

Implant System

KD KeystoneDentalGroup

Innovation
Meets Aesthetics



GENESISTM
ACTIVE

GENESIS[®]
A KeystoneDentalGroup Brand

Premi Redef

The Aesthetic Solution

The GENESIS ACTIVE™ Implant System, a state-of-the-art surgical solution with a comprehensive, highly innovative restorative portfolio, is backed by over a decade of science. AnaTite™ and BioSpark™ surfaces deliver clinically proven aesthetic results with high primary and secondary stability. The GENESIS ACTIVE™ is a complete system designed for all implant patients and indications, including immediate implant placement and temporization.

Premium Redefined



Advanced Biological System

Designed for Marginal Bone Preservation

Proven Cutting-Edge Surface Treatments

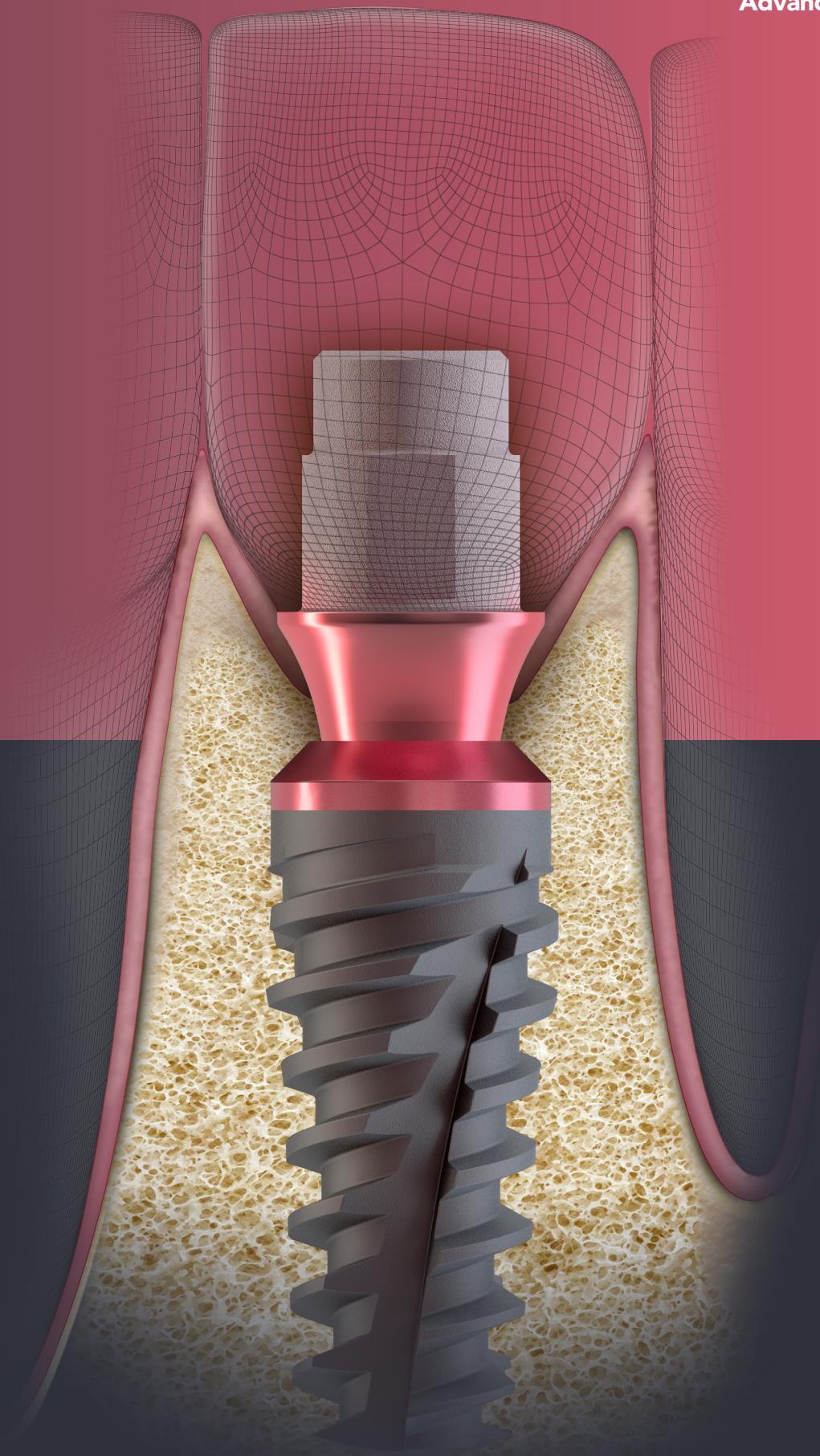
AnaTite™ is a gradual pink anodization process on the coronal aspect designed to emulate the hue of natural soft tissue. The BioSpark™ surface covers the remainder of the implant body, promoting bone growth and fast osseointegration, making it beneficial for immediate load protocols.

Secure Implant to Abutment Interface

The conical connection creates a seal against bacteria while offering high mechanical strength and platform switching to optimize bone preservation and healthy soft-tissue.^{1,2,3}

Innovation for Long-Term Aesthetics

The unique restorative options facilitate enhanced flexibility combined with pink concave emergence profiles, which improves soft-tissue aesthetics and volume.



GENESIS™ ACTIVE

Dual Surface Emulates Biology

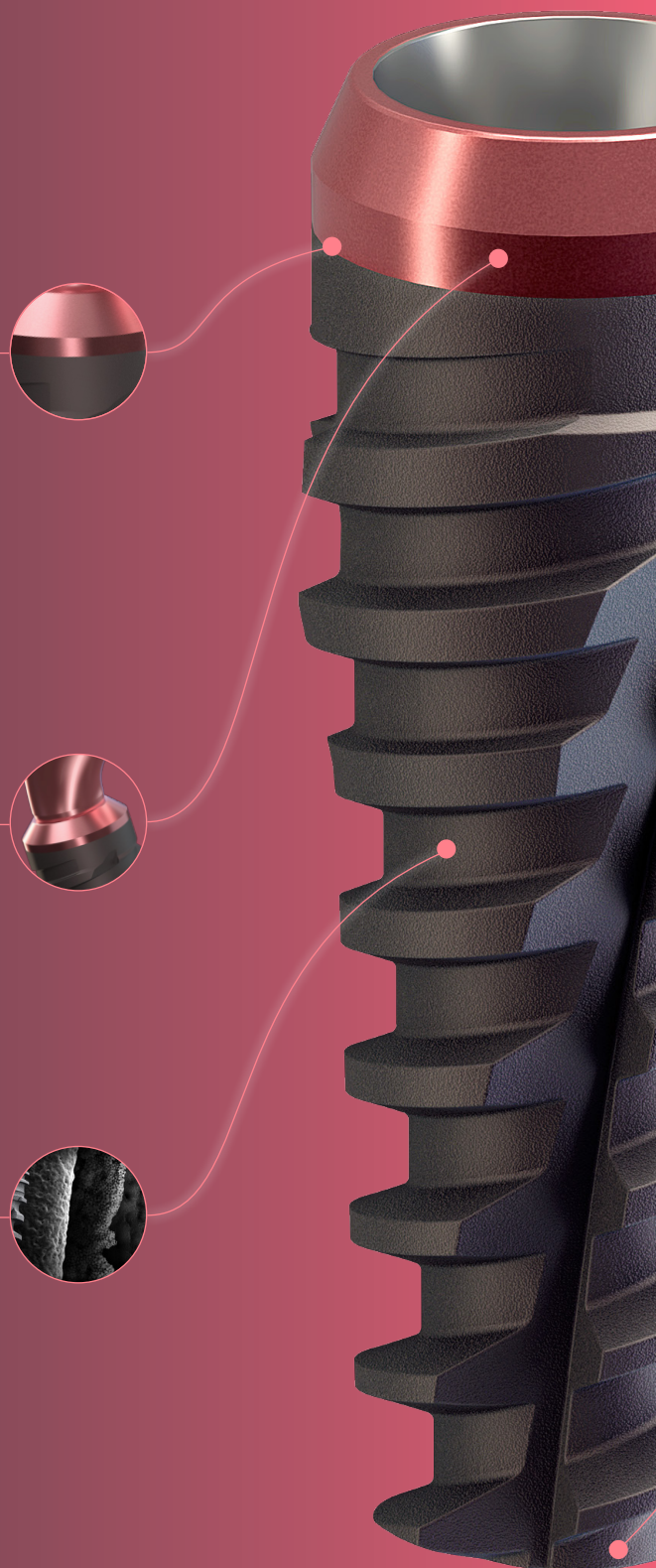
The combination of the AnaTite™ -treated collar and the scientifically engineered moderately rough topography of the GENESIS ACTIVE™ implant body stimulates soft-tissue and bone ingrowth.

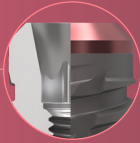
AnaTite™ Enhances Gingival Aesthetics

Pink anodization blends with the natural soft-tissue color while maintaining bone levels and enhancing the mucogingival seal.

BioSpark™ Mimics Natural Bone

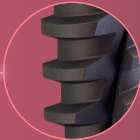
A three-step anodic spark deposition process produces a hydrophilic-, calcium- and phosphorus-enriched surface that mimics bone properties.





Conical Connection with Platform Switching

Offers a tightly sealed conical interface while providing precise implant positioning with its engaging feature. Designed for high mechanical strength and platform switching to optimize bone preservation and soft-tissue preservation.^{1,2,3}



Designed for High Primary Stability

Tapered Implant Body

The tapered implant body with double-lead and variable threads from the connection to implant apex secures high stability.

Aggressive Variable Threads

Aggressive cutting threads promote primary stability, and allow for bone anchoring in indications such as immediate loading, poor bone quality, and extraction sockets.

Active Apex

The active apex with enhanced cutting threads enables directional adjustments, providing optimal restorative orientation.^{4,5}

AnaTite™

Improved Soft-Tissue Aesthetic Results

AnaTite™ is a gradual pink anodization designed to mimic the lightness and purity of natural soft tissue.⁶ Multiple studies confirm the long-term advantage of pink-colored implants and prosthetic components over traditional titanium.^{7,8,9}

Proven Clinical Significance of Pink

"Using a pink-neck implant and a pink abutment would contribute positively to the overall esthetic outcome for an anterior implant."

8. Gil MS, Ishikawa-Nagai S, Elani HW, Da Silva JD, Kim DM, Tarnow D, Schulze-Späte U, Cleber S, Bittner N. Comparison of the Color Appearance of Peri-implant Soft Tissue with Natural Gingiva Using Anodized Pink-Neck Implants and Pink Abutments: A Prospective Clinical Trial.



Adapted from Ishikawa-Nagai S, Da Silva JD, Weber HP, Park SE. Optical phenomenon of peri-implant soft tissue. Part II. Preferred implant neck color to improve soft tissue aesthetics.¹⁰

Enhanced Soft-Tissue Seal

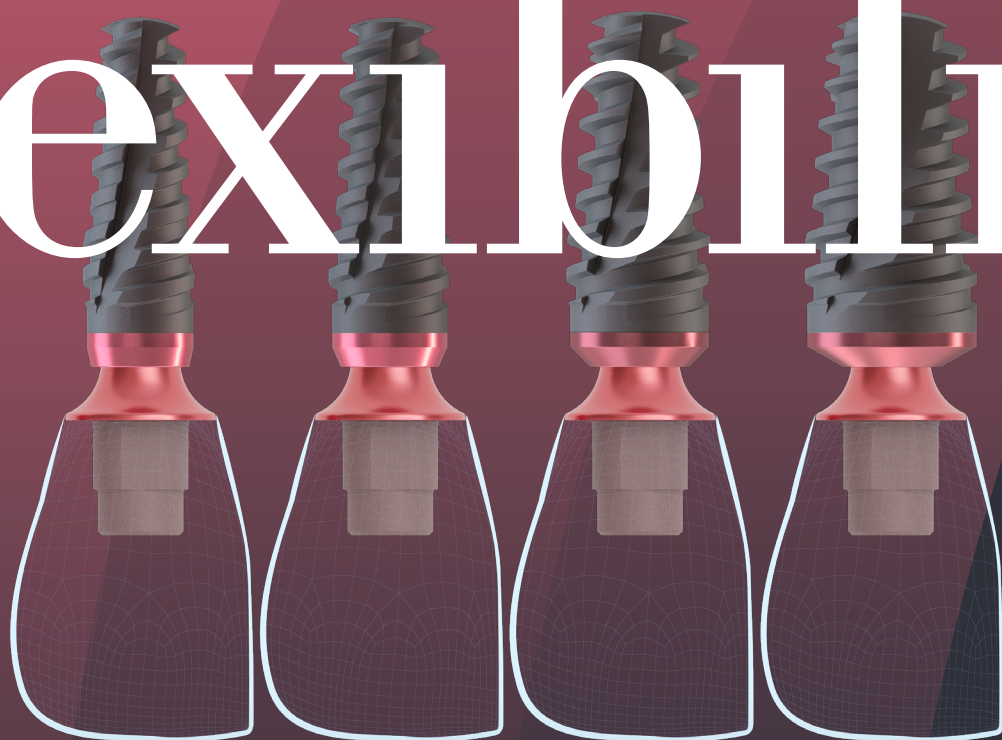
The anodization process has been shown to align collagen fibers perpendicular to the implant surface, enhancing the mucogingival seal and aesthetics.^{11,12,13}

BioSpark™

Macro Micro Nano Hydrophilic Surface

Hydrophilic, macro-, micro-, and nano- rough surface mimic natural bone, and the increased surface area is enriched with calcium and phosphorous ions to enhance osteogenesis. The BioSpark™ surface promotes bone growth and fast osseointegration, making it beneficial for immediate load protocols.^{14,15,16,17} The surface properties of BioSpark™ preserve hard and soft tissue.^{18,19,20,21}

Restorative Flexibility



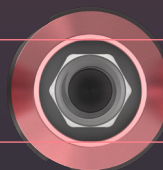
Ø 2.9 mm
Platform
Diameter



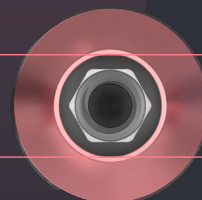
Ø 3.5 mm



Ø 3.8 mm



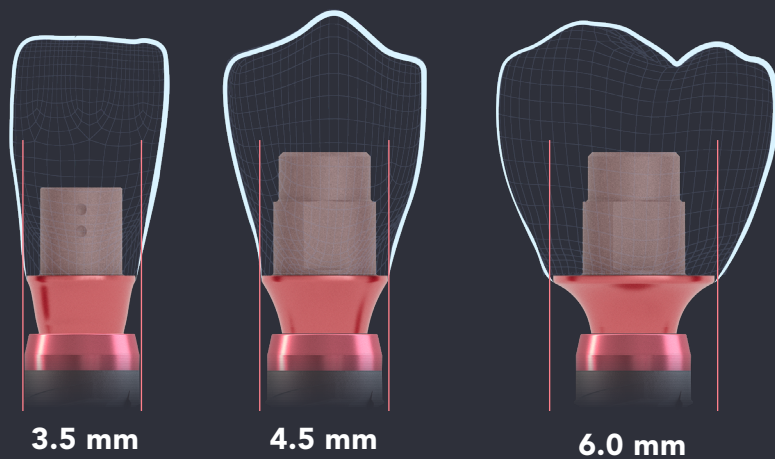
Ø 4.5 mm



Ø 5.5 mm

One Connection
Four Implant Diameters

Restorative Flexibility



Emergence Profile Diameters

One Connection Three Emergence Profiles Multiple Restorative Platforms

The prosthetically driven concave profile design on all prosthetic components increases soft-tissue volume and improves blood supply, thus supporting an optimal emergence profile.^{22,23,24,25} The three emergence profiles facilitate highly aesthetic restorations that follow natural tooth contours.

Premium Prosthetics



Innovative Multi-Unit Abutment Solutions

ANGLEBase® MUA

Simplifies and improves aesthetic and functional multi-unit restoration design by allowing the prosthetic screw access hole to be placed from 0° to 25° of angle correction in a 360° radius.

Enhanced Profile Design

Concave design improves soft-tissue volume thereby enhancing emergence profile aesthetics.

Reduced Bone Profiling

The innovative multi-unit abutment subgingival contour design reduces the need for bone milling and simplifies abutment seating.

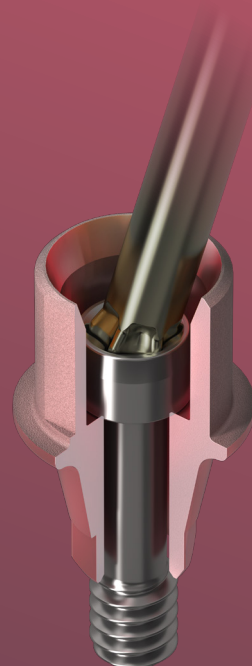
Angle Correction Solutions

ELLIPTIBase® Abutment

The innovative premium solution for areas of limited interdental space, such as mandibular incisors. In addition, it offers up to 20° angle correction for a screw-retained solution without compromising strength and material.

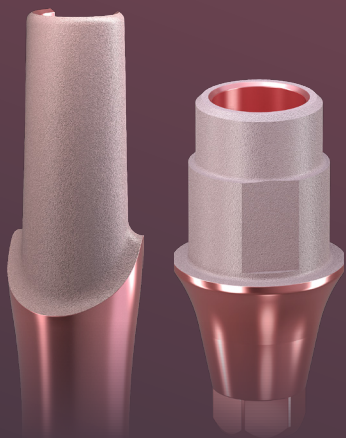
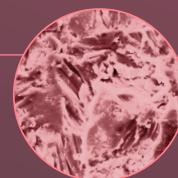
ANGLEBase® Direct to Implant Connection

Simplifies aesthetics and functional restorative outcomes in single tooth and multiple-unit restorations by allowing the abutment screw access hole to be placed from 0° to 25° of angle correction in a 360° radius.

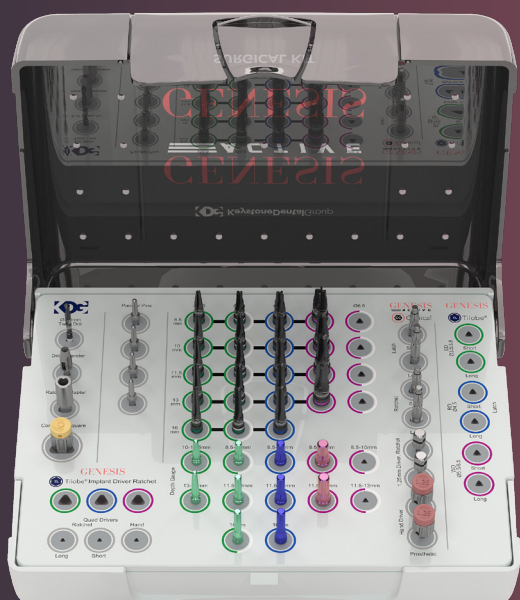


SelectGrip® Improves Restorative Adhesion

A new and innovative surface treatment applied to the cementation area of the abutment allows for improved adherence to the final prosthetic components. Verified up to five times greater adhesion of cemented components compared to untreated abutment surfaces.

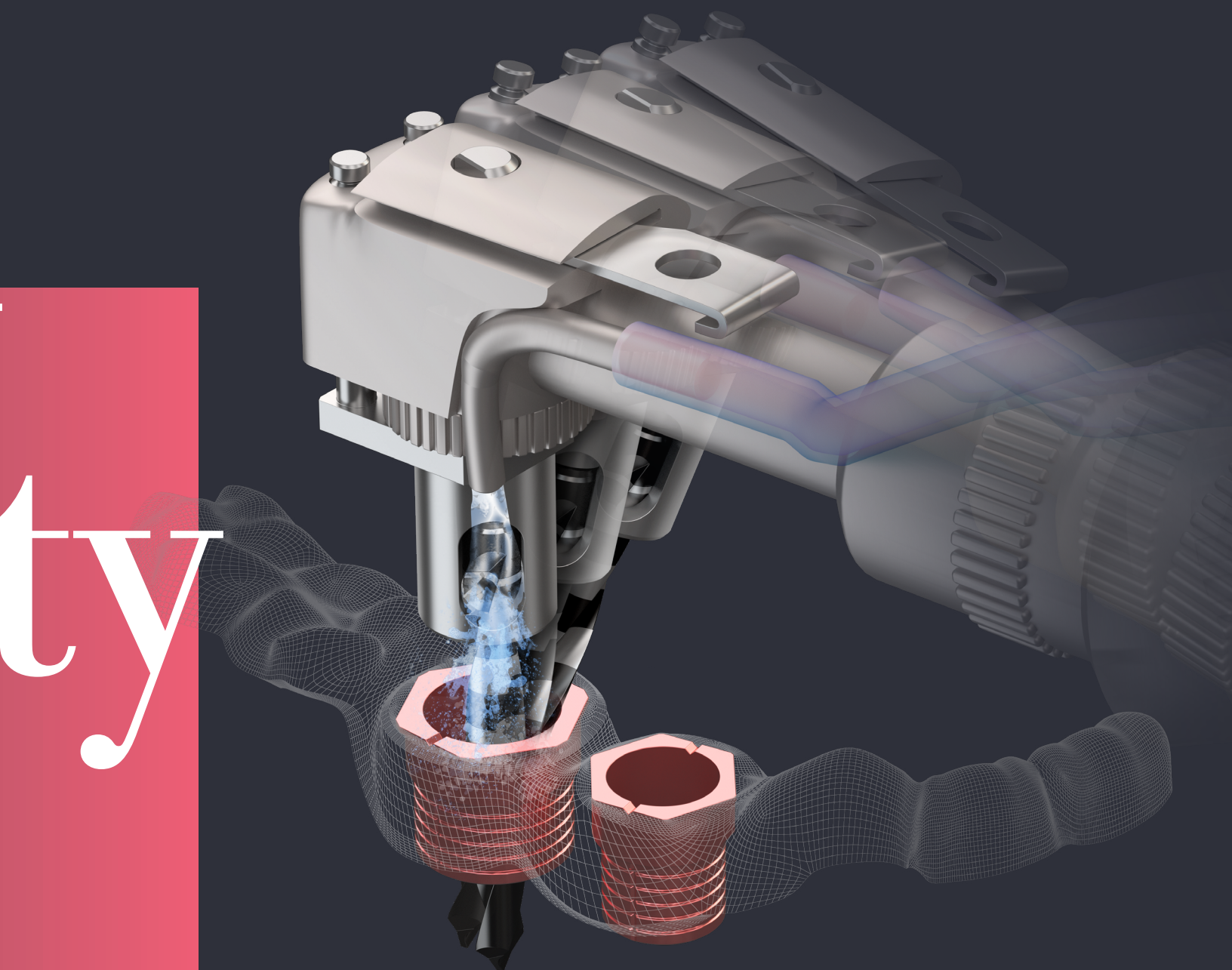


Surgical Simplicity



Improved Surgical Kit with DLC Coated Drills

The surgical kit is grommet-less for ease of cleaning and sterilizing. Diamond-like carbon (DLC) coated surgical drills provide an increase in surface hardness and reduces friction while the matte finish improves visibility of depth markings.



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Guided Surgical Innovation

The pioneering Digital Guidance Sleeve (DGS) engages into the handpiece and eliminates the need for drill guide keys. Increased entry-angle flexibility allows for access in limited-posterior interarch spaces. The DGS system design protects the osteotomy from inadvertent metal shavings while allowing for copious direct irrigation.

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References

1. M. Schmitt C, Nogueira Filho G, C. Tenenbaum H, Yuan Lai J, Brito C, Döring H, Nonhoff J. Performance of conical abutment (morse Taper) connection implants: A Systematic review. *J Biomed Mater Res Part A*: 102A: 552–574, 2014.
2. Sang-Woon L, Min-Sang C, Ji-Hye L, Lee-Ra C, Chan-Jin P. Joint stability of internal conical connection abutments with or without hexagon indexes: an in vitro study. *Journal of Dental Rehabilitation and Applied Science*, 10.14368/jdras.2020.36.2.95, 36, 2, 95-103, 2020.
3. Tsuruta K, Ayukawa Y, Matsuzaki T, Kihara M, Koyano K. The influence of implant-abutment connection on the screw loosening and microleakage. *Int. J. Implant Dent*. 2018, 4, 1–6.
4. Sun-Young Lee, Sung-Jun Kim, Hyun-Wook An, Hyun-Seung Kim, Dong-Guk Ha, Kyung-Ho Ryo, and Kwang-Bum Park. The effect of thread depth on the mechanical properties of the dental implant. *J Adv Prosthodont*. 2015 Apr; 7(2): 115–121.
5. Heba Abuhussein, Girogio Pagni, Alberto Rebaudi, Hom-Lay Wang. The effect of thread pattern upon implant osseointegration. *Clin Oral Implants Res*. 2010 Feb;21(2):129-36.
6. Park S, Da Silva J, Weber H, Ishikawa-Nagai S. Optical phenomenon of peri-implant soft tissue. Part I. Spectrophotometric assessment of natural tooth gingiva and peri-implant mucosa. *Clin Oral Implants Res*. 2007 Oct;18(5):569-74. Epub 2007 Jul 26.
7. Gil M, Ishikawa-Nagai S, Elani H. A prospective clinical trial to assess the optical efficacy of pink neck implants and pink abutments on soft tissue aesthetics. *J Esthet Restor Dent*. 2017;29(6):1-7.38.
8. Gil M, Ishikawa-Nagai S, Elani H, Da Silva J, Kim D, Tarnow D, Schulze-Späte U, Cleber S, Bittner N. Comparison of the Color Appearance of Peri-implant Soft Tissue with Natural Gingiva Using Anodized Pink-Neck Implants and Pink Abutments: A Prospective Clinical Trial. *Int J Oral Maxillofac Implants*. 2019 May/June;34(3):752–758.
9. Bittner N, Schulze-Späte U, Cleber S, Da Silva J, Kim D, Tarnow D, Ishikawa-Nagai S, Gil M. Comparison of Peri-implant Soft Tissue Color with the Use of Pink-Neck vs Gray Implants and Abutments Based on Soft Tissue Thickness: A 6-Month Follow-up Study. *Int J Prosthodont*. 2020 Jan/Feb;33(1):29-38.
10. Ishikawa-Nagai S, Da Silva J, Weber H, Park S. Optical phenomenon of peri-implant soft tissue. Part II. Preferred implant neck color to improve soft tissue aesthetics. *Clin Oral Impl Res*. 18, 2007; 575-580.
11. Schupbach P, Roland G. The defense architecture of the human periimplant mucosa: A histological study. *J Prosthet Dent* 2007; 97: S15-S25.
12. Zigterman B, Van den Borre C, Braem A, Mommaerts M. Titanium surface modifications and their soft tissue interface on nonkeratinized soft tissues—A systematic review. *Biointerphases*, Vol. 14, No. 4, Jul/Aug 2019.
13. Mussano F, Genova T, Laurenti M, Zicola E, Munaron L, Rivolo P, Mandraci P, Carossa S. Early Response of Fibroblasts and Epithelial Cells to Pink-Shaded Anodized Dental Implant Abutments: An In-vitro Study. *Int J Oral Maxillofac Implants*. 2018 May/June;33(3):571-579.
14. Giavaresi G, Fini M, Chiesa R, Giordano C, Sandrini E, Bianchi A, Ceribelli P, Giardino R. A novel multiphase anodic spark deposition coating for the improvement of orthopedic implant osseointegration: An experimental study in cortical bone of sheep. Published online 9 October 2007 in Wiley InterScience (www.interscience.wiley.com).
15. Giordano C, Sandrini E, Del Curto B, Signorelli E, Rondelli G, Di Silvio L. Titanium for osseointegration: Comparison between a novel biometric treatment and commercially exploited surfaces. *Journal of Applied Biomaterials and Biomechanics*, Volume: 2 issue: 1, page(s): 35-44 Issue published: January 1, 2004.
16. Giordano C, Chiesa R, Sandrini E, Cigada A, Giavaresi G, Fini M, Giardino R. Physical and biological characterizations of a novel multiphase anodic spark deposition coating to enhance implant osseointegration. *J Mater Sci Mater Med*. 2005 Dec;16(12):1221-9.
17. Chiesa R, Giavaresi G, Fini M, Sandrini E, Giordano C, Bianchi A, Giardino R. In-vitro and in-vivo performance of a novel surface treatment to enhance osseointegration of endosseous implants. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2007 Jun;103(6):745-56. Epub 2007 Jan 2.
18. Giordano C, Sandrini E, Busini V, Chiesa R, Fumagalli G, Giavaresi G, Fini M, Giardino R, Cigada A. A new chemical etching process to improve endosseous implant osseointegration: in-vitro evaluation on human osteoblast-like cells. *Int J Artif Organs*. 2006 Aug;29(8):772-780.
19. Grecchi F, Zolli-no I, Parafioriti A, Mineo G, Pricolo A, Carinci F. One-step oral rehabilitation by means of implants' insertion, Le Fort I, grafts, and immediate loading. *J Craniofac Surg*. 2009 Nov;20(6):2205-10.
20. Chiesa R, Sandrini E, Santin M, Rondelli G, Cigada A. Osteointegration of Titanium and Its Alloys by Anodic Spark Deposition and other Electrochemical Techniques: A Review. *J Appl Biomater Biomech*. 2003 May-Aug;1(2):91-107.
21. Giavaresi G, Chiesa R, Fini M, Sandrini E. Effect of a multiphase anodic spark deposition coating on the improvement of implant osseointegration in the osteopenic trabecular bone of sheep. *Int J Oral Maxillofac Implants*. 2008 Jul-Aug;23(4):659-68.
22. Redemagni M, Lomazzo C, Cremonesi S, Garlini G, Maiorana C. *European Journal of Esthetic Dentistry*. Volume 4. Number 4. Winter 2009.
23. López-López P, Mareque-Bueno J, Boquete-Castro A, Aguilar-Salvatierra Raya A, M Martínez-González J, L Calvo-Guirado J. *Clin Oral Implants Res*. 2016 Jan;27(1):90-6 doi:10.1111/crl.12516. Epub 2014 Oct 31.
24. Rompen E, Raepsaet N, Domsen O, Touati B, Van Dooren E. *The Journal of Prosthetic Dentistry*. Volume 97. Issue 6 supplement, June 2007, S119-S125.
25. Caram S, Huynh-Ba G, Schoolfield J, Jones A, Cochran D, Belser U. *Int J Oral Maxillofac Implants* 2014;29:1114–1122.



Keystone Dental makes a charitable donation to the American Cancer Society for every Genesis implant sold.