

# ATLANTIS™ CAD/CAM patient-specific abutments

ATLANTIS abutments are patient-specific products for cement-, screw-, and attachment-retained implant restorations. The abutments are comprised of a unique combination of four key features, summarized under the term ATLANTIS Abutment BioDesign Matrix. Together the key features allow for the design and production of consistent, high-quality, patient-specific abutments for all major implant systems.

Using the ATLANTIS VAD (Virtual Abutment Design) software, the abutments are individually designed based on the desired final tooth shape for a functional and esthetic result. Moreover, shape and emergence profile are based on the individual patients anatomy, which provides a foundation for optimal support for soft tissue sculpturing and adaptation to the final restoration. The customized connections provide a strong and stable fit, and they are available for all major implant systems, including ANKYLOS, ASTRA TECH Implant System and XiVE.

The clinical use of ATLANTIS Abutments has been described in case reports<sup>1-24</sup> and clinical studies<sup>25-33</sup> where esthetic results for titanium<sup>3-10, 12, 14, 16, 29, 30, 32</sup>, gold-shaded titanium<sup>19, 20, 28, 30-32</sup>, and zirconia<sup>11, 13, 15, 18, 21, 25, 27, 29, 30, 33</sup> abutments are reported. Clinical documentation on the ATLANTIS abutment reports on re-establishment and maintenance of the papilla<sup>7, 11, 26, 32</sup>, establishment of an optimal soft tissue contour and emergence profile<sup>3, 8, 11, 12</sup> and patient satisfaction<sup>7, 17, 27, 29</sup>. Advantages such as reduced chairtime<sup>14</sup>, cost-effective and simplified treatment procedures<sup>10</sup>, and reduced number of impression taking with duplicate abutments<sup>3-5, 12</sup> have also been described.

Experimental studies report on different aspects of the ATLANTIS abutments<sup>34-42</sup>; including ideal fit between abutment and implant<sup>34, 35</sup>, accuracy of fabrication<sup>39</sup>, and ideal fit and retention of copings<sup>36</sup>. Moreover, good mechanical properties, including strength and probability to survive occlusal forces, have been reported for the ATLANTIS Abutment in zirconia<sup>39, 42</sup>.

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