bicon®
DENTAL IMPLANTS

THE HISTORY OF THE **BICON DESIGN**

OVER 29 YEARS OF
CONTINUOUS CLINICAL SUCCESS

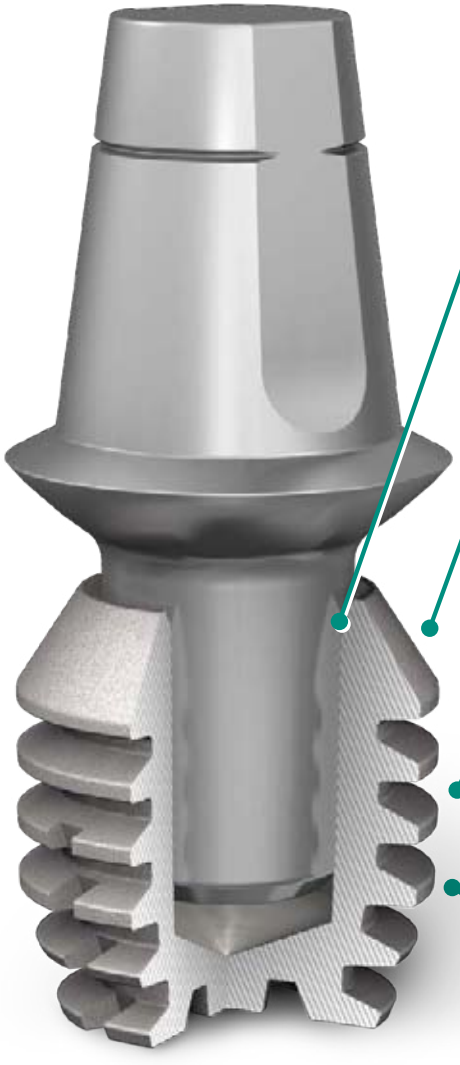
THE BICON SYSTEM

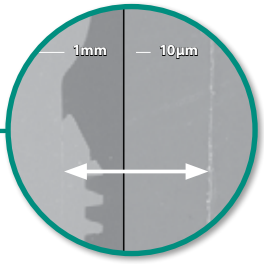
RESTORATIVE FLEXIBILITY

Since 1985 » Bicon offers a complete selection of abutments providing for exceptional restorative flexibility and platform switching. All Bicon abutments are completely interchangeable, and all benefit from the unique 360˚ of universal positioning provided by Bicon's locking taper connection. Once clinicians appreciate what 360˚ of abutment positioning can do, implant dentistry will never again be the same for them.

EXTRA-ORAL CEMENTATION & THE IAC®

Since 1985 » With the elimination of screws, Bicon's restorative procedures are conventional, requiring only standard impression techniques and allowing for intra-oral or extra-oral cementation techniques. Because of Bicon's 360˚ of universal abutment positioning, Bicon introduced the revolutionary Integrated Abutment Crown™ (IAC®), a screwless and fully retrievable restoration which affords a guaranteed aesthetic subgingival crown margin for every restoration, with no extra effort or expense.

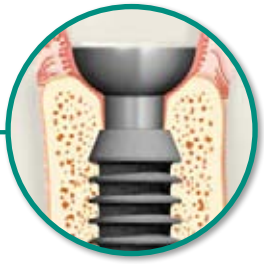




1.5˚ LOCKING TAPER

Since 1985 » Bicon's 1.5 degree locking taper connection provides a proven bacterial seal at the implant to abutment interface, with a microgap of less than 0.5 microns. Bicon's bacterial seal avoids the microbial leakage issues that can result in inflammation of the soft tissue around an implant, which could lead to not only bone loss around the implant but also to the loss of the implant itself.

Image courtesy of Ziedonis Skobe, PhD, Forsyth Institute and Harvard University, Boston, MA and Thomas G.H. Diekwisch, DDS, PhD, UIC College of Dentistry, Chicago, IL

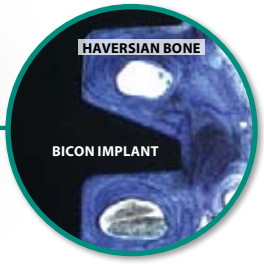


SLOPING SHOULDER

Since 1985 » Bicon's sloping shoulder affords more flexibility at the time of implant placement and provides for impressive bone maintenance. It also provides more room for bone over the implant, which provides support for the interdental papillae, enabling aesthetic gingival contours to be easily and consistently achieved. Inherent in the Bicon design is platform switching — complete interchangeability of abutment diameters and sensible biological width.

SHORT® IMPLANTS

Since 1985 » Bicon SHORT® Implants maximize implant placement possibilities and minimize the need for grafting procedures. With Bicon, longer implant lengths are not necessarily better. For many clinical situations, shorter implants offer a better solution.



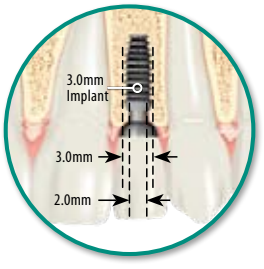
PLATEAU DESIGN

Since 1985 » The plateau or fin design offers at least 30% more surface area than a screw implant of the same dimensions and allows for the callus formation of mature haversian bone between the fins of the implant. This cortical-like bone forms at a faster rate of 10–50 microns per day in comparison to the appositional bone around non-plateaued implants, which forms at a slower rate of 1–3 microns per day.

Image courtesy of Paulo G. Coelho, Ph.D., New York University

LOW-SPEED DRILLING

Since 1985 » Low-speed drilling at 50 RPM without irrigation allows a clinician to harvest the patient's own bone with titanium reamers for autogenous grafting. Slow drilling is forgiving and is unique to Bicon. It also greatly extends the longevity of the titanium reamers, reducing costs.



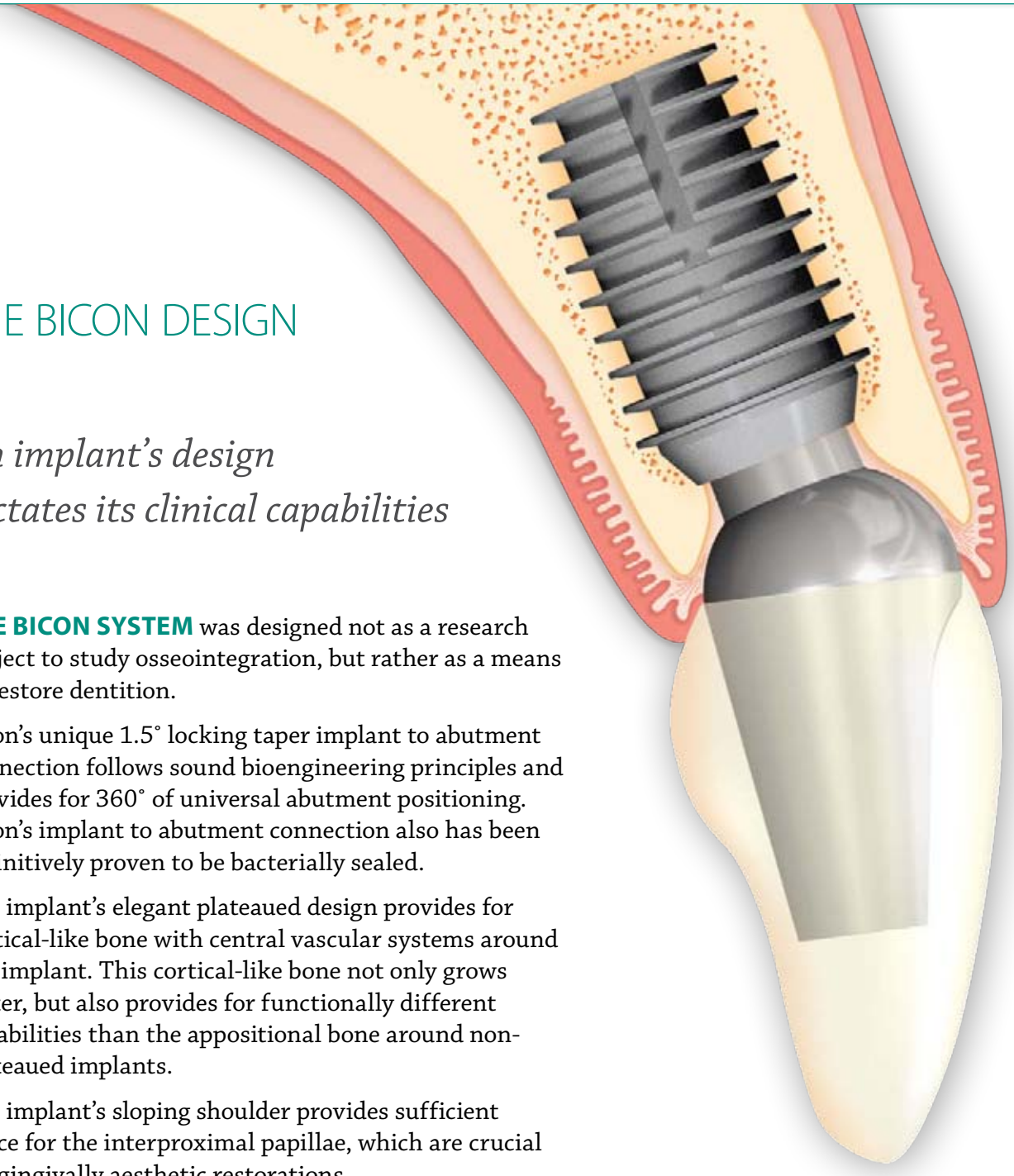
NARROW® IMPLANTS

Since 1985 » Bicon NARROW® Implants facilitate the restoration of missing maxillary lateral incisors as well as individual mandibular incisors. The sloping shoulder of the Bicon implant enhances crestal bone preservation while providing space for the interdental papillae — offering the opportunity for natural-looking gingival aesthetics.

A simple and elegant design that has remained unchanged and in continuous use since 1985.

THE BICON DESIGN

An implant's design dictates its clinical capabilities



THE BICON SYSTEM was designed not as a research project to study osseointegration, but rather as a means to restore dentition.

Bicon's unique 1.5˚ locking taper implant to abutment connection follows sound bioengineering principles and provides for 360˚ of universal abutment positioning. Bicon's implant to abutment connection also has been definitively proven to be bacterially sealed.

The implant's elegant plateaued design provides for cortical-like bone with central vascular systems around the implant. This cortical-like bone not only grows faster, but also provides for functionally different capabilities than the appositional bone around non-plateaued implants.

The implant's sloping shoulder provides sufficient space for the interproximal papillae, which are crucial for gingivally aesthetic restorations.

Since its introduction in 1985, the Bicon design has benefited from a sensible biological width, which is only now—*over 30 years later*—being promoted as platform switching.

For these reasons, Bicon clinicians and their patients do not experience the frustrations and limitations inherent in other implant designs.

The History of the Bicon Design

Initial research began in 1968, with innovations that were years ahead of "conventional" designs.

Thomas Driskell

Thomas Driskell initiates his dental implant research.

US Army Medical Research and Development Command Dental Research Division funds the development of a free standing single tooth replacement implant that could be placed into a fresh extraction site, and the development of synthetic bone grafting materials for the repair of avulsive wounds.

FIRST Wide-bodied implants.
FIRST Pre-formed angled abutments.

4.0 x 8.0mm SHORT® Implant

3.5 x 8.0mm NARROW® Implant

DB Precision Implant

SHORT IMPLANTS

Bicon's implant system is introduced, including highly successful 8.0mm length implants which were considered quite short at the time.

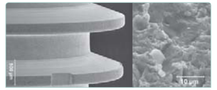
NARROW IMPLANTS

The Bicon system has offered 3.5mm NARROW® Implants since 1985.

Driskell Bio-Engineering is established.

Driskell Bio-Engineering receives FDA permission to market the DB Precision Fin implant system. Bicon offers this same design today.

Now available in the USA.



Bicon's Grit-Blasted, Acid-Treated, Passivated Surface

Sloping Shoulder

Locking Taper

FIRST Grit-blasted, acid-treated, passivated implants in sterile packaging, known today as Bicon's Integra-Ti™.

FIRST Titanium instrumentation.

FIRST Unique, 50RPM low-speed drills for socket preparation which harvest bone and do not require irrigation.

FIRST Unique sloping shoulder concept designed to help maintain crestal bone height and interdental papillae.

6.0 x 8.0mm SHORT® Implant

6.0 x 5.7mm SHORT® Implant

6.0 x 8.0mm SHORT® Implant receives FDA clearance.

Clinical studies begin for Bicon's 5.7mm SHORT® Implant.

Bicon is now available in Ireland, Palestine, South Korea, Spain, United Kingdom, and Venezuela.

Bicon is now available in Canada, Cyprus, France, Greece, Jordan, Lebanon, Portugal, and Turkey.

Bicon is now available in Austria, Iran, and Taiwan.

Stealth Shouldered Abutment

4.5 x 8.0mm SHORT® Implant

Bicon's immediate stabilization and function technique is introduced.

4.5mm diameter implants receive FDA clearance.

Bicon introduces Stealth Shouldered Abutments.

Bicon is now available in Ecuador, Honduras, Pakistan, and Uganda.

Bicon World Headquarters Boston, MA USA

Completion of state-of-the-art clinical and teaching facility.

Bicon adopts the trade names Integra-Ti™ for its unique grit-blasted implants, and Integra-CP™ for its unique HA-coated implants.

CE SyntheGraft™ receives CE mark.

Bicon is now available in Bangladesh, Macedonia, Moldova, and United Arab Emirates.

Stealth Transitional Implant

Bicon Transitional Implant System receives FDA clearance.

Worldwide distribution continues to expand, now reaching over 50 countries.

Bicon is now available in Bolivia, Indonesia, Malaysia, Mexico, Netherlands, Nigeria, Peru, Philippines, Romania, Russia, Saudi Arabia, and Singapore.

5.0 x 6.0mm SHORT® Implant

Brevis™ Abutment

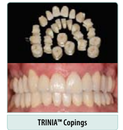
BREVIS™

Bicon introduces the Brevis™ Overdenture System.

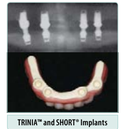
5.0 x 6.0mm SHORT® Implant receives FDA clearance.

Bicon is now available in China.

TRINIA™ Partial



TRINIA™ Copings



TRINIA™ and SHORT® Implants

TRINIA™

The metal-free dental CAD/CAM solution

Introduction of TRINIA™, the metal-free dental CAD/CAM solution.

Bicon is now available in Tunisia and Mauritius.

FIRST Fixed on SHORT® metal-free prosthesis.

CAD/CAM IAC™

CAD/CAM Bridge

Fabrication of fully retrievable and screwless IAC® restorations utilizing CAD/CAM technology, and metal-free materials.

5.0mm SHORT® Implants, 3.0 x 8.0mm NARROW® Implants and the MAX 2.5™ Implant System receive CE mark.

10-year anniversary of the Integrated Abutment Crown™ (IAC®).

Worldwide distribution expands to over 75 countries including Morocco.

29th Anniversary

Bicon celebrates 29 years of clinical success — the shortest implants with the longest history.

17-year anniversary of 5.7mm length SHORT® Implants.

1968 1970 1974 1975 1981 1985 1987 1988 1992 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Fin or Plateau Design

Studies reveal highly effective load transmission from the implant to the surrounding bone by means of an osseointegrated multi-finned design. This design was shown to be inherently more effective for the distribution of occlusal forces to the bone than screws or any other mechanical load transmitting design used by other implant manufacturers.

Driskell demonstrates histologically a direct bone to implant interface using free-standing tooth implants in Rhesus Monkeys. This phenomenon is now known as osseointegration.

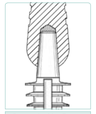
Initial research begins on Beta-Tricalcium Phosphate, a synthetic bone graft material.

Synthodont Implant

Driskell introduces the Synthodont implant. It is the first truly successful, free-standing osseointegrated single tooth dental implant, specifically designed and sold for use in humans on a large scale, which has a one piece, non-submergible design.

Stryker purchases Driskell Bio-Engineering's DB Precision Fin implant system.

Titanodont Implant



Reverse Locking Taper

Driskell introduces the Titanodont implant, made of titanium alloy (Ti6Al4V-ELI) incorporating the same design features as the Synthodont.

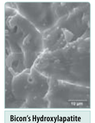
FIRST Mechanically textured and acid etched bone/implant surfaces.

FIRST Complete interchangeability of abutment diameters, providing sensible biological width and offering the concept now being described as platform switching.

FIRST Locking taper implant to abutment connection providing 360° of universal abutment positioning and a bacterial seal.

FIRST Recommended the use of cemented restorations rather than screw-retained restorations.

Bicon design is now available in Italy.



Bicon's Hydroxylapatite (HA) Surface

Bicon's Integra-CP™ implants are introduced.

bicon DENTAL IMPLANTS

BICON IS ESTABLISHED.

Bicon purchases Stryker's Precision Fin Implant System.

CE Bicon receives the CE mark.

Bicon is now available in Argentina, Bulgaria, Colombia, Panama, and South Africa.

Bicon Website

Bicon creates www.bicon.com

Bicon introduces one-stage surgical procedure.

3.0mm well implant is introduced.

Bicon is now available in Australia, Egypt, Germany, Japan, Papua New Guinea, Switzerland, and Thailand.

3.0mm Well Implant

6.0 x 5.7mm SHORT® Implant

6.0 x 5.7mm SHORT® Implant receives FDA clearance.

Bicon is now available in Brazil, Dominican Republic, and Hong Kong.

IAC® INTEGRATED ABUTMENT CROWN

IAC®

FIRST Integrated Abutment Crown™ (IAC®) as well as the promotion of extra oral cementation of crowns.

SHORT® Implant US Patent No. 6,227,857 issued.

Bicon is now available in Barbados, India, Israel, and Kenya.

CE 6.0mm SHORT® Implants receive CE mark.

4.5 x 6.0mm SHORT® Implant

6.0 x 6.0mm SHORT® Implant

SyntheGraft™

4.5 x 6.0mm and 6.0 x 6.0mm SHORT® Implants receive FDA clearance.

SyntheGraft™

Pure Phase Beta-Tricalcium Phosphate

SyntheGraft™, a new formulation of pure phase Beta-Tricalcium Phosphate, receives FDA clearance.

3.0 x 8.0mm NARROW® Implant

3.0 x 8.0mm NARROW® Implant receives FDA clearance.

Bicon's 25th Anniversary.

Bicon is now available in Hungary and Denmark.

4.0 x 5.0mm SHORT® Implant

4.0 x 6.0mm SHORT® Implant

4.0 x 8.0mm MAX 2.5™ Implant

MAX 2.5™

MAXIMUM STRENGTH IN MINIMUM SPACE

MAX 2.5™ Implant System, 4.0 x 5.0mm, and 4.0 x 6.0mm SHORT®Implant receive FDA clearance.

Bicon is now available in Chile and El Salvador.

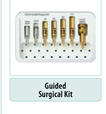
5.0 x 5.0mm SHORT® Implant

6.0 x 5.0mm SHORT® Implant

5.0 x 5.0mm and 6.0 x 5.0mm SHORT® Implants receive FDA clearance.

Bicon celebrates 40 years of research and development of its implant design.

Bicon is now available in Albania, Belgium, Norway, Poland and Ukraine.



Guided Surgical Kit

3.0 x 6.0mm NARROW®/SHORT® Implant

Bicon introduces its keyless Guided Surgery System.

3.0 x 6.0mm NARROW® and SHORT® Implant receives FDA clearance and CE mark.

Twenty year radiographic evidence highlights crestal bone gain.

Twenty-three year histological evidence demonstrates direct bone-to-implant contact and multiple haversian systems throughout.

20 Years

23 Years in Function

THE BICON DENTAL IMPLANT SYSTEM *is experiencing growing clinical acceptance throughout the world with distribution in over 75 countries. The system's unique and highly successful design and revolutionary clinical techniques continue to lead the trends of the implant market. The Bicon design has passed the test of time, while other systems are continuously undergoing revisions as they attempt to achieve the clinical benefits which have been inherent in Bicon's design since 1985.*

Since 1985 » Simple. Predictable. Profitable.

Bicon ◆ 501 Arborway ◆ Boston, MA 02130 ◆ USA ◆ www.bicon.com

bicon® DENTAL IMPLANTS