

Atlantis™ - patient-specific abutments

The Atlantis™ patient-specific abutments are Astra Tech's CAD/CAM solution for cement-retained implant restorations. Using the Atlantis VAD™ (Virtual Abutment Design) software, the abutments are individually designed based on the desired final tooth shape, which is an advantage for achieving a more natural, esthetic result. Atlantis abutments are available for all major implant systems, including the Astra Tech Implant System™ where the abutments are designed to function in harmony with all the features and benefits of the Astra Tech BioManagement Complex™. The abutments are available in zirconia, titanium and gold-shaded titanium. The Atlantis abutment in zirconia is made of Y-TZP (yttria-stabilized tetragonal zirconia polycrystals). Detailed information about Y-TZP is available in the Zirconia Scientific Review.

The clinical use of the Atlantis abutment has been described in numerous case reports. Excellent esthetic results have been reported for both titanium¹⁻⁸ and zirconia⁹⁻¹¹ abutments. Moreover, advantages such as reduced chairtime¹²⁻¹⁴, cost-effective and simplified treatment procedures^{8,15}, reduced number of impressions with duplicate abutments (Atlantis Gemini™ and Atlantis Gemini+™)^{1,2,7,15,16}, accuracy of fabrication¹⁷, ideal fit and retention of copings^{12,18}, and establishment of optimal soft tissue contour and emergence profile^{4,7} have been described for the Atlantis abutment.

Excellent mechanical properties have also been reported for the zirconia Atlantis abutment¹⁷. An in vitro study compared the mechanical properties of Atlantis and Procera™ (Nobel Biocare)* zirconia abutments, and found superior results for the Atlantis abutments in terms of strength and probability to survive occlusal forces¹⁷.

*Atlantis™, VAD™, Astra Tech Implant System™, Astra Tech BioManagement Complex™, Atlantis Gemini™ and Atlantis Gemini+™ are trademarks of Astra Tech AB, all other trademarks are the property of respective owners.

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Reprints can be ordered from references marked with ID No.

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