

Astra Tech Implant System®

Simplicity without compromise —Astra Tech Implant System® EV





Join the EVolution

Simplicity without compromise

We are pleased to introduce the next step in the continuous evolution of the Astra Tech Implant System.

The design philosophy of the Astra Tech Implant System EV is based on the natural dentition utilizing a site-specific, crown-down approach supported by an intuitive surgical protocol and a simple prosthetic workflow, for increased confidence and satisfaction for all members of the treatment team.

- Versatile implant designs including straight, conical, sloped, short, narrow and wide, using only one surgical tray
- Flexible drilling protocol allows for preferred primary stability
- Restorative components including round and triangular options supporting soft tissue sculpturing
- Unique interface with one-position-only^{*} placement for:
 - Atlantis patient-specific abutments
 - Self-guiding^{*} impression components that require only one hand for precise seating

The foundation of this evolutionary step remains the unique Astra Tech Implant System BioManagement Complex, well-documented for its long-term marginal bone maintenance and esthetic results.



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A continuous evolution

Our groundbreaking innovations are the result of knowledge and understanding of the biological and clinical processes involved in dental implant therapy.

2007

Atlantis patient-specific, CAD/CAM abutments introduced for the Astra Tech Implant System.

1989

The idea of blasting the implant surface with titanium dioxide particles to increase bone growth and osseo-integration is presented and the TiOblast surface is born.

1985

Clinical use of the first generation of implants with Conical Seal Design and Connective Contour is initiated in a study at the Karolinska University Hospital in Stockholm, Sweden.

1990

The concept of a a fluoride modified implant surface to help speed up the osseointegration process is conceived by a team at the University of Oslo, Norway. As a result, the first experimental pre-clinical studies on OsseoSpeed are initiated in 1993. In 2000, the first patient receives an OsseoSpeed implant at the University of Oslo. The first and only chemically modified implant surface - OsseoSpeed - is launched in 2004 at EAO in Paris.

1991

The idea of minute threads on the implant neck to ensure positive biomechanical bone stimulation and maintained marginal bone level is born – MicroThread. After comparing 840 threads of different shapes and sizes, the optimal profile for positive stress distribution is identified.

2010

OsseoSpeed TX is launched. TX stands for tapered apex and it is introduced on the complete implant assortment.

2011

OsseoSpeed TX Profile, the unique, patented implant that is anatomically designed for sloped ridges, is introduced.

2014

Introduction of the Astra Tech Implant System EV. The design philosophy of the implant system is based on the natural dentition utilizing a site-specific, crown-down approach.

Featuring a unique interface* with one-position-only placement for Atlantis patient-specific, CAD/CAM abutments.

Function, beauty and biology in perfect harmony

The unique combination of interdependent features of the Astra Tech Implant System BioManagement Complex ensures a reliable, predictable and esthetic result both in the short and long term.

Astra Tech Implant System BioManagement Complex®

OsseoSpeed® - more bone more rapidly

A chemically modified titanium surface with a unique nanoscale topography that stimulates early bone healing and speeds up the bone healing process.

MicroThread[®] - biomechanical bone stimulation

Minute threads on implant neck that offer optimal load distribution and stress values.

Conical Seal Design™ - a strong and stable fit

A conical connection that seals off the interior of the implant from the surrounding tissue, minimizing micromovements and microleakage.

Connective Contour™ - increased soft tissue contact zone and volume

The unique contour that is created when you connect the abutment to the implant.

Uncompromised results

Many years of research, science and documentation have revealed that the marginal bone level around the Astra Tech Implant System is well maintained. In fact, the average marginal bone reduction is only 0.3 millimeters* from the time of implant placement and from time of loading. And that figure still remains after 5 years.



Marginal bone maintenance with Astra Tech Implant System®

In the literature, it has been concluded that the Astra Tech Implant System maintains the bone even better than the current standard norm for success**.

*Astra Tech Implant System level based on data from more than 60 articles (published in English, peer-reviewed journals) presenting radiological data on study cohorts of no less than 10 patients receiving standard surgical procedures and followed for minimum 1 year after loading. Literature search September 2014.

** Standard norm (less than 1 mm bone loss during the first year of loading and less than 0.2 mm annually thereafter, to level out at approximately -1.5 mm after 5 years of loading) according to: Albrektsson T. et al., Int J Oral Maxillofac Implants 1986;1(1):11-25, Albrektsson T. and Zarb GA., Int J Prosthodont 1993;6(2):95-105, Roos J. et al., Int J Oral Maxillofac Implants 1997;12(4):504-514.

For a complete publication list, visit dentsplyimplants.com/science

A site-specific, crown-down approach

The success of an implant treatment is defined not only by function, but also by esthetics. The design philosophy of the Astra Tech Implant System EV is based on the natural dentition and utilizes a sitespecific, crown-down approach with the desired end result in mind to help ensure a successful outcome.

Multiple considerations are required for each individual tooth; the support needed for the final restoration in the particular position, soft-tissue healing, and implant design and size.

The implant assortment provides versatility for meeting the needs of each individual site. This is further supported by corresponding restorative components designed for optimized soft-tissue management and long-term function and esthetics.



Components are designed to support the crown-down philosophy.

Site-specific restorative components including round and triangular options.





Options for capturing the sculptured soft tissue.

The crown-down planning is supported by the innovative interface providing one-position-only^{*} placement of Atlantis patient-specific abutments.

Versatile implant assortment.



* Patent pending

Surgical simplicity and flexibility

Versatile implant assortment

The Astra Tech Implant System EV consists of a unique range of OsseoSpeed EV implants, including solutions for:

- Limited vertical bone height
- Narrow horizontal and wide spaces
- Sloped ridge situations

This allows you to easily and efficiently manage and adapt to different challenges as they arise, including:

- One- and two-stage surgery
- Immediate and early loading



Versatile implant assortment including straight, conical and sloped implants.

Flexible drilling protocol that allows for preferred primary stability

The drilling procedure is made easy by using colorcoding and a simple numbering system. The options within the drilling protocol help ensure proper preparation of the marginal bone and allow for the preferred level of primary stability to be achieved.

The protocol includes the flexibility of a wider osteotomy preparation apically or along the entire osteotomy, as needed.

The Step Drill design provides tactile control and guidance. The excellent cutting properties ensure efficient site preparation.



The flexible drilling protocol allows for the preferred primary stability to be achieved.



One surgical tray - three overlay options

The surgical tray design with three interchangeable overlays* allows for adaption of tray content according to your clinical preferences.

The color-coded tray has an intuitive layout for ease of use, effective handling throughout the surgical procedure and accurate communication among the surgical team.

In addition, the grommet-free tray design simplifies the cleaning process.



Overlay 1

Accommodates all implant lengths and designs for OsseoSpeed EV straight and conical implants including OsseoSpeed Profile EV for the most commonly used implant diameters.



Overlay 2

Accommodates the complete range of diameters for OsseoSpeed EV straight and conical implants, including OsseoSpeed Profile EV, lengths 8–17 mm.

* Patent pending

Restorative ease

Solutions for all restorative needs

The Astra Tech Implant System EV includes an extensive restorative assortment including patientspecific and a wide range of pre-fabricated abutments. Utilizing a site-specific, crown-down approach, these components are designed to help support all clinical situations and soft tissue sculpturing requirements for final restorations.

These solutions are also available in a choice of materials to support the planned final restoration and esthetic demand.



Wide range of pre-fabricated abutments for cement-, screw- and attachment-retained restorations.



Atlantis suprastructures bars and bridges.

Atlantis patient-specific abutments.



Color-coded abutment screws.

One system - one torque*

All final abutments are designed for one tightening torque value of 25 Ncm for simplicity reasons. In addition, each abutment screw is optimally designed to ensure correct pre-load and a stable screw joint over time.

Unique interface with one-position-only* placement

Atlantis® patient-specific CAD/CAM abutments

For ease of use, the Astra Tech Implant System EV features an innovative, one-position-only* placement for Atlantis patient-specific abutments.

Self-guiding* impression components

Self-guiding* impression components require only one hand for precise seating. When tightening the screw, the component rotates into position and engages into the implant only when correctly seated. This innovative design provides a predictable and time-efficient installation procedure.

In addition, the Implant Pick-up Design EV is available for capturing individualized, sculptured soft-tissue shapes.



Self-guiding* color-coded components for open- and closedtray impression taking.

One interface - three indexing solutions

The Astra Tech Implant System EV offers a unique interface with one-position-only^{*} for Atlantis patient-specific abutments. The interface design also allows for the flexibility of six-position indexing of pre-fabricated abutments, while indexfree abutments can be seated in any position.

One-position-only Six-position

Index free

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The interface design allows for a number of indexing options depending on the component selected.

* Patent pending

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Astra Tech Implant System BioManagement Complex™

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For the complete reference list, see www.dentsplysirona.com

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.

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