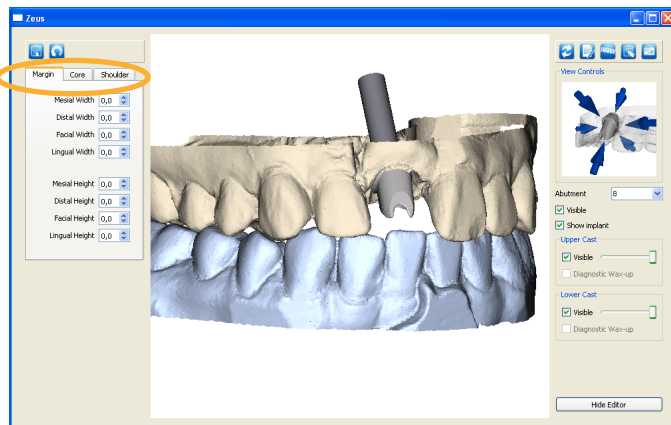
More information, page 16.

Margin adjustments

Open your case in 3D Editor mode, by clicking on the Show Editor button.

Use 3D Editor panel on left to make changes to the abutment.

Use the arrows in 3D Viewer panel (the right) to orientate right position for changing area.



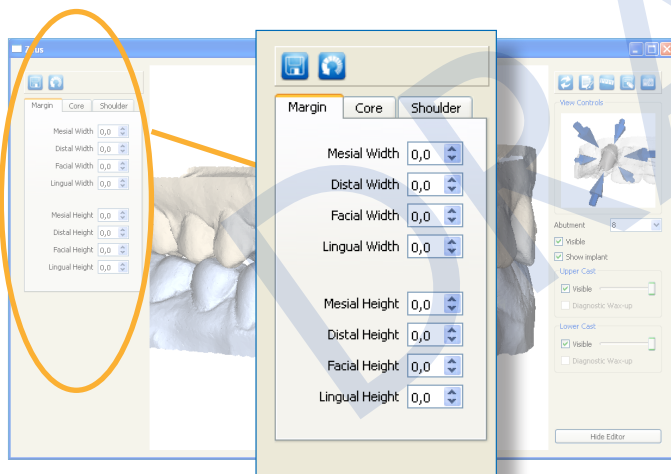
Margin adjustments

Margin height

Margin width

Changes can be made both with the height and width of the margin in mesial, distal, facial and lingual.

It allows for changes of margin widths to go beyond the emergence width chosen previously by the customer, support soft tissue can turn into contour soft tissue

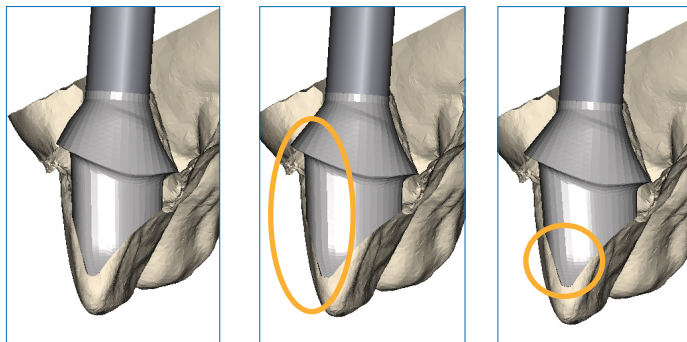


Click on the arrows.

All changes will be 1/10 mm per click

Note: If moving the margin towards the implant connection, the abutment turns red - keep out zone.

More information on page 19.



A. Original.

B. Changing facial width.

C. Adjust FL Angle

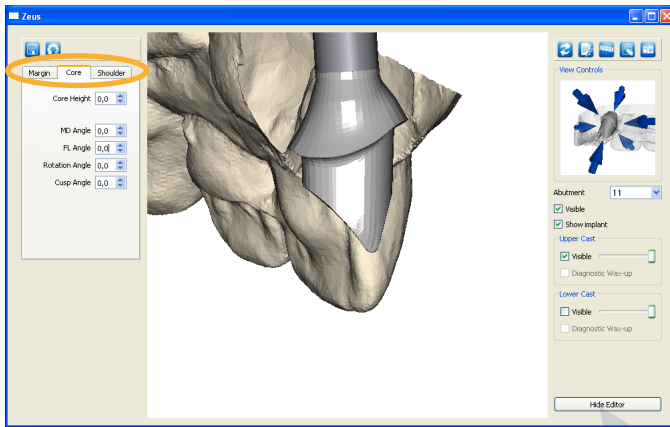
Note: When changing the margin width or shoulder width (B), make sure to check the incisal position, if necessary, adjust the core angle (C)

Core adjustments

Open your case in 3D Editor mode, by clicking on the Show Editor button.

Use 3D Editor panel on left to make changes to the abutment.

Use the arrows in 3D Viewer panel (the right) to orientate right position for changing area.



Core adjustments

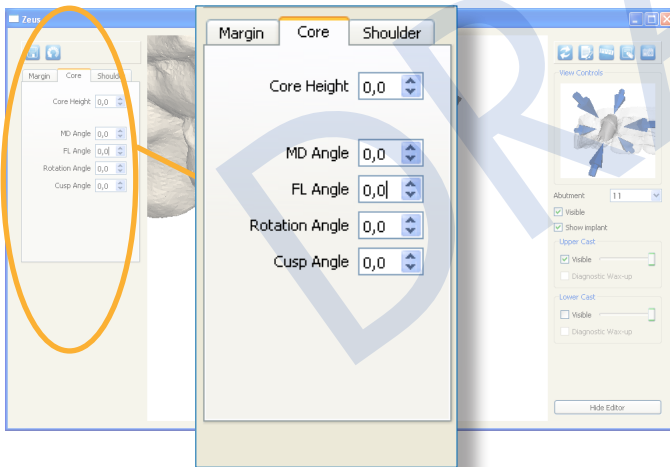
Core Elements makes it possible to adjust:

- Core heights
- Core angulations
- Abutment rotations

Possibility to change the core angle mesial-distally (MD) and facial-lingually.(FL)

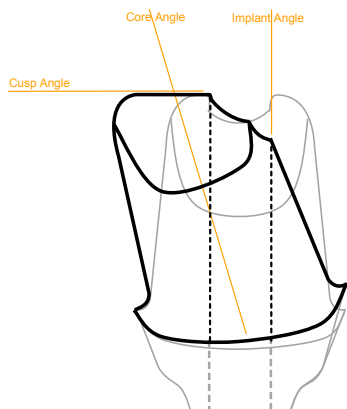
Change the rotation of the whole abutment.

Change the angle of the cusp along the cusp/incisal edge.



The changes will be

1° per click when changing angles and 1/10 mm when changing the core height



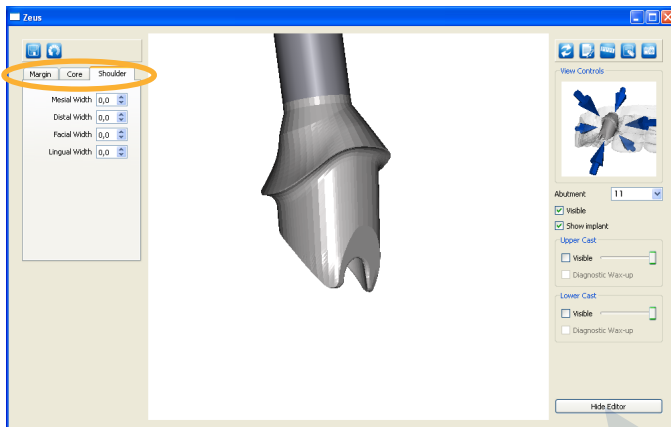
Note: When changing the core angle and the cusp angle, the incisal angle need to be adjusted.

Shoulder adjustments

Open your case in 3D Editor mode, by clicking on the Show Editor button.

Use 3D Editor panel on left to make changes to the abutment.

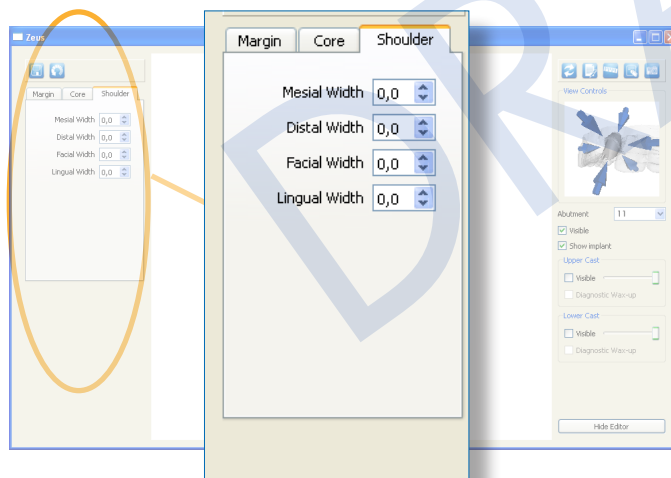
Use the arrows in 3D Viewer panel (the right) to orientate right position for changing area.



Shoulder adjustments

The changes can be made individually between mesial, distal, facial and lingual.

Increasing the shoulder width can be limited by core wall thickness.

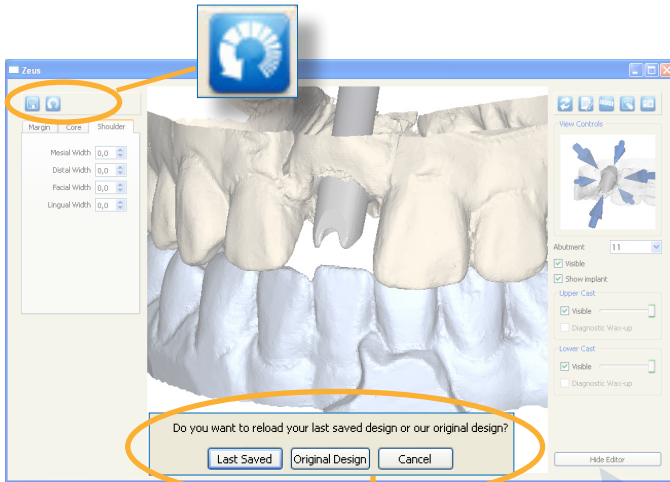


All changes will be 1/10 mm per click.

Reverting changes

If you made too many changes and the shape is in a confused state, you can revert your changes to your last saved state or the last version sent from Astra Tech.

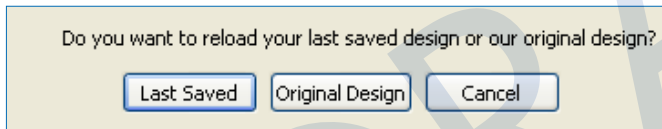
The Revert button is at the top of the editing panel.



Revert button

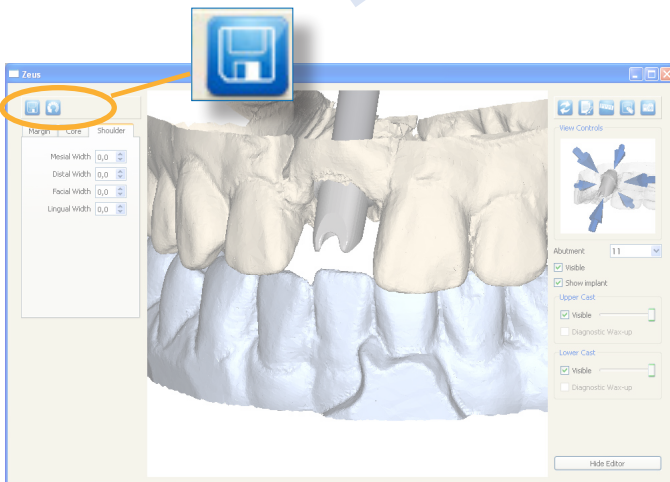
Revert the design to the last version you saved by clicking the Revert button at the top of the editing panel.

A pop up window appears, click Last Saved button.



Last Saved ,Original Design and Cancel button. Do you want to reload your last saved design or Astra Tech's original design?

Cancel to undo.



Save button

Save your work and approve it for production.

Once you press the save button, your changes are registered with Astra Tech.

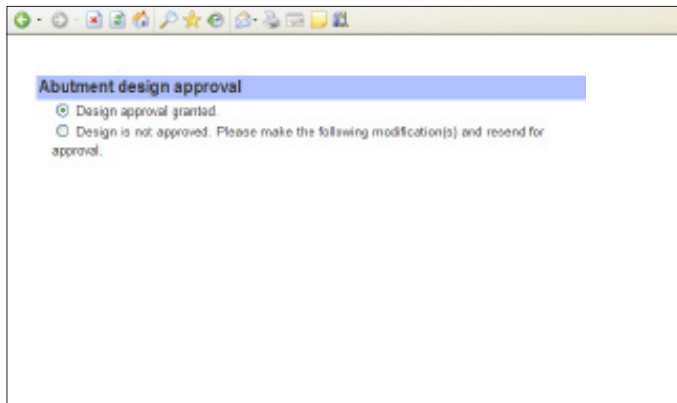
When you contact us, we will see the progress you've made up to that point.

There are some elements of the abutment design that can not be controlled from within Atlantis 3D Editor. If you can not achieve the design changes you are looking for, please request changes to your case by sending us a note or contact customer service.

Design approval

When you are happy with your changes, press the “Approve for production” button at the bottom of your case and the currently saved version of your abutment will be sent to be manufactured.

Note: Be sure to save your edits before approving it for production.



To indicate your approval for production, click the box next to **Design approval granted.**

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Questions and answers

Installation

Q: Where can I find information how to install and activate the 3D Editor?

A: Please follow the installation instructions found in the Atlantis™ 3D Viewer/Editor manual. (Will be available in Atlantis™ WebOrder help section.)

Q: Can I share Atlantis 3D Editor with my clinician?

A: The “click-to share” feature is not available for the Atlantis™ 3D Editor.

Editing features

Q: How precise can my changes be?

A: Changes will be accurate, although 2 or 3 tenths of a mm can be very visible on the screen, but on the actual abutment 10 times smaller, it's a very minor distance, hardly visible to the human eye.

Q: Can I stop working on changes and come back to them later?

A: Yes. You can save your work at any time with the save button. Next time you open the case, the abutment design will include any changes you have previously saved.

Q: What should I do if I can't make the changes I want?

A: There are some elements of the abutment design that can not be controlled from within the Atlantis 3D Editor. If you can not achieve the design changes you are looking for, please request changes to your case by sending us a note.

Q: If I've made some changes but need help, can Astra Tech see what I've done so far?

A: Yes. Once you press the save button, your changes are registered with Astra Tech. When you contact us, we will see the progress you've made up to that point.

Q: Will the Atlantis 3D Editor software have safeguards built in that help prevent improper design edits?

A: Yes. There are various parameters within the Atlantis 3D Editor software that help to ensure optimal strength and function of your abutment design, including:

- As you change one parameter, other design parameters are changed accordingly to maintain the most proper abutment shape achievable. All the elements of the Atlantis abutment design are set to allow for an optimal clinical result. For example, the abutment core taper angle and path of insertion are tightly maintained to ensure the absence of undercuts and a precise fit.
- All change are monitored as they are made against manufacturing standards. This allows proper control of minimum angles and ensures that abutments are not designed to be larger than the material blank.

If you exceed the blank limit for example, the abutment will turn red indicating that the requested design does not meet manufacturing requirements. Note that the blank limit has two elements, a length, which controls the maximum height of the abutment, and a radius, which controls how far the design can go from the screw hole.

Q: Can I see the shape of the planned tooth when I make design changes of the abutment design?

A: This option is currently not available.

Q: Why can't I control parallelism in Atlantis 3D Editor?

A: To ensure efficiency in your abutment design editing process, certain elements such as parallelism and adjustments to the path of insertion are not included in the 3D Editor because they bring in issues around working with multiple teeth. We are always looking for ways to add features, while maintaining the ease-of-use of this tool for the widest range of our customers. In the meantime, you can achieve parallelism by simply requesting it in the parallelism section of Atlantis™ WebOrder. And you can make adjustments to the path of insertion by requesting that from the Atlantis design group.

Q: Why does one side of my abutment core not move as I change the core angle?

A: In multi-unit cases, where the multiple units are to be splinted together, the path of insertion angle for the splinted units also goes into the calculation of the abutment core shape. In these cases, the new core angle is in conflict with the path of insertion, and the tool maintains as best as possible both the new core angle and the path of insertion. In other words, one side of the abutment matches the core angle, while the other side is limited by the path of insertion. For single unit cases, or cases where the units are not splinted, the path of insertion will follow the core angle, and this will not be a problem.

Q: I want to be able to create curved vs. straight base shape, is that possible?

A: It is possible to create abutment with different base profiles. However, this cannot be done using Atlantis 3D Editor. If you want to adjust the base profile, please contact us by sending a note.

Q: I want to make the cusps rounder and also change their position and height a bit, is that possible?

A: To make these type of adjustments, please contact us by sending us a note.

Q: What is Keep out zone?

A: There are numerous design parameters built into the sophisticated Atlantis VAD™ (Virtual Abutment Design) software that help to ensure the mechanical integrity of the abutment is maintained. The "keep out zone" is the parameter that helps to preserve the minimum core thickness needed at the base of an abutment."

Optimizing your Atlantis™ abutment designs

Q: How do I fix insufficient core retention?

A: If the software determines that the core of the abutment is too small to hold a crown, the abutment will display as red, indicating that it cannot be manufactured to the specifications requested. You can consider changes to, margin position and shoulder widths as good ways to fix this problem.

Q: How do I fix thin core walls?

A: Certain shape combinations result in thin core walls, which the software automatically reshapes to avoid fractures or sharp edges. This can appear as less core height than expected along one of the walls. You can increase the thickness in that area by reducing the corresponding shoulder width, widening the margin position, and sometimes by moving the core angle away from the thin area.

Q: How do I make my margins lower?

A: Sometimes the margin will not move lower because we have reached a minimum acceptable height. We can't move a margin lower than the interface. We also require a certain minimum height off the implant so that we don't interfere with the strength of the internal elements of the interface to the implant. This also occurs when angulations of the implant is too sharp.

Q: How do I adjust the height to fit within the blank?

A: When you increase the height of the abutment beyond the maximum manufacturing height limits, the abutment will change color to red to indicate that it no longer meets manufacturing requirements. If this happens while you are increasing the abutment height, simply reduce the height until the abutment color changes back to normal. This will also happen if the abutment exceeds the maximum manufacturing width or angle, and/or other design parameters. In all these cases, back off the change you made until the abutment color changes back to normal.

Q: What do nomenclatures such as "core" and "base" mean?

A: Please refer to the "Abutment design terminology" section of the Atlantis 3D Viewer/Editor user guide.

Q: Is the Atlantis warranty effected if changes are made by me to the original design?

A: The Atlantis warranty covers all Atlantis products that are manufactured including ones you have edited using the 3D Viewer/Editor.

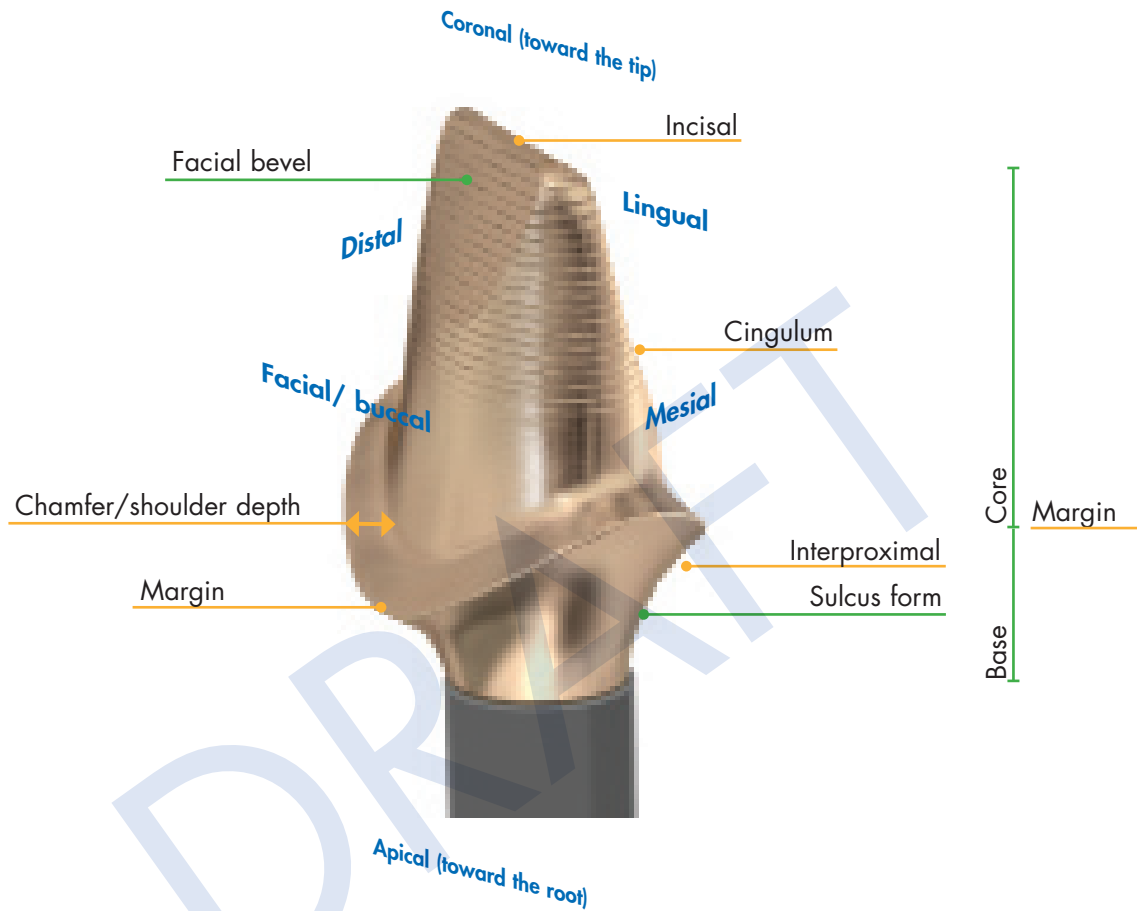
Q: Can I open the Atlantis 3D Editor on a Mac computer?

A: No, the Editor will not work on Mac at launch, but we are working to support it in the future.

For other issues, please contact your local customer service.

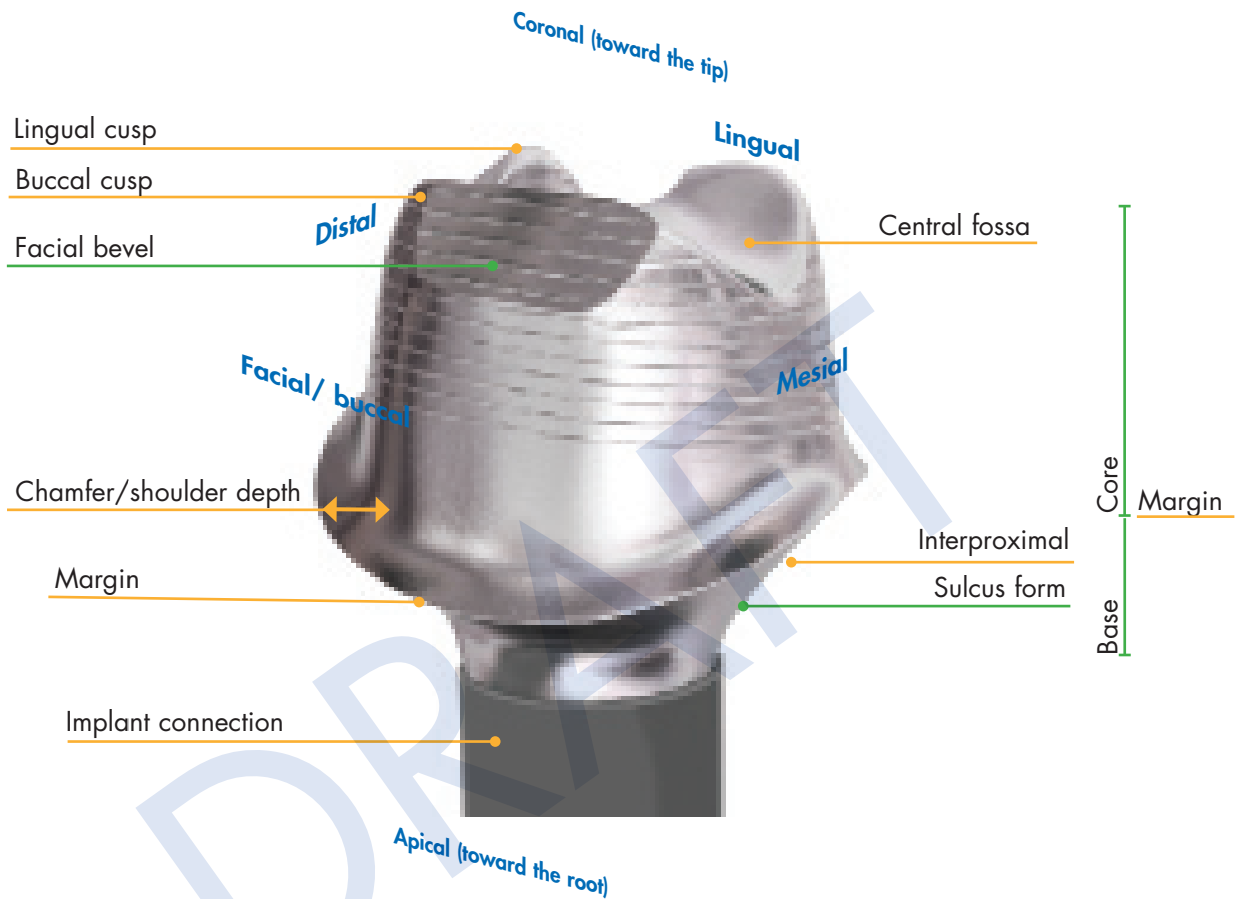
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Basic landmarks — anterior design



Green indicates VAD™ design terminology

Basic landmarks — molar posterior design



Green indicates VAD™ design terminology

Atlantis™ – patient-specific abutments for all major implant systems



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