



Atlantis®

When function and esthetics are prioritized

Atlantis® suprastructures for fixed solutions

 **Dentsply
Sirona**
Implants



Additive manufacturing

– adding layers for accuracy

Additive manufacturing – the latest in world class manufacturing – is a metal 3D printing technique, which provides new possibilities for advanced geometries. The suprastructures are produced by a “layer-upon-layer” technique, providing ultimate design control for Atlantis Bridge and Atlantis Hybrid for fixed screw-retained solutions.

New retention options

Additive manufacturing offers different surfaces retention for veneering. Choices include a standard additive manufacturing surface for ceramic veneering or an increased surface area for retention of composite layering.

The pin retention offers retention in areas where composite veneering will be applied, and the cell retention surface will provide up to 60% more bonding surface than a standard additive manufacturing surface.



Standard surface:

Preferred surface for ceramic or composite layering techniques.



Pin retention:

Increased retention area due to small pins, optimal for composite layering technique.



Cell retention (Basal/Occlusal):

Intricate surface shape – a net of cells are distributed on the surface of the framework to enlarge the contact area for composite veneering (only available for Atlantis Hybrid).



Optimized details

Additive manufacturing builds a detailed framework on the micron level, resulting in a more detailed design and finish.

The optimized surface details created by the process offers new retention options for veneering.

Choice of material

Titanium AM: CTE $9.9 \times 10^{-6} / K^{-1}$ (25-500°C)

Cobalt-chrome AM: CTE $14.0-14.5 \times 10^{-6} / K^{-1}$ (25-500°C)

Time-saving workflow

The delivery of highly detailed and sandblasted frameworks reduces the need of final adjustments in the dental laboratory.

Predictability

Application of engineering principles allows for design and production of consistent, high-quality, patient-specific implant suprastructures for all major implant systems.¹

¹. Refer to the Atlantis suprastructures implant compatibility chart.

A natural look

Atlantis offers a full range of implant suprastructures for removable and fixed prosthetic solutions – for all major implant systems.¹ When a patient's clinical situation requires a fixed prosthesis, Atlantis Bridge and Atlantis Hybrid provide a foundation to be able to design a safe, long-lasting and natural-looking solution that functions like real teeth.



Atlantis® Bridge

Atlantis Bridge – available in titanium and cobalt-chrome – is indicated for fixed prosthetics and provides a full-anatomical base for ceramic or composite layering techniques. The final restoration is screw-retained.



Atlantis® Hybrid

Atlantis Hybrid – available in titanium and cobalt-chrome – is indicated for fixed prosthetics and provides a surface with retention elements to be completed with prefabricated teeth and denture resin. The final restoration is screw-retained.

1. Refer to the Atlantis suprastructures implant compatibility chart.

Additive manufactured frameworks

– restorative advantages for implant-supported bridges

With additive manufacturing, the ability to print lightweight materials such as titanium opens up new restorative advantages.

The main advantage with additive manufacturing is individualized products with high precision and accuracy. It brings limited need for further treatment before veneering with composite or ceramic material.



The Atlantis Viewer allows the dental technician and the clinician to view the design of the Atlantis suprastructures and provide comments before final approval.



Atlantis suprastructure with opaquer applied. Additive manufacturing allows for pin retention to increase the mechanical retention area of the surface.



The exposed surface of the final restoration was polished prior to delivery to reduce plaque adhesion.



Final clinical situation, supported by Atlantis suprastructures produced utilizing additive manufacturing technique.

Note: the shape and contour of the suprastructure would not have been possible using milling technology.

Courtesy of Mr. Steve Campbell, CDT, Nexus Dental, Harrogate, United Kingdom and Dr. Martin Wanendeya, BDS, DiplImpDent RCS ENG (Adv. Cert), London, United Kingdom

“For me, the consistency of the fit, the variety of materials, the ability to view and edit frameworks before production, and the exceptional customer support make Atlantis the leader in patient-specific suprastructures and abutments. Now, together with the ability to print titanium in a highly detailed 3D printing technique, they raise the quality once again.”

Dr. Martin Wanendeya BDS
DiplImpDent RCS ENG (Adv. Cert)
London, United Kingdom

“We have loved the superior accuracy and consistency of milled frameworks for years, but there have always been limits to what could be produced using traditional milling technology.

The additive manufacturing 3D printing technology allows us to create a perfect design and surface finish for very tricky cases. It permits a world of new design possibilities to create ideal suprastructures regardless of selected layering material.”

Mr. Steve Campbell, CDT,
Nexus Dental, Harrogate, United Kingdom

Angulation up to
30 degrees

The crucial angle

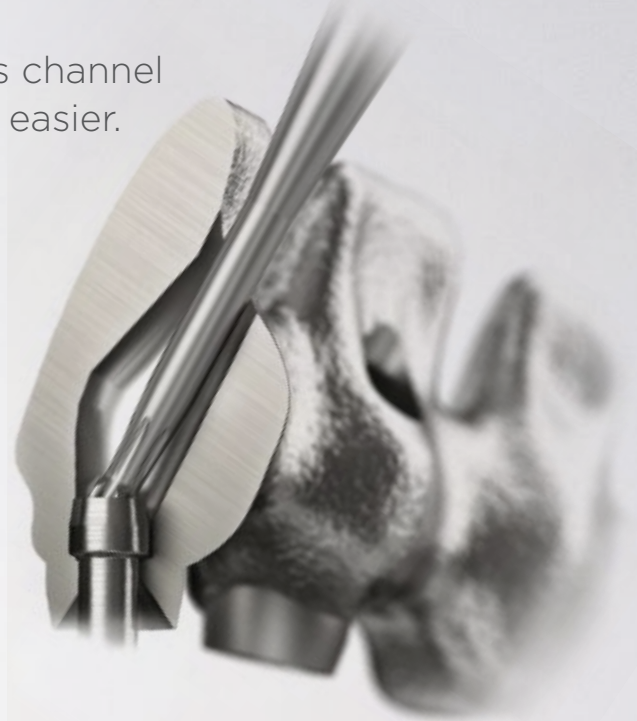
Optimal positioning of the screw access channel improves esthetics and makes handling easier.

Angling the screw access channel allows the screw access hole to be optimally positioned, improving the function and esthetics of the Atlantis Bridge and Atlantis Hybrid restoration.

The channel can be angled up to 30 degrees off the implant/abutment axis.



*Courtesy of Dr. Sissel Heggdalsvik,
Dr. Per-Johan Halvorsen
and MDT Svein Thorstensen.*



Easier handling – optimized screw head and screwdriver design

Every connection with angulated access is supplied with a specially designed Atlantis suprastructure prosthetic screw. Accompanying the screw(s) is a hexalobular screwdriver that simplifies engagement and ensures insertion and rotational forces are applied perpendicularly to the screw axis.



Reliability you can count on

By choosing Atlantis, you can be assured that the prosthetic solutions you receive are of the highest quality, safety and reliability. This is why Atlantis patient-specific prosthetic solutions come with an exclusive and industry-leading comprehensive warranty program.

Unique experience in design

Our confidence is based on our extensive design history and the delivery of more than two million Atlantis abutments and more than half-a-million Atlantis suprastructures globally.

Extensive research and development

Atlantis products and services are supported by years of research and use, continued enhancements in production and manufacturing, and industry-leading innovation.

Precision production technologies

Atlantis patient-specific prosthetic solutions are produced and quality assured at state-of-the-art production facilities in Europe and North America. These facilities are ISO certified and regularly inspected for production quality and efficiency.

Comprehensive warranty

Every Atlantis product delivered is backed by a comprehensive warranty for your peace of mind.¹

¹ Subject to the terms and conditions of the Atlantis warranty.

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About Dentsply Sirona Implants

Dentsply Sirona Implants offers comprehensive solutions for all phases of implant therapy, including Ankylos®, Astra Tech Implant System® and Xive® implant lines, digital technologies, such as Atlantis® patient-specific solutions and Simplant® guided surgery, Symbios® regenerative solutions, and professional and business development programs, such as STEPPS™. Dentsply Sirona Implants creates value for dental professionals and allows for predictable and lasting implant treatment outcomes, resulting in enhanced quality of life for patients.

About Dentsply Sirona

Dentsply Sirona is the world's largest manufacturer of professional dental products and technologies, with a 130-year history of innovation and service to the dental industry and patients worldwide. Dentsply Sirona develops, manufactures, and markets a comprehensive solutions offering including dental and oral health products as well as other consumable medical devices under a strong portfolio of world class brands. As The Dental Solutions Company™, Dentsply Sirona's products provide innovative, high-quality and effective solutions to advance patient care and deliver better, safer and faster dentistry. Dentsply Sirona's global headquarters is located in York, Pennsylvania, and the international headquarters is based in Salzburg, Austria. The company's shares are listed in the United States on NASDAQ under the symbol XRAY.

Visit www.dentsplysirona.com for more information about Dentsply Sirona and its products.