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Letter of Direction

If there's one word that defines **Radhex Implants®**, it's personality. With the knowledge and experience acquired over 18 years of existence, the company has become a benchmark in the dental implants sector, boasting sustained growth that further solidifies its position in the national market and its international projection. Its unique brand endows the system with various design options, all rooted in a comprehensive concept based on the highest performance standards that a dental implant can offer.

Our commitment to carrying out innovative projects, the expertise of our production team, and the service-oriented approach of our commercial team make it possible, year after year, for the company to continue evolving and positioning itself as a brand with clear values and identity markers. And if there's one thing ingrained in our DNA, it's our clear product vocation, with initiatives always focused on promoting the most advanced in terms of design and production, always under the auspices of scientific consensus. This is achieved through optimization of design and new lines of development, aimed at keeping us constantly up-to-date and offering our customers the widest range of existing alternatives for successful resolution of the clinical challenges presented on a case-by-case basis.

The preceding years have laid the foundation for an experience that underpins our ability to offer our clients the most advanced concepts in dental implant design, their attachments, and instruments. But our mission doesn't end there; we will continue to work on new projects because it's a vocation inherent in the Company's DNA.

There will always be new challenges and developments aimed at bringing professionals the most evolved, exquisite, and technological products related to the world of oral implantology, making even the most complicated procedures simpler, if desired.



I choose it because...

Undoubtedly, each case within the clinical field of surgery poses an undeniable challenge, even for the most experienced.

Therefore, being aware of this reality, we allow ourselves to offer products of high performance, versatile, and multipurpose, which in themselves will enable the professional to have a unique, definitive, and secure experience. This will turn those cases that may offer the most difficulty within clinical practice into manageable cases with a more practical and simpler technique. These products have been developed based on meticulous study of the natural difficulties encountered in clinical practice, aiming to enable an efficient and safe approach while providing successful solutions to patients.

The simplicity of handling, ease of application, and high clinical efficiency are the reasons why we propose the different lines of our dental implant surgical “arsenal,” highly adaptable to any clinical situation, including those of the highest level of difficulty, with maximum effectiveness of results.





QUALITY

THE NEW APPROACH

Under the expression “Radhex versus Radhex,” we have embraced a global perspective in implantology, challenging and surpassing the internal limits of our company. This self-struggle has been a genuine challenge, a process of self-improvement driven by the innate passion we have always had for our product, elevating it to the highest levels of quality.

As a result of this dedicated work, we present two distinctive lines in our products:

QUALITY Lines: These stand out for their versatility, wide range of therapeutic applications, and exceptional restorative flexibility. We offer 5 lines of implants within this family.

PREMIUM Lines: These incorporate all the aforementioned characteristics, along with highly specific designs for critical clinical situations. These Premium lines offer exceptional solutions both in terms of functionality and aesthetics. We have three families of implants for this category.

Both lines offer the possibility of working conventionally or in a digital environment, with components designed for scanning, transfer, and replication of models. Always featuring internal hexagonal, external hexagonal, or conical platform connection platforms that adhere to the safest and most widely used standards worldwide.

These products are carefully designed to facilitate the design and manufacture of prostheses with maximum precision and aesthetics, providing our users with options tailored to the most demanding demands of modern dentistry. We are excited to share these advancements, reflecting our ongoing commitment to excellence and innovation in the field of dental implantology.

RADHEX QUALITY:

THE PERFECT TOOL TO COMPETE AT THE HIGHEST LEVEL.



S



RADHEX

IMPLANTS

PREMIUM

PREMIUM



Radhex Implants® is a leading brand in implant-supported dental solutions, applying the most advanced production technology for dental implants, attachments, and implantological tools. Our philosophy is based on science and geared towards all indications.

Headquartered in Spain, our main objective is safety based on quality, education, and innovation to reduce treatment duration and improve therapeutic prospects in oral rehabilitation on implants.

Through strong collaborations with dental professionals, our advanced products and their highly precise complements fulfill our essential commitment to contribute to patient health.

Comprehensive Solutions Approach

We offer dental professionals a comprehensive range of alternatives for dental solutions, catering to different treatment concepts, with a secure supply source, thus guaranteeing high quality, flexibility, and compatibility to achieve the optimal solution for each indication.

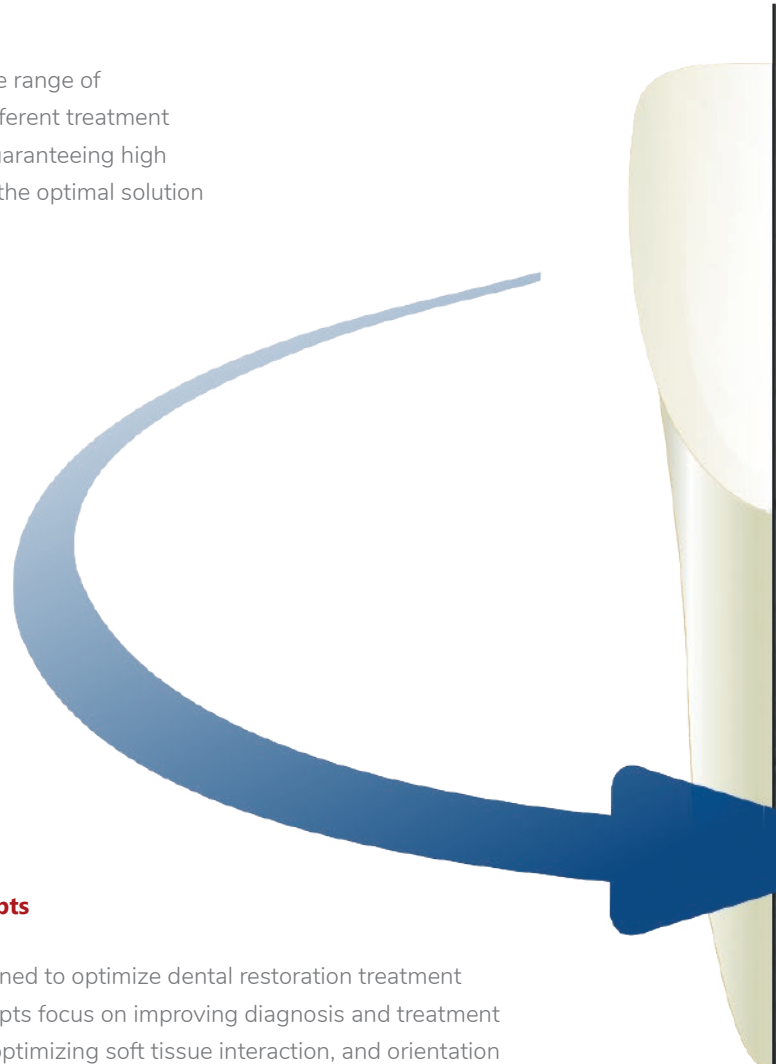
Wide Selection of Materials

All our solutions are manufactured using various highly biocompatible and durable materials.

Their clinically tested safety ensures safe and predictable results, including implants made of high-purity titanium and prosthetic solutions in Grade V titanium, chrome-cobalt, and treatments such as anodizing and nitriding to optimize mechanical and tissue response.

Innovative Diagnosis and Treatment Concepts

We have developed numerous concepts designed to optimize dental restoration treatment and maximize clinical effectiveness. Key concepts focus on improving diagnosis and treatment planning, implant primary stability by design, optimizing soft tissue interaction, and orientation of implants for less invasive surgical protocols.



360° - A Global Perspective

Implant Systems for Every Indication

We have developed an extensive range of implants with different self-tapping design profiles, based on solid scientific concepts, ensuring an optimal level of bone and tissue response for each case. These implants are suitable for covering all therapeutic indications, including small diameter implants (Fit Implants), maintaining a wide range of lengths, and including short implants. Additionally, we offer various prosthetic connection alternatives.

Commercial Service and Customer Support

All our standard products can be ordered directly from our headquarters or through our sales team. Our sales representatives have extensive experience and are available to provide assistance, offering the support that every professional needs.

Professional Training

Throughout the year, we provide a wide variety of conferences, courses, and events focused on promoting the dissemination of scientific knowledge and current clinical experience, led by expert professionals. These events teach the skills necessary to integrate **Radhex Implants®** solutions into the field of dental clinics and laboratories.

The great things are simple.
Winston Churchill.

The Company

Our company began its activity around the year 2004, with the integration of entirely national capital, investing in assets in the Swiss machinery of the highest technology for the precision medical industry.

Since our inception, production has been focused on the field of implants and attachments for the dental sector, and we have progressively launched new implant systems with external hexagon, internal hexagon, Morse taper, and single-body designs.

Radhex Implants® designs, manufactures, and markets cutting-edge, highly precise technology, offering advanced solutions for dental implants, with fifteen years of experience. This is just part of the story of this company, born out of an idea, a deep illusion, and tenacious work, based on the long trajectory of its mentors, some from the world of clinical experience in implantology, and others from the world of aeronautical mechanics.

Currently, we have diversified our business line with the incorporation of new implant families and product projects to expand customer service.

Radhex Implants® brings together a proactive human team that plays a significant role in the growing success of a company that highly values each person and attributes its increasing success to their continued dedication over the years.

Our communication and marketing strategy demand **Radhex Implants®**'s presence at industry fairs and congresses, both nationally and internationally, to disseminate products and innovations.

Radhex Implants® has continuously focused on advancing research through the commitment to professional teams, aiming to guarantee the development of technologically advanced and high-quality products. Therefore, **Radhex Implants®** works closely with prominent professionals, surgeons, and technicians to provide users with the most up-to-date knowledge and information.

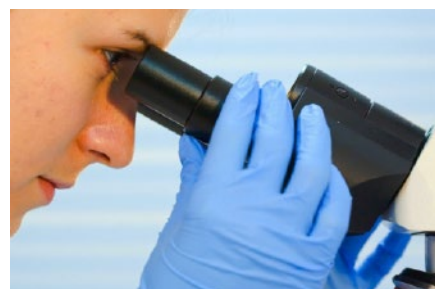
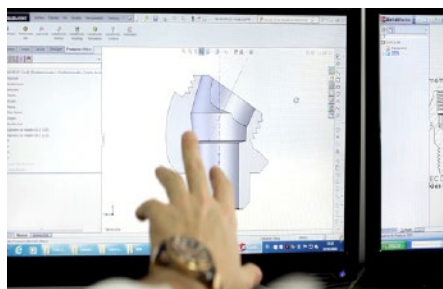
Radhex Implants® prides itself on providing excellent customer service, with constant communication and availability to provide top-level solutions, from the simplest restoration to the most complex surgical case.

Radhex Implants®'s commitment to education is reflected in a better future and the overall improvement of professional users, collaborating with institutions and developing relationships with national and foreign universities.

Currently, **Radhex Implants®** is conducting a multicenter prospective study to validate survival rates, remodeling, and maintenance of peri-implant health.

A company with manufacturing of high-quality implants, excellent user service, and a leading research and development team makes **Radhex Implants®** the perfect recipe for the success of its customers.

Throughout this time until the present, a deep perfectionist desire remains alive in our company, constantly contributing to the sense of excellence and innovation.



Reflecting on the past, the challenges overcome, and the achievements obtained, being involved in providing professionals with the latest advances in technique fills us with pride. Therefore, we maintain the firmest conviction that we have always been on the right path of values such as honesty, transparency, quality, research, and development.

Certified Quality

Our company guarantees the perfect quality of its products by complying with the rigorous requirements of the European Economic Community Regulations for medical devices.

The Quality Management System implemented in the company controls all manufacturing processes and ensures the documentary harmony of our product with current legislation. This means maximum quality and safety assurance for our customers, making choosing our products a wise decision.

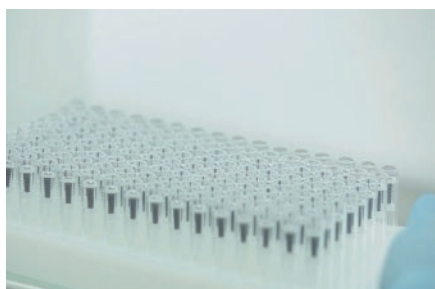
Through a Certified Quality System, developed based on the requirements of the UNE-EN-ISO 13485:2016 standard, and compliance with the strict requirements of European Directive 93/42/EEC, amended by Directive 2007/47/EC, for CE marking of products.

The manufacturer of **Radhex Implants®** holds a license to manufacture medical devices and marketing authorization from the Spanish Agency of Medicines and Medical Devices (AEMPS).

The **Radhex Implants®** system complies with all requirements established by European laws and guidelines regarding the manufacture and distribution of medical devices. Its innovative and patented design incorporates the most advanced features developed exclusively for professionals who value technology as an advantage and design as a benefit. The most important objective is the constant increase in customer satisfaction. The system is certified and authorized for marketing by the European Notified Body 2797, British Standard Institution - BSI.



European Certification: A safe product of the highest quality is the greatest guarantee for our customers. Radhex Implants® is a permanent commitment to excellence.



General Technical Report

The Product: Raw Material

The biocompatibility and affinity with bone have made commercially pure grade 4 titanium (c.p.) and its alloy Ti6AL4V grade 5 the standard materials of highest performance for the dental sector.

For over eighteen years, we have manufactured implants from chemically unmodified variants of commercially pure titanium.

For these reasons, **Radhex Implants®** implants are made from grade 4 pure titanium and we also offer models made from grade 5 titanium alloy, Ti6AL4V, meeting high-quality standards, which ensures very high performance in functional capabilities, as well as compliance with the requirements of ASTM F67 and ISO 5832-2 standards for grade 4 titanium, and ASTM F136 and ISO 5832-3 standards for grade 5 titanium alloy.

Implant models manufactured in Grade 4 Titanium:

PHI, **PHIA**, **PHE**, **PHEA** models in all sizes, and **PCI** for **PCI280** and **PCI350** platforms.

Implant models manufactured in grade 5 titanium alloy, Ti6AL4V:

PCI models for **PCI230** platform and all implants from the **SLD** line in all sizes.

The implants are sterilized using accelerated electron beam irradiation (e-beam).

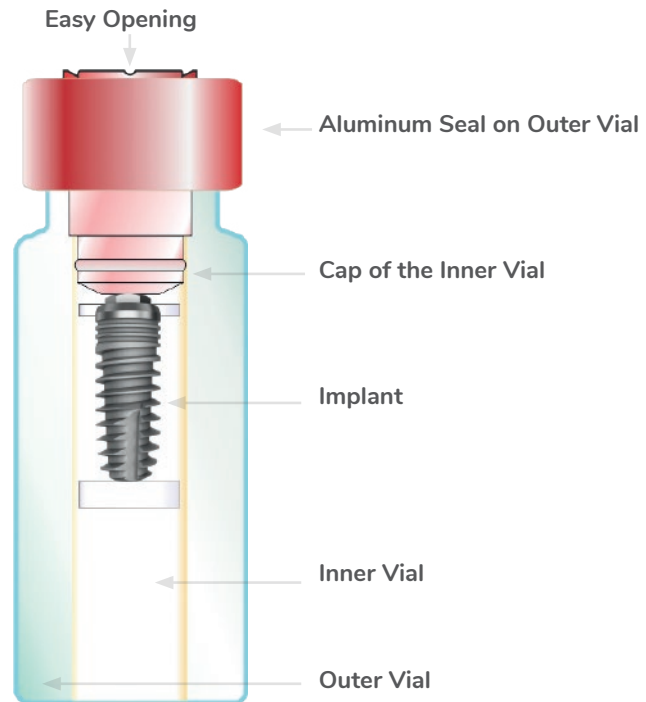
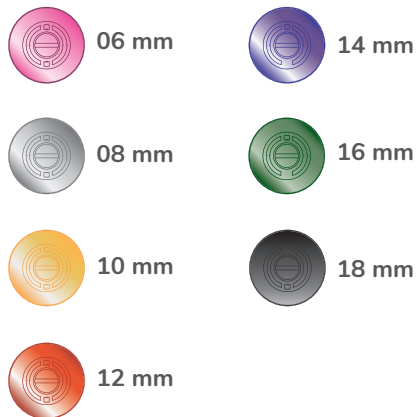


Packaging Features

Length Coding

Double Sterile Protection Vial.

- Outer Vial
- Inner Vial



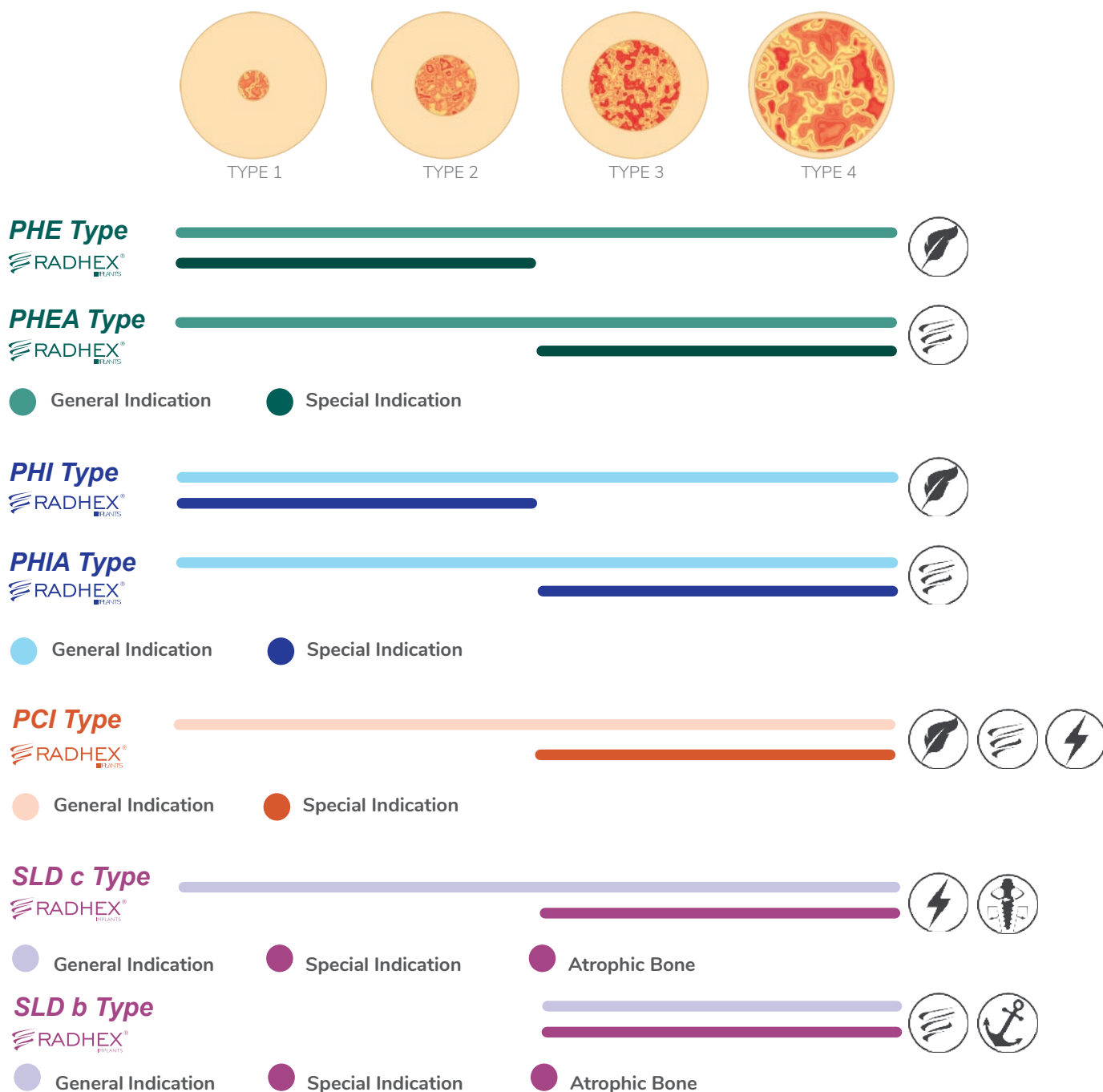
Product Labeling

	RADHEX IMPLANTS	Inmet Garnick S.A. 19200, Azuqueca de Henares, Guadalajara (SPAIN)	Manufacturer
Medical Device Reference Number	MD REF AAA000-0000	AAAA.MM.DD	Edition
Product Description	Dental Implant: Internal Hex. Platform Length.: 00 mm Ø (Diám.): 00 mm	UDI	UDI Device Unique Identifier
UDI DI	UDI-DI: (01) 00000000000000		
Lot Number	LOT 00000-00X.0	(01) 00000000000000	Manufacture Date
Material	Mat. AAAAAAA AAAA-MM	(17) 000000	Expiration Date
Sterilized Using Radiation	STERILE R AAAA/MM/DD	(10) 0000-00X.0	
Single Sterile Barrier System With Inner Protective Packaging		CE 0000	CE Marking - Notified Body
MR Conditional			

Do Not Use if Packaging is Damaged	Keep Dry
Do Not Reuse	Keep Out of Sunlight
Caution	Consult Instructions for Use
Do Not Sterilize	

General Indications by Bone Density

Implant Indications Table



*According Leckholm et Zarb 1985

All the advantages and anatomical versatility in implant designs:



The Radhex Implants® systems, both for the PHE and PHEA models, are indicated for all types of bones, although due to the characteristics of the design:

For the PHE model, its preferential indication is for Type 1 and Type 2 bones.

For the PHEA model, its preferential indication is for Type 3 and Type 4 bones.

These indications relate the preference for use, depending on the implant design and type of bone, as a review, but it is the professional who, based on his experience, must establish the final indication, because both models are fully valid to use, in any bone topography regardless of its density..

The **Radhex Implants®** systems, both for the **PHI** and **PHIA** models, are indicated for all types of bones, although due to the characteristics of the design:

For the **PHI** model, its preferential indication is for Type 1 and Type 2 bones.

For the **PHIA** model, its preferential indication is for Type 3 and Type 4 bones.

These indications relate the preference for use, depending on the implant design and type of bone, as a review, but it is the professional who, based on his experience, must establish the final indication, because both models are fully valid to use, in any bone topography regardless of its density.

Radhex Implants® systems, for **PCI** models, are indicated for all types of bones, although due to the characteristics of the design:

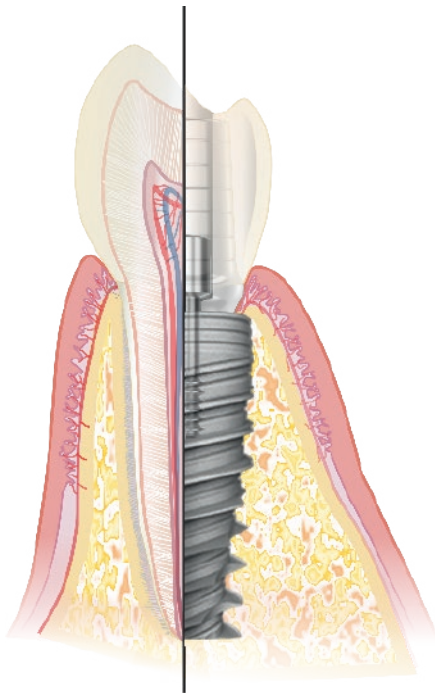
For the **PCI** model, its preferential indication is for Type 3 and Type 4 bones.

This indication relates the preference for use, depending on the implant design and type of bone, as a review, but it is the professional, who, based on his experience, must establish the final indication, because this implant design is fully valid for Use in any bone topography regardless of its density.

For the Compressive **SLD c** model, its preferential indication is for Atrophic bones, and also Type 3 and Type 4.

For the Basal **SLD b** model, its preferential indication is for bones with extreme atrophy where cortical anchorage is sought.

These indications relate the preference for use, depending on the implant design and type of bone, as a review, but it is the professional who, based on his experience, must establish the final indication, because both models are fully valid to use, in any bone topography regardless of its density.



High Quality and Design in our products

Quality is our religion, and design is our spirit.

With an always innovative attitude, we create effective, innovative products and solutions, and improve existing ones, so that professionals can provide their patients with fully functional, safe and natural-looking results.

Abutments

The connection and its adjustments: Generic Prosthetic Torques

For screw-retained restorations, the recommended torques can be followed.

For cemented restorations it is always advisable to increase 5 Ncm to ensure greater stability, given the impracticality of screw readjustment in case of loosening.

At the time of initial adjustment of the attachment, the preload value will have been achieved. It is important to remember that the torque wrench does not measure the tension or preload value of the micro-screw, but rather it measures the torque actually applied.

This concept has important significance in future mechanical behavior, because the initial threading tension is lost due to passivation of forces, and due to the functional requirement itself due to the characteristics of metallic behavior, ductility and elasticity.

Therefore, in any case, it is advisable to ensure that the threading tension is very close to the torque indicated by the torque wrench. For this reason, it is recommended to leave the final restorations practicable, to make an adjustment again, after 15/ 20 days after applying the initial adjustment, and prior to the final cementing of the prosthesis, (Cemented Technique), or closure with definitive obturation, of the chimney of the same, (Screwed Technique).

The torques indicated in the following table, for the different components of **Radhex Implants®**, are valid for both the **PHE** and **PHEA** models, and are indicated as a general recommendation since the specific indications are incorporated for each abutment:

	Scar covers, Transfers and Shapers Gingivals	Restoration Temporary or Provisional	Definitive Unitary Restoration ^{*1}	Definitive Multiple Restoration ^{*2}	Screw Retained Restoration Definitive Hint ^{*3}
PHE 350 Type 	15 Ncm	20 Ncm	35 Ncm	35 Ncm	35 Ncm
PHE 410 Type 	15 Ncm	20 Ncm	35 Ncm	35 Ncm	35 Ncm
PHEA 410 Type 					

^{*1} (Screwed on implant)
^{*2} (Screwed on implant)
^{*3} (Screwed on PMU)

The torques indicated in the following table, for the different components of **Radhex Implants®**, are valid for both the **PHI** and **PHIA** models, and are indicated as a general recommendation since the specific indications are incorporated for each abutment:

	Scar covers, Transfers and Shapers Gingivals	Restoration Temporary or Provisional	Definitive Unitary Restoration ^{*1}	Definitive Multiple Restoration ^{*2}	Screw Retained Restoration Definitive Hint ^{*3}
PHI Type 	15 Ncm	15/20 Ncm	35 Ncm	35 Ncm	35 Ncm
PHIA Type 					

^{*1} (Screwed on implant)
^{*2} (Screwed on implant)
^{*3} (Screwed on PMU)

The torques indicated in the following table, for the different **Radhex Implants®** components, are valid for both the **PCI** models, and are indicated as a general recommendation since the specific indications are incorporated for each abutment:

	Scar covers, Transfers and Shapers Gingivals	Restoration Temporary or Provisional	Definitive Unitary Restoration ^{*1}	Definitive Multiple Restoration ^{*2}	Screw Retained Restoration Definitive Hint ^{*3}
PCI 230 Type 	15 Ncm	15 Ncm	20 Ncm	20 Ncm	35 Ncm
PCI 280 Type 	15 Ncm	20 Ncm	35 Ncm	35 Ncm	35 Ncm
PCI 350 Type 	15 Ncm	20 Ncm	35 Ncm	35 Ncm	35 Ncm

^{*1} (Screwed on implant)
^{*2} (Screwed on implant)
^{*3} (Screwed on PMU)

The **SLD** models do not have torques, as they are a cemented restoration.

The convexity allows for smooth insertion with high protection of anatomical risk areas.

PHI Type The Internal Hexagonal Connection

Design of Connection Platforms:

These references belong to the [PHI](#) and [PHIA lines](#), inspired by the classic prosthetic connection, conceived by the American school of Dr. Gerald Niznick, being the most widespread internal connection system in the world, offering optimal tactile perception in threading, high stability and sealing of the GAP with internal hexagonal anti-rotation insert with 45° seat bevel and six positioning orientations in its axial indexing.

Both models come with:

► **Plataforma IS** 3.50 mm with body 3.50mm - 3.75mm - 4.00mm - 4.50mm - 5.00mm.

► **Plataforma IM** 4.50 mm with bodies of 4.50 mm- 5.00 mm and 6.00 mm.

They come in different lengths.

Internal Screw M1.8.

Cervical Zone Design:

Switch Platform for body diameter of 3.75 mm or greater to promote the maintenance of the turbinate bone.

Machined ring 1 mm high and 1.5 mm micro-grooves to reduce cortical stress on [PHI Models](#).

Machined ring 0.5 mm high and 1 mm radial groove to reduce cortical stress in [PHIA Models](#).

Profile Architecture:

Self-tapping design profile with progressive thread:

[PHI Models](#): Moderately conical central core with cylindrical crest profiles.

[PHIA models](#): Highly conical central core with cylindrical crest profiles.

Threading mechanics:

Trapezoidal threads with fine crests to ensure threading ergonomics, with wide intercrestal valleys for maximum primary stability:

[PHI Models](#): Single Spiral Thread with 1 mm pitch.

[PHIA models](#): 4x4: two main double-propeller threads and two secondary threads at the bottom of the valley with a pitch of 2.4 mm.

Self-tapping Fronts:

[PHI models](#): Straight cutting fronts.

[PHIA models](#): Helical shear-deformation fronts.

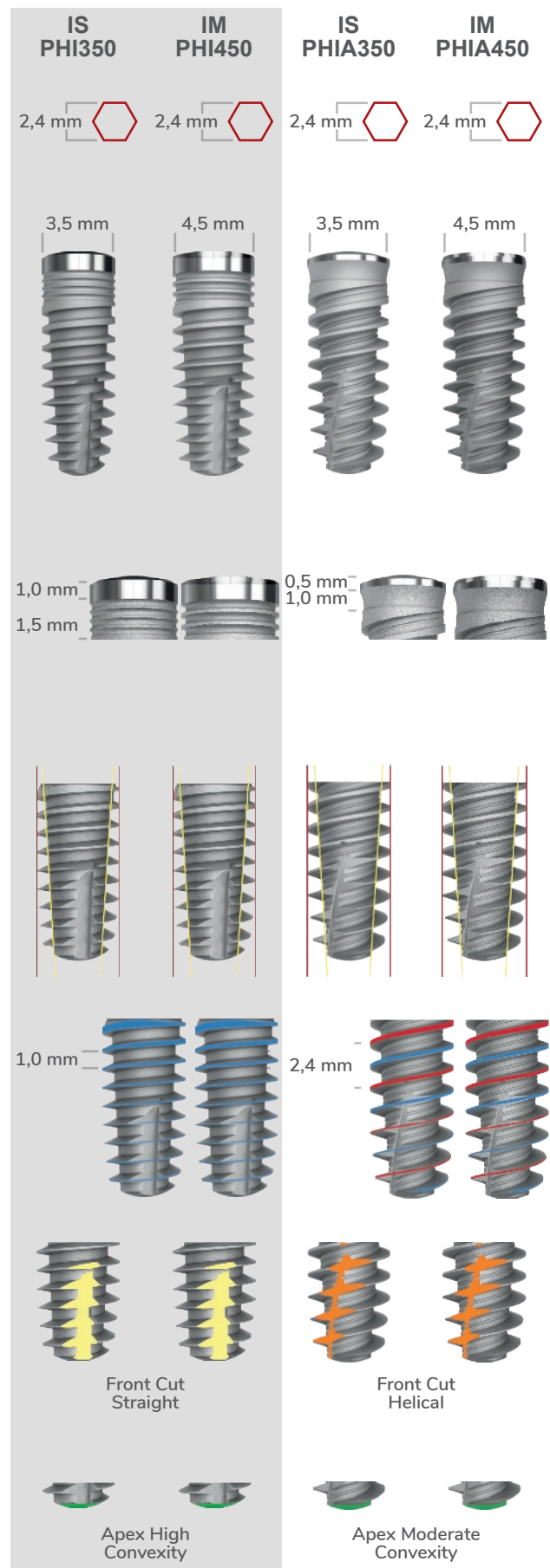
They act as anti-rotational stabilizers in the osseointegrated implant.

Apical design lines:

[PHI models](#): High convexity apex.

[PHIA models](#): Apex of moderate convexity.

The convexity enables smooth insertion with high protection of anatomical risk areas.



PCI Type The Internal Conical Connection



Design of Connection Platforms:

Radhex Implants® PCI lines are the safest dual-function connection, the two prosthetic seating principles integrated into the conical insert, along with internal hexagonal locking and integrated platform change. They provide uniform load distribution, with a hermetic seal of the GAP, protecting the peri-implant tissues. The implant-abutment interface allows for appropriate emergence profile designs, to improve the maintenance of the level of tissue insertion with a system entirely oriented to the Switch Platform.

- **Platform CS** 2.30 mm with 3.00 mm body. M1.4 inner screw.
 - **Platform CM** 2.80 mm with 3.50 mm bodies - 3.75mm - 4.00mm and 4.50mm. M1.6 inner screw.
 - **Platform CL** 3.50mm with 5.00mm bodies and 6.00 mm. M2 inner screw.
- They come in different lengths.

Cervical Zone Design:

Switch Platform is the integrated concept within this system, to guarantee maximum protection of peri-implant tissues and vertebral bone health.

Machined ring of 0.4 mm height and 1.5 mm micro-thread to reduce cortical stress on **PCI 230 Models**.

Machined ring of 0.4 mm height and 1 mm micro-thread to reduce cortical stress on **Models PCI 280 and PCI350**.

Profile Architecture:

Self-tapping design profile with progressive thread: Highly conical central core with cylindrical crest profiles guarantee the highest self-threading efficiency and stability, ensuring a gradual and progressive increase in forces during the progression of the threading maneuver.

Threading mechanics:

Thread with very fine ridges to ensure ergonomics threading, with wide intercrestal valleys for maximum primary stability:

All Models: Double Helix thread with 2.6 mm pitch.

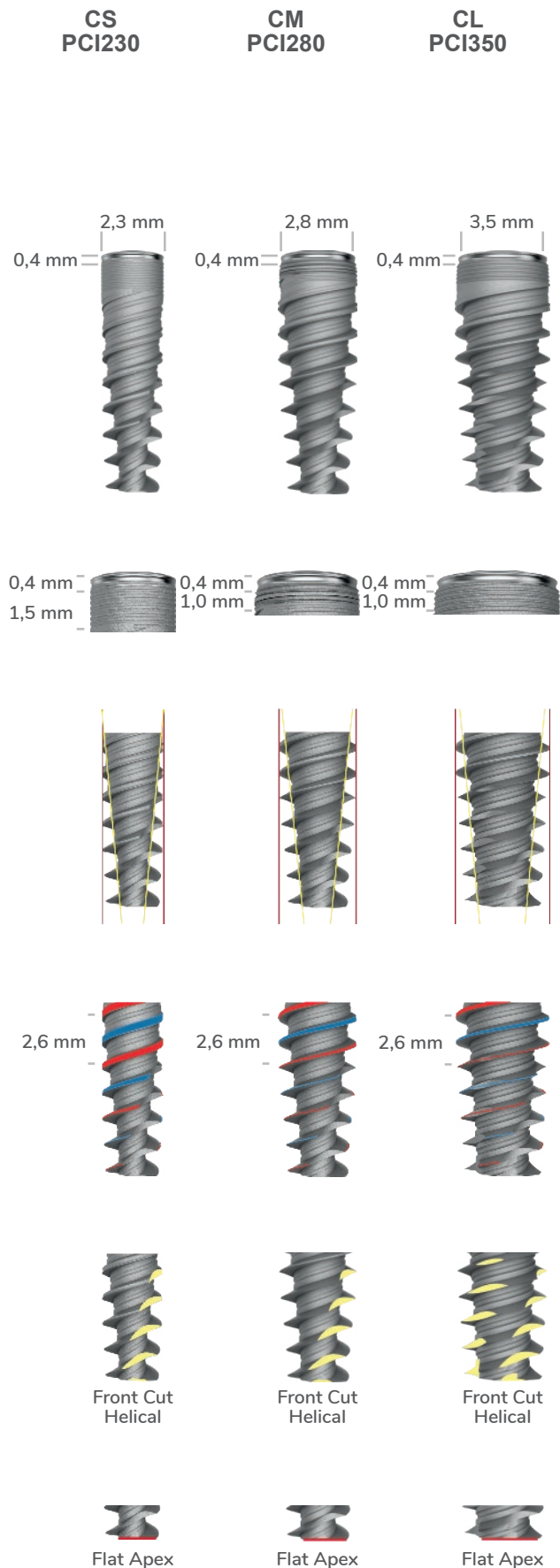
Self-tapping Fronts:

Helical shear-deformation fronts. They act as anti-rotational stabilizers once the implant has osseointegrated.

Apical design lines:

Zero convexity apex, totally flat, which allows an aggressive entrance front, which easily carves the final bed in the bone.

This enables great maneuverability, and high effectiveness in redirecting the implant to correct its position.



SLD-C Type The Monobody Implant, (one piece). COMPRESSION.**General Design and Pillar:**

Solid compressive one-piece implants with cementable abutment, corresponding to the **Radhex Implants® SLDc lines**, may be the ideal alternative for clinical cases of high therapeutic commitment, due to insufficiency in the bone structure due to atrophy and resorption. They configure the recovery of a solid and well-founded paradigm within oral implantology techniques, which is once again gaining strength as a therapeutic alternative with an improved design that proposes

Radhex Implants® with the advantage that minimally invasive surgery offers.

It comes in diameters from 3.00 mm to 5.00 mm and lengths from 6 mm to 18 mm.

The Abutment is millable, and has a convergent occlusal angulation of 10°, with height marks every 2 mm and system tri-channel socket that ensures maximum control of the insertion torque.

Cervical Zone Design:

Cervical section that presents an option of 2, 3 or 4 mm in height, with a significant jump in diameter, (analogous concept to the switch platform for two-piece implants), to guarantee maximum protection of the turbinate bone and health of peri-implant tissues. Cervical mechanized section that extends to the body of the implant, it can be immersed in bone terrain according to the requirements of the gingival thickness of each case. With diameter of 2.05 mm up to 4 mm body diameter, for larger diameters, 2.35 mm.

Profile Architecture:

The conical body profile is harmonically combined with an equally conical bestiary profile, which provides a constant core-crestal relationship throughout the entire length of the thread.

These characteristics, together with the absence of internal screwed elements, ensure minimal volumetric occupation by the implant, which minimizes symptoms.

postoperative inflammation and hematoma.

The high taper ensures a firm entry with a sustained increase in the stability of the implant, providing the proper conditions for the immediate loading technique.

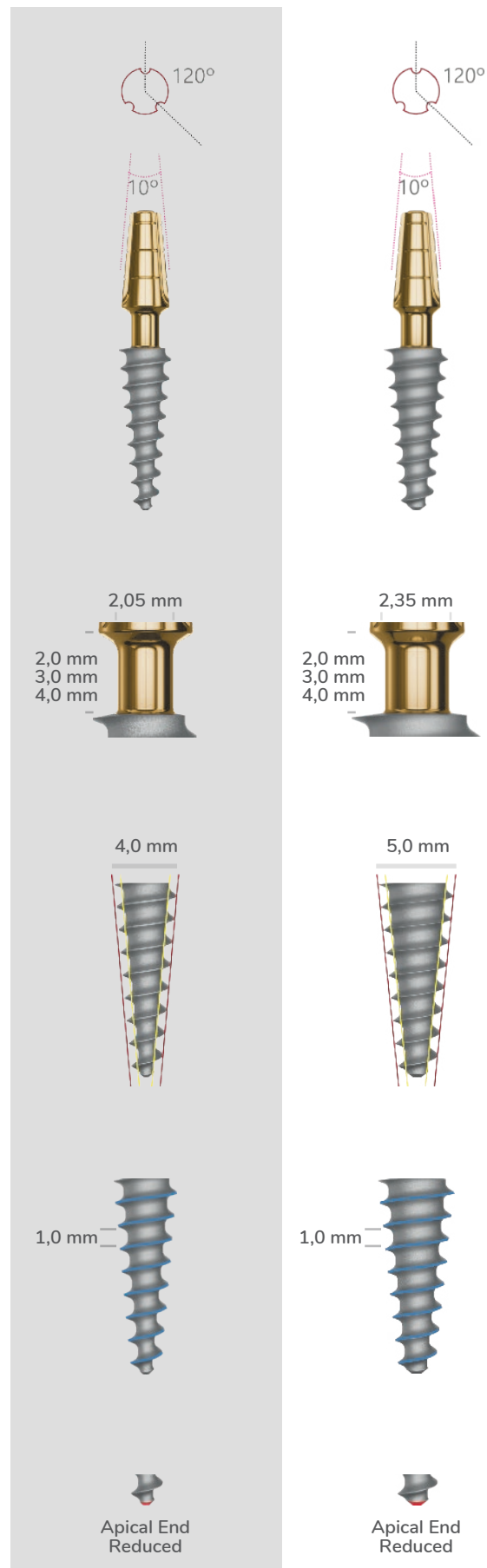
Threading mechanics:

Design profile with progressive conical thread of a compressive type: Thread type with trapezoidal openings with radius corners, which guarantees maximum efficiency in the entry of the implant into the bone terrain, minimizing the surgical preparation of the bed and its milling, ensuring the ergonomics of Threaded for maximum primary stability.

It is the appropriate choice for the successful application of minimally invasive techniques. Propeller thread with 1 mm pitch.

Apical design lines:

Reduced, pointed apical end, which ensures great penetration capacity into bone tissue.

SLDc 1240**SLDc 1250**

SLD-B Type The Monobody Implant, (one piece). BASAL.

RADHEX
IMPLANTS

General Design and Pillar:

Radhex Implants® SLD b Basal solid implants, with abutment for cemented technique, stand out as an effective alternative for complex clinical cases, especially in situations of atrophy and bone resorption. This robust concept of oral implantology is presented as an improved therapeutic option, with emphasis on surgery in cases of extreme bone resorption.

With diameters from 3.50 mm to 8.50 mm and lengths from 6 mm to 18 mm, (consult by diameter), these implants offer exceptional versatility. The abutment, cementable and with a convergent occlusal angulation of 10°, includes a tri-channel anti-rotational system, ensuring maximum control of the insertion torque. This advanced design contributes significantly to optimizing clinical outcomes and long-term stability.

Cervical Zone Design:

Cervical section of variable heights of 2mm, 3 mm, 5 mm and 7 mm, with a significant jump in diameter, (analogous concept to the switch platform for two-piece implants), to guarantee maximum protection of the hidraden bone and health of peri-tissues. implants. Cervical mechanized section that extends to the body of the implant, it can be immersed in bone terrain according to the requirements of the gingival thickness of each case.

Profile Architecture:

The conical body profile is harmonically combined with an equally conical cepal profile, which provides a constant core-crestal relationship throughout the entire thread path. These characteristics, together with the absence of internal screwed elements, ensure minimal volumetric occupation by the implant, which minimizes post-operative symptoms of inflammation and hematoma.

The high core-crestal discrepancy ensures a firm entry with a sustained increase in the implant's own stability, providing the proper conditions for the immediate loading technique.

Threading mechanics:

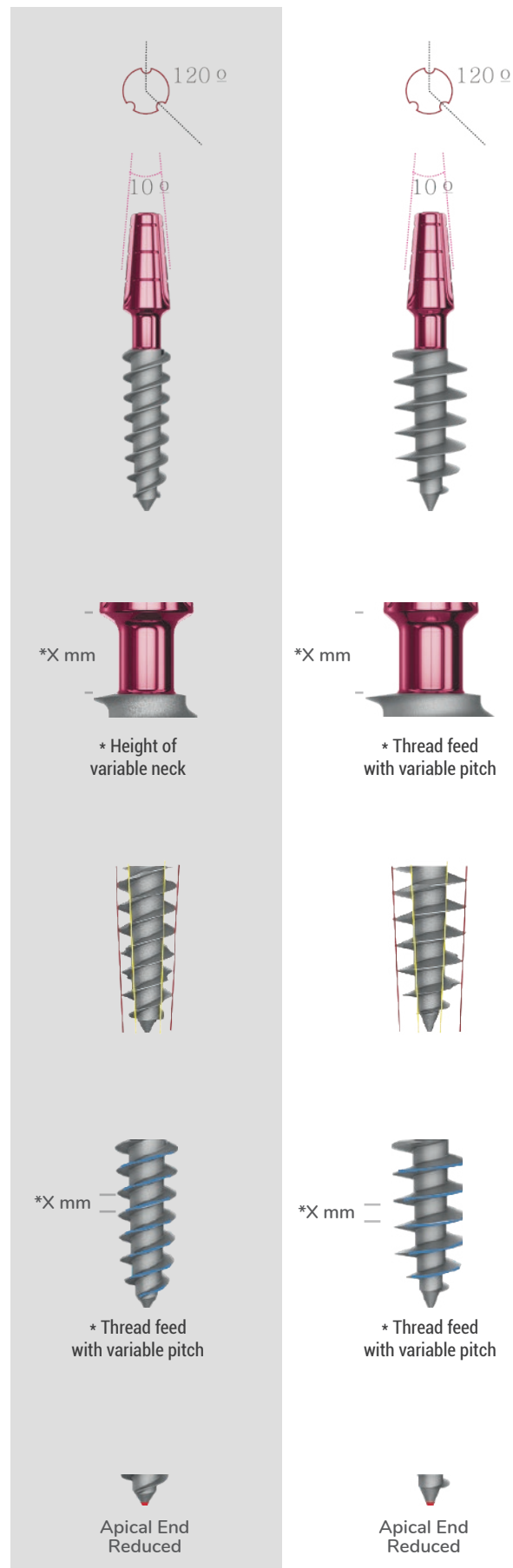
Design profile with wide progressive basal-type thread: Thread mode with trapezoidal openings with radius corners, which guarantees maximum efficiency in the entry of the implant into the bone terrain, minimizing the surgical preparation of the bed and its milling, ensuring the ergonomics of Threaded for maximum primary stability in bone cortices of extreme atrophic bone.

Apical design lines:

Reduced, pointed apical end, which ensures great penetration capacity into bone tissue.

SLDb 1245

SLDb 1255



The “Bone Link” surface

External micro design using subtractive surface treatment using shot blasting. Creates a microrough, hydrophilic surface with high wettability and low surface tension.

Below are the images obtained by magnification optical microscopy and scanning electron microscope after the shot blasting phases with the optimal structural roughness, and from the final phase of the heat treatment, where the highly rough structure can be observed at high magnification. in the surface titanium oxide.

A proven surface, backed by more than 15 years of clinical experience.

General surface images

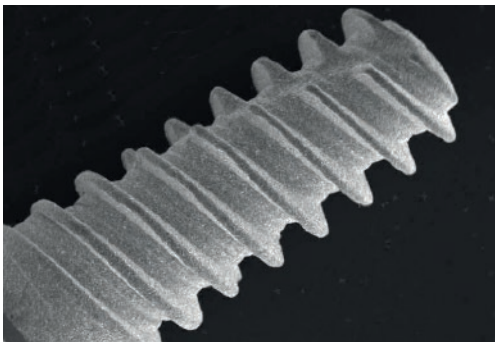


Figure 1: 10X image with full visualization of the treated surface of the sample.

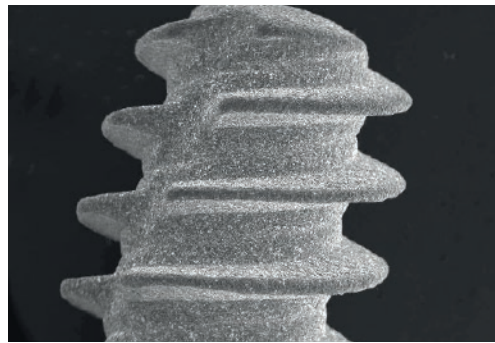


Figure 2: 20X image with visualization of the apical area of the treated surface of the sample.

Surface Images: Ridges

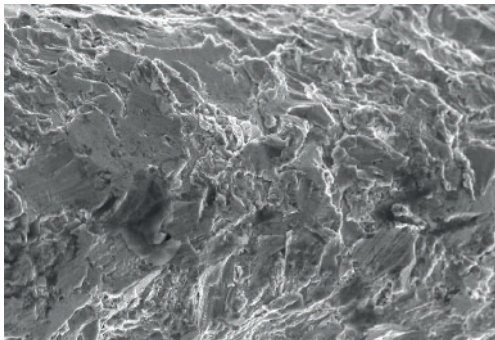


Figure 3: Image of the thread crest area 500X.

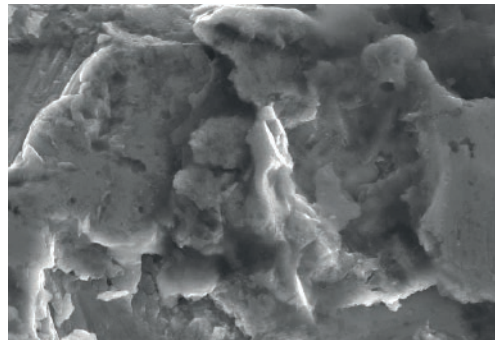


Figure 4: Image of the thread crest area 3,000X.

Surface Images: Valley

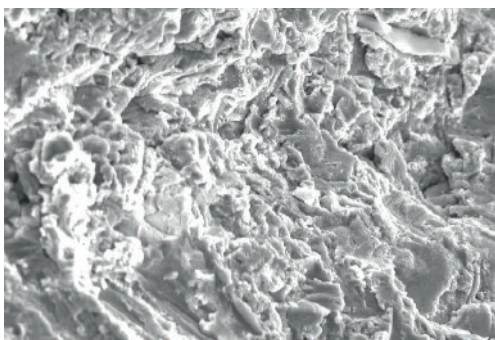


Figure 5: 1,000X image of the thread valley area.

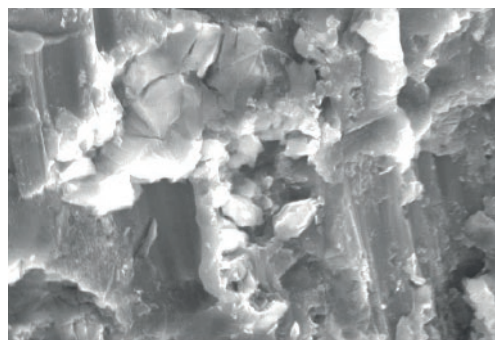


Figure 6: 6,000X image of the thread valley area.

Surface Images: Tip

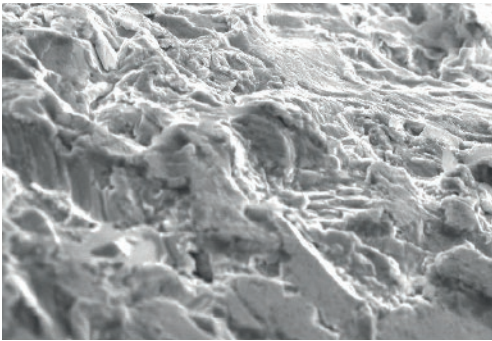


Figure 7: Image of the apical tip area 1,000X.

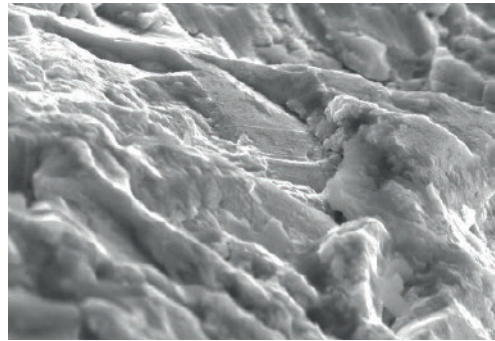


Figure 8: Image of the apical tip area 3,000X.

At the Center de Disseny d'Aliatges Lleugers i Tractaments de Superfície - Polytechnic University of Catalonia, a study of the surface roughness profiles has been carried out, determining the parameters: Ra, Rt, Rz and Rmax. The analysis has been carried out using use of a Roughness Meter - TAYLOR-HOBSON Profilometer.

The results for Ra are between 1.7 and 2.1µm.

This shows that the **Radhex Implants®** surface treatment considerably increases the total area of the implant.

This fact improves the stability of the dental implant, since there is a larger contact area between the implant and the bone and thus proper osseointegration is promoted.

Quality Processes, A Guarantee of Security

After the study and development of the surface treatment, **Radhex Implants®**, the Bone-link surface is brought to the dental professional, a surface currently available in all its implant lines.

The Bone-link surface is achieved through a shot peening process, with oxides of controlled granulometry, to create irregularities with micro cavities on the surface of the titanium that are then subsequently subjected to a controlled drying process using a specific temperature and time protocol.

The entire process to obtain the surface is guaranteed by exhaustive quality control, taking into account time, speed, pressure and particle size.

**High wettability - Wettability to serum and blood - Low surface tension of Titanium
Maximum biological affinity**

PHE Implants



PHE 350 Type



PHE 410 Type



- PHE External Hexagonal Connection.
- Bone-link subtractive surface treatment.
- Application of torque inside the implant, so as not to deform the external hexagonal connection.
- Cervical ring, with machined surface finish, 1 mm.
- Platform switching availability.
- Helix threads, with a progressive profile, conical central core and cylindrical bestiary profile.
- Straight design self-threading apical fronts.
- Generically indicated for all types of Bones.
- Especially indicated for high bone density, (especially for type I and type II).
- Milling speed: 500 to 800 rpm.
- Insertion speed: 50 rpm.
- Container with double protection vial.
- Maximum protection and easy handling.
- Includes closing cap.



PHE Lines

CONNECTIVITY:

ES = Ø3.50 = Plat. Hex. External Ø3.50 mm / Type Brånemark System NP

EM = Ø4.10 = Plat. Hex. External Ø4.10 mm / Type Brånemark System RP

Based on a manufacturing philosophy, which has Quality and Safety as its pillars, at **Radhex Implants®** we have focused on the basic concepts, the most practical, the most useful, the most effective to guarantee the success of a dental implant, and we have transferred them to our product.

It is within this spirit, in which each element of the design of our products moves, and therefore also, our **PHE** lines, bringing to the hands of the surgeon, a state-of-the-art, self-tapping and stable implant body.

An implant designed for the professional who prefers external inserts with the efficiency and safety that can be provided by the platform of European origin, originally designed by **Dr. Prof. Per Ingvar Brånemark**, surely the most widely spread internationally, and equipped with a simple, safe and excellent prosthetic handling, together with a body of innovative design.

A multipurpose implant, always with the **PHE line** platform. Compatible in its two platform diameter versions:

PHE 350: A restricted diameter connection for 3.50 mm diameter implants.

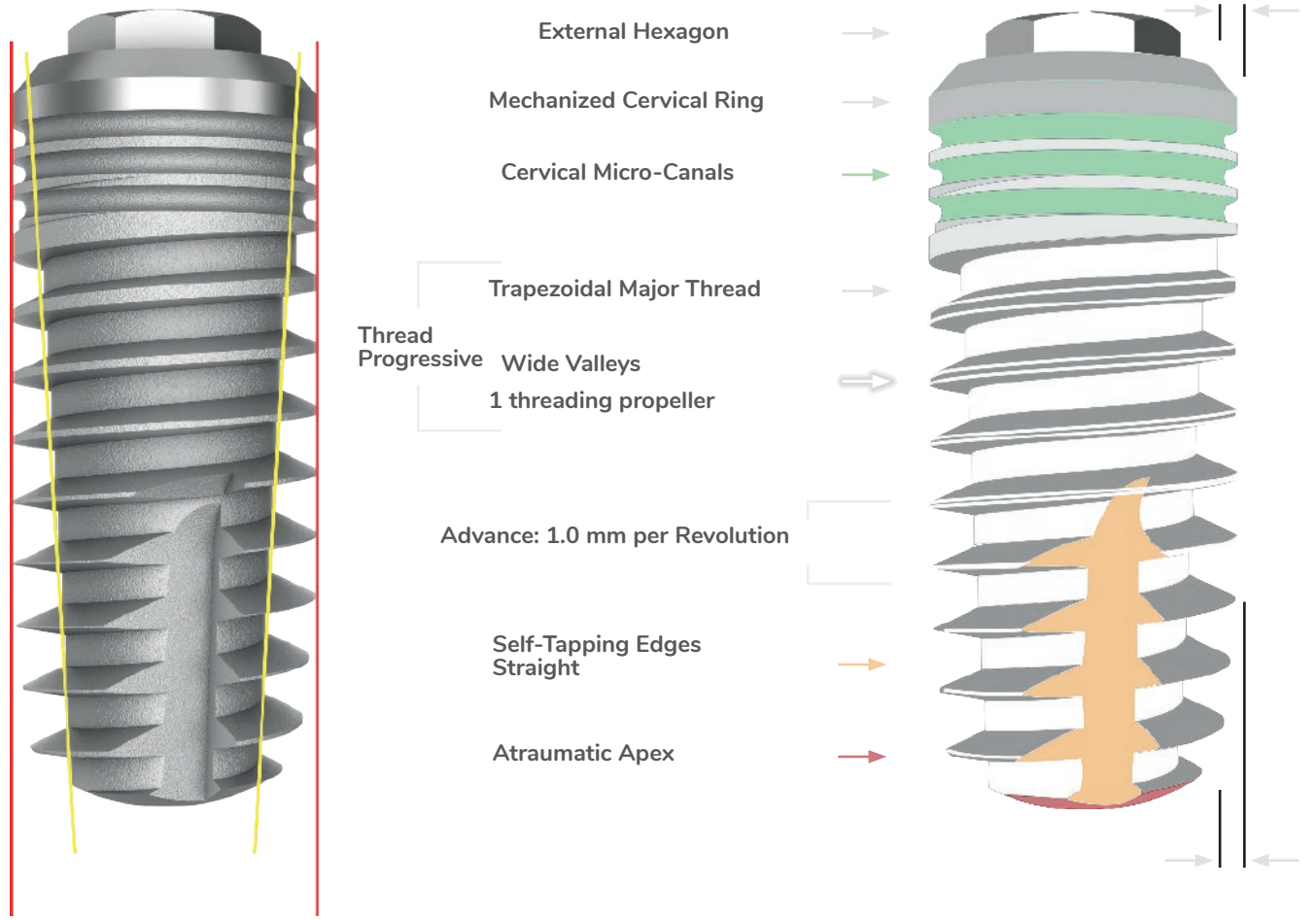
PHE 410: Probably the most experienced connection in the world, for implants with a diameter of 3.50mm up to 5.00mm

Composition: Made of Pure Grade 4 Titanium. Suitable for all clinical situations.

Design and quality are the backbone of the **Radhex Implants®** System that is simply **SAFETY and PRACTICALITY**.

Technical Data Scheme

Technical Data Scheme



Cylindrical Crestal Profile + Conical Core

High Primary Stability +
Easy Insertion and Reorientability

Large Nucleocrestal Discrepancy
High primary stability



Threading Smoothness

Indication

General indication for all types of cases, presenting optimal behavior in Type I and Type II Bones (Leckholm et Zarb).

Main Features

CONNECTION ENGINEERING:

External Hexagonal Platform Compatible* / 0° Flat Horizontal Seat

ES platform of Ø 3.50 mm, with body diameter of 3.50 mm.

EM platform of Ø 4.10 mm, with body diameters of 4.00 mm; 4.50mm and 5.00mm.

0° flat seat, on platform, with 0.7 mm high external hexagon for indexing control of the prosthetic restoration.

External hexagonal socket section with anti-rotation and stabilizing function of the pillar, compensating lateral forces with:

- ▶ 2.40 mm faceted hexagon, combined with 1.6 mm internal metric for **PHE350** platform.
- ▶ 2.70 mm faceted hexagon, combined with 2.0 mm internal metric for **PHE410** and **PHEA410** platform.

CERVICAL DESIGN:

Partial Platform Switching of the system, limited to larger diameters: favors the modeling of soft tissues and conformation of the emergence profile, contributing to the maintenance of the crestal bone.

Cervical “machined ring” 1 mm high: For prevention of peri-implantitis in the most mechanically and biologically critical area of the implant: the connection GAP. At the same time it guarantees adaptation to sinuous bone profiles.

Micro Trunks or cervical slots in 1.5 mm height: Reduction of cortical stress due to compression, favoring the stabilization of the bony bone in the cervical area of the implant.

PROFILE ARCHITECTURE:

The **PHE** implant Model has a smooth self-tapping design and optimal Primary Stability.

Anatomical Design Cylinder - Conical, (Cylindrical ridge profile and conical central core), which define a Progressive Thread with High Stability Geometry suitable for Immediate Loading, providing a Guarantee of maximum primary stability and self-sustainability.

MICRO DESIGN OF SURFACE:

Micro Textured Surface by subtractive method with micro particles of controlled granulometry incorporating thermal convection process for surface decontamination and stabilization of the surface titanium oxide layer that favors bio-compatibility. Creates a micro-roughness, hydrophilic surface with high wettability and low surface tension.

THREADING MECHANICS:

Trapezoidal spirals with flat edges, with wide valleys that favor BIC, (Bone Implant Contact).

Single Spiral that defines a Single Helix Thread, which guarantees an adequate safety margin in the insertion control:

- ▶ Thread crests with fine profile, ensuring adequate primary stability.
- ▶ Wide intercrestal valleys, ensuring high volume of bone tissue between crests.
- ▶ Advance of 1 mm per turn or revolution: e.g. : A 10 mm implant requires 10 revolutions to be fully threaded.

SELF-THREADING MECHANICS:

Straight Self-cutting Front: Self-tapping function with straight front design allowing the adaptation of the bone tissue to the threading profile, by self-tapping and cutting, with anti-rotational function after the integration of the implant.

APICAL FRONT DESIGN:

Atraumatic apex of moderate convexity, provides protection of anatomical risk areas.

COMPOSITION:

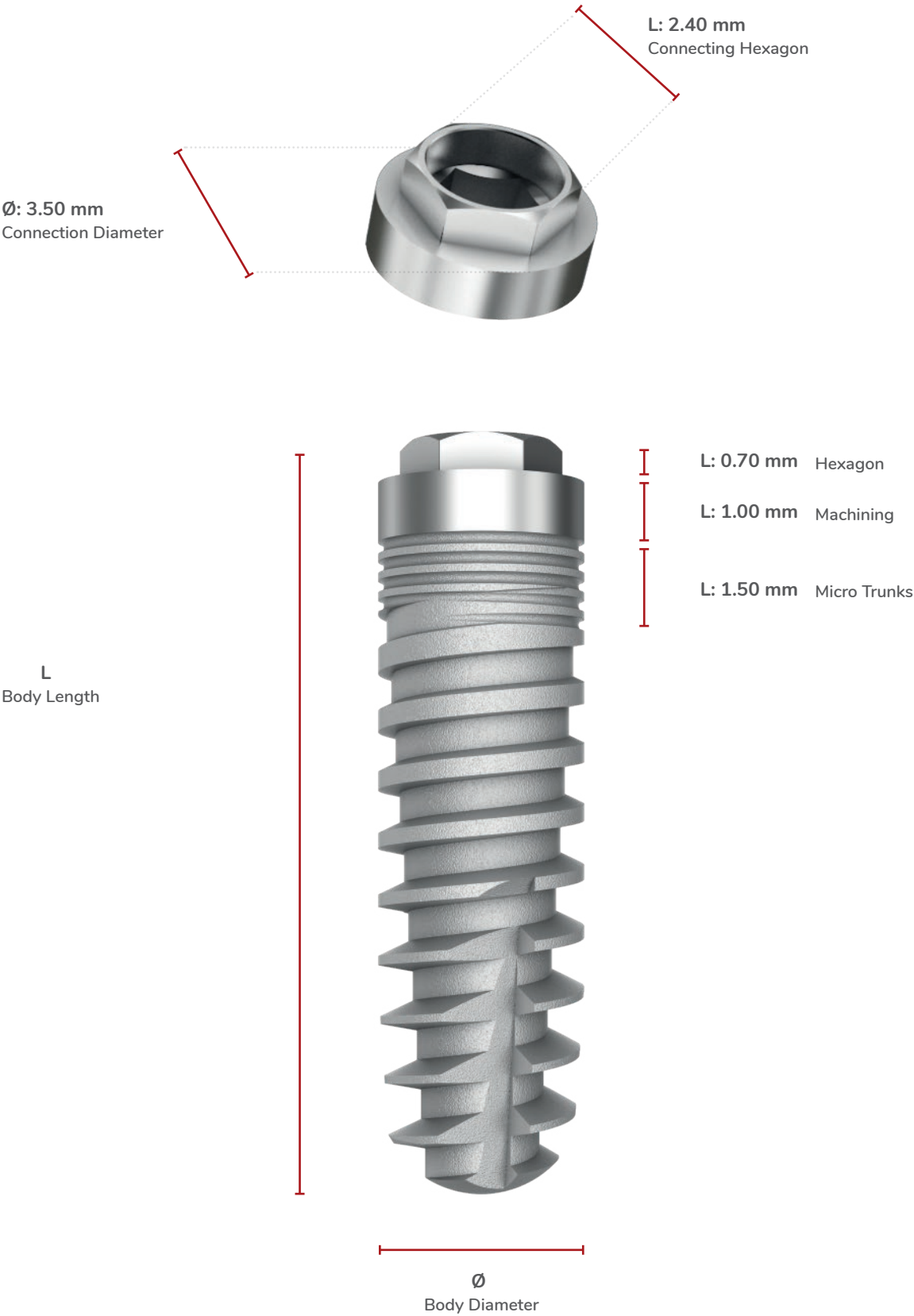
TCP: Commercially Pure Titanium Grade 4.

THREADING SPEED:

Recommended Speed/Insertion: 50 RPM.

PHE 350 Type

General Length and Diameter Measurements



PHE350: External Hexagonal Platform Implants Ø 3.50.
ES Connection Code.

Available Diameters and Lengths

SCALE 1.5:1

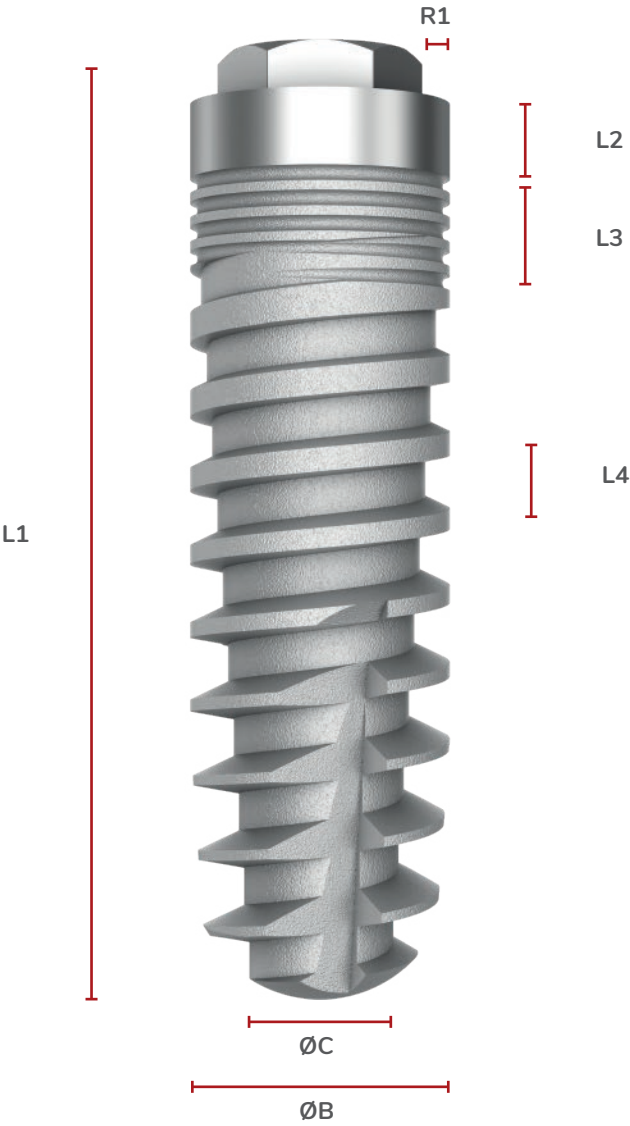
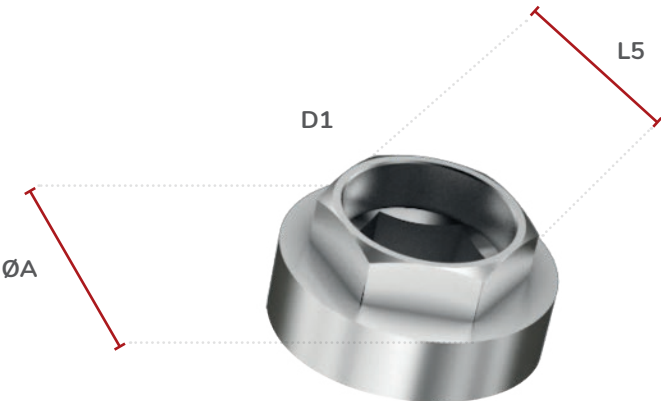
Ø 3.50



Short Implant

PHE 350 Type

General Table of Technical Details

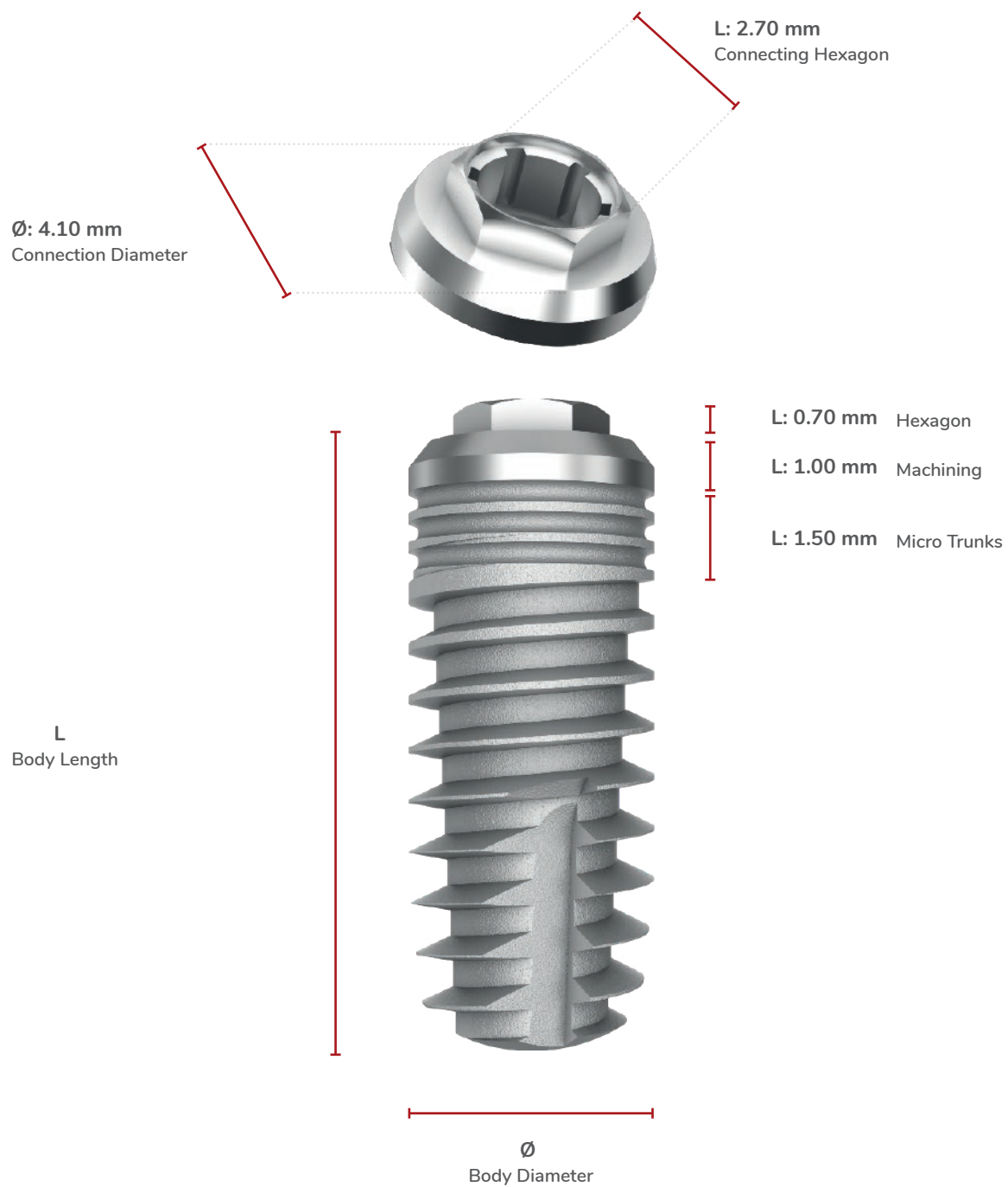


Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHE350	PHE350 0835	ES	08,00	1,00	1,50	1,00	2,40	3,50	3,50	2,05	0,00	White
	PHE350 1035	ES	10,00	1,00	1,50	1,00	2,40	3,50	3,50	1,90	0,00	Yellow
	PHE350 1235	ES	12,00	1,00	1,50	1,00	2,40	3,50	3,50	1,90	0,00	Red
	PHE350 1435	ES	14,00	1,00	1,50	1,00	2,40	3,50	3,50	1,90	0,00	Blue
	PHE350 1635	ES	16,00	1,00	1,50	1,00	2,40	3,50	3,50	1,90	0,00	Green

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**
Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**
Recommended Insertion Speed: 50 R.P.M.
* Measurements are expressed in millimeters (mm).
** Expresses indicative values, since the viability of the technique depends on multiple factors.

PHE 410 Type

General Length and Diameter Measurements



PHE410: External Hexagonal Platform Implants Ø 4.10. EM Connection Code.

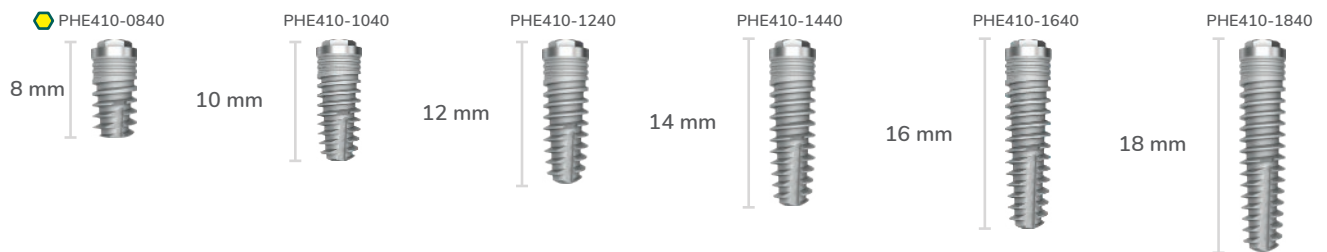
Available Diameters and Lengths

SCALE 1.5:1

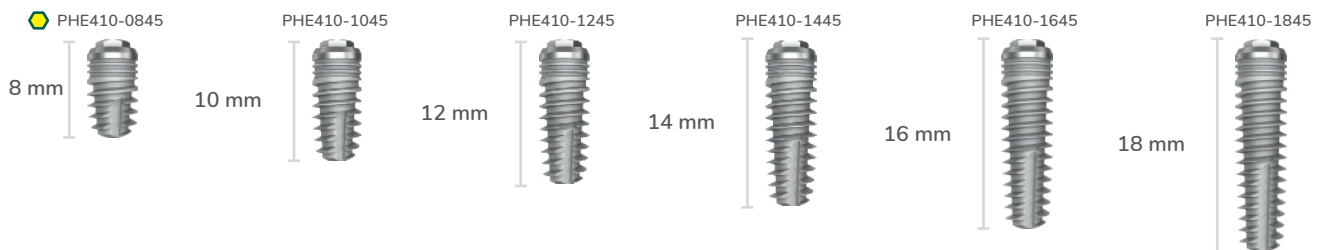
Ø 3.50



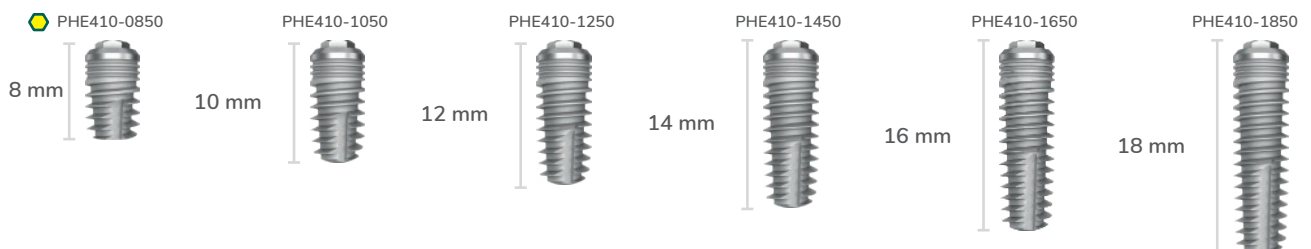
Ø 4.00



Ø 4.50



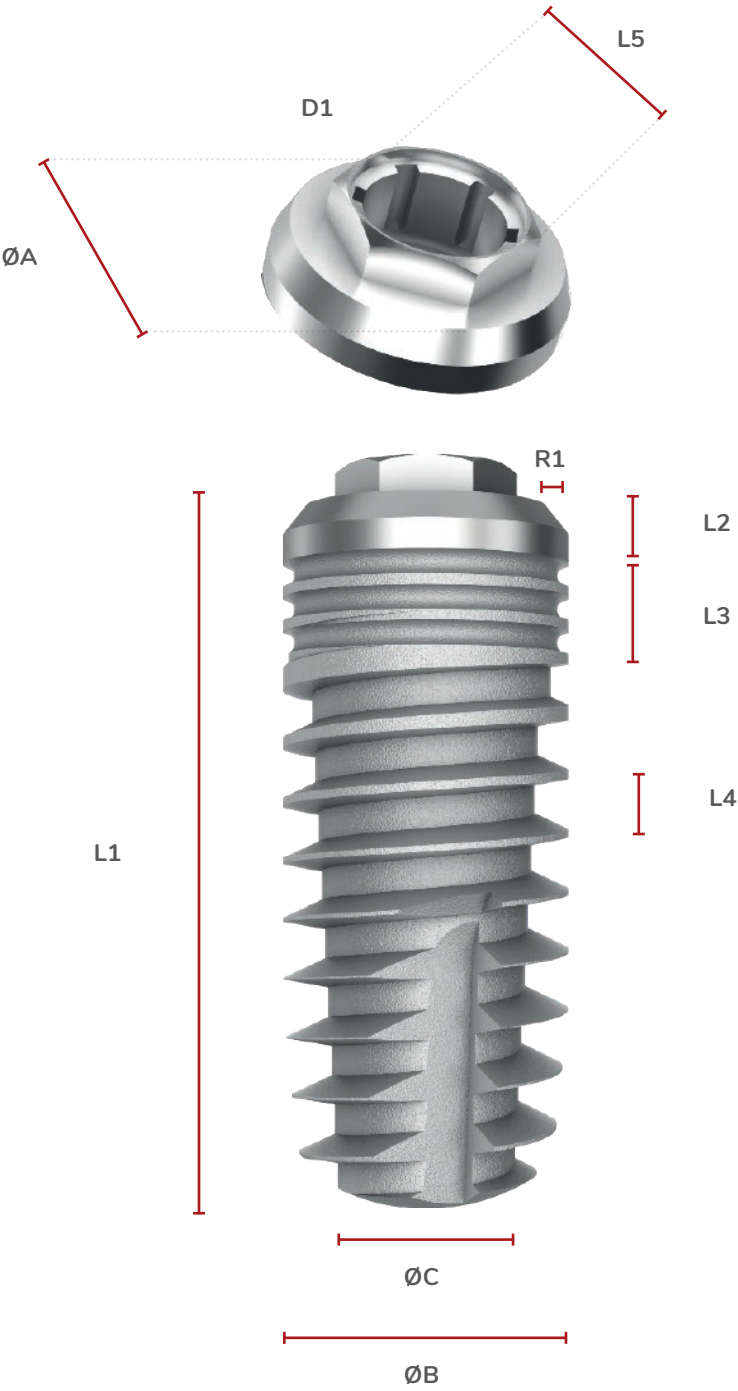
Ø 5.00



Short Implant

PHE 410 Type

General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHE410	PHE410 0835	EM	08,00	1,00	1,50	1,00	2,70	4,10	3,50	2,20	0,00	Blanco
	PHE410 1035	EM	10,00	1,00	1,50	1,00	2,70	4,10	3,50	2,00	0,00	Amarillo
	PHE410 1235	EM	12,00	1,00	1,50	1,00	2,70	4,10	3,50	2,00	0,00	Rojo
	PHE410 1435	EM	14,00	1,00	1,50	1,00	2,70	4,10	3,50	2,00	0,00	Azul
	PHE410 1635	EM	16,00	1,00	1,50	1,00	2,70	4,10	3,50	2,00	0,00	Verde
	PHE410 0840	EM	08,00	1,00	1,50	1,00	2,70	4,10	4,00	2,35	0,00	Blanco
	PHE410 1040	EM	10,00	1,00	1,50	1,00	2,70	4,10	4,00	2,35	0,00	Amarillo
	PHE410 1240	EM	12,00	1,00	1,50	1,00	2,70	4,10	4,00	2,35	0,00	Rojo
	PHE410 1440	EM	14,00	1,00	1,50	1,00	2,70	4,10	4,00	2,30	0,00	Azul
	PHE410 1640	EM	16,00	1,00	1,50	1,00	2,70	4,10	4,00	2,30	0,00	Verde
	PHE410 1840	EM	18,00	1,00	1,50	1,00	2,70	4,10	4,00	2,30	0,00	Negro
	PHE410 0845	EM	08,00	1,00	1,50	1,00	2,70	4,10	4,50	2,80	0,20	Blanco
	PHE410 1045	EM	10,00	1,00	1,50	1,00	2,70	4,10	4,50	2,70	0,20	Amarillo
	PHE410 1245	EM	12,00	1,00	1,50	1,00	2,70	4,10	4,50	2,70	0,20	Rojo
	PHE410 1445	EM	14,00	1,00	1,50	1,00	2,70	4,10	4,50	2,60	0,20	Azul
	PHE410 1645	EM	16,00	1,00	1,50	1,00	2,70	4,10	4,50	2,60	0,20	Verde
	PHE410 1845	EM	18,00	1,00	1,50	1,00	2,70	4,10	4,50	2,60	0,20	Negro
	PHE410 0850	EM	08,00	1,00	1,50	1,00	2,70	4,10	5,00	3,05	0,40	Blanco
	PHE410 1050	EM	10,00	1,00	1,50	1,00	2,70	4,10	5,00	3,05	0,40	Amarillo
	PHE410 1250	EM	12,00	1,00	1,50	1,00	2,70	4,10	5,00	3,00	0,40	Rojo
	PHE410 1450	EM	14,00	1,00	1,50	1,00	2,70	4,10	5,00	3,00	0,40	Azul
	PHE410 1650	EM	16,00	1,00	1,50	1,00	2,70	4,10	5,00	3,00	0,40	Verde
	PHE410 1850	EM	18,00	1,00	1,50	1,00	2,70	4,10	5,00	3,00	0,40	Negro

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**
Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**
Recommended Insertion Speed: 50 R.P.M.
* Measurements are expressed in millimeters (mm).
** Expresses indicative values, since the viability of the technique depends on multiple factors.

PHEA Implants



PHEA 410 Type



- PHE External Hexagonal Connection.
- Bone-link subtractive surface treatment.
- Cervical ring, with 0.5 mm machined surface finish.
- Platform switching availability.
- Double Helix threads, with progressive profile, conical central core and cylindrical bestiary profile.
- Self-threading apical fronts of helical design.
- Generically indicated for all types of Bones.
- Especially indicated where high primary stability is required (especially for type III and type IV).
- Milling speed: 500 to 800 rpm.
- Insertion speed: 25 rpm.
- Container with double protection vial.
- Maximum protection and easy handling.
- Includes closing cap.



PHEA Lines

CONECTIVIDAD:

ES = Ø3.50 = Plat. Hex. Externa Ø3.50 mm / Tipo Brånemark System NP

EM = Ø4.10 = Plat. Hex. Externa Ø4.10 mm / Tipo Brånemark System RP

At Radhex Implants® we are aware of the practical value and evident restorative comfort of the external hexagonal connection designed by Prof. Dr. Per Ingvar Brånemark.

At the same time, we have felt the obvious need to maintain this type of connection, linked to a macro-geometry body of technological and current design. This and no other is the reason for the birth of our PHEA lines, made up of implants with a body design designed for High Stability, even in low-density bones.

Those who know implantology in depth, and have experience, understand the difficulties they can offer, the different topographical and structural situations of the jaws.

For this reason, they especially value a design that responds to extreme situations, where bone quality requires high stability designs.

This is the concept on which the PHEA line is based, an implant with a body designed for High Stability, even in low-density bones and always, with the platform, of the PHE Compatible line:

PHEA 410: High stability of prosthetic seat, for implants with a diameter of 3.50 mm; 3.75mm; 4.00mm; 4.50mm; 5.00mm and 6.00mm.

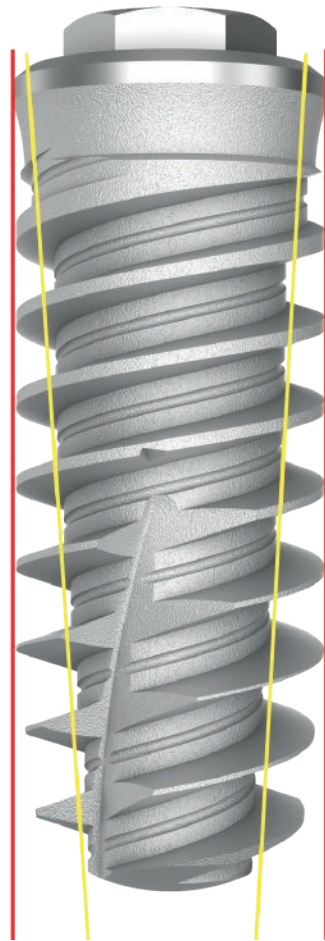
Composition: Made of Pure Grade 4 Titanium.

Suitable for all clinical situations, and especially indicated if there is low bone density, or irregular bone topography.

Practicality is the backbone of the Radhex Implants® System.

Technical Data Scheme

Progressive profile thread

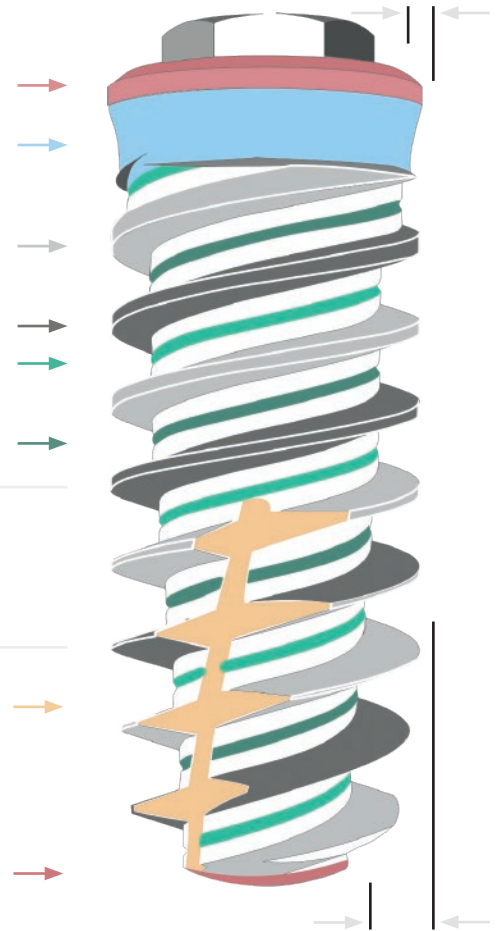


Cylindrical Crestal Profile + Conical Core

High Primary Stability +
Easy Insertion and Reorientability

Mechanized Cervical Profile
Smooth Concave Profile
Double Major Thread
4x4 traction
Micro thread channel
Double Thread
Advance: 2.4 mm per Revolution
Self-Tapping Edges
Helical
Atraumatic Apex

Platform Jump



Large Nucleocrestal Discrepancy
High primary stability



Indication

General indication for all types of cases, presenting optimal behavior in Type III and Type IV Bones (Leckholm et Zarb).

Main Features

CONNECTION ENGINEERING:

External Hexagonal Platform Compatible*. / Horizontal Flat Seat 0°

EM platform of Ø 4.10 mm, with body diameters of 3.50 mm; 3.75mm; 4.00mm; 4.50mm; 5.00mm and 6.00mm.

0° flat seat, on platform, with 0.7 mm high external hexagon for indexing control of the prosthetic restoration.

External hexagonal socket section with anti-rotation and stabilizing function of the pillar, compensating lateral forces with a 2.70 mm faceted hexagon, combined with an internal metric of 2.0 mm.

CERVICAL DESIGN:

Platform Switching: Modeling of soft tissues and conformation of the emergence profile, with maintenance of the crestal bone.

Line of body diameters, with platform switching for Ø 4.10 mm EM platform: body 4.50 mm; 5.00mm and 6.00mm.

Cervical "machined ring" 0.5 mm high: For prevention of peri-implantitis in the most mechanically and biologically critical area of the implant: the connecting GAP. Guarantees adaptation to sinuous bone profiles.

Cervical Capping with a soft concave profile of 1.0 mm in height: Reduction in cortical stress due to compression, with an increase in cervical diameter to favor adjustment and final stability.

PROFILE ARCHITECTURE:

The PHEA implant Model responds to a self-tapping, re-addressable design with High Primary Stability.

Anatomical Design Cylinder - Conical, (Cylindrical ridge profile and conical central core with high core discrepancy in the apical area), which define a Progressive Thread with High Stability Geometry suitable for Immediate Loading, providing a Guarantee of maximum primary stability and self-sustainability.

MICRO DESIGN OF SURFACE:

Micro Textured Surface by subtractive method with micro particles of controlled granulometry incorporating thermal convection process for surface decontamination and stabilization of the surface titanium oxide layer that favors bio-compatibility. Creates a micro-roughness, hydrophilic surface with high wettability and low surface tension.

THREADING MECHANICS:

Active coils with reduced angles that favor BIC, (Bone Implant Contact).

Double threading in Major Threads and double channel threading in Thread Core: they make up 2 Threads with double turns:

- ▶ Design for high traction and grip on Bone terrain: 4x4, (4 threads), with double major coil, and double microcoil in bottom of threading channels. Advance, (2.4 mm per Revolution).
- ▶ Speed of insertion with reduction in surgical time while maintaining a soft touch in its threading.
- ▶ Possibility of re-direction of the implant. The implant literally "bites" into the bone tissue.
- ▶ Rapid feed of 2.4 mm per turn or revolution: e.g. : A 10mm implant requires approximately 4 revolutions to be fully threaded.
- ▶ Wide intercrestal valleys, ensuring high volume of bone tissue between ridges.

SELF-THREADING MECHANICS:

Helical Self-Cutting Front: It acts by causing cutting and deformation of the bone bed to carve its own thread and allows bone remains from the insertion to be collected, with an anti-rotational function after the integration of the implant.

APICAL FRONT DESIGN:

Atraumatic apex of low convexity, provides protection of anatomical risk areas.

COMPOSITION:

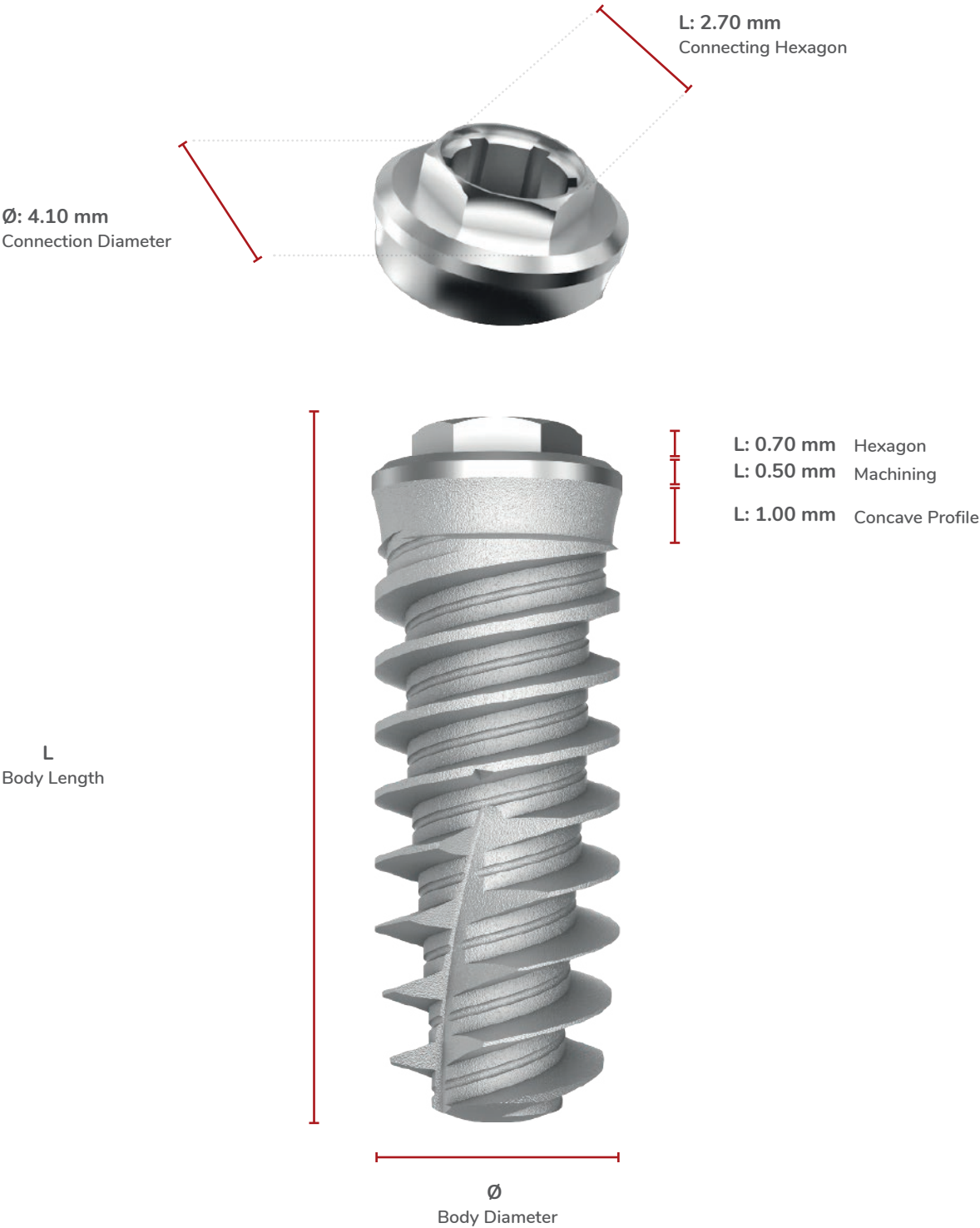
TCP: Commercially Pure Titanium Grade 4.

THREADING SPEED:

Recommended Speed/Insertion: 25 RPM.

PHEA 410 Type

General Length and Diameter Measurements

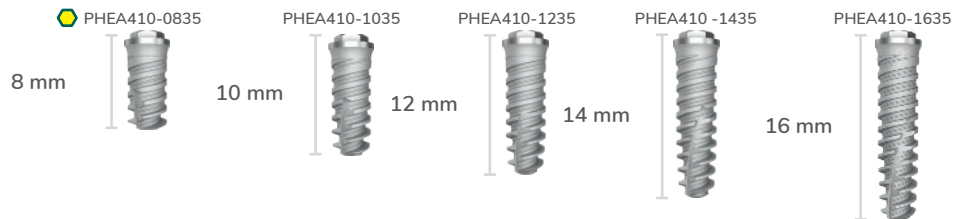


PHEA410: Active External Hexagonal Platform Implants Ø 4.10. EM Connection Code.

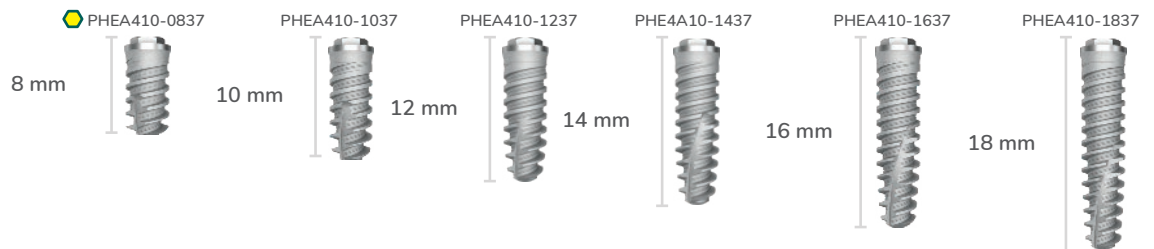
Available Diameters and Lengths

SCALE 1.5:1

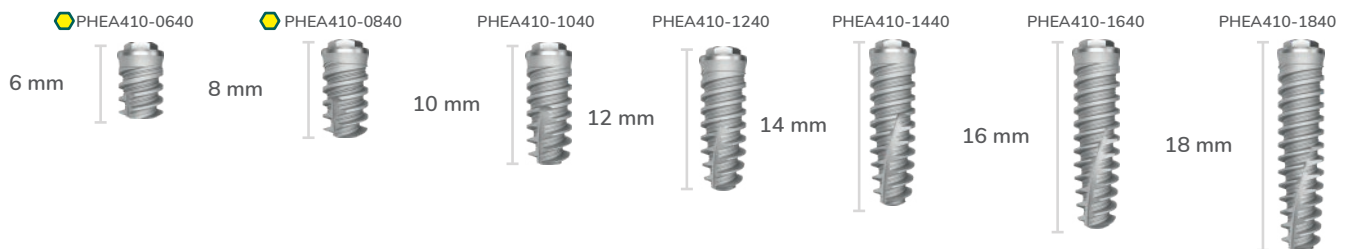
Ø 3.50



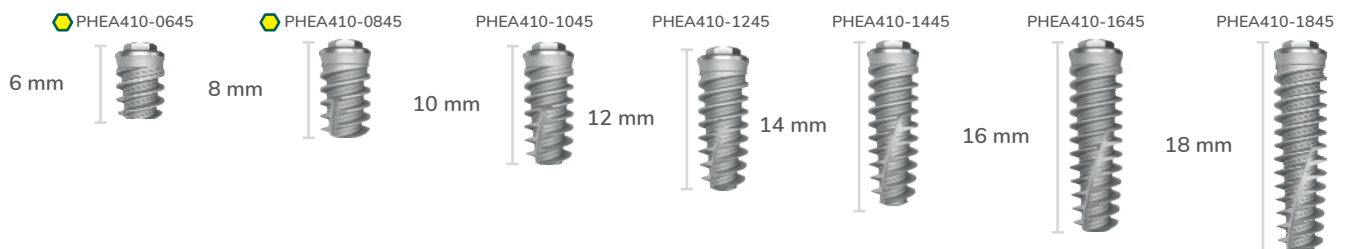
Ø 3.75



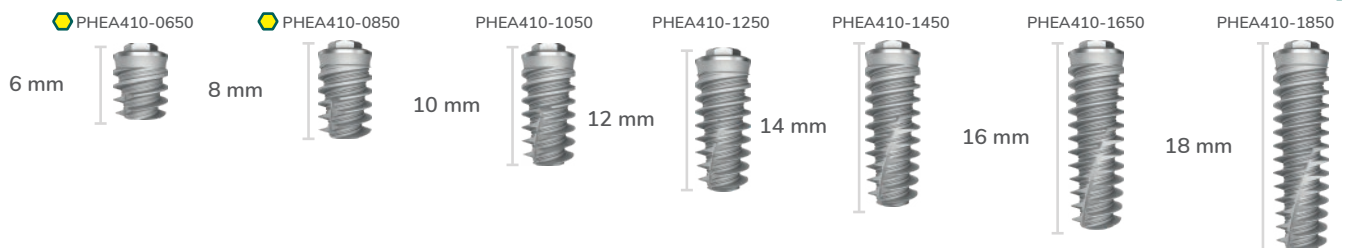
Ø 4.00



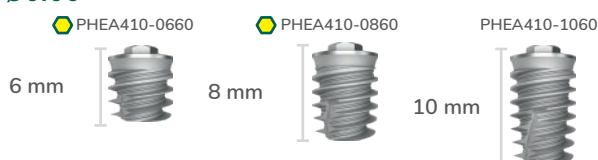
Ø 4.50



Ø5.00



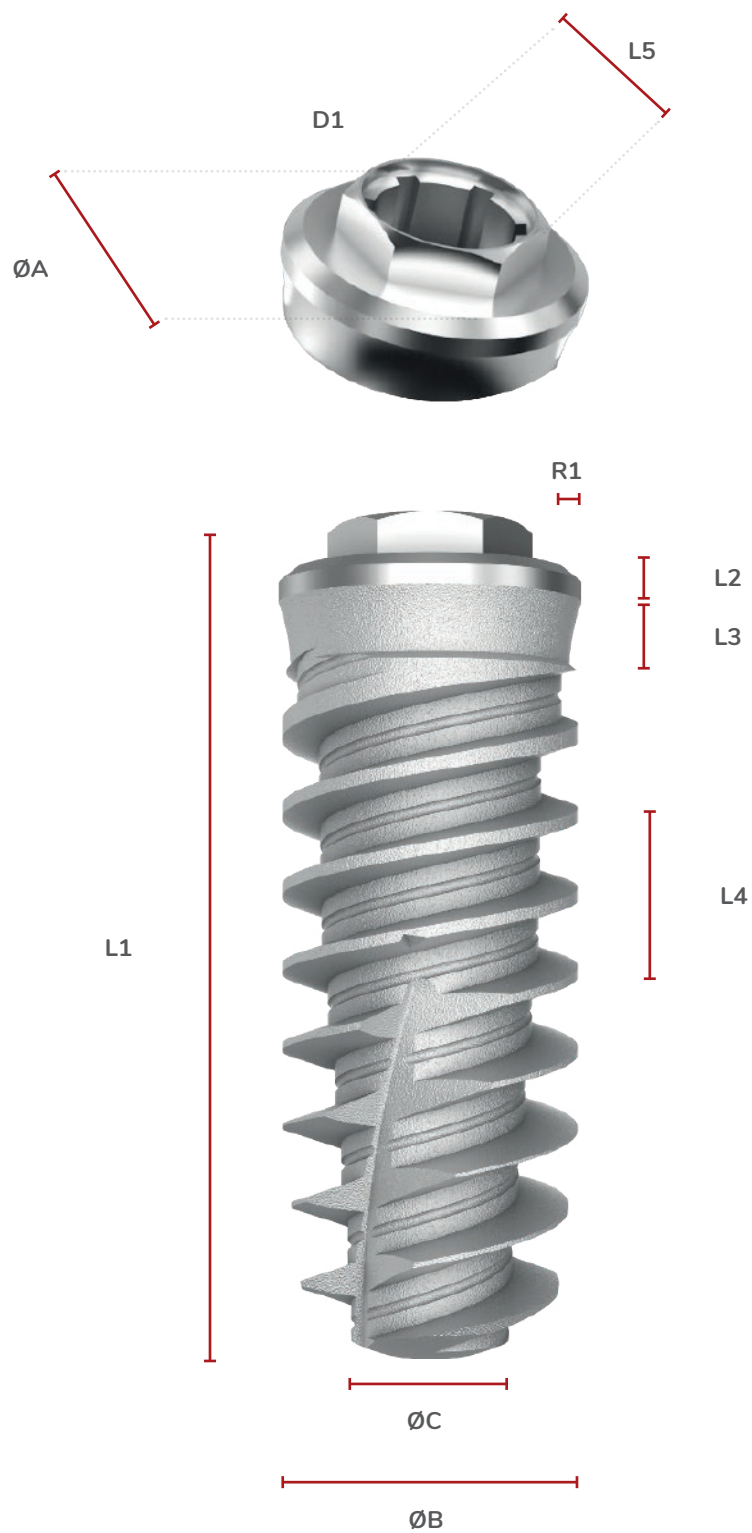
Ø6.00



Short Implant

PHEA 410 Type

General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHEA410	PHEA410 0835	EM	08,00	0,50	1,00	2,40	2,70	4,10	3,50	2,00	0,00	Blanco
	PHEA410 1035	EM	10,00	0,50	1,00	2,40	2,70	4,10	3,50	2,00	0,00	Amarillo
	PHEA410 1235	EM	12,00	0,50	1,00	2,40	2,70	4,10	3,50	2,00	0,00	Rojo
	PHEA410 1435	EM	14,00	0,50	1,00	2,40	2,70	4,10	3,50	2,00	0,00	Azul
	PHEA410 1635	EM	16,00	0,50	1,00	2,40	2,70	4,10	3,50	2,00	0,00	Verde
	PHEA410 0837	EM	08,00	0,50	1,00	2,40	2,70	4,10	3,75	2,10	0,00	Blanco
	PHEA410 1037	EM	10,00	0,50	1,00	2,40	2,70	4,10	3,75	2,10	0,00	Amarillo
	PHEA410 1237	EM	12,00	0,50	1,00	2,40	2,70	4,10	3,75	2,10	0,00	Rojo
	PHEA410 1437	EM	14,00	0,50	1,00	2,40	2,70	4,10	3,75	2,10	0,00	Azul
	PHEA410 1637	EM	16,00	0,50	1,00	2,40	2,70	4,10	3,75	2,10	0,00	Verde
	PHEA410 1837	EM	18,00	0,50	1,00	2,40	2,70	4,10	3,75	2,10	0,00	Negro
	PHEA410 0640	EM	06,00	0,50	1,00	2,40	2,70	4,10	4,00	2,75	0,00	Violeta
	PHEA410 0840	EM	08,00	0,50	1,00	2,40	2,70	4,10	4,00	2,20	0,00	Blanco
	PHEA410 1040	EM	10,00	0,50	1,00	2,40	2,70	4,10	4,00	2,20	0,00	Amarillo
	PHEA410 1240	EM	12,00	0,50	1,00	2,40	2,70	4,10	4,00	2,20	0,00	Rojo
	PHEA410 1440	EM	14,00	0,50	1,00	2,40	2,70	4,10	4,00	2,20	0,00	Azul
	PHEA410 1640	EM	16,00	0,50	1,00	2,40	2,70	4,10	4,00	2,20	0,00	Verde
	PHEA410 1840	EM	18,00	0,50	1,00	2,40	2,70	4,10	4,00	2,20	0,00	Negro
	PHEA410 0645	EM	06,00	0,50	1,00	2,40	2,70	4,10	4,50	2,90	0,20	Violeta
	PHEA410 0845	EM	08,00	0,50	1,00	2,40	2,70	4,10	4,50	2,75	0,20	Blanco
	PHEA410 1045	EM	10,00	0,50	1,00	2,40	2,70	4,10	4,50	2,50	0,20	Amarillo
	PHEA410 1245	EM	12,00	0,50	1,00	2,40	2,70	4,10	4,50	2,40	0,20	Rojo
	PHEA410 1445	EM	14,00	0,50	1,00	2,40	2,70	4,10	4,50	2,40	0,20	Azul
	PHEA410 1645	EM	16,00	0,50	1,00	2,40	2,70	4,10	4,50	2,40	0,20	Verde
	PHEA410 1845	EM	18,00	0,50	1,00	2,40	2,70	4,10	4,50	2,40	0,20	Negro
	PHEA410 0650	EM	06,00	0,50	1,00	2,40	2,70	4,10	5,00	3,00	0,40	Violeta
	PHEA410 0850	EM	08,00	0,50	1,00	2,40	2,70	4,10	5,00	2,90	0,40	Blanco
	PHEA410 1050	EM	10,00	0,50	1,00	2,40	2,70	4,10	5,00	2,90	0,40	Amarillo
	PHEA410 1250	EM	12,00	0,50	1,00	2,40	2,70	4,10	5,00	2,90	0,40	Rojo
	PHEA410 1450	EM	14,00	0,50	1,00	2,40	2,70	4,10	5,00	2,90	0,40	Azul
	PHEA410 1650	EM	16,00	0,50	1,00	2,40	2,70	4,10	5,00	2,90	0,40	Verde
	PHEA410 1850	EM	18,00	0,50	1,00	2,40	2,70	4,10	5,00	2,90	0,40	Negro
	PHEA410 0660	EM	06,00	0,50	1,00	2,40	2,70	4,10	6,00	3,70	0,90	Violeta
	PHEA410 0860	EM	08,00	0,50	1,00	2,40	2,70	4,10	6,00	3,60	0,90	Blanco
	PHEA410 1060	EM	10,00	0,50	1,00	2,40	2,70	4,10	6,00	3,60	0,90	Amarillo

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

Recommended Insertion Speed: 25 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

PHI Implants

RADHEX
IMPLANTS

PHI 350 Type
RADHEX
IMPLANTS



PHI 450 Type
RADHEX
IMPLANTS



- PHI Internal Hexagonal Connection.
- Bone-link subtractive surface treatment.
- Cervical ring, with 1 mm machined surface finish.
- Platform switching availability.
- Helix threads, with progressive profile, conical central core and cylindrical bestiary profile.
- Straight design self-threading apical fronts.
- Generically indicated for all types of Bones.
- Especially indicated for high bone density, (especially for type I and type II).
- Milling speed: 500 to 800 rpm.
- Insertion speed: 50 rpm.
- Container with double protection vial.
- Maximum protection and easy handling.
- Includes closing cap.



PHI Lines

CONNECTIVITY:

IS = PHI350 = Plat. Hex. Internal Ø3.50 mm / Type Zimmer Tapped Screw Vent 3.5

IM = PHI450 = Plat. Hex. Internal Ø4.50 mm / Type Zimmer Tapped Screw Vent 4.5

At Radhex Implants® we think that a high standard of quality and design in the product, together with the practicality provided by an adequate design ergonomics, and the accessibility provided by economy, are our main bastions of support for the professional in the search for the excellence.

It is within this spirit that each element of the design of our products moves, and especially our PHI line.

An implant designed for the professional who prefers internal inserts, with the efficiency and security that can be provided by the American platform originally designed by Dr. Gerald Niznick, surely the most widespread worldwide as an internal hexagonal connection, which at the same time creates a secure conical seat connection closure, which ensures maximum GAP reduction in the implant - attachment interconnection

A versatile implant, always with the PHI Compatible line platform in its two diameter versions:

PHI 350: The most widespread connection, for implants with diameters from 3.50 mm to 4.00 mm.

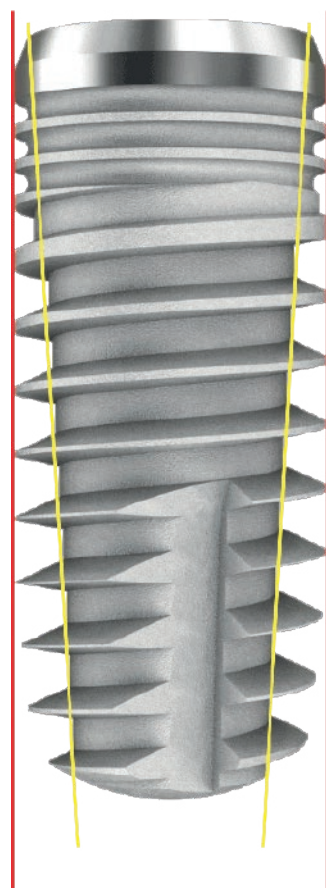
PHI 450: High stability of prosthetic seat, for implants with a diameter of 4.50 mm to 6.00 mm.

Composition: Made of Pure Grade 4 Titanium. Suitable for all clinical situations.

Practicality is the backbone of the Radhex Implants® System.

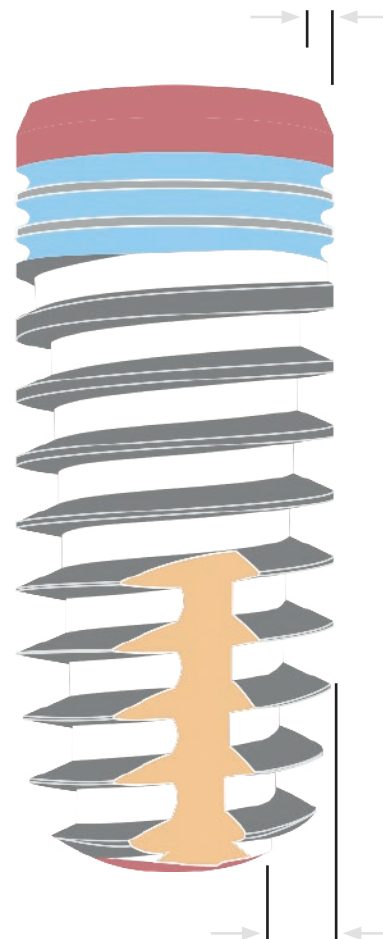
Technical Data Scheme

Progressive profile thread



- Mechanized Cervical Ring
- Cervical Micro-Canals
- Trapezoidal Major Thread
- Thread Progressive Wide Valleys
- 1 threading propeller
- Advance: 1.0 mm per Revolution
- Self-Tapping Edges Straight
- Atraumatic Apex

Platform Jump



Cylindrical Crestal Profile + Conical Core

High Primary Stability +
Easy Insertion and Reorientability

Large Nucleocrestal Discrepancy
High primary stability



4 x 4 Total Grip



Threading Smoothness

Indication

General indication for all types of cases, presenting optimal behavior in Type I and Type II Bones (Leckholm et Zarb).

Main Features

CONNECTION ENGINEERING:

Compatible Internal Hexagonal Platform*. / 45° Conical Seat

Ø 3.50 mm IS platform, with body diameters of 3.50 mm, 3.75 mm and 4.00 mm.

Ø 4.50 mm IM platform, with body diameters of 4.50 mm, 5.00 mm and 6.00 mm.

Internal seat bezel on platform, with 45° conical geometry insert, to obtain maximum closure, hermeticism and stability,

Reduction of Micro-movements, optimally orienting the loads, at the same time ensuring an optimal biological seal in the GAP of connection.

Internal hexagonal socket section with anti-rotation and stabilizing function of the pillar, compensating lateral forces with a 2.40 mm faceted hexagon, combined with an internal metric of 1.8 mm.

CERVICAL DESIGN:

Coronal conical external bevel: Reduction of bacterial infiltration.

Partial platform switching of the system, limited to larger diameters: Modeling of soft tissues and conformation of the emergence profile, with maintenance of the turbinate bone.

Cervical “machined ring” 1 mm high: For prevention of peri-implantitis in the most mechanically and biologically critical area of the implant: the connection GAP. Guarantees adaptation to sinuous bone profiles.

Micro Trunks or cervical slots in 1.5 mm height: Reduction of cortical stress due to compression, favoring the stabilization of the bony bone in the cervical area of the implant.

PROFILE ARCHITECTURE:

The PHI implant Model has a smooth self-tapping design and adequate Primary Stability.

Anatomical Design Cylinder - Conical, (Cylindrical ridge profile and conical central core), which define a Progressive Thread with High Stability Geometry suitable for Immediate Loading, providing a Guarantee of maximum primary stability and self-sustainability.

MICRO DESIGN OF SURFACE:

Micro Textured Surface by subtractive method with micro particles of controlled granulometry incorporating thermal convection process for surface decontamination and stabilization of the surface titanium oxide layer that favors bio-compatibility. Creates a micro-roughness, hydrophilic surface with high wettability and low surface tension.

THREADING MECHANICS:

Trapezoidal spirals with flat edges, with wide valleys that favor BIC, (Bone Implant Contact).

Single Spiral that defines a Single Helix Thread, which guarantees an adequate safety margin in the insertion control:

- ▶ Thread crests with fine profile, ensuring adequate primary stability.
- ▶ Wide intercrestal valleys, ensuring high volume of bone tissue between crests.
- ▶ Advance of 1 mm per turn or revolution: e.g. : A 10 mm implant requires 10 revolutions to be fully threaded.

SELF-THREADING MECHANICS:

Straight Self-cutting Front: Self-tapping function with straight front design allowing the adaptation of the bone tissue to the threading profile, by self-tapping and cutting, with anti-rotational function after the integration of the implant.

APICAL FRONT DESIGN:

Atraumatic apex of moderate convexity, provides protection of anatomical risk areas.

COMPOSITION:

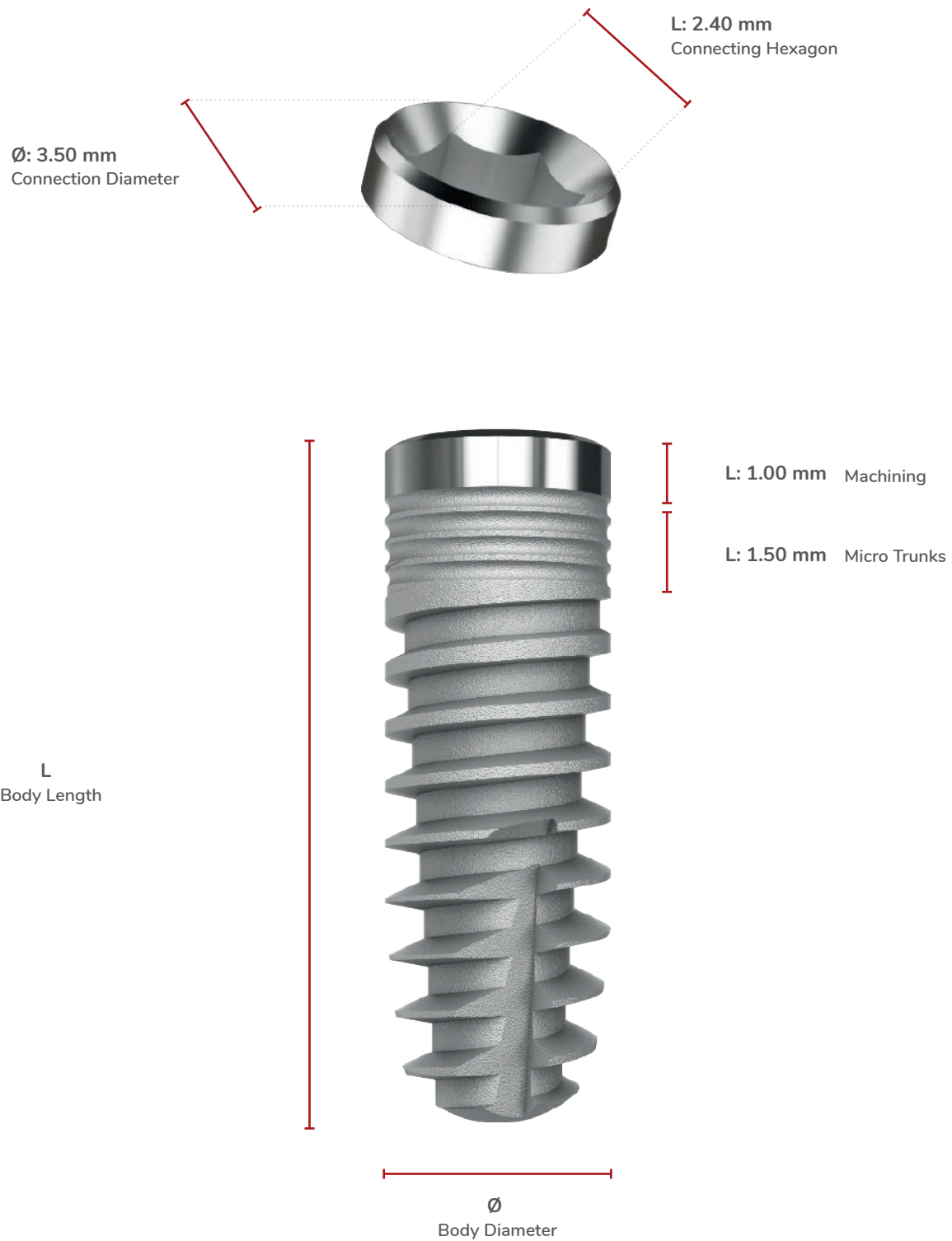
TCP: Commercially Pure Titanium Grade 4.

THREADING SPEED:

Recommended Speed/Insertion: 50 RPM.

PHI 350 Type

General Length and Diameter Measurements



PHI350: Internal Hexagonal Platform Implants Ø 3.50. IS Connection Code.

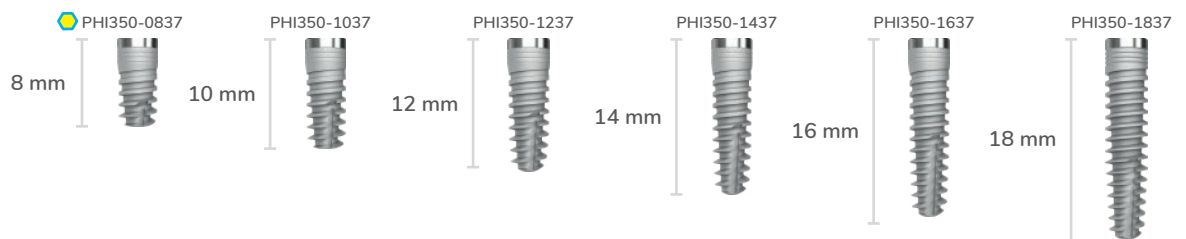
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Available Diameters and Lengths

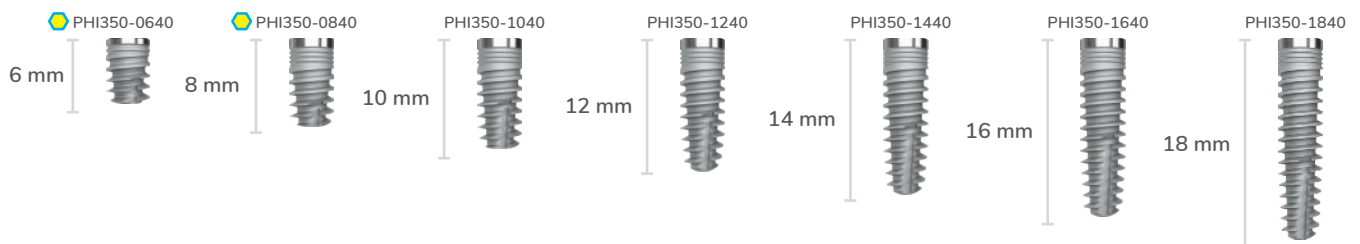
Ø 3.50



Ø 3.75

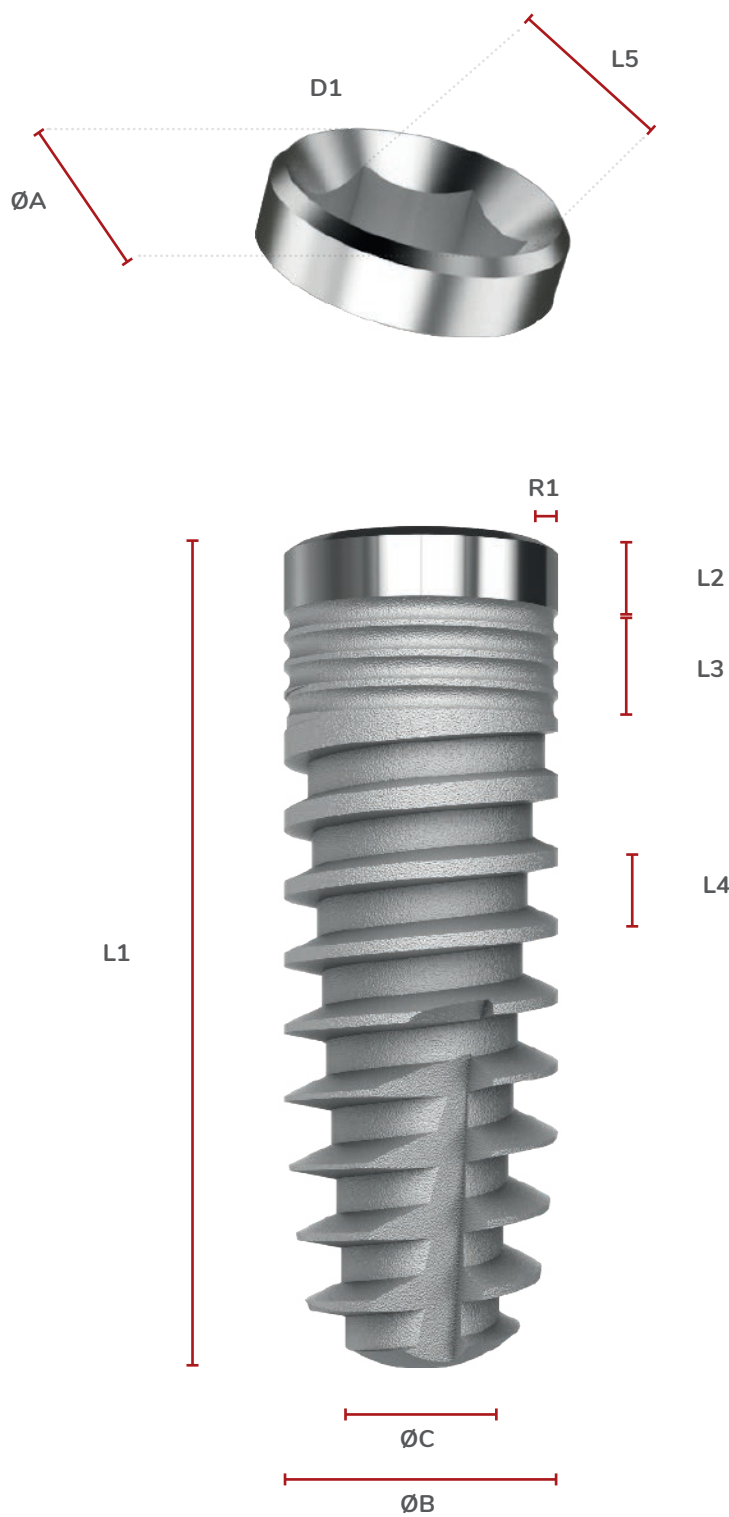


Ø 4.00



PHI 350 Type

General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHI350	PHI350 0835	IS	08,00	1,00	1,50	1,00	2,40	3,50	3,50	2,10	0,10	Blanco
	PHI350 1035	IS	10,00	1,00	1,50	1,00	2,40	3,50	3,50	2,00	0,10	Amarillo
	PHI350 1235	IS	12,00	1,00	1,50	1,00	2,40	3,50	3,50	2,00	0,10	Rojo
	PHI350 1435	IS	14,00	1,00	1,50	1,00	2,40	3,50	3,50	2,00	0,10	Azul
	PHI350 1635	IS	16,00	1,00	1,50	1,00	2,40	3,50	3,50	2,00	0,10	Verde
	PHI350 0837	IS	08,00	1,00	1,50	1,00	2,40	3,50	3,75	2,25	0,15	Blanco
	PHI350 1037	IS	10,00	1,00	1,50	1,00	2,40	3,50	3,75	2,20	0,15	Amarillo
	PHI350 1237	IS	12,00	1,00	1,50	1,00	2,40	3,50	3,75	2,10	0,15	Rojo
	PHI350 1437	IS	14,00	1,00	1,50	1,00	2,40	3,50	3,75	2,10	0,15	Azul
	PHI350 1637	IS	16,00	1,00	1,50	1,00	2,40	3,50	3,75	2,10	0,15	Verde
	PHI350 1837	IS	18,00	1,00	1,50	1,00	2,40	3,50	3,75	2,10	0,15	Negro
	PHI350 0640	IS	06,00	1,00	1,50	1,00	2,40	3,50	4,00	2,60	0,25	Violeta
	PHI350 0840	IS	08,00	1,00	1,50	1,00	2,40	3,50	4,00	2,40	0,25	Blanco
	PHI350 1040	IS	10,00	1,00	1,50	1,00	2,40	3,50	4,00	2,25	0,25	Amarillo
	PHI350 1240	IS	12,00	1,00	1,50	1,00	2,40	3,50	4,00	2,20	0,25	Rojo
	PHI350 1440	IS	14,00	1,00	1,50	1,00	2,40	3,50	4,00	2,20	0,25	Azul
	PHI350 1610	IS	16,00	1,00	1,50	1,00	2,40	3,50	4,00	2,20	0,25	Verde
	PHI350 1840	IS	18,00	1,00	1,50	1,00	2,40	3,50	4,00	2,20	0,25	Negro

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

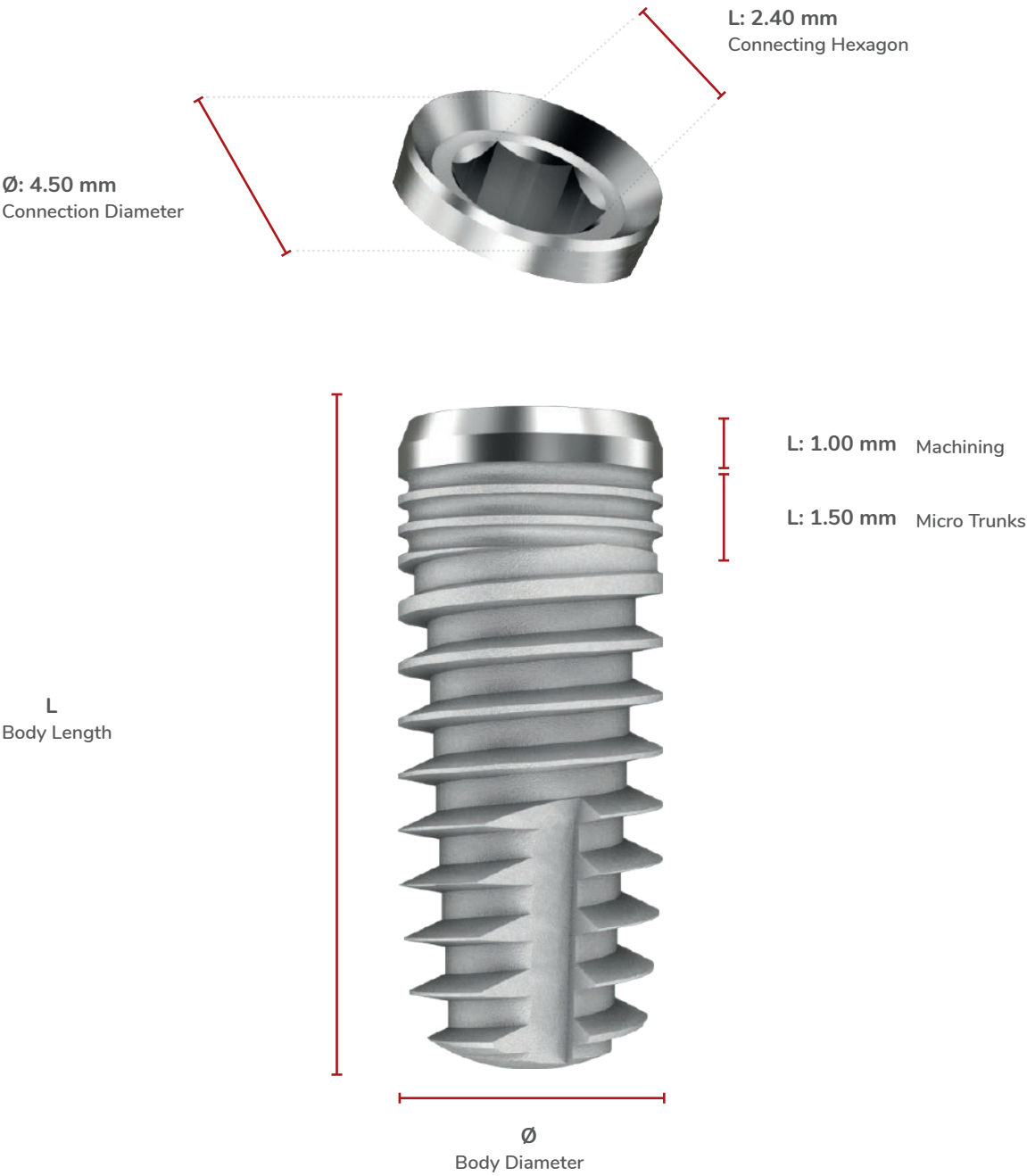
Recommended Insertion Speed: 50 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

PHI 450 Type

General Length and Diameter Measurements

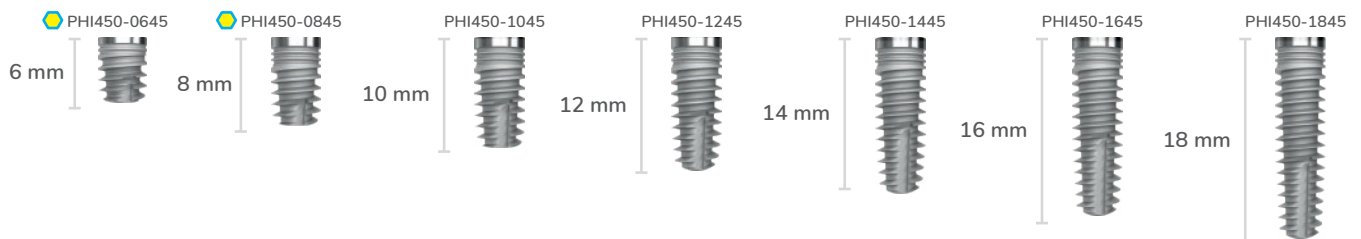


PHI450: Internal Hexagonal Platform Implants Ø 4.50. IM Connection Code.

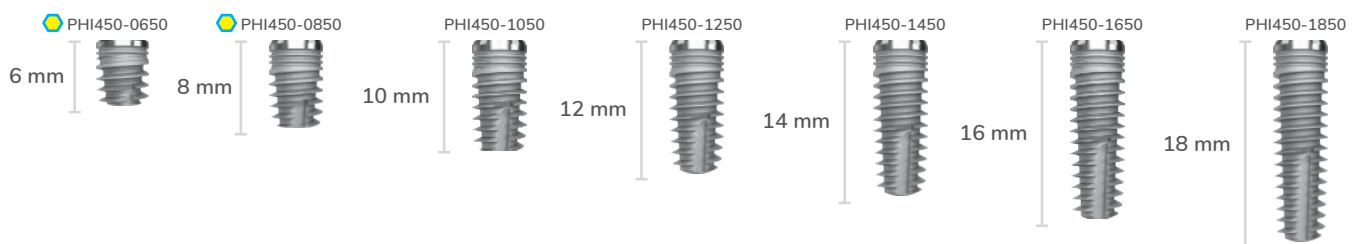
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Available Diameters and Lengths

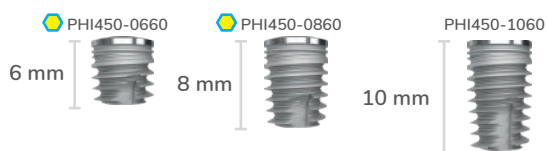
Ø 4.50



Ø 5.00

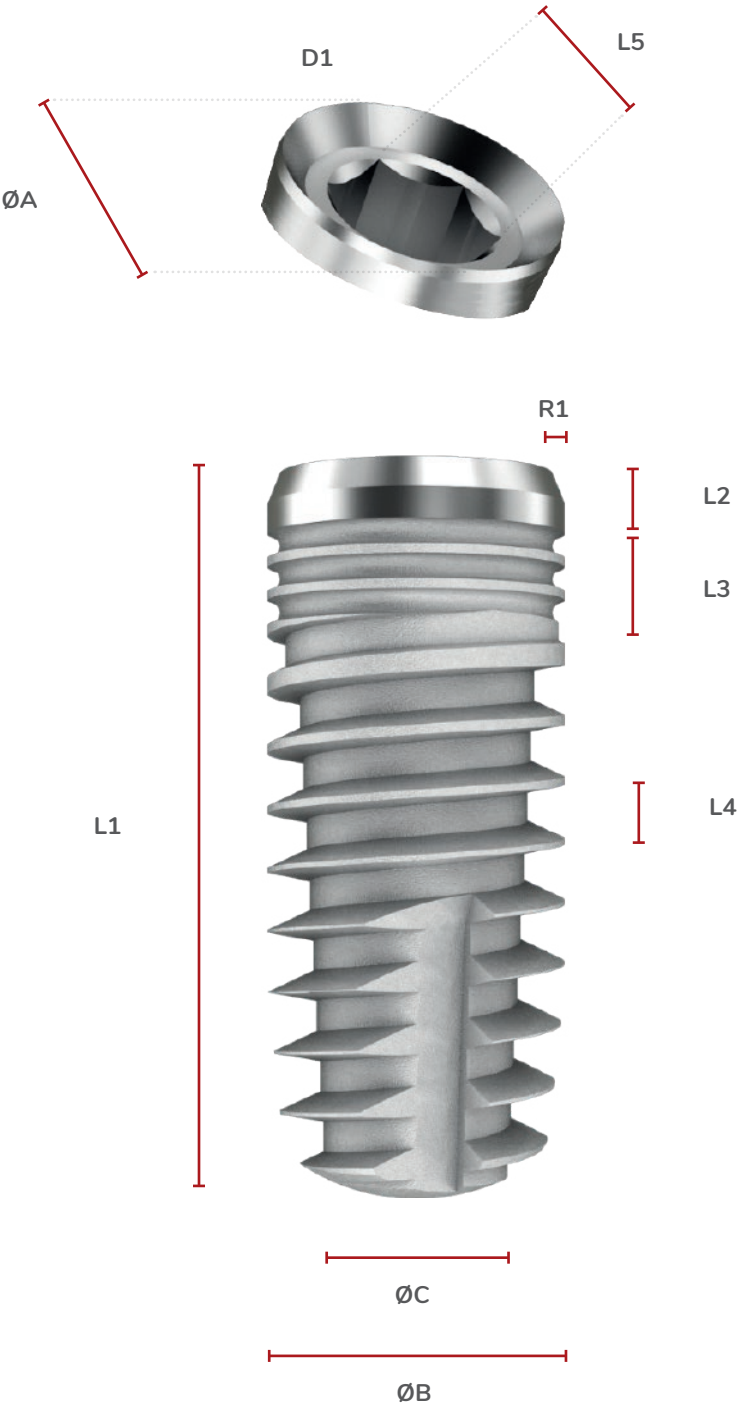


Ø 6.00



PHI 450 Type

General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHI450	PHI450 0645	IM	06,00	1,00	1,50	1,00	2,40	4,50	4,50	3,00	0,00	Violeta
	PHI450 0845	IM	08,00	1,00	1,50	1,00	2,40	4,50	4,50	2,75	0,00	Blanco
	PHI450 1045	IM	10,00	1,00	1,50	1,00	2,40	4,50	4,50	2,65	0,00	Amarillo
	PHI450 1245	IM	12,00	1,00	1,50	1,00	2,40	4,50	4,50	2,65	0,00	Rojo
	PHI450 1445	IM	14,00	1,00	1,50	1,00	2,40	4,50	4,50	2,65	0,00	Azul
	PHI450 1645	IM	16,00	1,00	1,50	1,00	2,40	4,50	4,50	2,65	0,00	Verde
	PHI450 1845	IM	18,00	1,00	1,50	1,00	2,40	4,50	4,50	2,65	0,00	Negro
	PHI450 0650	IM	06,00	1,00	1,50	1,00	2,40	4,50	5,00	3,10	0,20	Violeta
	PHI450 0850	IM	08,00	1,00	1,50	1,00	2,40	4,50	5,00	3,05	0,20	Blanco
	PHI450 1050	IM	10,00	1,00	1,50	1,00	2,40	4,50	5,00	3,00	0,20	Amarillo
	PHI450 1250	IM	12,00	1,00	1,50	1,00	2,40	4,50	5,00	3,00	0,20	Rojo
	PHI450 1450	IM	14,00	1,00	1,50	1,00	2,40	4,50	5,00	3,00	0,20	Azul
	PHI450 1650	IM	16,00	1,00	1,50	1,00	2,40	4,50	5,00	3,00	0,20	Verde
	PHI450 1850	IM	18,00	1,00	1,50	1,00	2,40	4,50	5,00	3,00	0,20	Negro
	PHI450 0660	IM	06,00	1,00	1,50	1,00	2,40	4,50	6,00	4,10	0,70	Violeta
	PHI450 0860	IM	08,00	1,00	1,50	1,00	2,40	4,50	6,00	4,00	0,70	Blanco
	PHI450 1060	IM	10,00	1,00	1,50	1,00	2,40	4,50	6,00	3,80	0,70	Amarillo

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

Recommended Insertion Speed: 50 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

PHIA Implants



PHIA 350 Type



PHIA 450 Type



- PHI Internal Hexagonal Connection.
- Bone-link subtractive surface treatment.
- Cervical ring, with 0.5 mm machined surface finish.
- Platform switching availability.
- Double Helix threads, with progressive profile, conical central core and cylindrical bestiary profile.
- Self-threading apical fronts of helical design.
- Generically indicated for all types of Bones.
- Especially indicated where high primary stability is required (especially for type III and type IV).
- Milling speed: 500 to 800 rpm.
- Insertion speed: 25 rpm.
- Container with double protection vial.
- Maximum protection and easy handling.
- Includes closing cap.



PHIA Lines

CONECTIVIDAD:

IS = PHI350 = Plat. Hex. Interna Ø3.50 mm / Tipo Zimmer Tapered Screw Vent 3.5

IM = PHI450 = Plat. Hex. Interna Ø4.50 mm / Tipo Zimmer Tapered Screw Vent 4.5

At Radhex Implants® we think that an implant system should provide the professional with different alternatives.

PHIA is an implant with a body designed for High Stability, even in low-density bone and always with the platform of the **PHI line** compatible.

Those who know implantology in depth, and have experience, understand the difficulties that can arise. offer the different topographic and structural situations of the jaws.

For this reason, they especially value a design that responds to extreme situations, where bone quality requires high stability designs.

This is the conceptual sense to which the **PHIA line** responds, an implant with a body designed for High Stability, even in low density bones and always, with the platform, from the **PHI Compatible** line in its two versions of diameter:

PHIA 350: Maximum restorative comfort, responding to a complete line of diameters and lengths, with a single platform, for implants with a diameter of 3.50 mm; 3.75mm; 4.00mm; 4.50mm and 5.00mm.

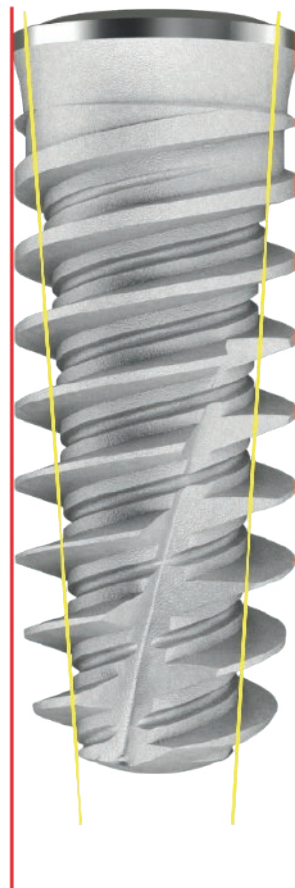
PHIA 450: High stability of prosthetic seat, for implants with a diameter of 4.50mm; 5.00mm and 6.00mm.

Composition: Made of Pure Grade 4 Titanium. Suitable for all situations, and especially indicated if there is low bone density, or irregular bone topography.

Practicality is the backbone of the Radhex Implants® System.

Technical Data Scheme

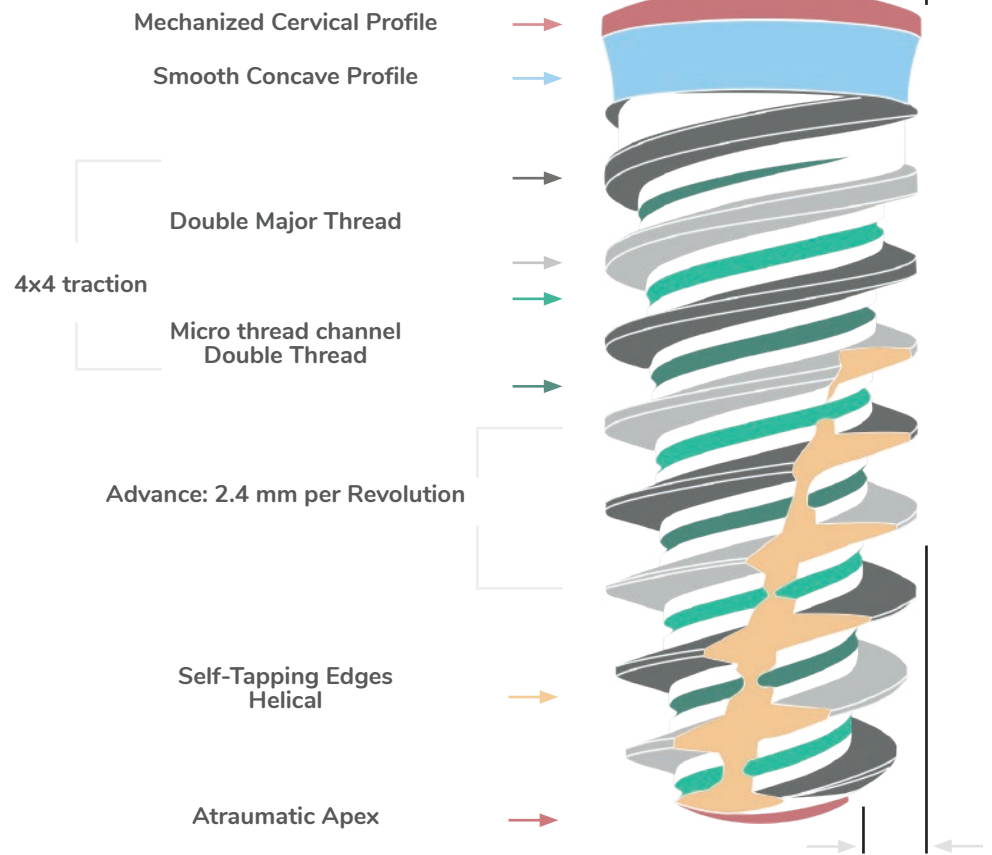
Progressive profile thread



Cylindrical Crestal Profile + Conical Core

High Primary Stability +
Easy Insertion and Reorientability

Salto de Plataforma



Large Nucleocrestal Discrepancy
High primary stability



Indication

General indication for all types of cases, presenting optimal behavior in Type III and Type IV Bones (Leckholm et Zarb).

Main Features

CONNECTION ENGINEERING:

Compatible Internal Hexagonal Platform* / 45° Conical Seat

Ø 3.50 mm IS platform, with body diameters of 3.50 mm, 3.75 mm, 4.00 mm, 4.50 mm and 5.00 mm.

Ø 4.50 mm IM platform, with body diameters of 4.50 mm, 5.00 mm and 6.00 mm.

Internal seat bezel on platform, with 45° conical geometry insert, to obtain maximum closure, hermeticism and stability,

Reduction of Micro-movements, optimally orienting the loads, at the same time ensuring an optimal biological seal in the GAP of connection.

Internal hexagonal socket section with anti-rotation and stabilizing function of the pillar, compensating lateral forces with a 2.40 mm faceted hexagon, combined with an internal metric of 1.8 mm.

CERVICAL DESIGN:

Coronal conical external bevel: Reduction of bacterial infiltration.

Platform Switching: Modeling of soft tissues and conformation of the emergence profile, with maintenance of the crestal bone.

Complete line of body diameters, with platform switching for Ø 3.50 mm IS platform.

Cervical “machined ring” 0.5 mm high: For prevention of peri-implantitis in the most mechanically and biologically critical area of the implant: the connecting GAP. Guarantees adaptation to sinuous bone profiles.

Cervical Capping with a soft concave profile of 1.0 mm in height: Reduction in cortical stress due to compression, with an increase in cervical diameter to favor adjustment and final stability.

PROFILE ARCHITECTURE:

The PHIA implant Model responds to a self-tapping, re-addressable design with High Primary Stability.

Anatomical Design Cylinder - Conical, (Cylindrical ridge profile and conical central core with high core discrepancy in the apical area), which define a Progressive Thread with High Stability Geometry suitable for Immediate Loading, providing a Guarantee of maximum primary stability and self-sustainability.

MICRO DESIGN OF SURFACE:

Micro Textured Surface by subtractive method with micro particles of controlled granulometry incorporating thermal convection process for surface decontamination and stabilization of the surface titanium oxide layer that favors bio-compatibility. Creates a micro-roughness, hydrophilic surface with high wettability and low surface tension.

THREADING MECHANICS:

Active coils with reduced angles that favor BIC, (Bone Implant Contact).

Double threading in Major Threads and double channel threading in Thread Core: they make up 2 Threads with double turns:

- Design for high traction and grip on Bone terrain: 4x4, (4 threads), with double major coil, and double microcoil in bottom of threading channels. Advance, (2.4 mm per Revolution).
- Speed of insertion with reduction in surgical time while maintaining a soft touch in its threading.
- Possibility of re-direction of the implant. The implant literally “bites” into the bone tissue.
- Rapid feed of 2.4 mm per turn or revolution: e.g. : a 10 mm implant requires approximately 4 revolutions to be fully threaded.
- Wide intercrestal valleys, ensuring high volume of bone tissue between crests.

SELF-THREADING MECHANICS:

Helical Self-Cutting Front: It acts by causing cutting and deformation of the bone bed to carve its own thread and allows bone remains from the insertion to be collected, with an anti-rotational function after the integration of the implant.

APICAL FRONT DESIGN:

Atraumatic apex of low convexity, provides protection of anatomical risk areas.

COMPOSITION:

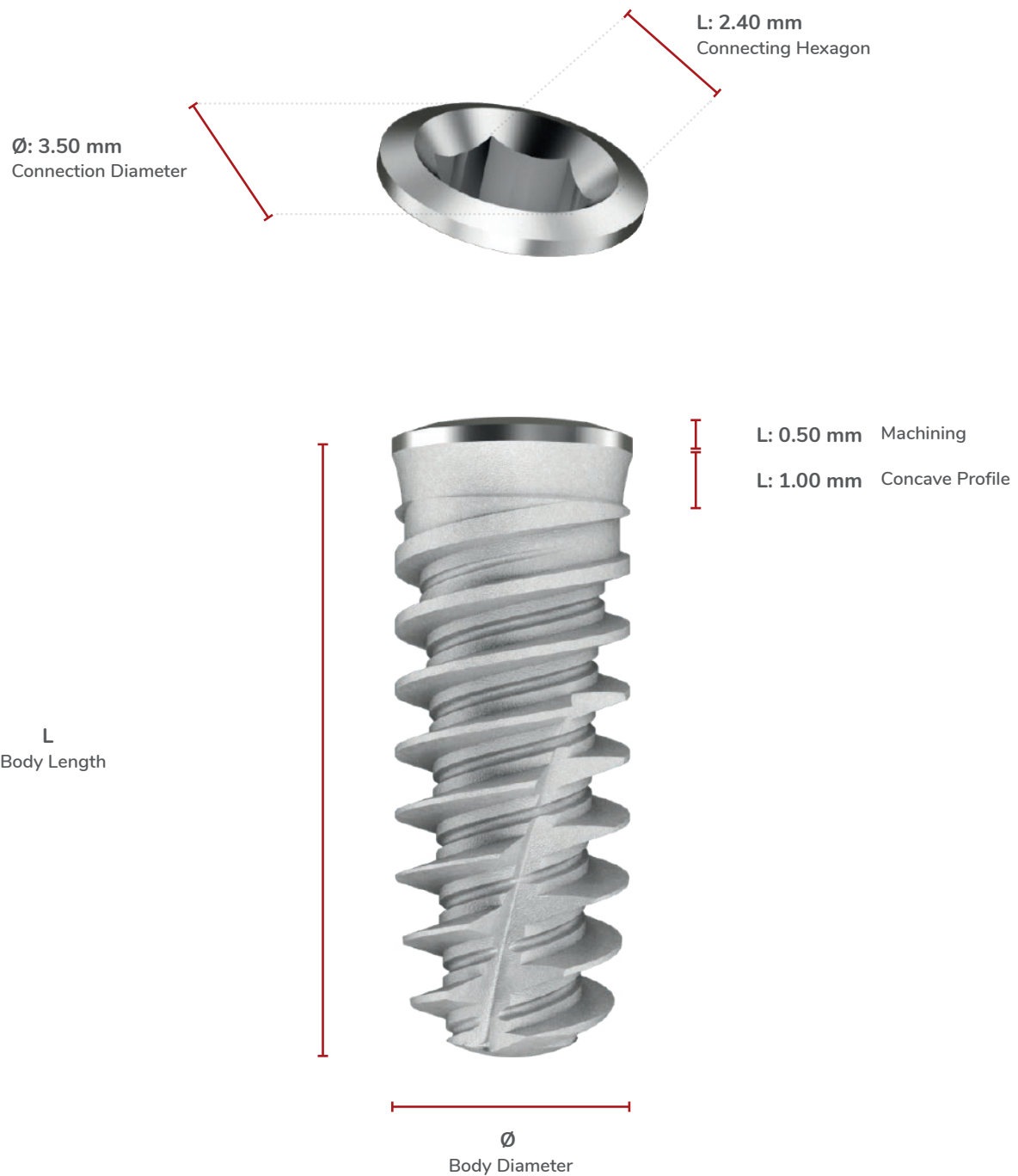
TCP: Commercially Pure Titanium Grade 4.

THREADING SPEED:

Recommended Speed/Insertion: 25 RPM.

PHIA 350 Type

General Length and Diameter Measurements

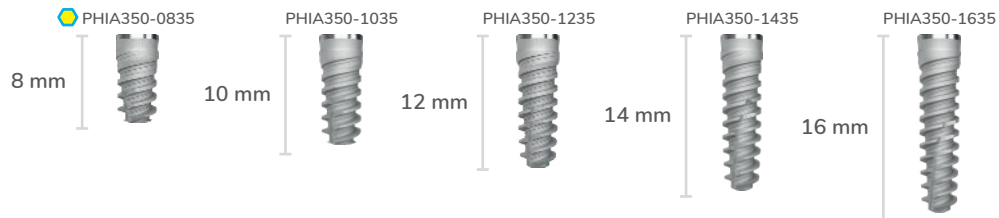


PHIA350: Active Internal Hexagonal Platform Implants Ø 3.50. IS Connection Code.

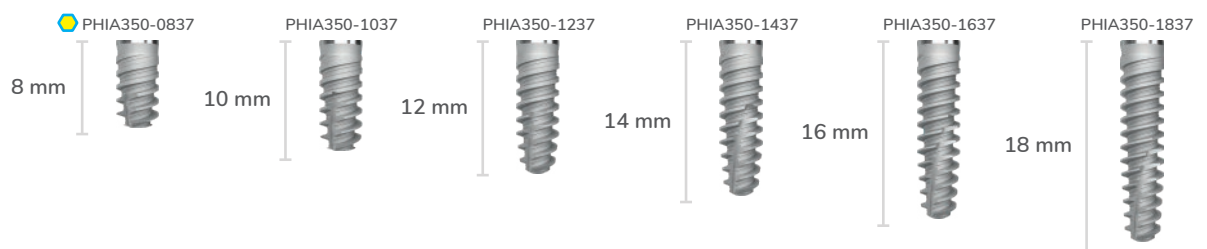
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Available Diameters and Lengths

Ø 3.50



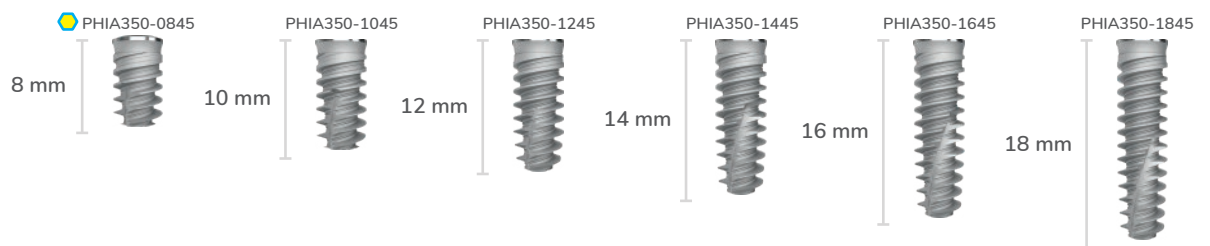
Ø 3.75



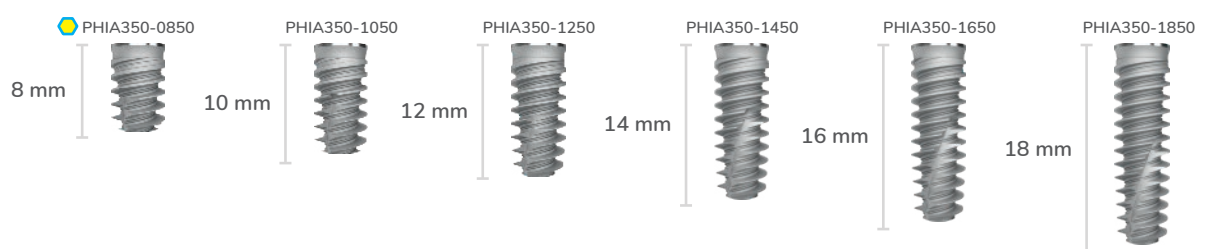
Ø 4.00



Ø 4.50



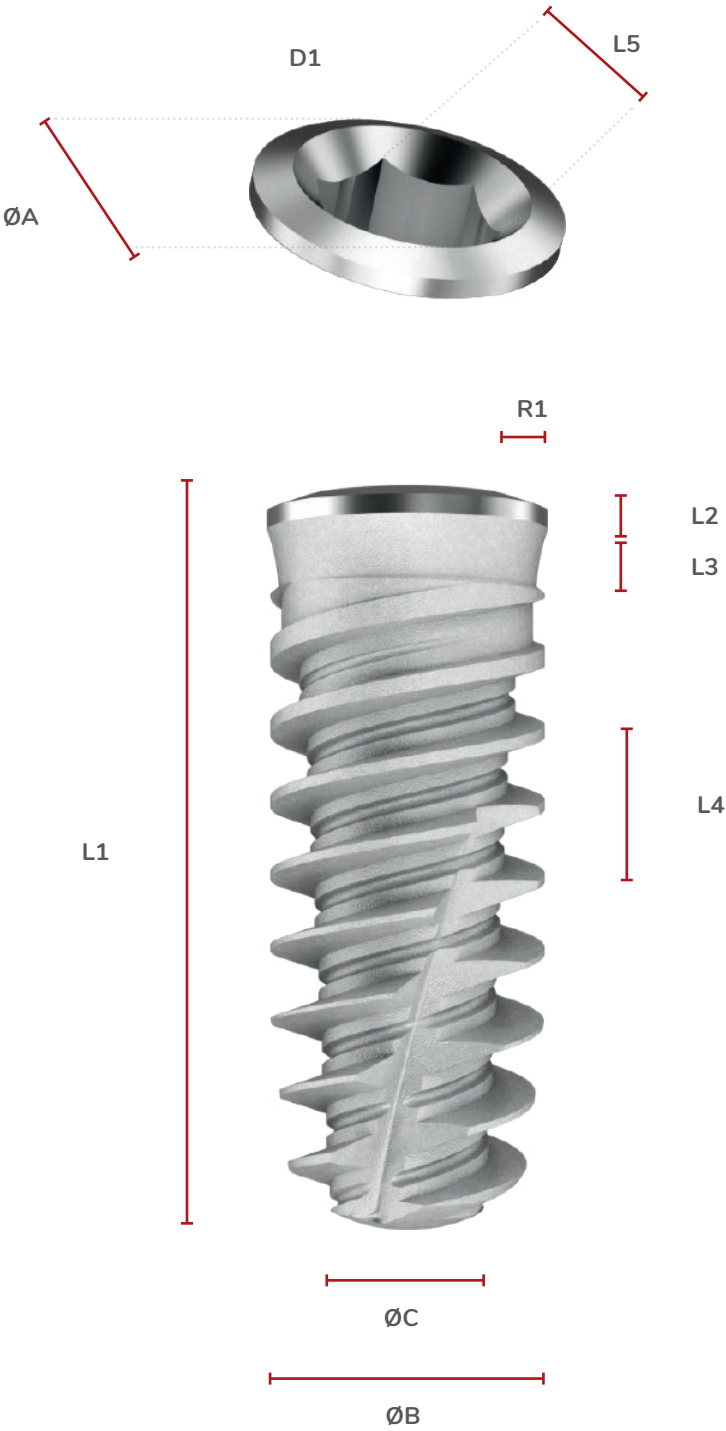
Ø 5.00



Short Implant

PHIA 350 Type

General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHIA350	PHIA350 0835	IS	08,00	0,50	1,00	2,40	2,40	3,50	3,50	2,05	0,17	Blanco
	PHIA350 1035	IS	10,00	0,50	1,00	2,40	2,40	3,50	3,50	2,05	0,17	Amarillo
	PHIA350 1235	IS	12,00	0,50	1,00	2,40	2,40	3,50	3,50	2,05	0,17	Rojo
	PHIA3501435	IS	14,00	0,50	1,00	2,40	2,40	3,50	3,50	2,05	0,17	Azul
	PHIA350 1635	IS	16,00	0,50	1,00	2,40	2,40	3,50	3,50	2,05	0,17	Verde
	PHIA350 0837	IS	08,00	0,50	1,00	2,40	2,40	3,50	3,75	2,15	0,17	Blanco
	PHIA350 1037	IS	10,00	0,50	1,00	2,40	2,40	3,50	3,75	2,15	0,17	Amarillo
	PHIA350 1237	IS	12,00	0,50	1,00	2,40	2,40	3,50	3,75	2,15	0,17	Rojo
	PHIA350 1437	IS	14,00	0,50	1,00	2,40	2,40	3,50	3,75	2,15	0,17	Azul
	PHIA350 1637	IS	16,00	0,50	1,00	2,40	2,40	3,50	3,75	2,15	0,17	Verde
	PHIA350 1837	IS	18,00	0,50	1,00	2,40	2,40	3,50	3,75	2,15	0,17	Negro
	PHIA350 0640	IS	06,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Violeta
	PHIA350 0840	IS	08,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Blanco
	PHIA350 1040	IS	10,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Amarillo
	PHIA350 1240	IS	12,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Rojo
	PHIA350 1440	IS	14,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Azul
	PHIA350 1640	IS	16,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Verde
	PHIA350 1840	IS	18,00	0,50	1,00	2,40	2,40	3,50	4,00	2,50	0,35	Negro
	PHIA350 0845	IS	08,00	0,50	1,00	2,40	2,40	3,50	4,50	2,50	0,55	Blanco
	PHIA350 1045	IS	10,00	0,50	1,00	2,40	2,40	3,50	4,50	2,50	0,55	Amarillo
	PHIA350 1245	IS	12,00	0,50	1,00	2,40	2,40	3,50	4,50	2,50	0,55	Rojo
	PHIA350 1445	IS	14,00	0,50	1,00	2,40	2,40	3,50	4,50	2,50	0,55	Azul
	PHIA350 1645	IS	16,00	0,50	1,00	2,40	2,40	3,50	4,50	2,50	0,55	Verde
	PHIA350 1845	IS	18,00	0,50	1,00	2,40	2,40	3,50	4,50	2,50	0,55	Negro
	PHIA350 0850	IS	08,00	0,50	1,00	2,40	2,40	3,50	5,00	2,85	0,70	Blanco
	PHIA350 1050	IS	10,00	0,50	1,00	2,40	2,40	3,50	5,00	2,85	0,70	Amarillo
	PHIA350 1250	IS	12,00	0,50	1,00	2,40	2,40	3,50	5,00	2,85	0,70	Rojo
	PHIA350 1450	IS	14,00	0,50	1,00	2,40	2,40	3,50	5,00	2,85	0,70	Azul
	PHIA350 1650	IS	16,00	0,50	1,00	2,40	2,40	3,50	5,00	2,85	0,70	Verde
	PHI A350 1850	IS	18,00	0,50	1,00	2,40	2,40	3,50	5,00	2,85	0,70	Negro

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

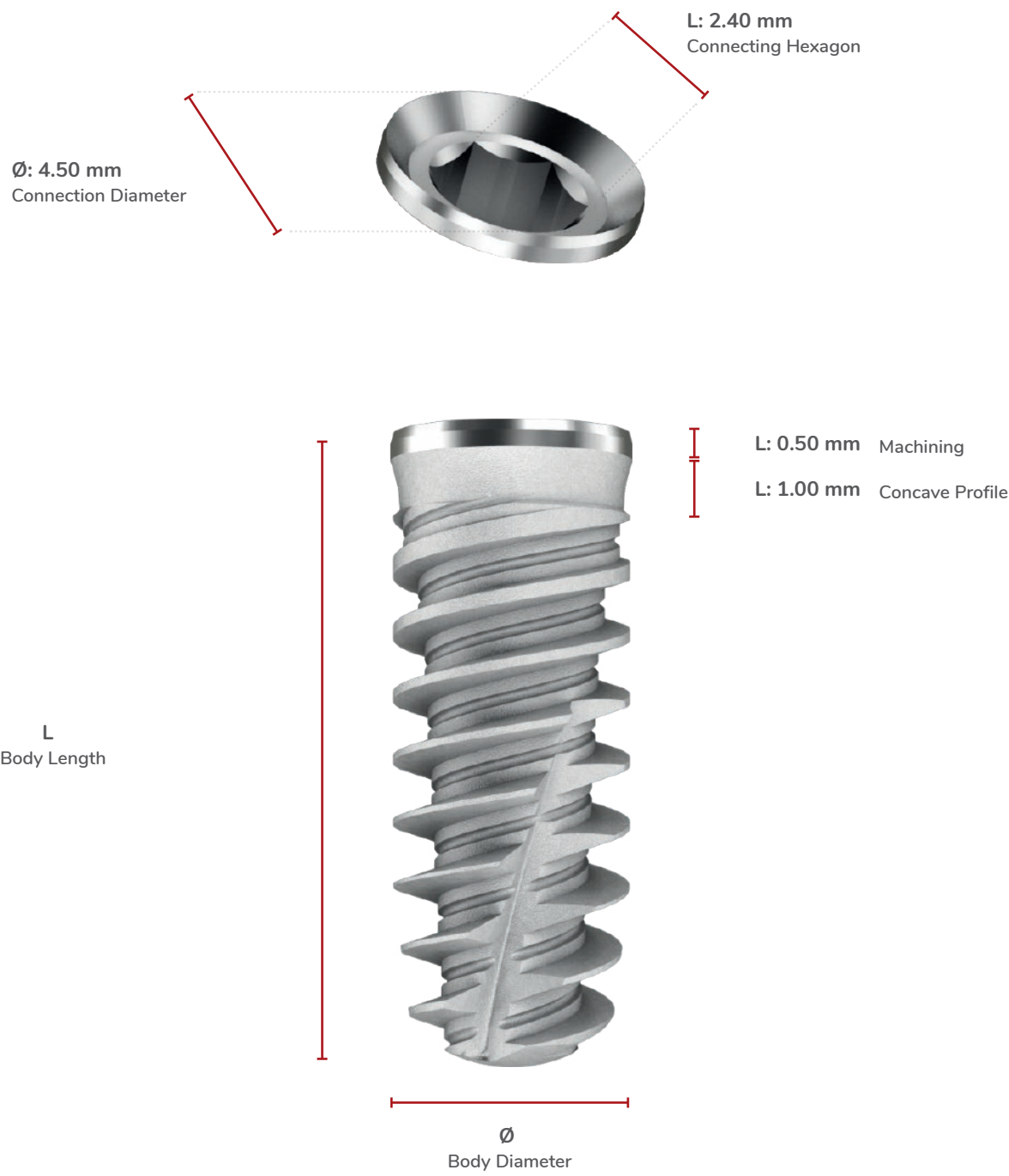
Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

Recommended Insertion Speed: 25 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

PHIA 450 Type
General Length and Diameter Measurements



PHIA450: Active Internal Hexagonal Platform Implants Ø 4.50. IM Connection Code.

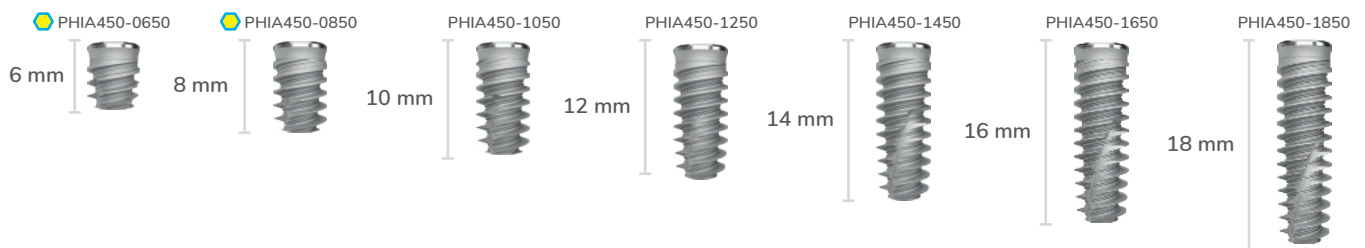
SCALE 1.5:1

Available Diameters and Lengths

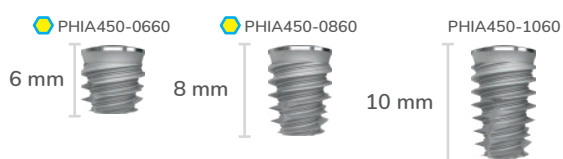
Ø 4.50



Ø5.00

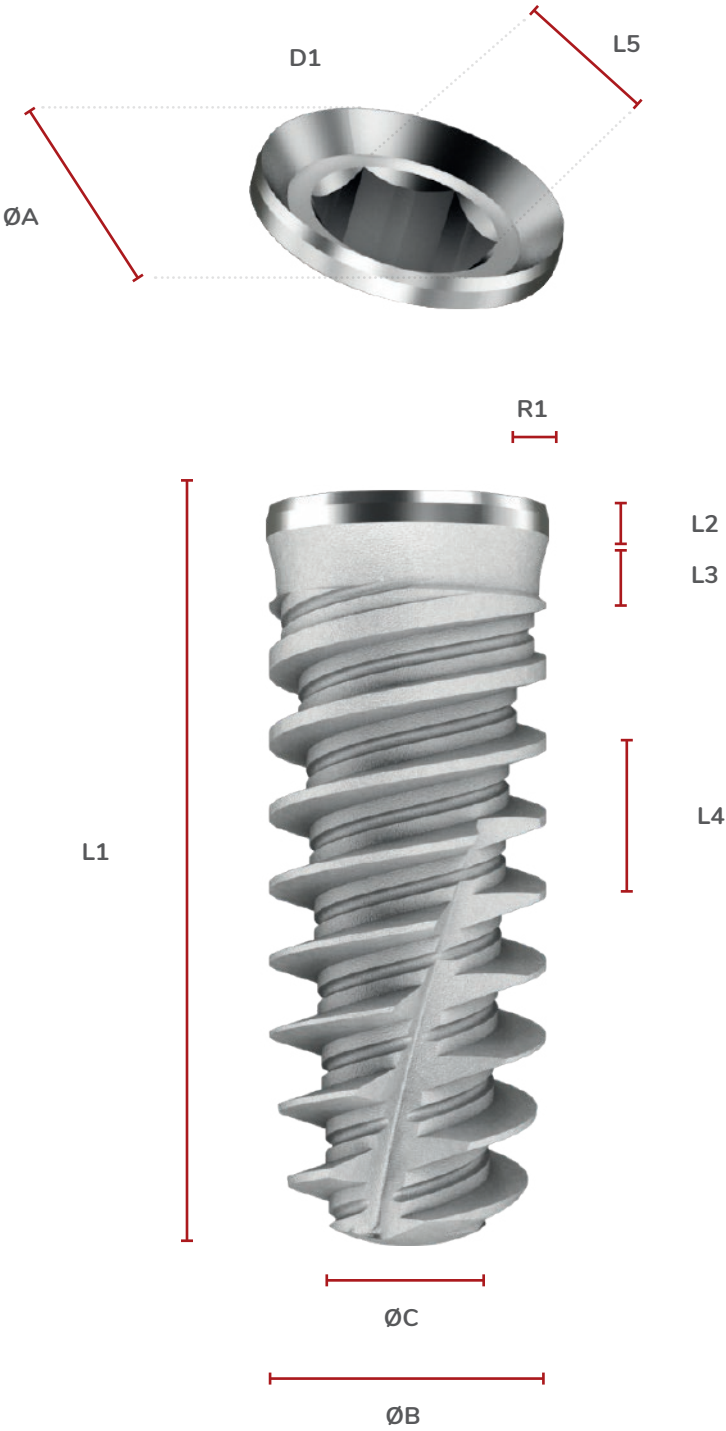


Ø6.00



PHIA 450 Type

General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length
PHIA450	PHIA450 0645	IM	06,00	0,50	1,00	2,40	2,40	4,50	4,50	3,00	0,05	Violeta
	PHIA450 0845	IM	08,00	0,50	1,00	2,40	2,40	4,50	4,50	2,50	0,05	Blanco
	PHIA450 1045	IM	10,00	0,50	1,00	2,40	2,40	4,50	4,50	2,50	0,05	Amarillo
	PHIA450 1245	IM	12,00	0,50	1,00	2,40	2,40	4,50	4,50	2,50	0,05	Rojo
	PHIA4501445	IM	14,00	0,50	1,00	2,40	2,40	4,50	4,50	2,50	0,05	Azul
	PHIA450 1645	IM	16,00	0,50	1,00	2,40	2,40	4,50	4,50	2,50	0,05	Verde
	PHIA450 1845	IM	18,00	0,50	1,00	2,40	2,40	4,50	4,50	2,50	0,05	Negro
	PHIA450 0650	IM	06,00	0,50	1,00	2,40	2,40	4,50	5,00	3,10	0,20	Violeta
	PHIA450 0850	IM	08,00	0,50	1,00	2,40	2,40	4,50	5,00	2,85	0,20	Blanco
	PHIA450 1050	IM	10,00	0,50	1,00	2,40	2,40	4,50	5,00	2,85	0,20	Amarillo
	PHIA450 1250	IM	12,00	0,50	1,00	2,40	2,40	4,50	5,00	2,85	0,20	Rojo
	PHIA4501450	IM	14,00	0,50	1,00	2,40	2,40	4,50	5,00	2,85	0,20	Azul
	PHIA450 1650	IM	16,00	0,50	1,00	2,40	2,40	4,50	5,00	2,85	0,20	Verde
	PHIA450 1850	IM	18,00	0,50	1,00	2,40	2,40	4,50	5,00	2,85	0,20	Negro
	PHIA450 0650	IM	06,00	0,50	1,00	2,40	2,40	4,50	6,00	3,85	0,70	Violeta
	PHIA450 0850	IM	08,00	0,50	1,00	2,40	2,40	4,50	6,00	3,65	0,70	Blanco
	PHIA450 1050	IM	10,00	0,50	1,00	2,40	2,40	4,50	6,00	3,50	0,70	Amarillo

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

Recommended Insertion Speed: 25 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

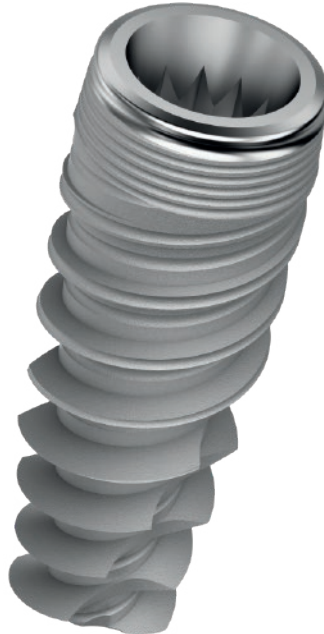
PCI Implants



PCI 230 Type



PCI 280 Type



PCI 350 Type



- **PCI** Internal Conical Connection.
- Bone-link subtractive surface treatment.
- Cervical ring, with 0.4 mm machined surface finish.
- Availability of Platform switching, in all references and Body diameters.
- Double Helix threads, with progressive profile, conical central core and cylindrical-conical crest profile.
- Helical design self-threading apical fronts.
- Generically indicated for all types of Bones.
- Especially indicated for low bone density, (especially for type III and type IV).
- Milling speed: 500 to 800 rpm.
- Insertion speed: 25 rpm.
- Container with double protection vial.
- Maximum protection and easy handling.
- Includes closing cap.



PCI Lines

CONNECTIVITY:

CS = PCI230 = Plat. Internal Conical Ø2.30 mm / Astra Yellow Type

CM = PCI280 = Plat. Internal Conical Ø2.80 mm / Astra Aqua Type

CL = PCI350 = Plat. Internal Conical Ø3.50 mm / Type Astra Lilac

A high standard of product quality and design makes up the DNA of the Radhex Implants® manufacturing company, offering the user the practicality provided by optimal ergonomics and designs based on the most advanced technological principles for the conception of a dental implant.

We are proud to present to professionals, the **PCI** Lines, whose macro-geometry is based on a design that at the same time offers Safety and Aggressiveness, with its high self-threading profile, which enables a smooth, safe, and insertion maneuver. firm, with high primary stability and rapid progression due to its high metric advance step.

Line designed with Conical connection platforms, which offer high mechanical safety and at the same time an absolute biological sealing of the GAP, with the “cold welding” effect, a maximum guarantee for the protection of the most critical area, and for prevention of peri-implantitis.

PCI are multipurpose implants, which come in three platform diameter versions:

PCI 230: The FIT connection, for implants with diameters of 3.00 mm.

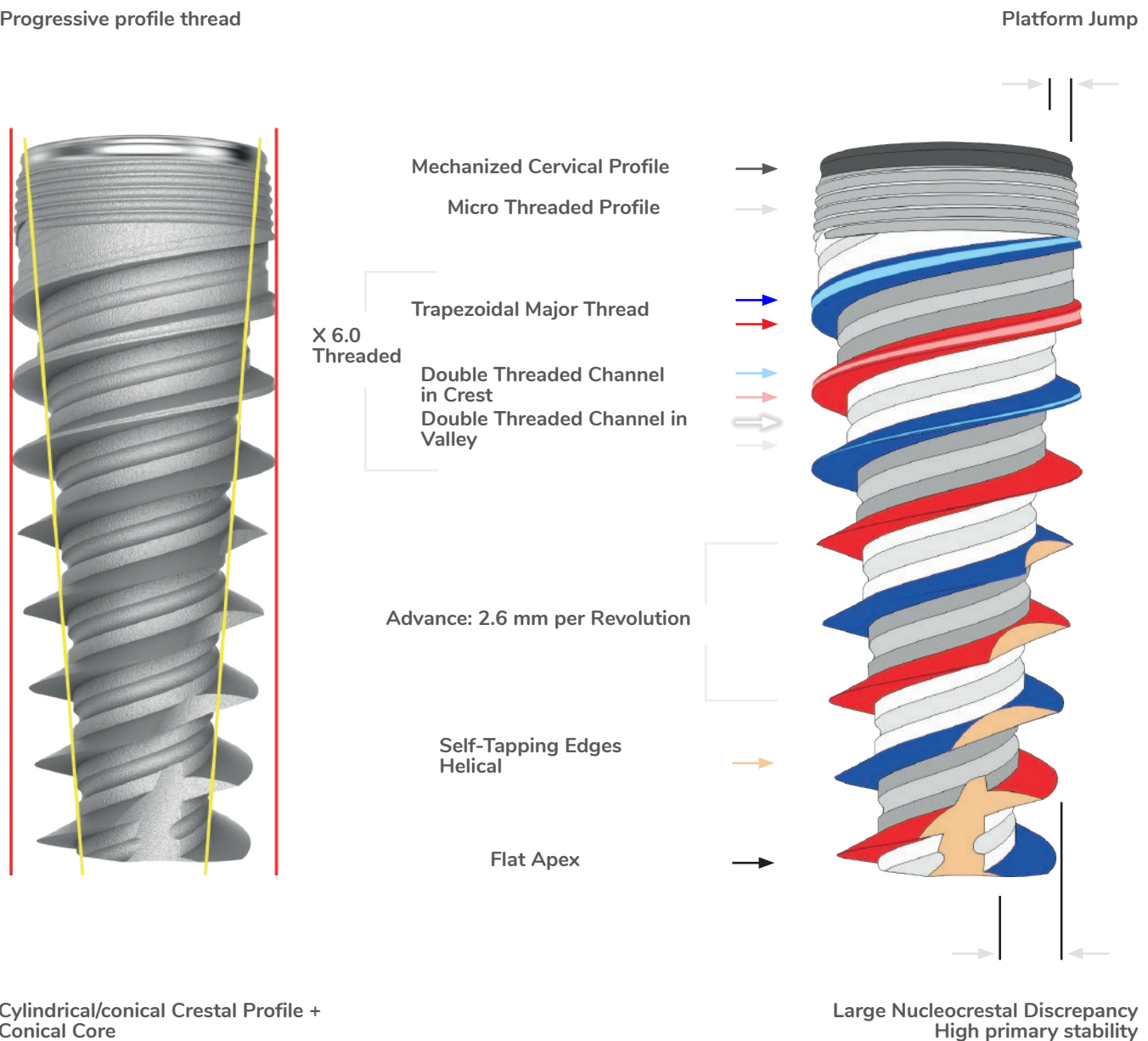
PCI 280: High versatility of use, for 3.50mm diameter implants; 3.75mm; 4.00mm and 4.50mm.

PCI 350: Large diameter implants, 5.00mm and 6.00mm.

At Radhex Implants® we invite you to fly with the highest security, and enjoy the extremely high efficiency of the **PCI** design.

Technical Data Scheme

Progressive profile thread



Cylindrical/conical Crestal Profile +
Conical Core

High Primary Stability +
Easy Insertion and Reorientability

Indication

General indication for all types of bone density, and especially in Type III and Type IV Bones.
(Leckholm et Zarb).

Main Features

CONNECTION ENGINEERING:

Compatible Internal Conical Platform*. / Morse Cone Seat of 11° with respect to the central axis.

CS platform of Ø 2.30 mm, with body diameter of 3.00 mm.

CM platform of Ø 2.80 mm, with body diameters of 3.50 mm, 3.75 mm, 4.00 mm and 4.50 mm.

Ø 3.50 mm CL platform, with body diameters of 5.00 mm and 6.00 mm.

22° conical geometry insert, to obtain maximum closure, hermeticism and stability, Reduction of Micro-movements, optimally orienting the loads and ensuring the safest biological seal in the connection GAP.

Equipped with hexagonal anti-rotating geometry, with a double hexagonal positioning system, which enables indexing control every 30°.

CERVICAL DESIGN:

Platform Switching: Modeling of soft tissues and conformation of the emergence profile, with maintenance of the crestal bone.

Complete line of body diameters, with platform switching for all conical platforms.

Cervical “machined ring” of 0.4 mm height: a plus for the prevention of peri-implantitis in the mechanical and biologically most critical of the implant: the connection GAP.

Cervical diameter restriction area with Micro-Catching and Micro-threading to reduce cortical stress due to compression.

BODY AREA, PROFILE ARCHITECTURE:

The **PCI** implant lines respond to a self-tapping, re-addressable design with High Primary Stability.

Anatomical Design Cylinder - Conical: Cylindrical ridge profile and conical central core with the highest core discrepancy - crest by design in the apical area, which defines a Progressive Thread with High Stability Primary Geometry indicated especially for Immediate Loading..

MICRO DESIGN OF SURFACE:

Micro Textured Surface by subtractive method with micro particles of controlled granulometry incorporating thermal convection process for surface decontamination and stabilization of the surface titanium oxide layer that favors bio-compatibility. Creates a micro-roughness, hydrophilic surface with high wettability and low surface tension.

THREADING MECHANICS:

Active coils with closed angles that favor BIC, (Bone Implant Contact).

Double threading in Major Threads, double threading of the channel in the Thread Core and double threading in thread crests: total of 6 external threads:

- Design of high traction and grip on Bone terrain together with a maximum insertion speed with a Advance of 2.6 mm per Revolution, resulting in our design: “Alma 6.0” the absolute power in self-threading
- Speed of insertion with reduction in surgical time while maintaining a soft touch in its threading.
- Possibility of re-direction of the implant. The implant literally “bites” into the bone tissue.
- Rapid feed of 2.6 mm per turn or revolution: e.g. : A 10 mm implant requires less than 4 revolutions, (turns), to be fully inserted.
- Wide intercrestal valleys, ensuring high volume of bone tissue between ridges.

SELF-THREADING MECHANICS:

Helical Self-Cutting Front with concave opening: It acts by causing cutting and deformation of the bone bed to carve its own thread and allows collecting bone remains from the insertion, offering anti-rotational function after the integration of the implant.

APICAL FRONT DESIGN:

Flat attack apex, with high penetrability into bone tissue, and stability from the first apical turn.

COMPOSITION:

Ti 6Al 4V: Grade 5 Titanium Alloy for **PCI230**.

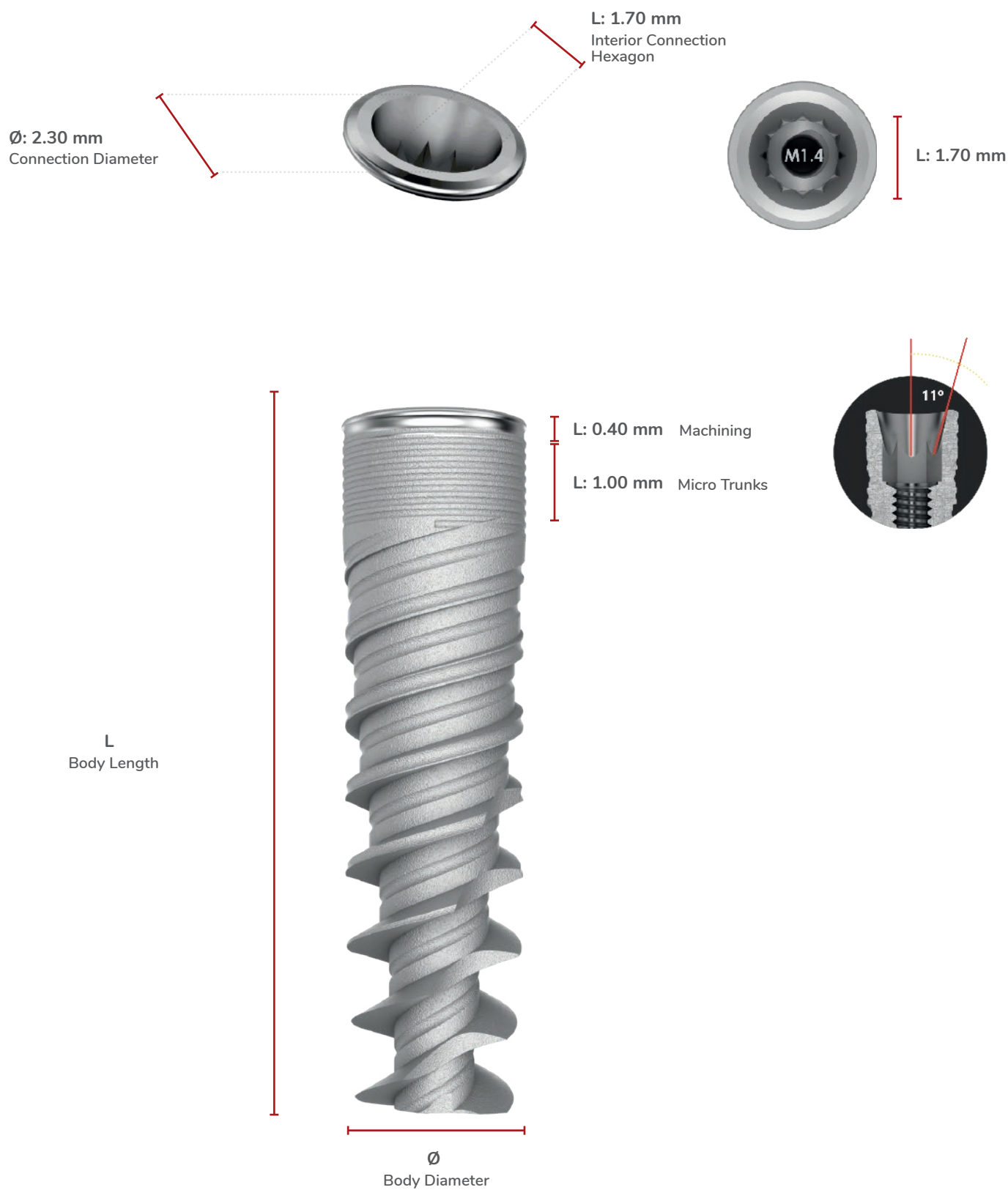
TCP: Commercially Pure Titanium Grade 4 for **PCI280** and **PCI350**.

THREADING SPEED:

Recommended Speed/Insertion: 25 RPM

PCI 230 Type

General Length and Diameter Measurements

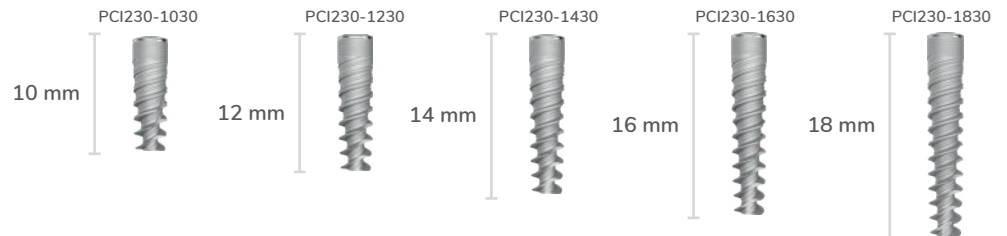


PCI230: Internal Conical Platform Implants Ø 2.30.
CS Connection Code.

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Available Diameters and Lengths

Ø 3.00



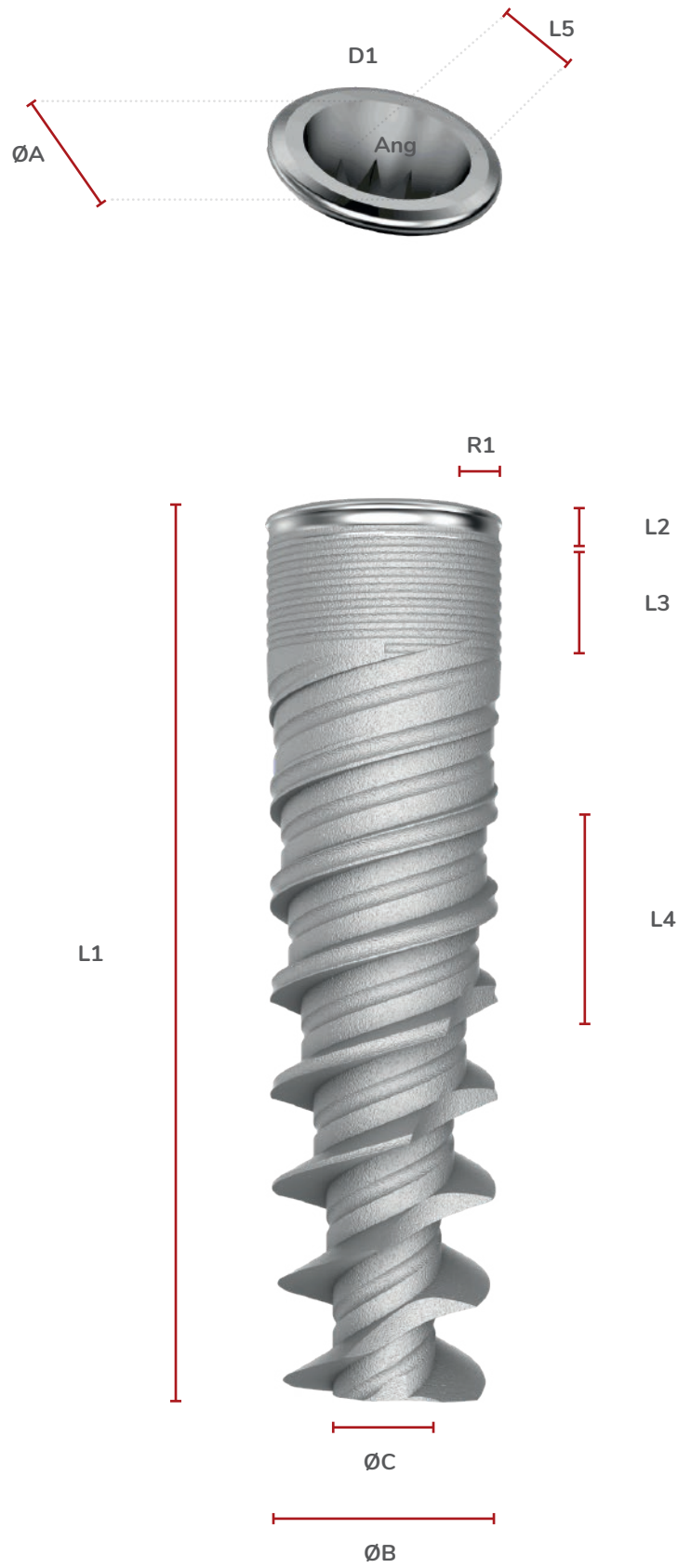
→ **FIT** ←
3.0
IMPLANTS

THE NARROW DIAMETER FOR SHARP CRESTS
IN ANTERO-LOWER SECTOR
WITH THE CONICAL CONNECTION OF RADHEX IMPLANTS®.



“The Reason for Narrow Ridges”

PCI 230 Type
General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length	Color Longitud
PCI230	PCI230 1030	CS	10,00	0,40	1,50	2,60	1,70	2,30	22°	3,00	1,40	0,35	Amarillo
	PCI230 1230	CS	12,00	0,40	1,50	2,60	1,70	2,30	22°	3,00	1,40	0,35	Rojo
	PCI230 1430	CS	14,00	0,40	1,50	2,60	1,70	2,30	22°	3,00	1,40	0,35	Azul
	PCI230 1630	CS	16,00	0,40	1,50	2,60	1,70	2,30	22°	3,00	1,40	0,35	Verde

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

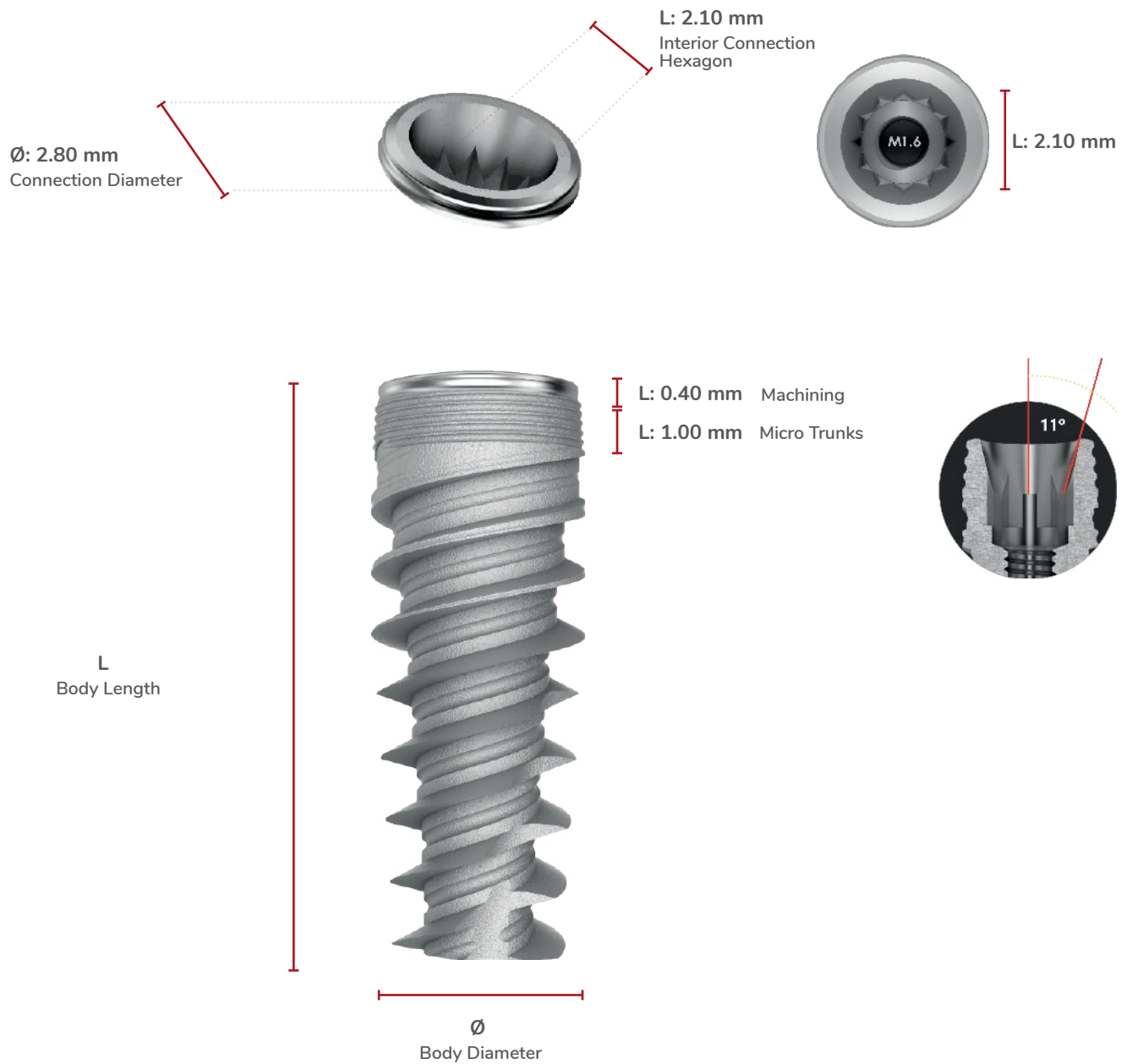
Recommended Insertion Speed: 25 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

PCI 280 Type

General Length and Diameter Measurements

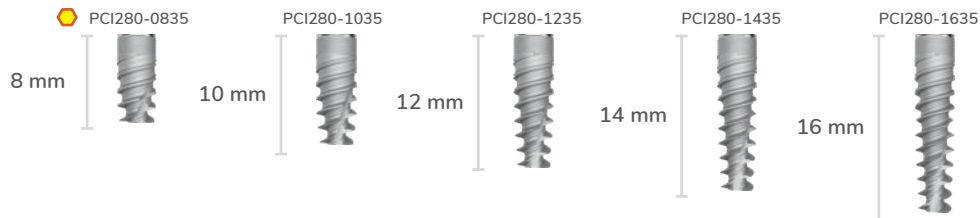


PCI280: Internal Conical Platform Implants Ø 2.80. CM Connection Code.

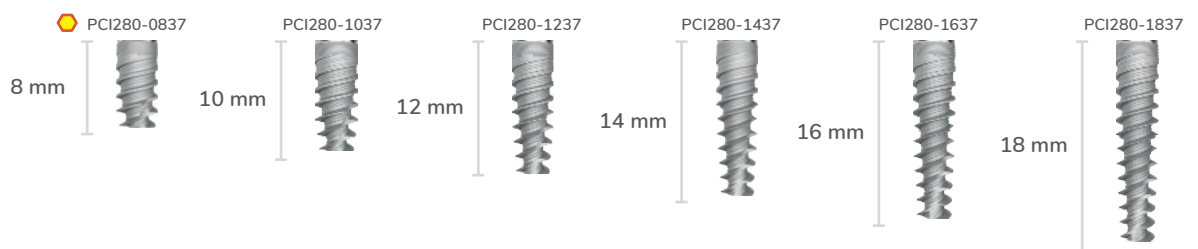
SCALE 1.5:1

Available Diameters and Lengths

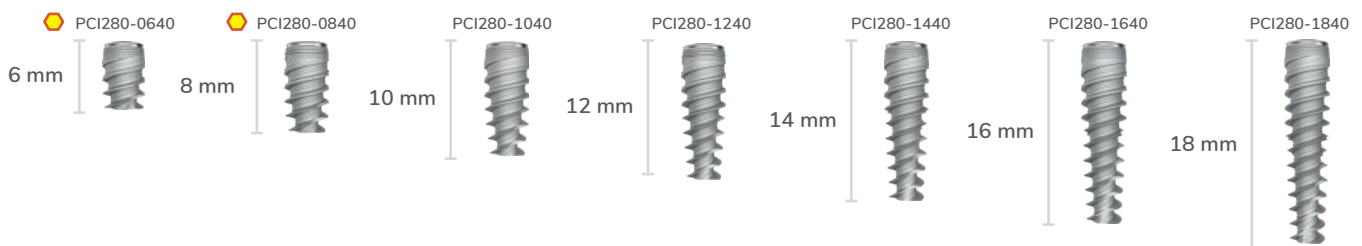
Ø 3.50



Ø 3.75



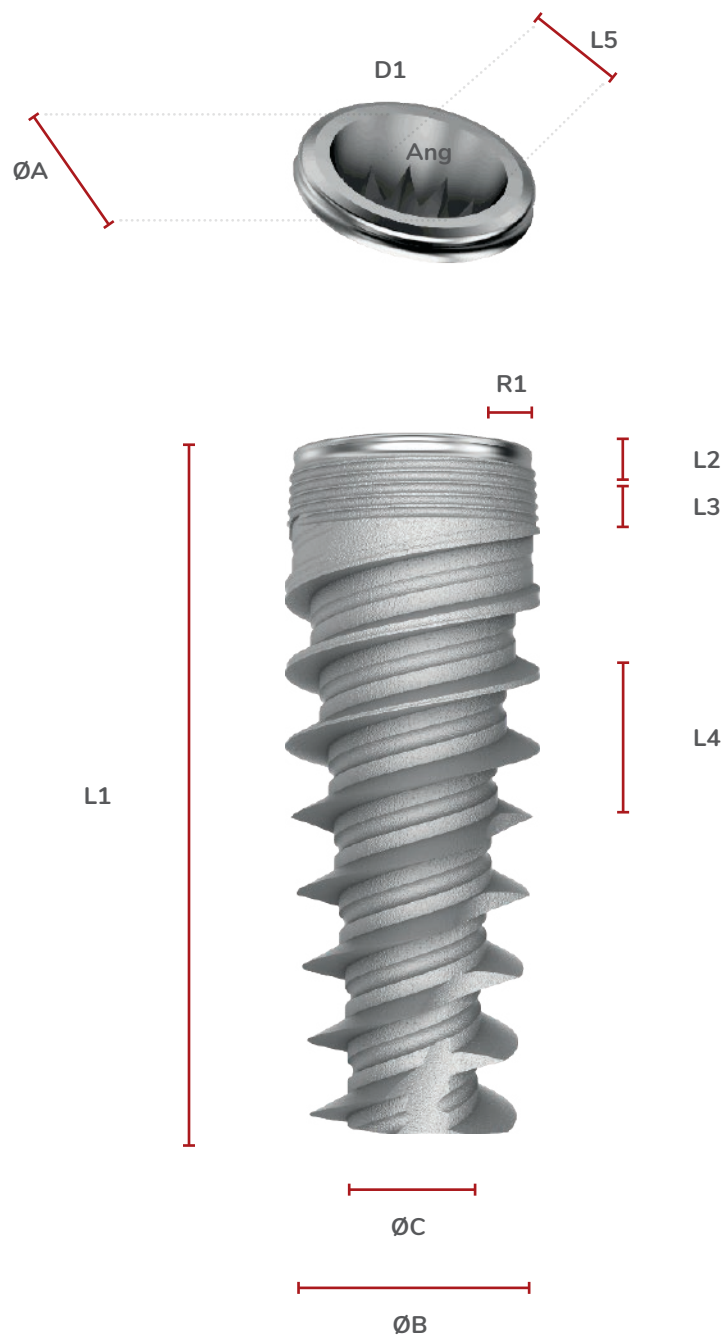
Ø 4.00



Ø 4.50



PCI 280 Type
General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length	Color Longitud
PCI280	PCI280 0835	CM	08,00	0,40	1,00	2,60	2,10	2,80	22°	3,50	1,65	0,35	Blanco
	PCI280 1035	CM	10,00	0,40	1,00	2,60	2,10	2,80	22°	3,50	1,55	0,35	Amarillo
	PCI280 1235	CM	12,00	0,40	1,00	2,60	2,10	2,80	22°	3,50	1,55	0,35	Rojo
	PCI280 1435	CM	14,00	0,40	1,00	2,60	2,10	2,80	22°	3,50	1,55	0,35	Azul
	PCI280 1635	CM	16,00	0,40	1,00	2,60	2,10	2,80	22°	3,50	1,55	0,35	Verde
	PCI280 0837	CM	08,00	0,40	1,00	2,60	2,10	2,80	22°	3,75	1,75	0,45	Blanco
	PCI280 1037	CM	10,00	0,40	1,00	2,60	2,10	2,80	22°	3,75	1,65	0,45	Amarillo
	PCI280 1237	CM	12,00	0,40	1,00	2,60	2,10	2,80	22°	3,75	1,65	0,45	Rojo
	PCI280 1437	CM	14,00	0,40	1,00	2,60	2,10	2,80	22°	3,75	1,65	0,45	Azul
	PCI280 1637	CM	16,00	0,40	1,00	2,60	2,10	2,80	22°	3,75	1,65	0,45	Verde
	PCI280 1837	CM	18,00	0,40	1,00	2,60	2,10	2,80	22°	3,75	1,65	0,45	Negro
	PCI280 0640	CM	06,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	2,35	0,50	Violeta
	PCI280 0840	CM	08,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	1,80	0,50	Blanco
	PCI280 1040	CM	10,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	1,80	0,50	Amarillo
	PCI280 1240	CM	12,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	1,80	0,50	Rojo
	PCI280 1440	CM	14,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	1,80	0,50	Azul
	PCI280 1640	CM	16,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	1,80	0,50	Verde
	PCI280 1840	CM	18,00	0,40	1,00	2,60	2,10	2,80	22°	4,00	1,80	0,50	Negro
	PCI280 0645	CM	06,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,40	0,70	Violeta
	PCI280 0845	CM	08,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,30	0,70	Blanco
	PCI280 1045	CM	10,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,20	0,70	Amarillo
	PCI280 1245	CM	12,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,20	0,70	Rojo
	PCI280 1445	CM	14,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,20	0,70	Azul
	PCI280 1645	CM	16,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,20	0,70	Verde
	PCI280 1845	CM	18,00	0,40	1,00	2,60	2,10	2,80	22°	4,50	2,20	0,70	Negro

Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

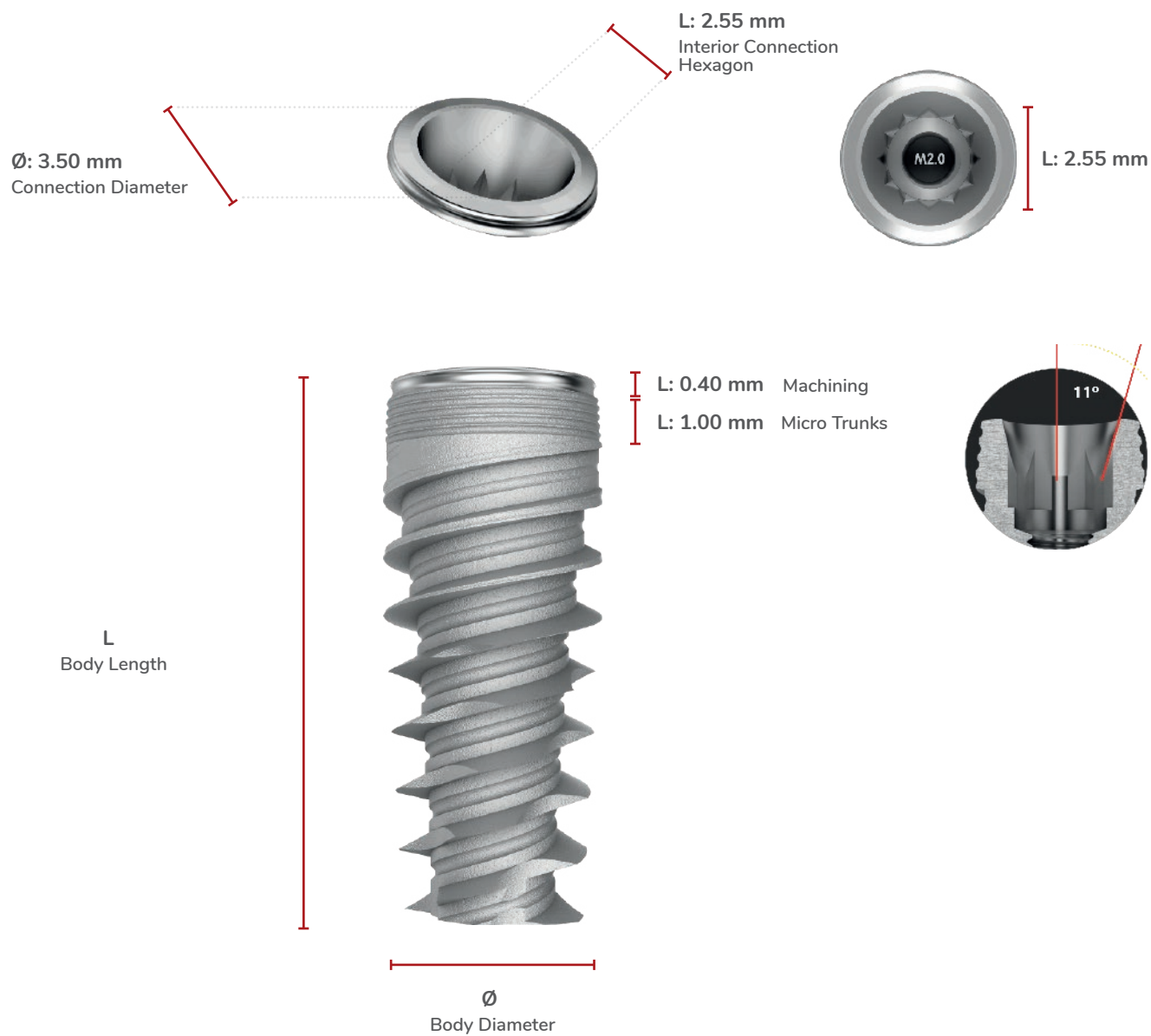
Recommended Insertion Speed: 25 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.

PCI 350 Type

General Length and Diameter Measurements

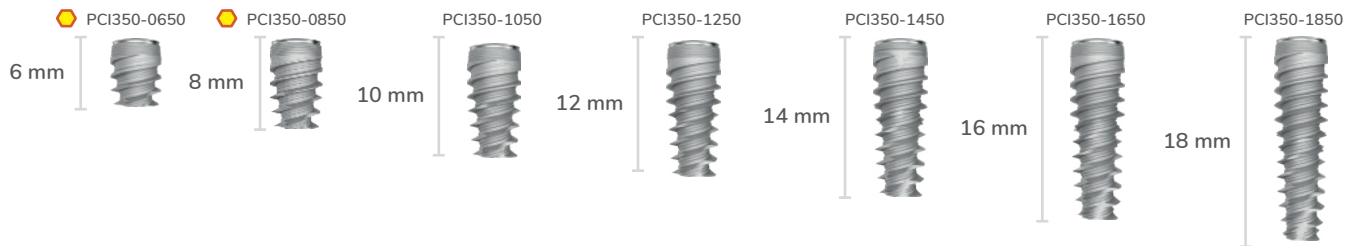


PCI350: Internal Conical Platform Implants Ø 3.50.
CL Connection Code.

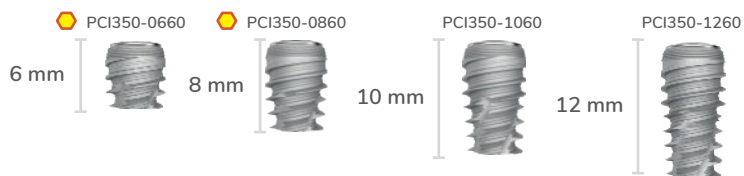
SCALE 1.5:1

Available Diameters and Lengths

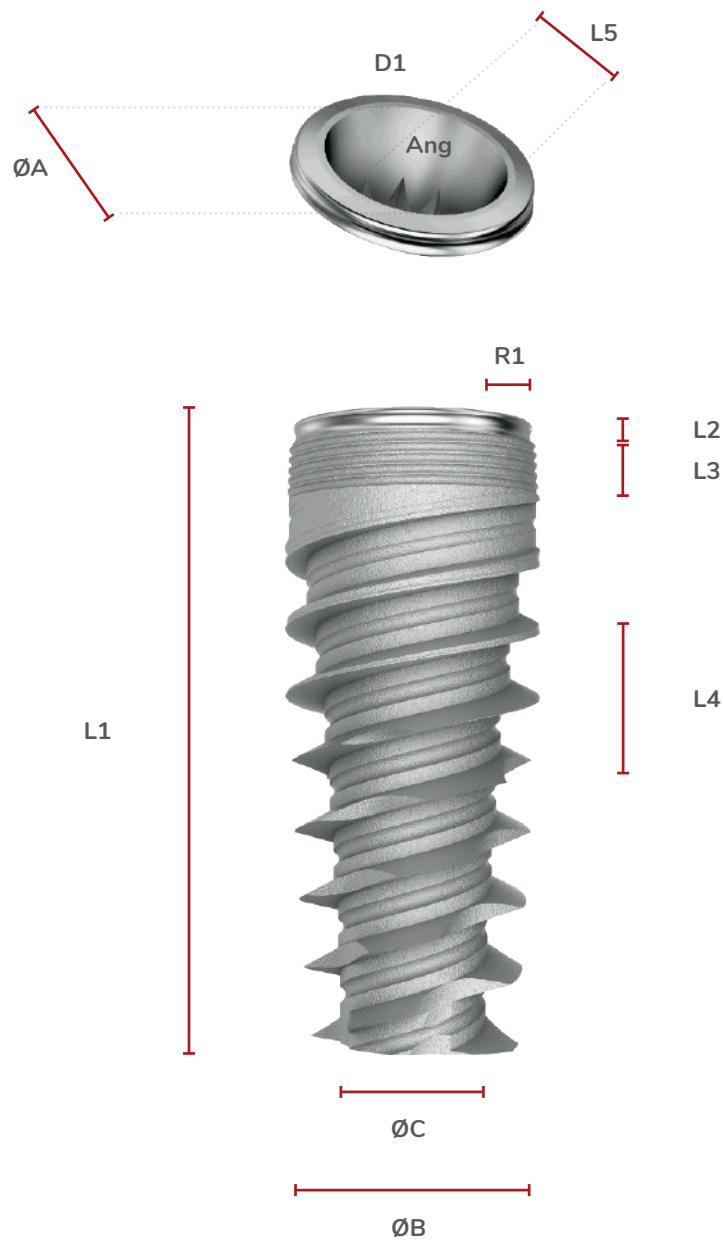
Ø 5.00



Ø 6.00



PCI 350 Type
General Table of Technical Details



Model	Reference	D1	L1	L2	L3	L4	L5	ØA	ØB	ØC	R1	ID Color	ID Color
		Code Connection Additives	Length Total	Height Neck Machining	Zone Height Micro Trunks	Step of Threading -Lap Advance-	Hexagon Connection Width	Diameter Platform (seat)	Diameter Body	Diameter Core Apical	Jump of Connection Switch Platform	Color Length	Color Longitud
PCI350	PCI350 0650	CL	06,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,80	0,55	Violeta
	PCI350 0850	CL	08,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,80	0,55	Blanco
	PCI350 1050	CL	10,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,80	0,55	Amarillo
	PCI350 1250	CL	12,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,80	0,55	Rojo
	PCI350 1450	CL	14,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,80	0,55	Azul
	PCI350 1650	CL	16,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,70	0,55	Verde
	PCI350 1850	CL	18,00	0,40	1,00	2,60	2,55	3,50	22°	5,00	2,70	0,55	Negro
	PCI350 0660	CL	06,00	0,40	1,00	2,60	2,55	3,50	22°	6,00	3,80	0,75	Violeta
	PCI350 0860	CL	08,00	0,40	1,00	2,60	2,55	3,50	22°	6,00	3,80	0,75	Blanco
	PCI350 1060	CL	10,00	0,40	1,00	2,60	2,55	3,50	22°	6,00	3,80	0,75	Amarillo
	PCI350 1260	CL	12,00	0,40	1,00	2,60	2,55	3,50	22°	6,00	3,80	0,75	Rojo

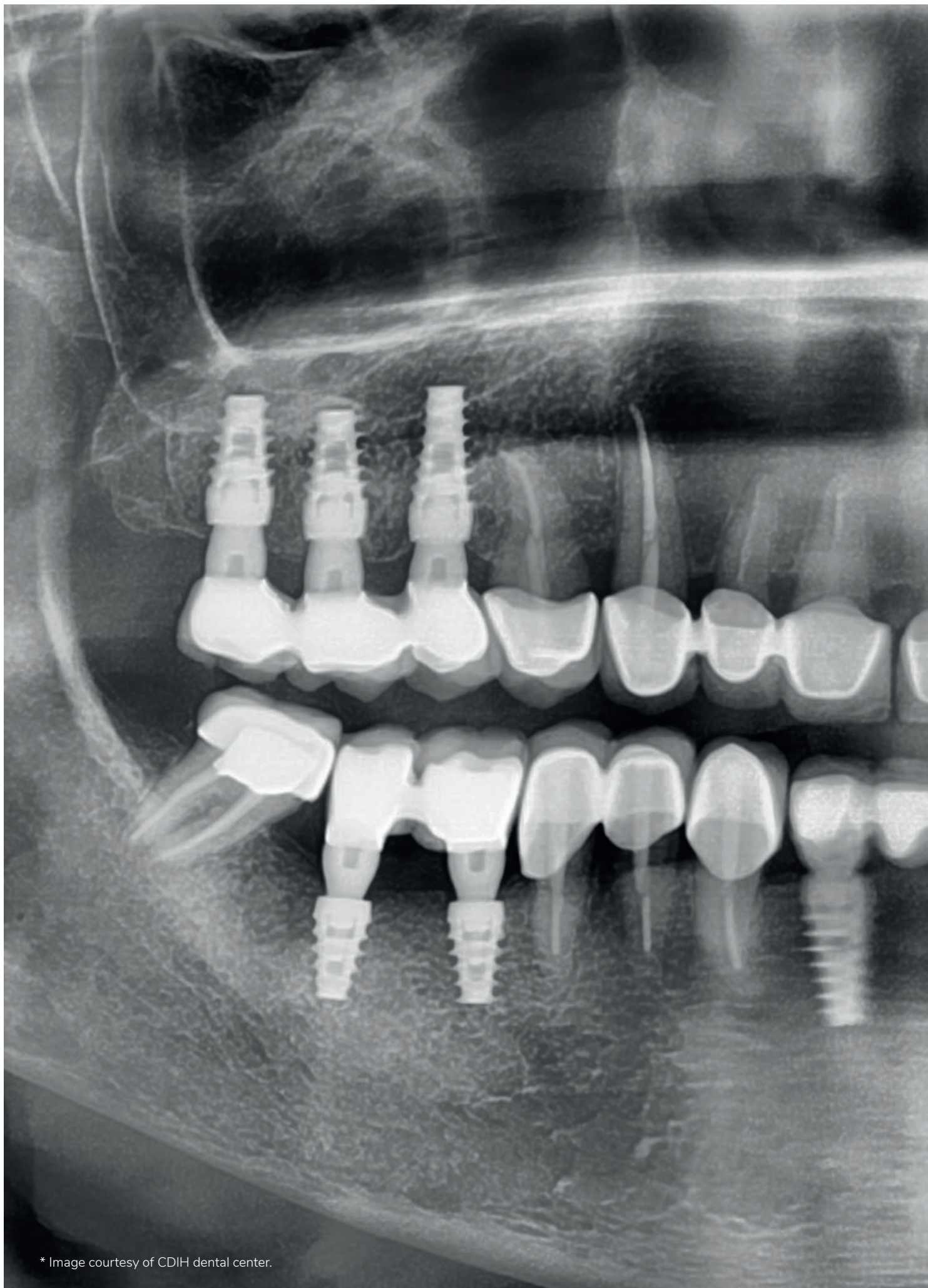
Insertion Torque per implant Recommended for delayed loading protocol: 40 / 50 Ncm.**

Insertion Torque per implant Recommended for immediate loading protocol: 70 / 80 Ncm.**

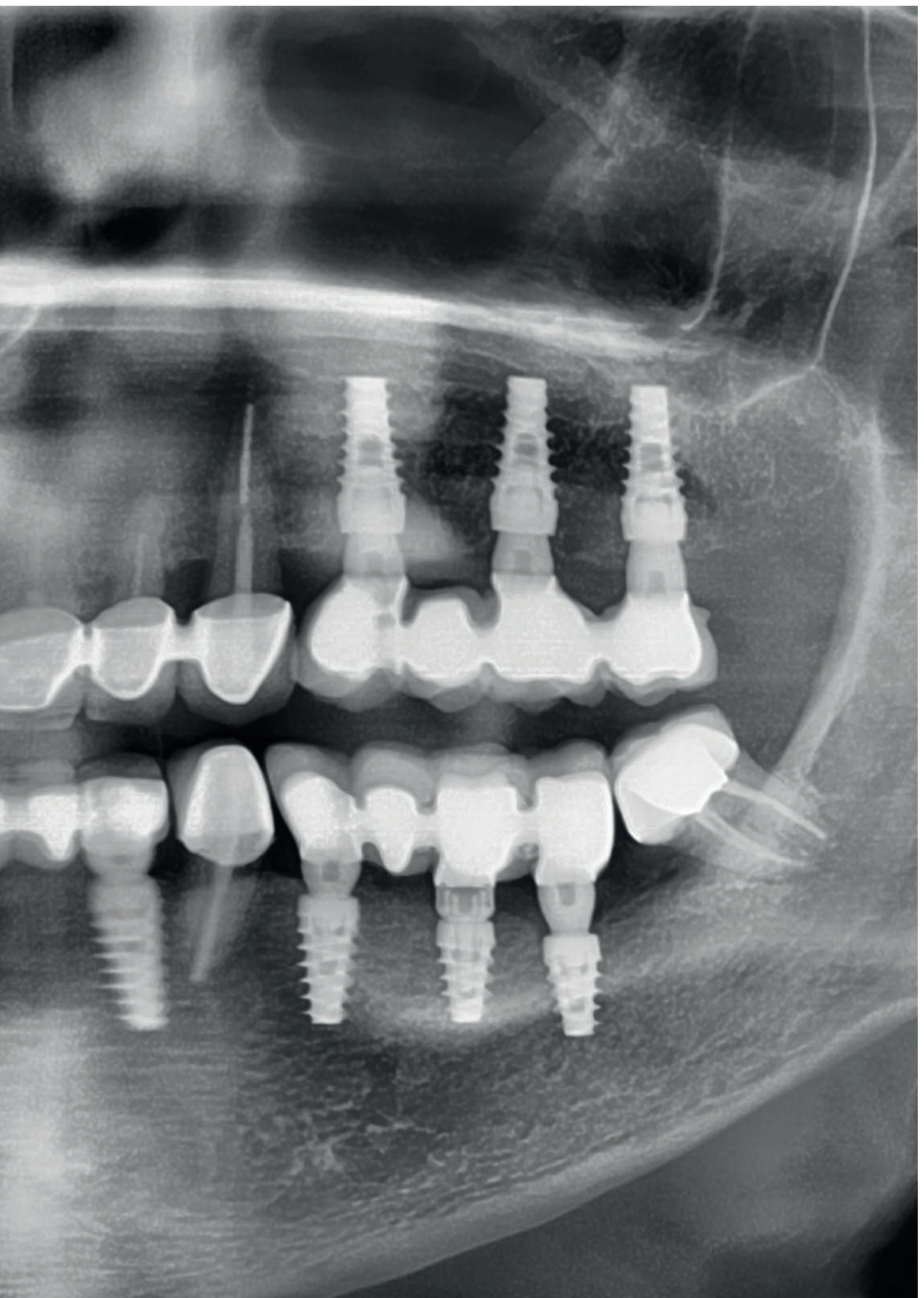
Recommended Insertion Speed: 25 R.P.M.

* Measurements are expressed in millimeters (mm).

** Expresses indicative values, since the viability of the technique depends on multiple factors.



* Image courtesy of CDIH dental center.



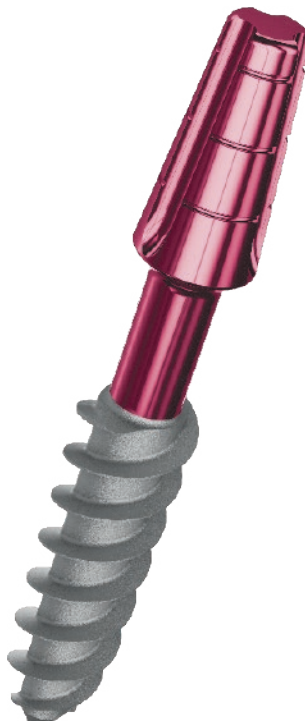
SLD Implants



SLD-C Type



SLD-B Type



- Monolithic pillar height 7.00 mm.
- Height Marks every 2 mm.
- Triple threading channel.
- Cementable Abutment with 10° Occlusal Convergence Angle.
- Transgingival section Ø2.05 mm for bodies up to Ø 4.0 mm and Ø2.35 mm from bodies Ø 4.5 mm onwards.
- Simple Thread.
- Advance of 1.4 mm per turn for Compressive models and variable for Basal models.
- Trapezoidal Compressive profile thread.
- Micro Textured Surface.
- Compressive Implants with Macro-Conical Compressive Wedge Design.
- Basal Implants with Macro - Wide spiral design for basal fixation.
- Reduced Apex.
- High Stability Geometry.
- Recommended Speed/Insertion: 50 RPM.



SLD Lines

CONNECTIVITY:

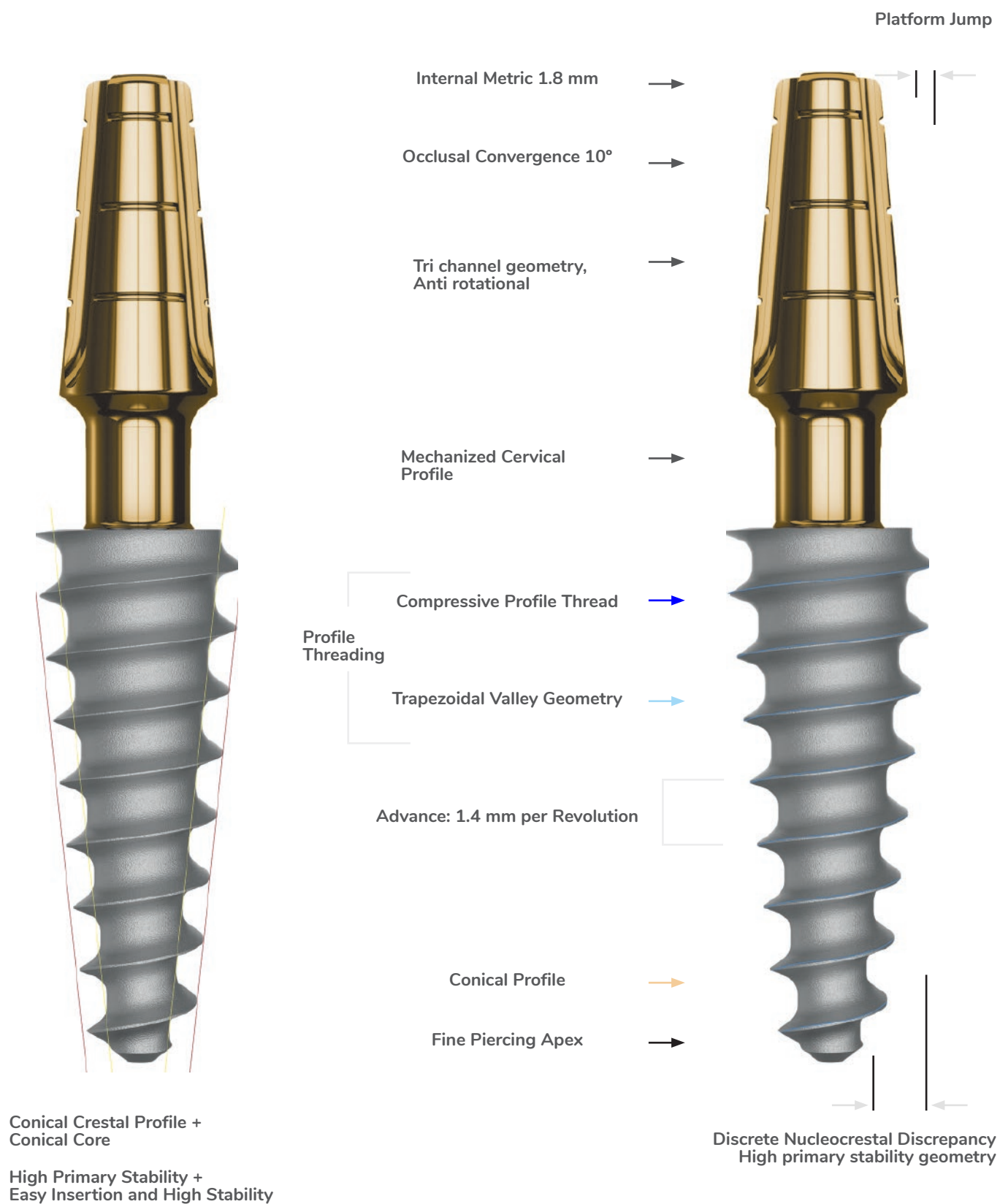
SLD c / SLD b = Cementable abutment = Treat Type convergence 10°

The cutting-edge technology applied to the field of prosthetics finds its maximum expression in the **Solid Mono-Body implant** from **Radhex Implants®**. This revolutionary advance in cementable abutment prosthesis technique is exceptionally combined with an outstanding design, giving this component optimal effectiveness and safety. In this way, it stands as an exceptional option for prosthetic restoration using cementation.

This innovative design is presented as an unmatched resource, especially in cases of extreme bone atrophy. It allows the application of highly versatile screw-retained prosthetic solutions, offering a maximum level of primary stability through a threading system. Whether through a compressive model with compressive wedge action or a basal model with anchorage in the basal cortices, this approach makes a substantial difference in the clinical outcome.

The optimal design of this implant adapts perfectly to narrow bone profiles, facilitating the practice of surgery with minimally invasive techniques. In situations of bone atrophy, the trapezoidal profile of the thread plays a crucial role in allowing a moderate and progressive compressive action. This design facilitates a smooth and comfortable insertion process for the operator, standing out for its high efficiency in immediate loading situations. In summary, the Solid Mono-Body implant from **Radhex Implants®** is consolidated as the alternative of choice to address bone atrophies, standing out for its innovation, versatility and clinical efficiency.

Technical Data Scheme



Indication

General indication for all types of bone density, and especially in Type III and Type IV Bones. (Leckholm et Zarb).

Main Features

CONNECTION ENGINEERING:

The Solid Mono-Body implant from **Radhex Implants®** stands out for its integral design that integrates a cementable abutment with 10° of convergence towards occlusal. This abutment not only has extraordinary prosthetic versatility, but it has also been designed with three anti-rotational channels that facilitate the application of torque during insertion.

In summary, the unique combination of a mono-body structure together with a highly versatile cementable abutment, supported by specific design features, positions the Solid Mono-Body implant as an exceptional choice in the field of dental implantology.

CERVICAL DESIGN:

Platform Switching: Soft tissue profiling and formation of the emergence profile, maintaining the integrity of the turbinate bone. We offer a complete range of body diameters, with the implementation of platform switching in all dimensions. The cervical section has a diameter restriction of 2.05 mm for bodies with diameters up to 4.0 mm, and 2.35 mm for bodies with diameters of 4.5 mm and above. Transgingival height options of 2.0 mm, 3.0 mm and 4.0 mm in Compressive models, admitting 5.0 mm and 7.0 mm options for Basal implants. This guarantees an optimal defense barrier for the gingival tissues.

BODY AREA, PROFILE ARCHITECTURE:

The **SLD** implant lines stand out for their design, which can be Compressive or Basal, providing high primary stability. In the conical anatomical design, a ridge profile and a conical central core are presented for the Compressive models. Meanwhile, in the cylinder-conical anatomical design, a cylindrical crest profile and a conical central nucleus are used, with the largest nucleus-crestal discrepancy, specifically designed for Basal models.

These designs define a thread with a geometry of high primary stability, especially indicated for immediate loading, ensuring optimal performance in various clinical applications.

MICRO DESIGN OF SURFACE:

Micro Textured Surface by subtractive method with micro particles of controlled granulometry incorporating thermal convection process for surface decontamination and stabilization of the surface titanium oxide layer that favors bio-compatibility. Creates a micro-roughness, hydrophilic surface with high wettability and low surface tension.

THREADING MECHANICS:

In the case of Compressive models, the trapezoidal coils promote Bone-Implant Contact (BIC) in a compressive conical design. This design exhibits high traction and stability in bone terrain, combined with an optimal insertion speed of 1.4 mm per revolution. The ease of insertion not only reduces surgical time, but also provides smooth threading, allowing effective stabilization even in very thin bone ridges, where the implant literally “bites” into the bone tissue.

For the Basal models, the stabilization achieved through a design that presents a wide nucleocrestal discrepancy stands out. This feature ensures solid fixation, especially designed for situations where exceptional stability in the basal area is required, providing an effective solution for various clinical needs.

SELF-THREADING MECHANICS:

Compressive: wedge effect for compressive implants.

Basal: taking basal cortices by design of wide threads for basal affirmation.

APICAL FRONT DESIGN:

Fine-tipped piercing apex with exceptional penetrability into bone tissue, ensuring stability from the first apical turn.

COMPOSITION:

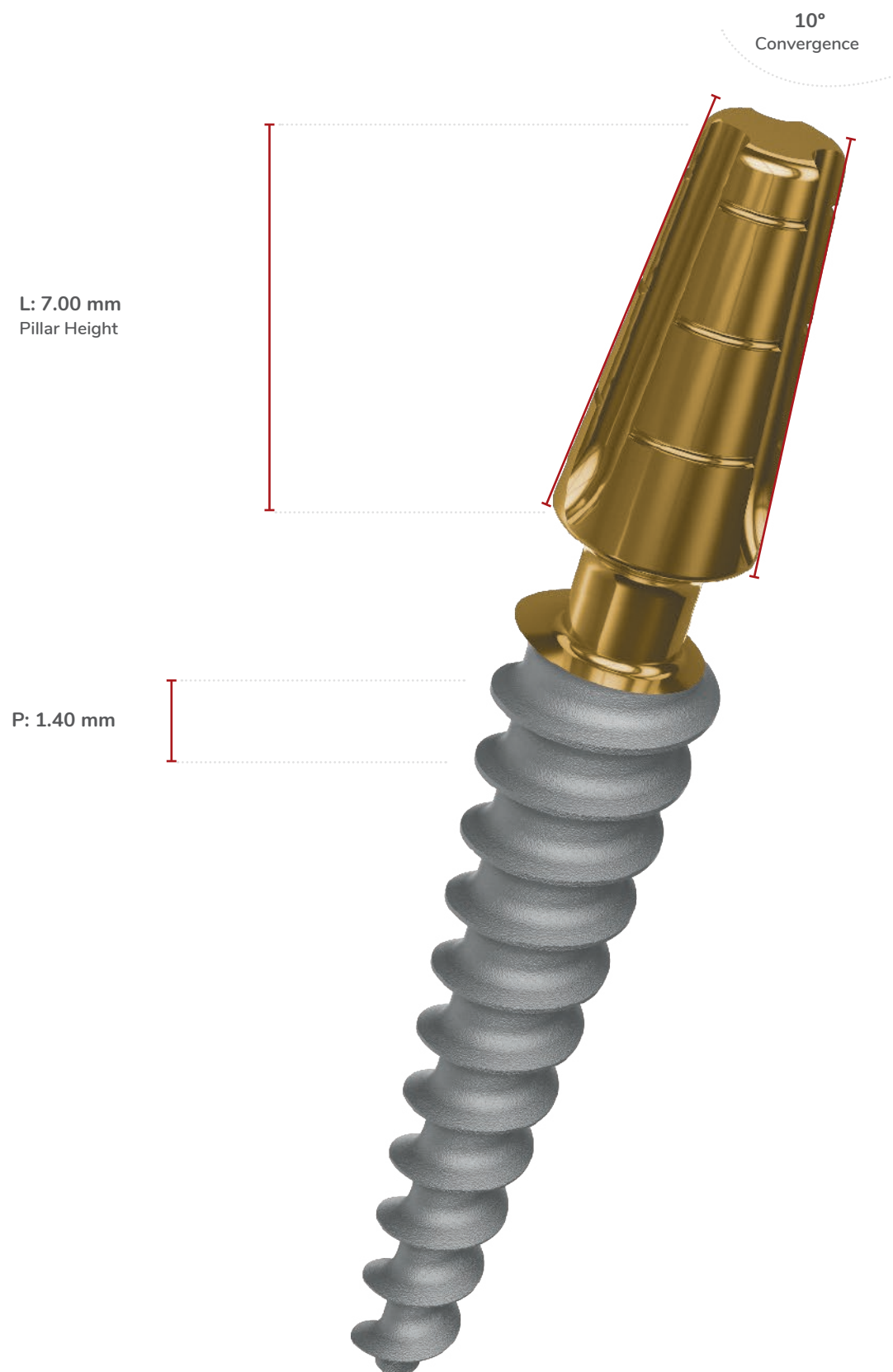
Ti 6Al 4V: Grade 5 Titanium Alloy.

THREADING SPEED:

Recommended Speed/Insertion: 50 RPM.

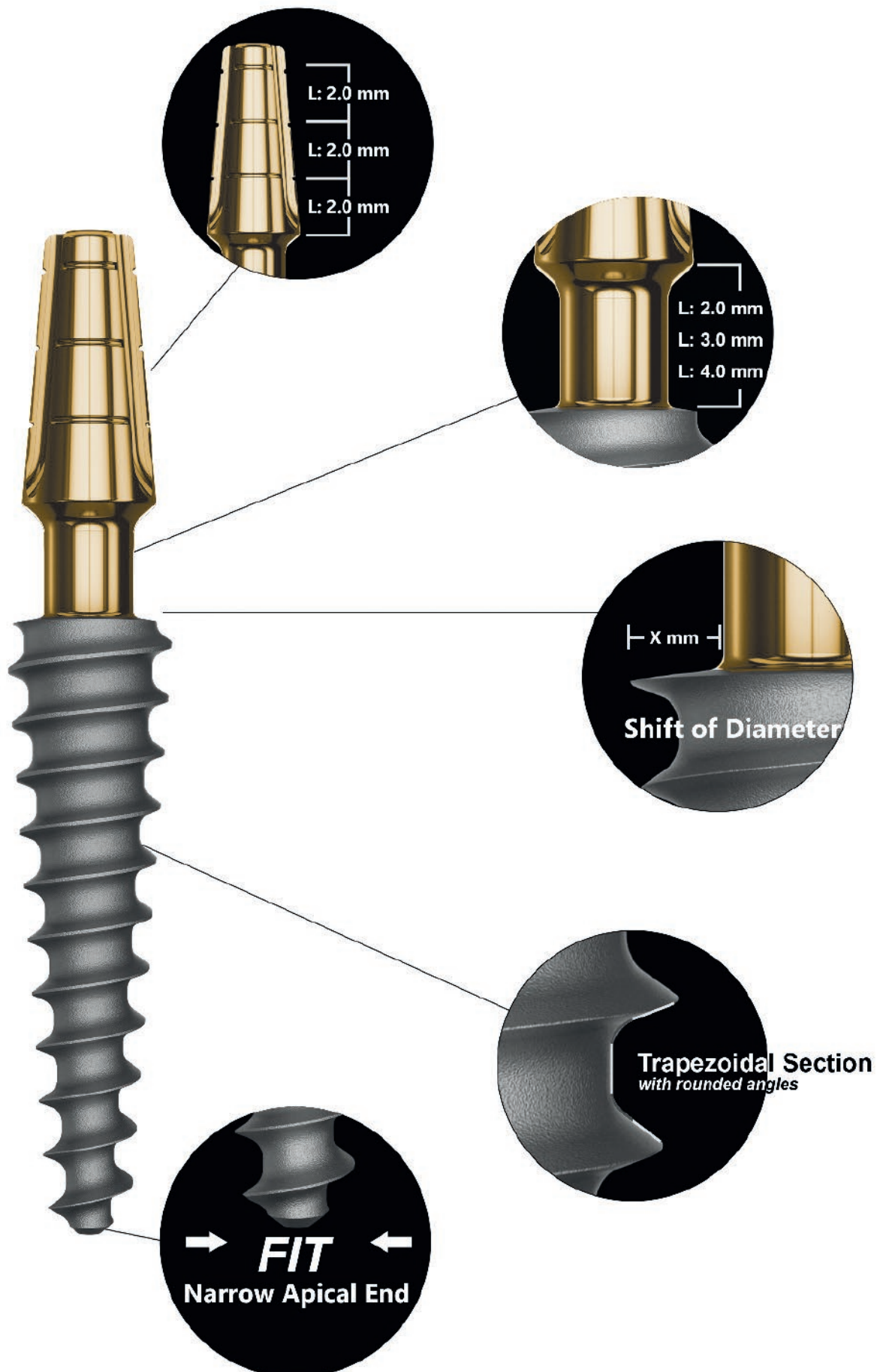
SLD-C Type

General Length and Diameter Measurements



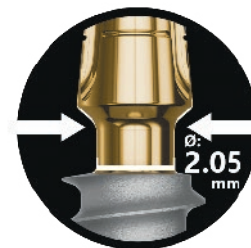
SLD-C Type

General Length and Diameter Measurements



SLDc+2 Type: One-Piece Compressive Solid Implant, 2mm neck, with Cementable Pillar. SLD Connection Code.

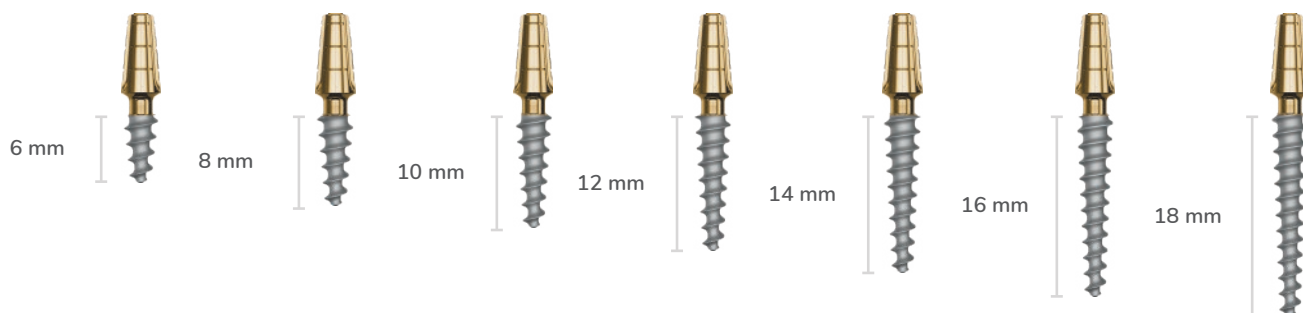
Available Diameters and Lengths



SCALE 1.5:1

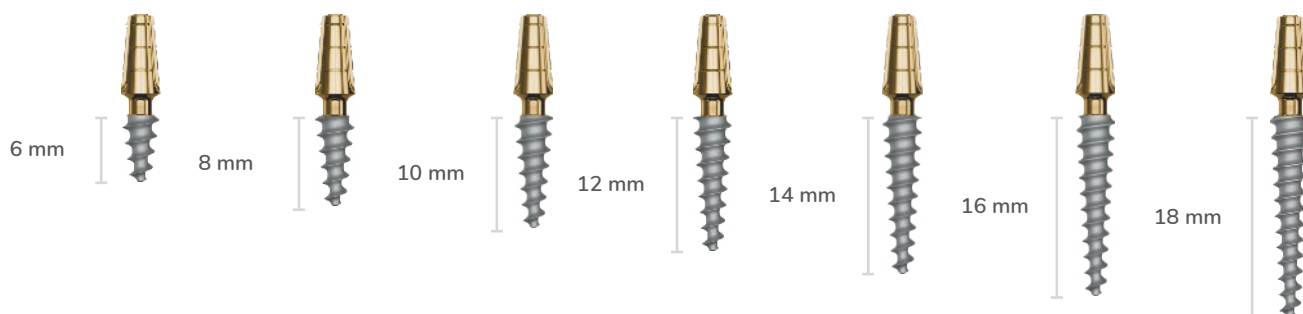
Ø 3.00

SLD 0630 C+2 SLD 0830 C+2 SLD 1030 C+2 SLD 1230 C+2 SLD 1430 C+2 SLD 1630 C+2 SLD 1830 C+2



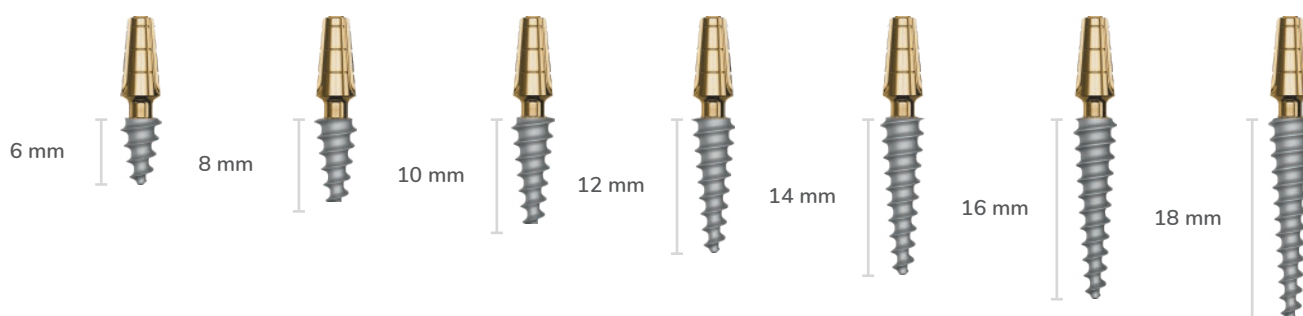
Ø 3.50

SLD 0635 C+2 SLD 0835 C+2 SLD 1035 C+2 SLD 1235 C+2 SLD 1435 C+2 SLD 1635 C+2 SLD 1835 C+2



Ø 4.00

SLD 0640 C+2 SLD 0840 C+2 SLD 1040 C+2 SLD 1240 C+2 SLD 1440 C+2 SLD 1640 C+2 SLD 1840 C+2



Short Lines

Short Implants!!
L 6.0 / 8.0 mm

Trapezoidal profile thread with flat bottom:
Maximum accommodation of bone tissue.
Greater compression distribution.



Short Implant

SLDc+2 Type: One-Piece Compressive Solid Implant, 2mm neck, with Cementable Pillar. SLD Connection Code.

Available Diameters and Lengths



SCALE 1.5:1

Ø 4.50

SLD 0645 C+2

SLD 0845 C+2

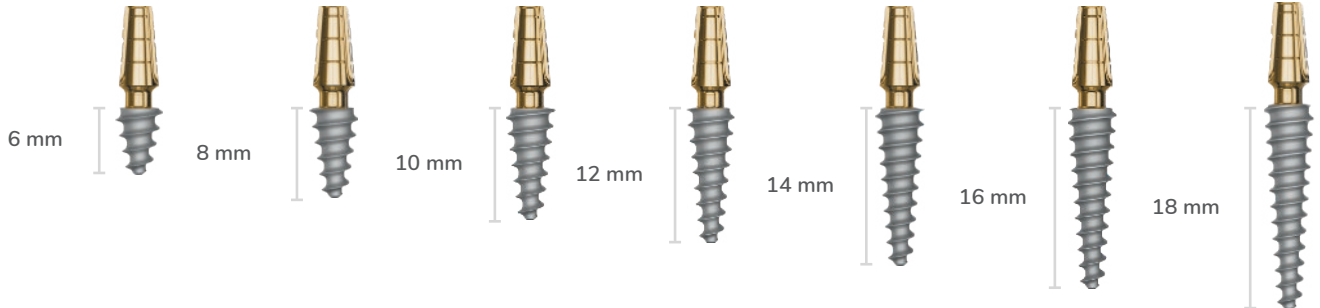
SLD 1045 C+2

SLD 1245 C+2

SLD 1445 C+2

SLD 1645 C+2

SLD 1845 C+2



Ø 5.00

SLD 0650 C+2

SLD 0850 C+2

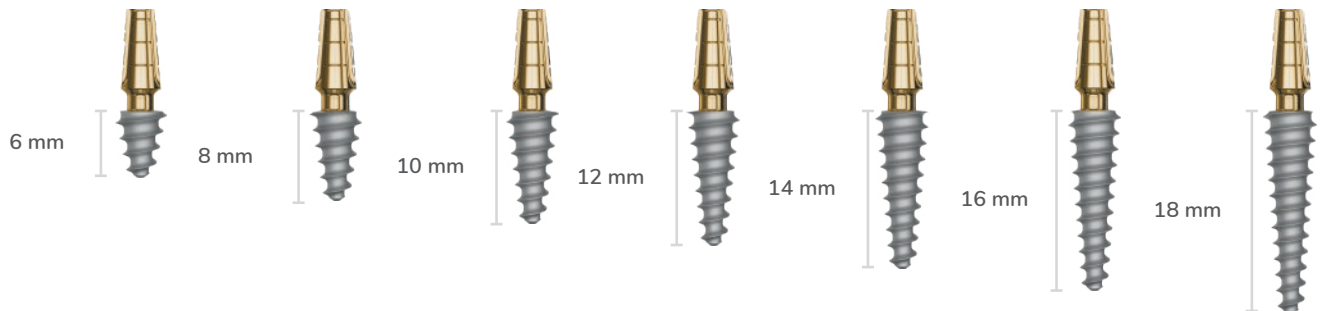
SLD 1050 C+2

SLD 1250 C+2

SLD 1450 C+2

SLD 1650 C+2

SLD 1850 C+2



Ø 5.50

SLD 0655 C+2

SLD 0855 C+2

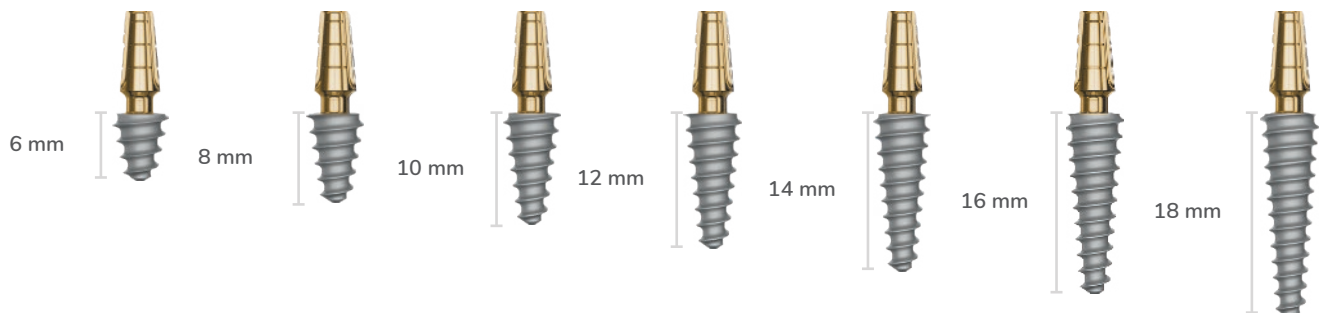
SLD 1055 C+2

SLD 1255 C+2

SLD 1455 C+2

SLD 1655 C+2

SLD 1855 C+2



Ø 6.00

SLD 0660 C+2

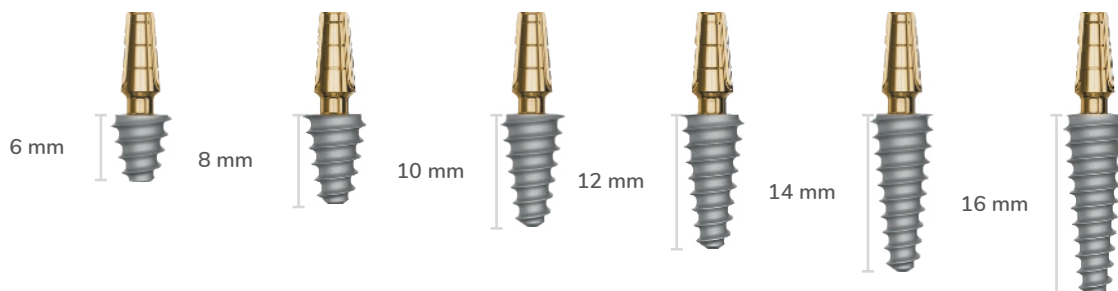
SLD 0860 C+2

SLD 1060 C+2

SLD 1260 C+2

SLD 1460 C+2

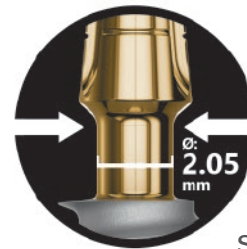
SLD 1660 C+2



Short Implant

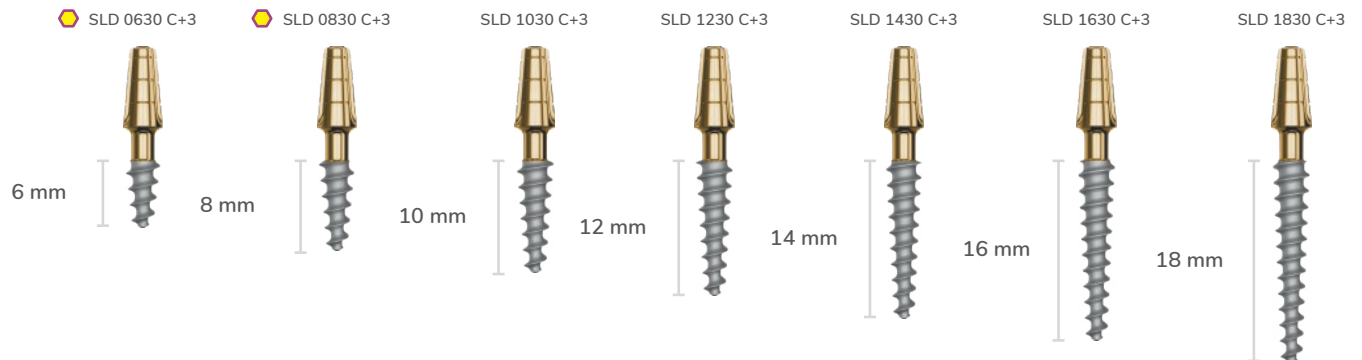
SLDc+3 Type: One-Piece Compressive Solid Implant, 3mm neck, with Cementable Pillar. SLD Connection Code.

Available Diameters and Lengths

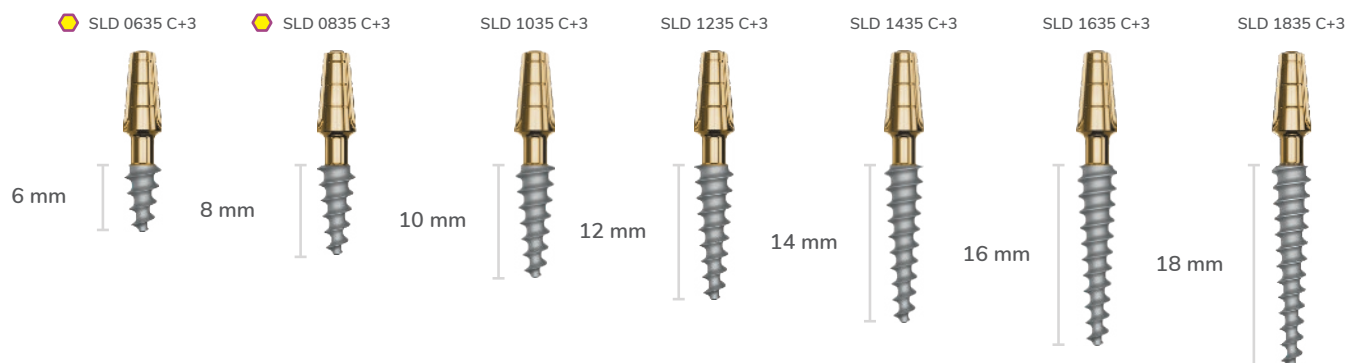


Ø 3.00

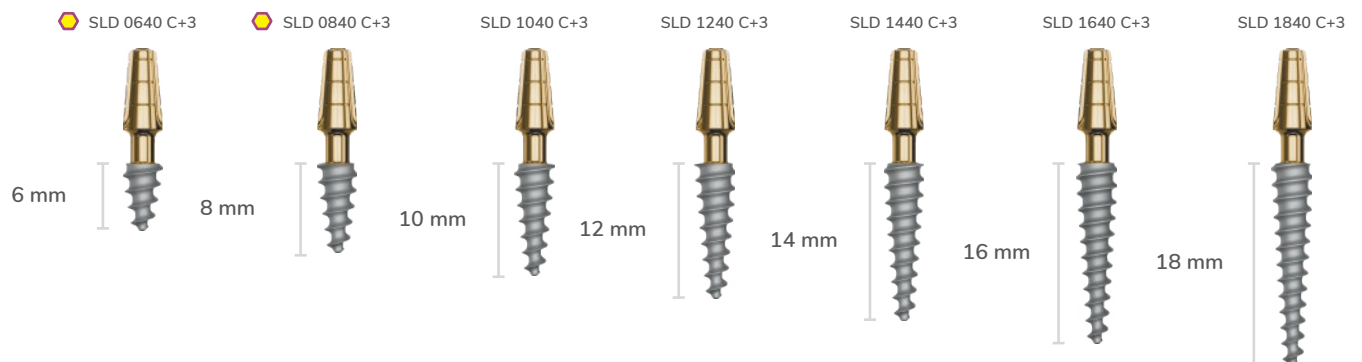
SCALE 1.5:1



Ø 3.50



Ø 4.00



Short Lines

Short Implants!!
L 6.0 / 8.0 mm

Trapezoidal profile thread with flat bottom:
Maximum accommodation of bone tissue.
Greater compression distribution.



Short Implant

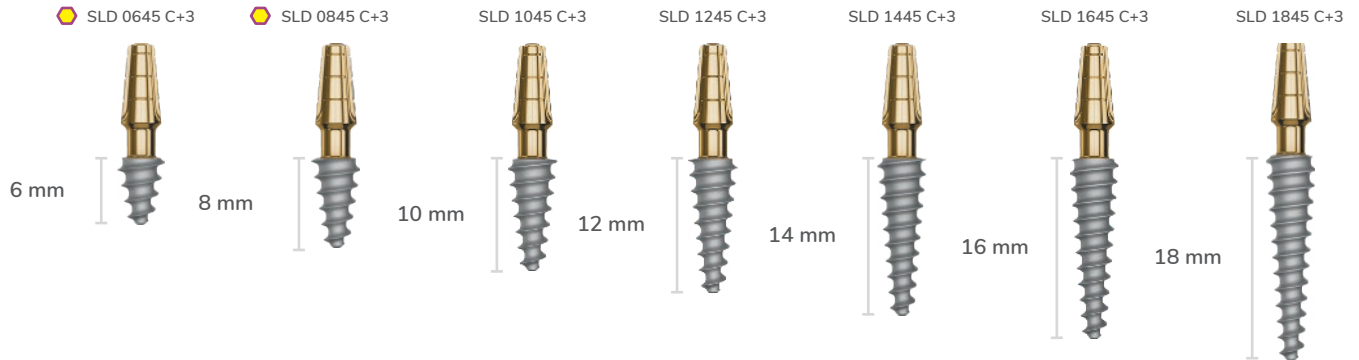
SLDc+3 Type: One-Piece Compressive Solid Implant, 3mm neck, with Cementable Pillar. SLD Connection Code.

Available Diameters and Lengths

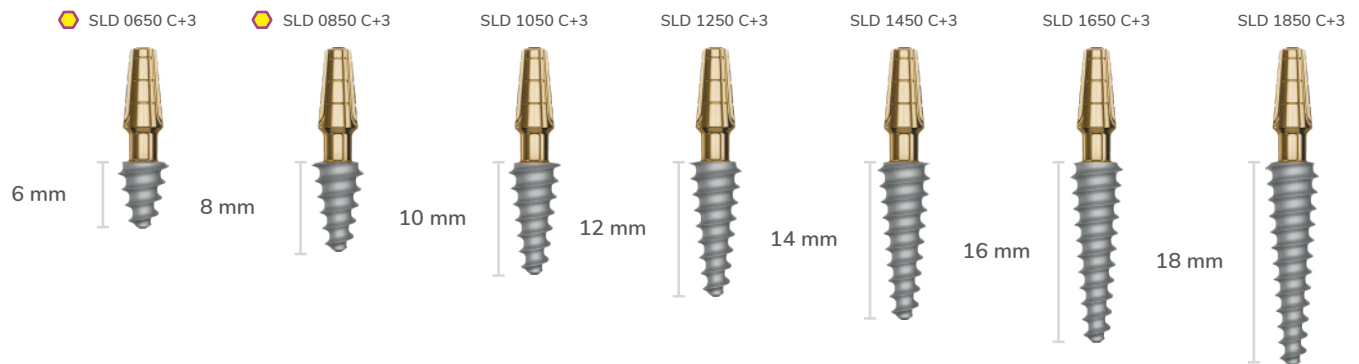


SCALE 1.5:1

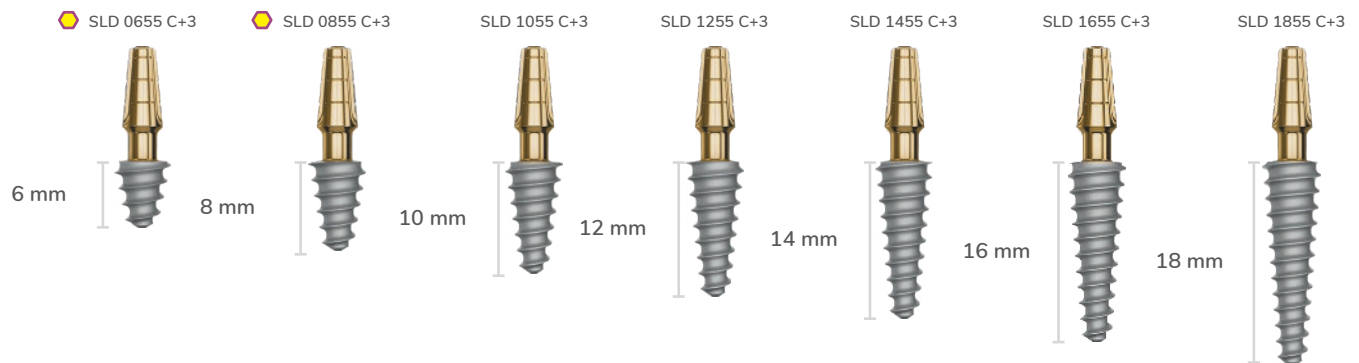
Ø 4.50



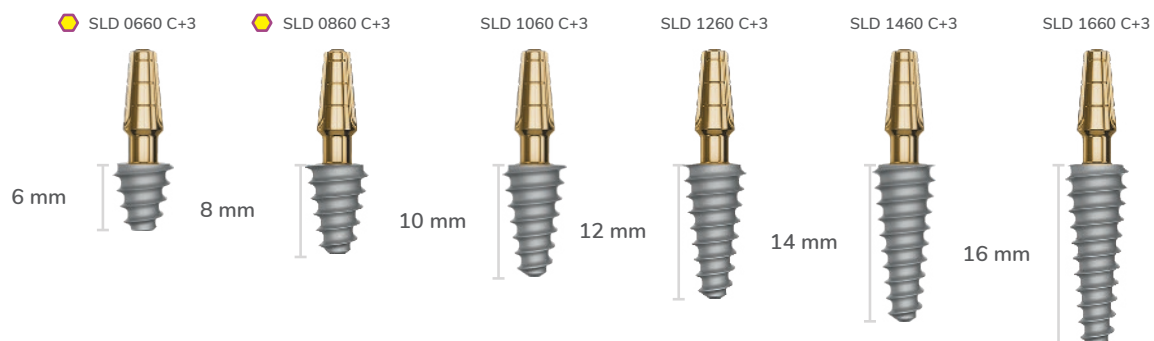
Ø 5.00



Ø 5.50



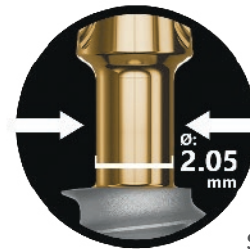
Ø 6.00



Short Implant

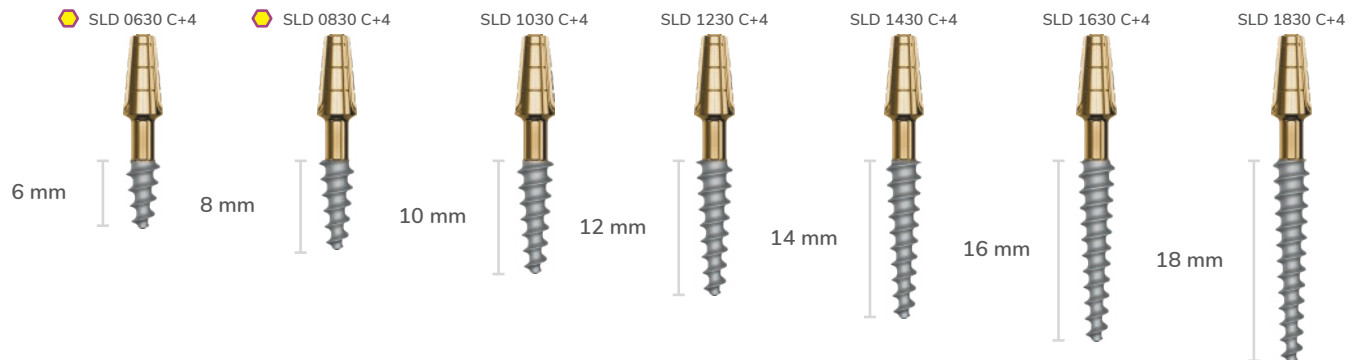
SLDc+4 Type: One-Piece Compressive Solid Implant, 4mm neck, with Cementable Pillar. SLD Connection Code.

Available Diameters and Lengths

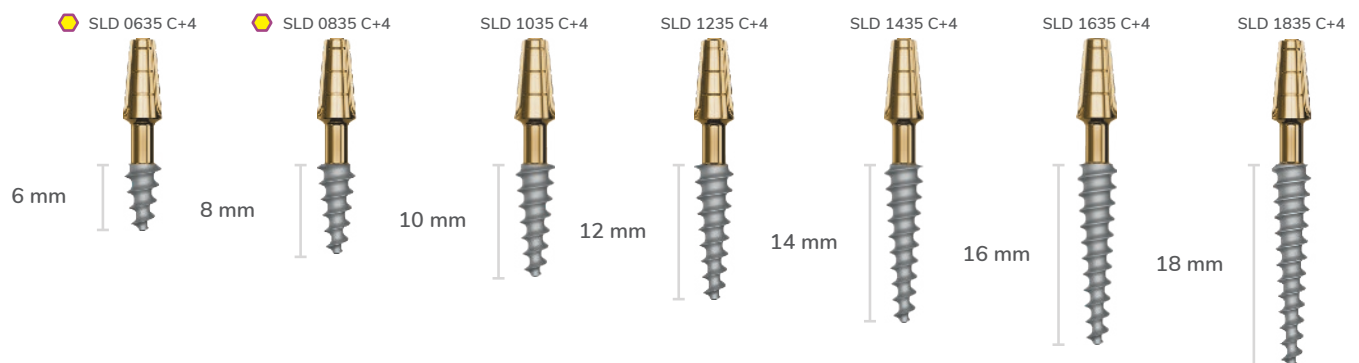


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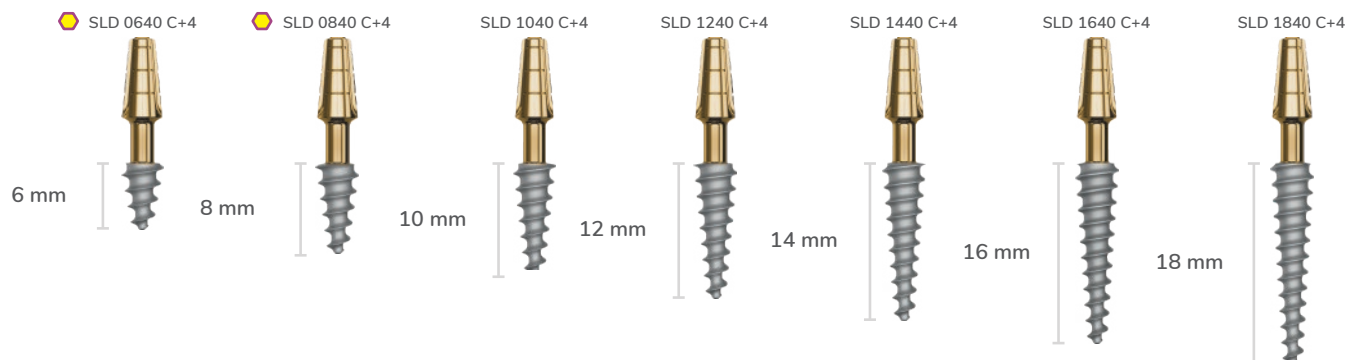
Ø 3.00



Ø 3.50



Ø 4.00



Short Lines

Short Implants!!
L 6.0 / 8.0 mm

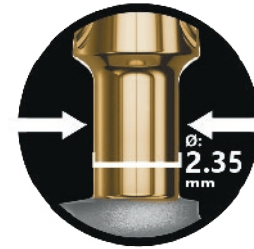
Trapezoidal profile thread with flat bottom:
Maximum accommodation of bone tissue.
Greater compression distribution.



Short Implant

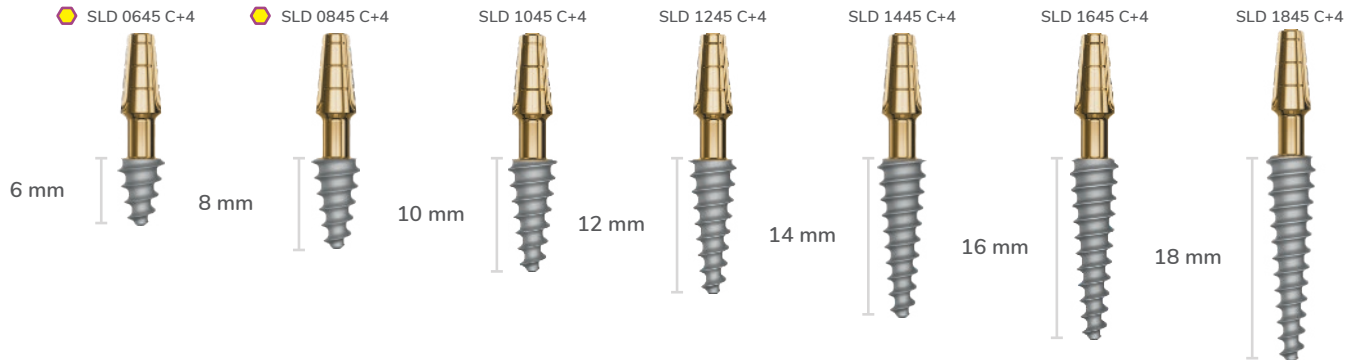
SLDc+4 Type: One-Piece Compressive Solid Implant, 4mm neck, with Cementable Pillar. SLD Connection Code.

Available Diameters and Lengths

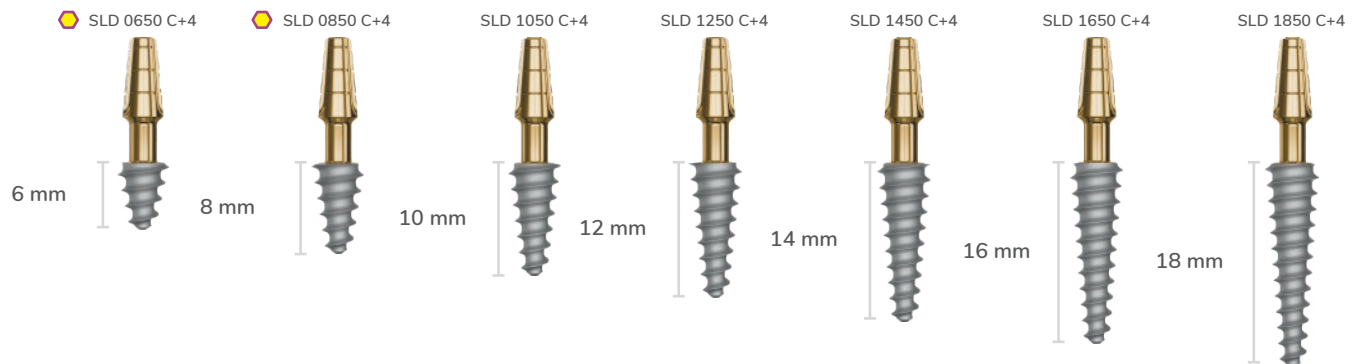


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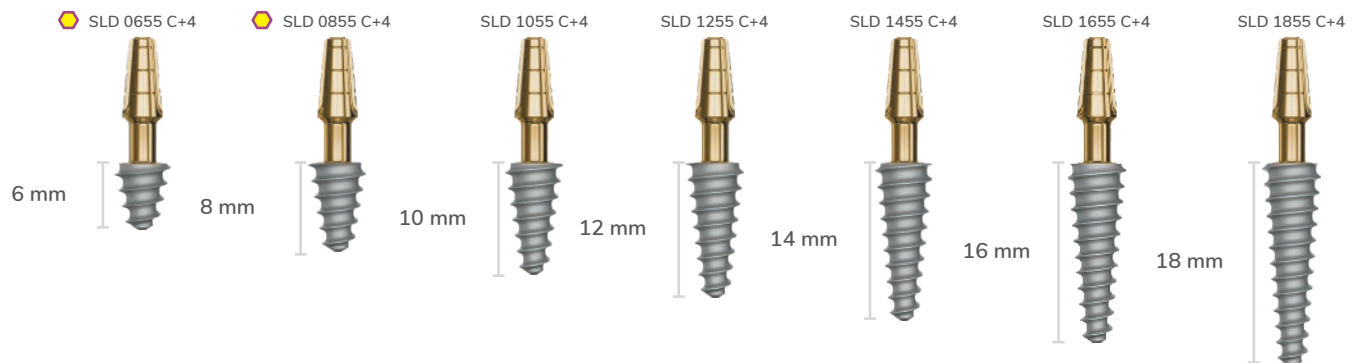
Ø 4.50



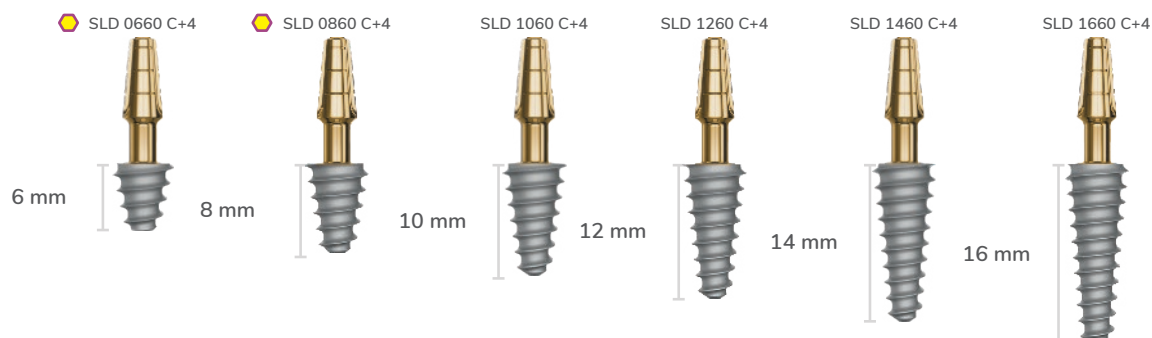
Ø 5.00



Ø 5.50

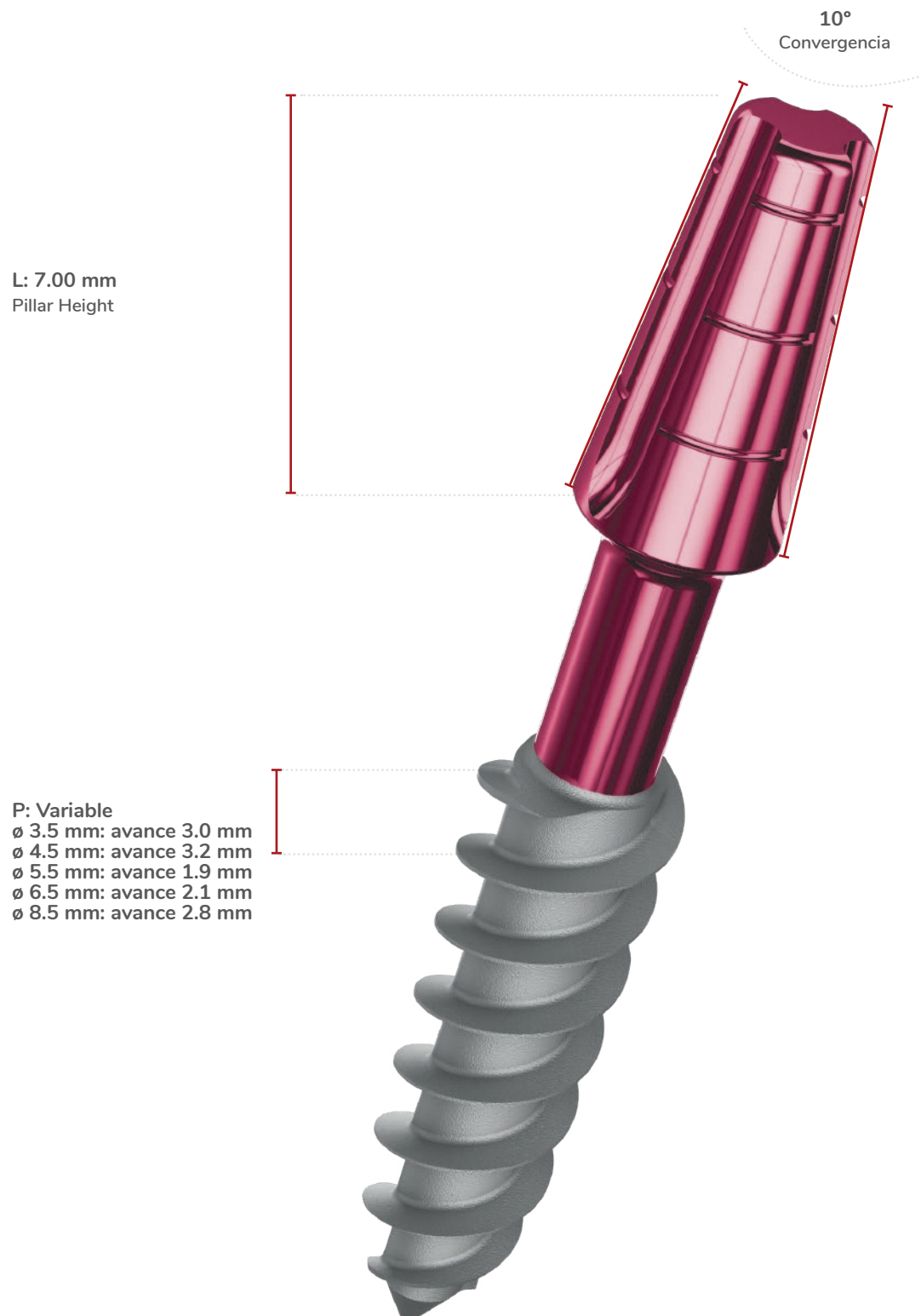


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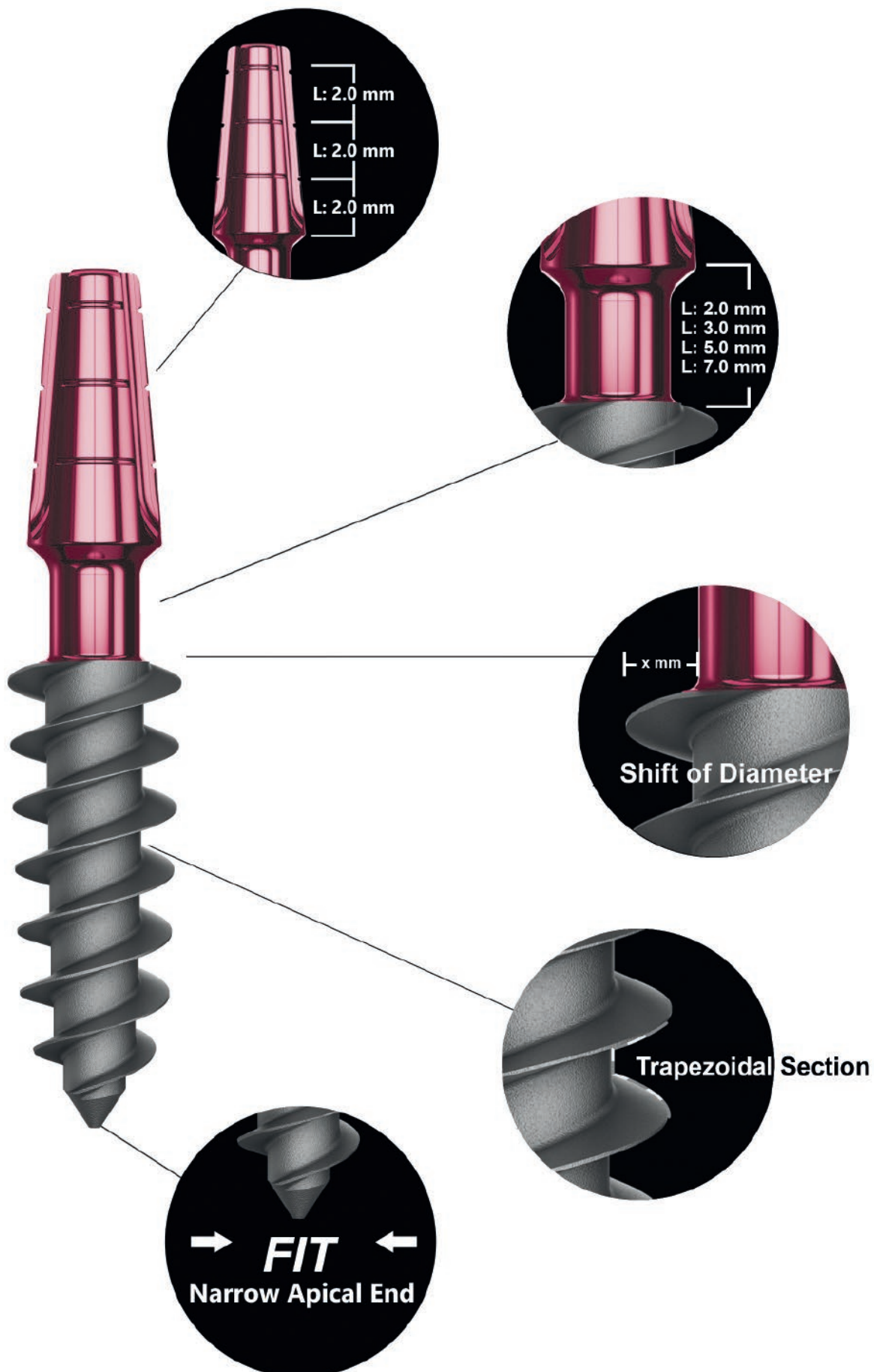
SLD-B Type

General Length and Diameter Measurements



SLD-B Type

General Length and Diameter Measurements

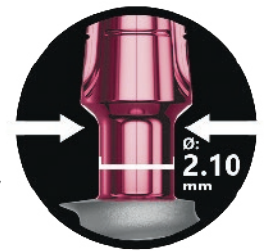


SLDb Type: One-Piece Solid Basal Implant with Cementable Abutment.

SLD Connection Code.

Available Diameters and Lengths

Ø 3.50 SCALE 1.5:1

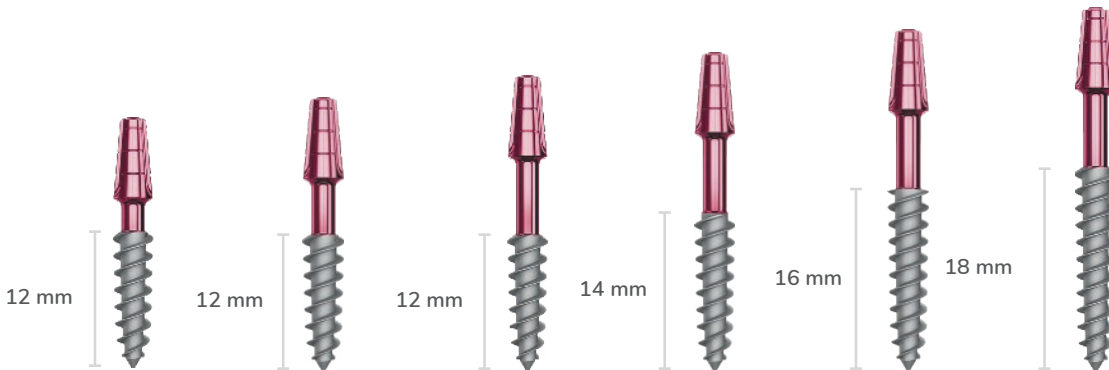


SLD 0635 B+2 SLD 0635 B+3 SLD 0835 B+3 SLD 1035 B+3 SLD 1035 B+5 SLD 1035 B+7

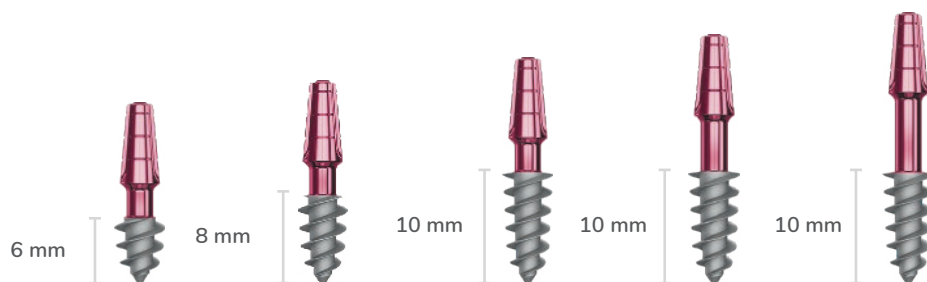


Ø 3.50

SLD 1235 B+3 SLD 1235 B+5 SLD 1235 B+7 SLD 1435 B+7 SLD 1635 B+7 SLD 1835 B+7

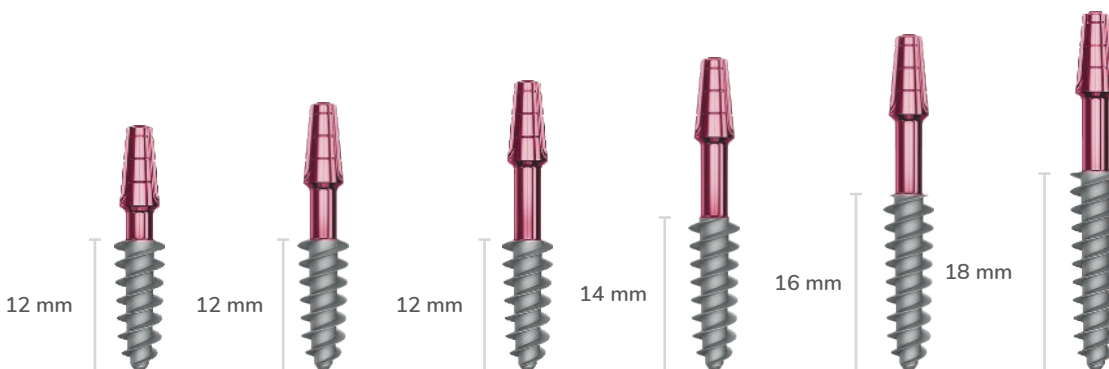


Ø 4.50 SLD 0645 B+3 SLD 0845 B+3 SLD 1045 B+3 SLD 1045 B+5 SLD 1045 B+7



Ø 4.50

SLD 1245 B+3 SLD 1245 B+5 SLD 1245 B+7 SLD 1445 B+7 SLD 1645 B+7 SLD 1845 B+7

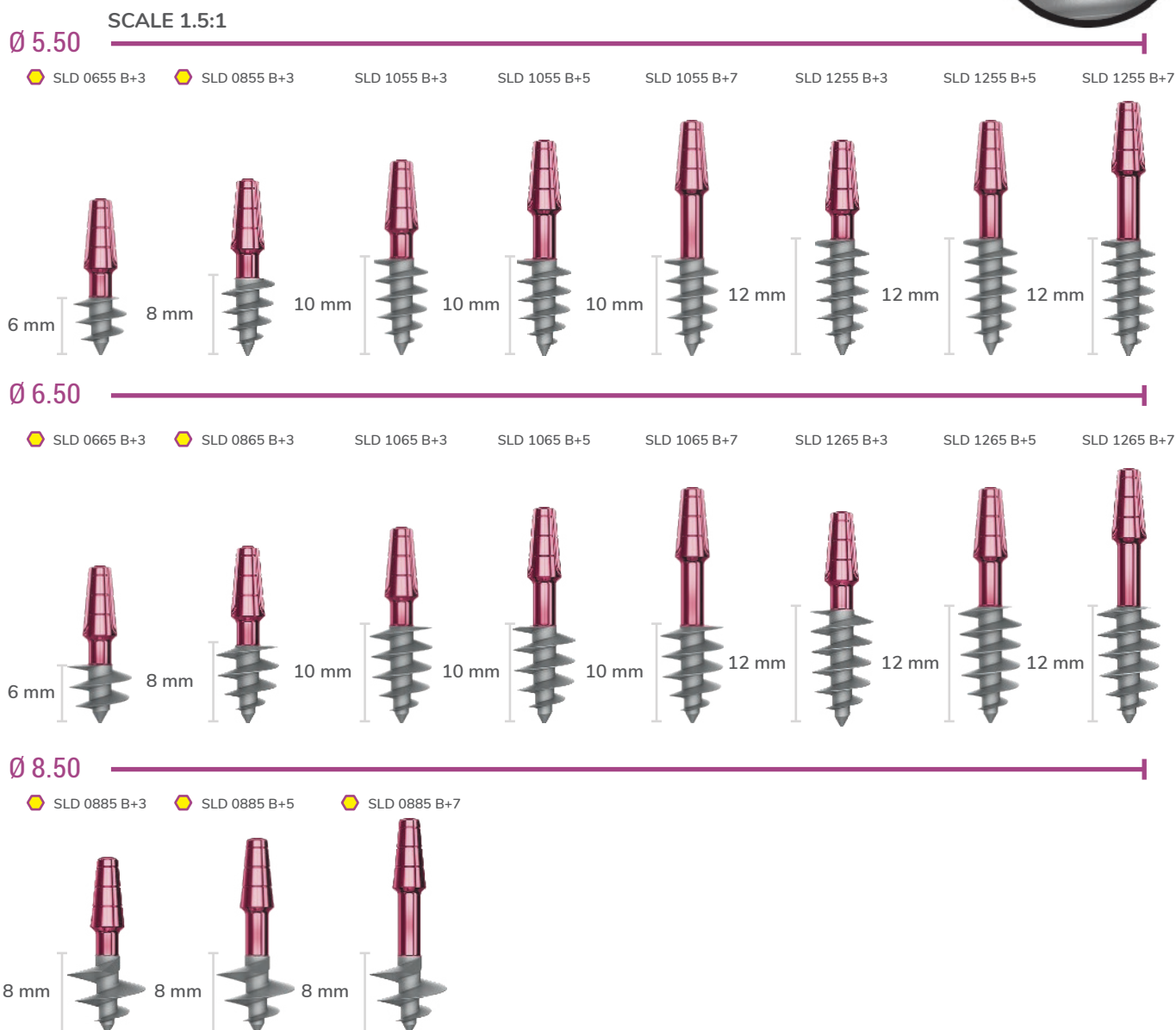


Short Implant

SLDb Type: One-Piece Solid Basal Implant with Cementable Abutment.

SLD Connection Code.

Available Diameters and Lengths



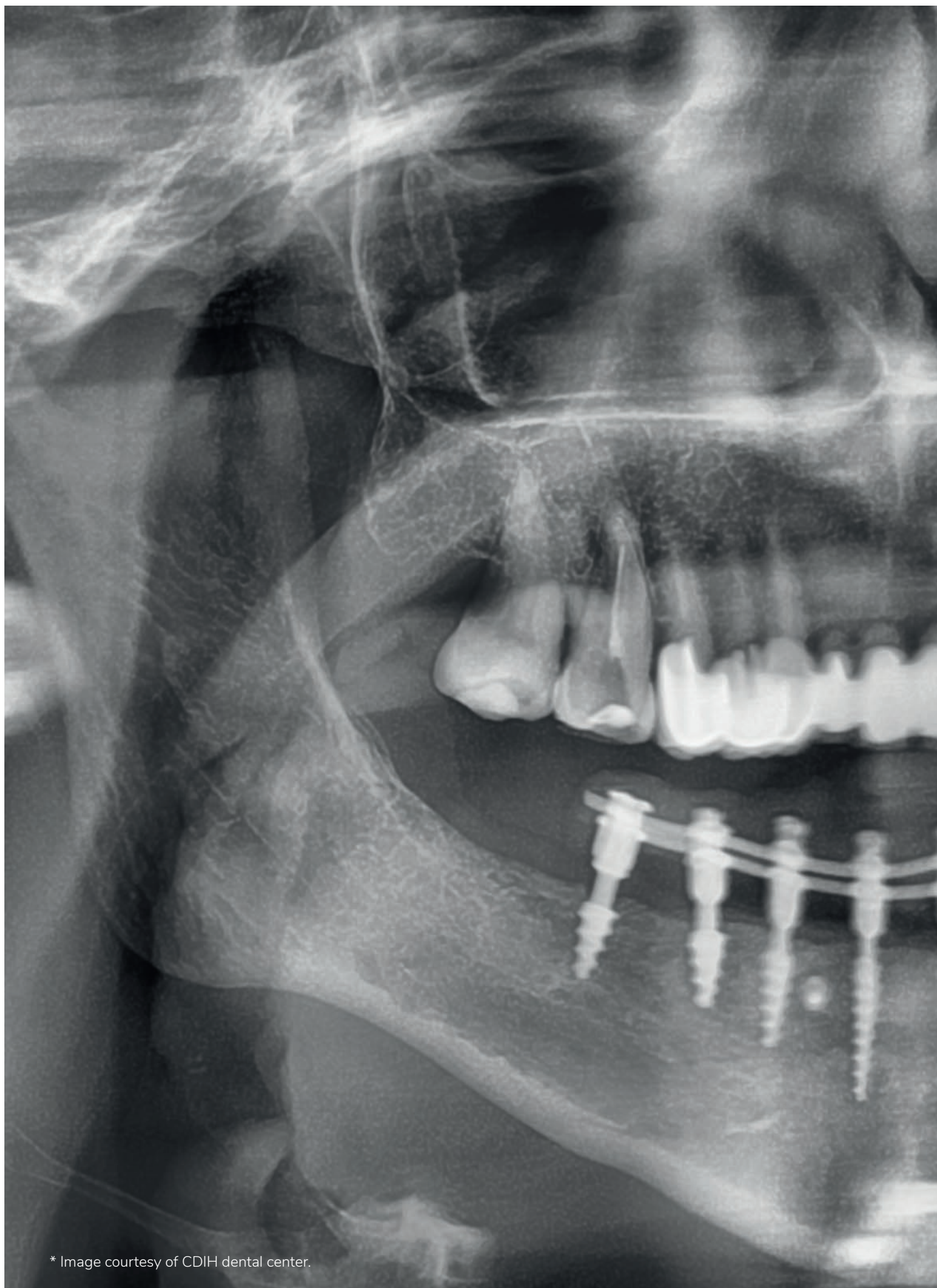
Short Lines

Short Implants!!
L 6.0 / 8.0 mm

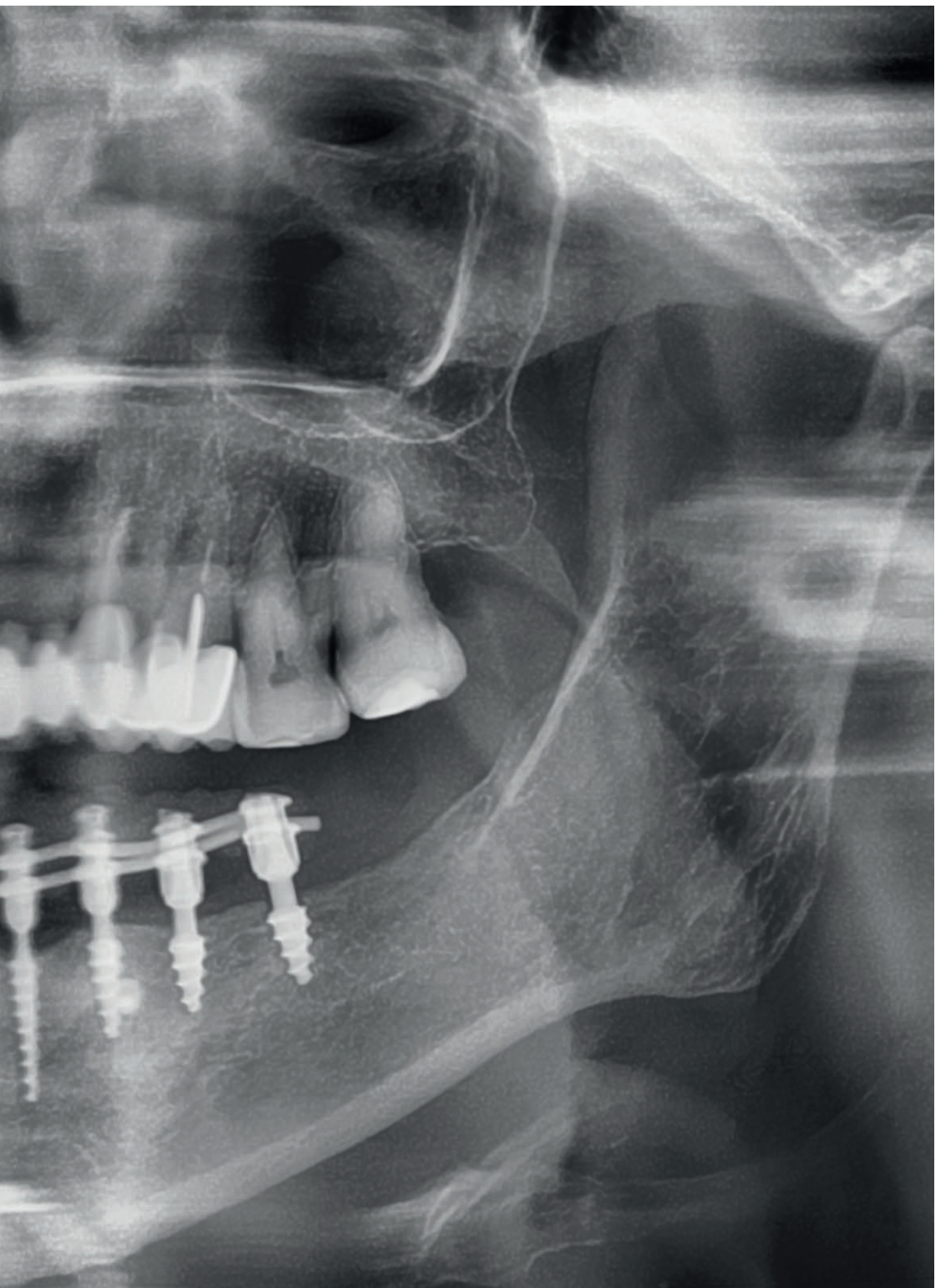
Trapezoidal profile thread with flat bottom:
Maximum accommodation of bone tissue.
Greater compression distribution.



Short Implant



* Image courtesy of CDIH dental center.





Surgical instruments

There is no doubt that a phase of special delicacy and importance is the manipulation developed by the professional, during all the processes of implant treatment.

This importance takes on a capital meaning, in surgical instrumentation in general and when preparing surgically the bed for the insertion of the implants, where the different levels of difficulty that can be caused by the anatomical terrain treated in each case come into play.

This is why **Radhex Implants®** has involved all the design efforts in optimizing the system to obtain surgical instruments with high ergonomic performance, which allow the professional to obtain high performance and comfort in handling, facilitating the performance of the technique.

This is a concept that the **Radhex Implants®** system assumes in special detail, and has been the guide in the development and design of instruments for surgery with implants.

Enabling agile, comfortable, practical and versatile management, whether manual or mechanical in any of the treatment stages.

BIC: Circular Scalpel

This instrument, made of the highest quality surgical steel, allows for the gingival opening in the shape of a buttonhole, for the application of the “Punch” technique or minimally invasive gingival opening technique:

The design of the circular scalpels - BIC - from **Radhex Implants®** includes the following features:

- ▶ Torque socket with universal contra angle connection.
- ▶ Length markings, using micro-channels, with 2 mm intervals, to guide the operator in verifying the milling depth.
- ▶ Marked with laser engraving for identification, of the Product Reference.
- ▶ Sharpened perimeter of different diameter alternatives for select the appropriate size of the opening, according to the diameter of implant.
- ▶ Diameters with 0.2 mm increment with respect to diameters of available implants, to maintain a safety margin that prevents “inserting” or “dragging” soft tissue into the cavity, during threading.
- ▶ Application: connected to contra angle.
- ▶ Attention:

Check the working depth and gingival thickness.
Press with rocking movements to adapt to the natural convexity of the bony crest and ensure complete excision of the mucosal button.
Apply with abundant irrigation to avoid overheating due to friction.



BIC	References:	BIC35	BIC37	BIC40	BIC45	BIC50	BIC60
Scalpels Circulars	ØA	3.70 mm	4.00 mm	4.20 mm	4.70 mm	5.20 mm	6.20 mm
	ØB	2.30 mm	2.30 mm	2.30 mm	2.30 mm	2.30 mm	2.30 mm
	L1	29.50 mm	29.50 mm	29.50 mm	29.50 mm	29.50 mm	29.50 mm
	L2	8.50 mm	8.50 mm	8.50 mm	8.50 mm	8.50 mm	8.50 mm
	Speed	200 RPM	200 RPM	200 RPM	200 RPM	200 RPM	200 RPM

FRL: Spear Strawberries - Technical Specifications

Made of high-hardness surgical steel, these drills allow the perforation of the bone cortex and the creation of an initial guide cavity for cavity formation.

The design of the **Radhex Implants®** lanceolate burs includes the following characteristics:

- Torque socket with universal contra angle connection.
- Product presentation in 2 lengths for easy access and cavity initiation maneuver, in different anatomical situations:

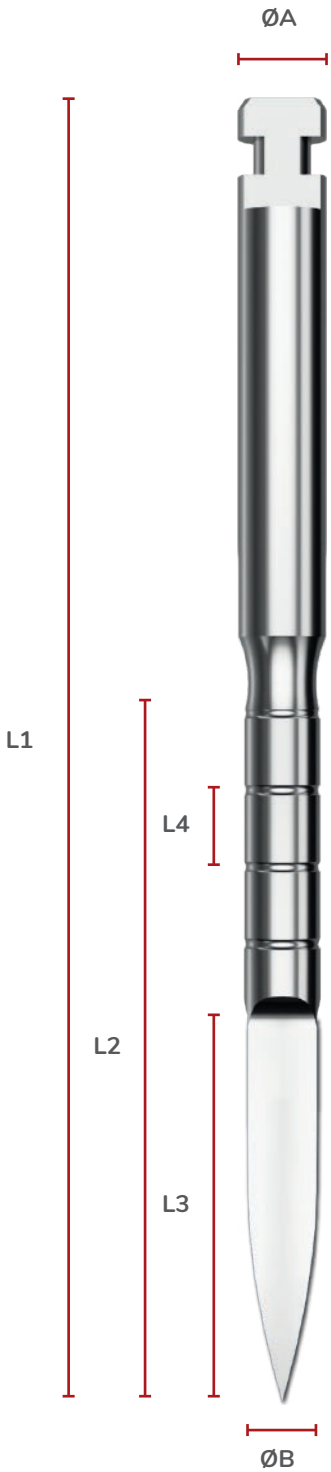
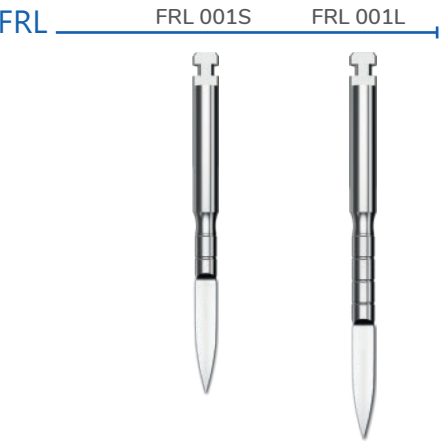
Short Lanceolate Milling Cutter: FRL 001S

Long Lance Milling Cutter: FRL 001L

- Lanceolate tip with triple straight cutting edge, every 120° to ensure maximum efficiency in milling, which have a travel of 10 mm and a drilling diameter of 2.00 mm.
- Length orientation marks, using micro-channels, with 2 mm intervals, to guide the operator in the milling depth.
- Recommended work speed: 800 R.P.M.
- Milling must be carried out:

With intermittency, (alternating short entries and exits, to facilitate the bone chip evacuation).

With abundant irrigation: to avoid fiction and overheating that cause tissue necrosis.



FRL	Referencias:	L1	L2	L3	L4	ØA	ØB
Spear Strawberries	FRL 001S	30,00 mm	14,00 mm	10,00 mm	2,00 mm	2,30 mm	2,00 mm
	FRL 001L	34,00 mm	18,00 mm	10,00 mm	2,00 mm	2,30 mm	2,00 mm

FRF: Final Mills - Technical Specifications

They allow the application of a simple, ergonomic, milling protocol.

Safe and efficient for cavity preparation.

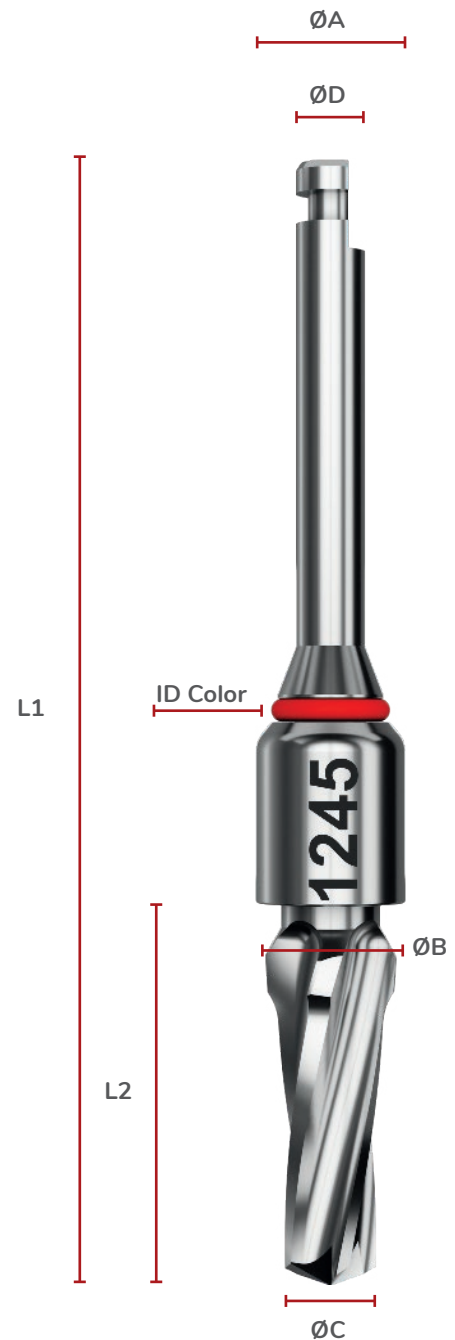
The special design of the **Radhex Implants®** final drills includes the following characteristics:

- ▶ Harmonious cavity profile design for each implant dimension, ensuring settlement with peri-implant bone compression uniform, to guarantee excellent stability of the implant
- ▶ Maximum security: One Final Drill, for each implant measurement in length and diameter.
- ▶ Fixed length stop: For each implant dimension, each final drill has its fixed limit, to determine a high level of security in the milling, limiting the depth without having to make stop changes nor adjustment thereof.
- ▶ Laser marking for reference identification: with code that contains four digits: the first two digits to indicate the Length, and the last two digits to indicate the Milling Diameter.
- ▶ Color-coded marking for strawberry length, according to the following sequence:

	06mm: purple
	08mm: white
	10mm: yellow
	12mm: red
	14mm: blue
	16mm: green
	18mm: black
- ▶ Conical Profile: Favors progressive entry, simplifying the technique and the number of drills to use to make the cavity.
- ▶ Helical cutting profiles: Optimal cutting efficiency.
- ▶ Channels between wide cutting blades, which help evacuate the tissue cut towards the outside preventing "dulling" of the instrument, (and its consequent difficulty in cutting and increase in temperature due to friction), and also allow the recovery of milled autologous bone tissue, for use in ROG techniques.
- ▶ Torque socket with universal contra-angle connection.
- ▶ Recommended work speed: 500 R.P.M.
- ▶ Milling must be carried out:

With intermittency, (alternating short entries and exits, to facilitate the bone chip evacuation).

With abundant irrigation: to avoid friction and overheating that they cause tissue necrosis.



Cavities For Implants	Reference	L1	L2	ØA	ØB	ØC	ØD	ID Color
Ø 3,00 mm	FRF1030	35,20 mm	10,65 mm	4,20 mm	3,10 mm	2,10 mm	2,30 mm	Yellow
	FRF1230	37,20 mm	12,65 mm	4,20 mm	3,10 mm	2,10 mm	2,30 mm	Red
	FRF1430	39,20 mm	14,65 mm	4,20 mm	3,10 mm	2,10 mm	2,30 mm	Blue
	FRF1630	41,20 mm	16,65 mm	4,20 mm	3,10 mm	2,10 mm	2,30 mm	Green
Ø 3,50 mm	FRF0835	33,20 mm	08,65 mm	4,20 mm	3,50 mm	2,60 mm	2,30 mm	White
	FRF1035	35,20 mm	10,65 mm	4,20 mm	3,50 mm	2,45 mm	2,30 mm	Yellow
	FRF1235	37,20 mm	12,65 mm	4,20 mm	3,50 mm	2,45 mm	2,30 mm	Red
	FRF1435	39,20 mm	14,65 mm	4,20 mm	3,50 mm	2,45 mm	2,30 mm	Blue
	FRF1635	41,20 mm	16,65 mm	4,20 mm	3,50 mm	2,45 mm	2,30 mm	Green
	FRF1835	43,20 mm	18,65 mm	4,20 mm	3,50 mm	2,45 mm	2,30 mm	Black
Ø 3,75 mm	FRF0837	33,20 mm	08,65 mm	4,50 mm	3,75 mm	2,80 mm	2,30 mm	White
	FRF1037	35,20 mm	10,65 mm	4,50 mm	3,75 mm	2,70 mm	2,30 mm	Yellow
	FRF1237	37,20 mm	12,65 mm	4,50 mm	3,75 mm	2,70 mm	2,30 mm	Red
	FRF1437	39,20 mm	14,65 mm	4,50 mm	3,75 mm	2,70 mm	2,30 mm	Blue
	FRF1637	41,20 mm	16,65 mm	4,50 mm	3,75 mm	2,70 mm	2,30 mm	Green
	FRF1837	43,20 mm	18,65 mm	4,50 mm	3,75 mm	2,70 mm	2,30 mm	Black
Ø 4,00 mm	FRF0640	31,20 mm	06,65 mm	4,50 mm	3,95 mm	2,90 mm	2,30 mm	Violet
	FRF0840	33,20 mm	08,65 mm	4,50 mm	3,95 mm	2,80 mm	2,30 mm	White
	FRF1040	35,20 mm	10,65 mm	4,50 mm	3,95 mm	2,80 mm	2,30 mm	Yellow
	FRF1240	37,20 mm	12,65 mm	4,50 mm	3,95 mm	2,80 mm	2,30 mm	Red
	FRF1440	39,20 mm	14,65 mm	4,50 mm	3,95 mm	2,80 mm	2,30 mm	Blue
	FRF1640	41,20 mm	16,65 mm	4,50 mm	3,95 mm	2,80 mm	2,30 mm	Green
	FRF1840	43,20 mm	18,65 mm	4,50 mm	3,95 mm	2,80 mm	2,30 mm	Black
Ø 4,50 mm	FRF0645	31,20 mm	06,65 mm	5,00 mm	4,45 mm	3,20 mm	2,30 mm	Violet
	FRF0845	33,20 mm	08,65 mm	5,00 mm	4,45 mm	3,20 mm	2,30 mm	White
	FRF1045	35,20 mm	10,65 mm	5,00 mm	4,45 mm	3,10 mm	2,30 mm	Yellow
	FRF1245	37,20 mm	12,65 mm	5,00 mm	4,45 mm	3,10 mm	2,30 mm	Red
	FRF1445	39,20 mm	14,65 mm	5,00 mm	4,45 mm	3,10 mm	2,30 mm	Blue
	FRF1645	41,20 mm	16,65 mm	5,00 mm	4,45 mm	3,10 mm	2,30 mm	Green
	FRF1845	43,20 mm	18,65 mm	5,00 mm	4,45 mm	3,10 mm	2,30 mm	Black
Ø 5,00 mm	FRF0650	31,20 mm	06,65 mm	5,50 mm	4,80 mm	3,70 mm	2,30 mm	Violet
	FRF0850	33,20 mm	08,65 mm	5,50 mm	4,80 mm	3,70 mm	2,30 mm	White
	FRF1050	35,20 mm	10,65 mm	5,50 mm	4,80 mm	3,50 mm	2,30 mm	Yellow
	FRF1250	37,20 mm	12,65 mm	5,50 mm	4,80 mm	3,50 mm	2,30 mm	Red
	FRF1450	39,20 mm	14,65 mm	5,50 mm	4,80 mm	3,50 mm	2,30 mm	Blue
	FRF1650	41,20 mm	16,65 mm	5,50 mm	4,80 mm	3,50 mm	2,30 mm	Green
	FRF1850	43,20 mm	18,65 mm	5,50 mm	4,80 mm	3,50 mm	2,30 mm	Black
Ø 6,00 mm	FRF0660	31,20 mm	06,65 mm	6,50 mm	5,80 mm	4,30 mm	2,30 mm	Violet
	FRF0860	33,20 mm	08,65 mm	6,50 mm	5,80 mm	4,30 mm	2,30 mm	White
	FRF1060	35,20 mm	10,65 mm	6,50 mm	5,80 mm	4,30 mm	2,30 mm	Yellow
	FRF1260	37,20 mm	12,65 mm	6,50 mm	5,80 mm	4,30 mm	2,30 mm	Red

FRF: Final Mills - Product Range

* Ø 3.00 mm - Fit Implants: See at the end of the reference table

Ø 3.50 mm

FRF0835



FRF1035



FRF1235



FRF1435



FRF1635



FRF1835



Ø 3.75 mm

FRF0837



FRF1037



FRF1237



FRF1437



FRF1637



FRF1837



Ø 4.00 mm

FRF0640



FRF0840



FRF1040



FRF1240



FRF1440



FRF1640



FRF1840



FRF: Final Mills - Product Range

Ø 4.50 mm

FRF0645



FRF0845



FRF1045



FRF1240



FRF1445



FRF1645



FRF1845



Ø 5.00 mm

FRF0650



FRF0850



FRF1050



FRF1250



FRF1450



FRF1650



FRF1850



Special Diameters

Ø 3.00 mm - Fit Implants -

FRF1030



FRF1230



FRF1430



FRF1630



Ø 6.00 mm - Short Implants -

FRF0660



FRF0860



FRF1060



FRF1260



Final Drills: Characteristics of the Cavity Profile

Dimensions of Final Mills -FRF-

Final Drills by implant diameter



Main Features

The final drills of the **Radhex Implants®** system have a conical profile, so that the widening of the cavity is progressive, as we introduce the drill into the bed that is being created.

For this reason, the technical protocol for cavity preparation is simplified, requiring fewer drill changes, so that with a minimum number of drills, cavity conformation is completed with maximum efficiency.

- Milling diameter: Milling volume equivalent to the Implant core, with tolerance for adjustment by self-threading.
- Milling length: Minimum extension of the cutting tip, increasing the milling depth by *0.65 mm.

*Attention: this factor must be taken into account with respect to anatomical risk areas.

These final drills are indicated for optimal cavity dimensional finishing for type II and III bones.

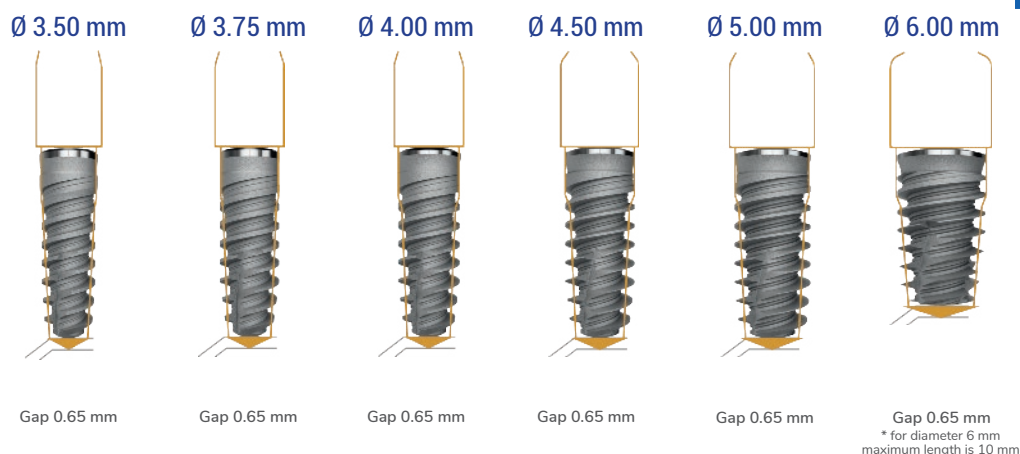
(Leckholm et Zarb).

- For type I bone, a bone tapping maneuver should be used.
- For Type IV Bone, it is recommended to finish the cavity with a smaller diameter bur.

Warning: it must be taken into account that the leading tip of the final drill extends the drilling length by 0.65 mm in the apical area. This must be taken into account to avoid damaging risky anatomical structures.

Cavity - Implant Dimensions List:

Drills and Nucleus-Crest Relationship of Implants



TRJ: Bone Taps - Technical Specifications

Bone taps, or bone thread formers, are instruments made of surgical steel, whose purpose is to use them when the anatomical terrain is high-density bone type 1 and type 2, to carve the threads inside the cavity, making it easier to this way the subsequent implant insertion maneuver.

The design of the Bone Taps (TRJ), Radhex Implants® includes the following features:

► Three models of taps, to adapt to the type of external thread of the implant used:

PHI and **PHE** implants: Taps with a single thread, with a pitch of 1 mm advance per turn.

PHIA and **PHEA** implants: Double thread taps, with 2.4 mm pitch of advance per turn.

PHIA+, **PCI** and **PCI+** implants: Double thread taps, with 2.6 mm pitch of advance per turn.

Technical characteristics:

- Torque socket with 3.7 Hexagon and elastic retention.
- Straight cutting fronts, for creating the cavity thread.
- Length orientation marks, using micro-channels, with 2 mm intervals, to guide the operator in the working depth.
- Marked by laser engraving to identify the working depth, using dark bands and numerical depth coding in millimeters.
- Marked by identification laser engraving, for product reference.
- Recommended work speed: 25 R.P.M.
- Bone Tapping must be performed:

Maintaining the orientation direction chosen for the implant, with necessary entrances and exits, removing the bone mud from the cavity.

With abundant irrigation: to avoid friction and overheating that cause tissue necrosis.



TRJ Single threading propeller - Advance 1.0 mm/v



TRJA Double threading propeller - Advance 2.4 mm/v



TRJAA Double threading propeller - Advance 2.6 mm/v



EXP: Threaded Osteotomy Bone Expanders

This instrument allows for cavity formation by expansion.

Radhex Implants® expanders are specific for compaction in the treatment of low-density bones, particularly in the jaw superior, especially postero-superior and also indicated in the area antero-inferior.

They allow promoting corticalization with greater bone density peri-implant level, ensuring greater stability of the implant at long term.

Its entrance allows the cavity to be expanded up to the desired diameter, performing its mechanical work through compressive expansion by progressive coinage.

The design of the **Radhex Implants®** brand Threaded Bone Expanders includes the following features:

- ▶ Torque socket with 3.7 Hexagon and elastic retention.
- ▶ Soft tapered walls, which ensure expansion with discharge progressive of forces, not abrupt.
- ▶ Progressive expansion sequence, with increase in diameter.
- ▶ Marked by laser engraving identification, for Reference of product.
- ▶ Application: Manual using a ratchet wrench.
- ▶ The profile of the instrument does not reproduce the implant core.
- ▶ Recommended working speed: 25 R.P.M.
- ▶ Attention

Verify the working depth during the application of the technique.

Control the progression of the expansion to avoid board fractures.

Control the working direction of the instrument.



Coinage action
Compressive Profile Thread

EXP



Work Instruments - Technical Specifications

Ratchet

The implant ratchet is an instrument developed with a high-quality stainless steel body, designed with an extension arm that allows the adequate and safe application of the threading or unscrewing maneuver.

The design of the Ratchet, (CRR), from **Radhex Implants®**, includes the following Technical characteristics:

- ▶ Mono-body design in Surgical Steel.
- ▶ Laser Engraving in Entry Position (front) or Threading Exit Position (reverse).
- ▶ Washable and Autoclavable.
- ▶ Torque socket with 3.7 Hexagon.



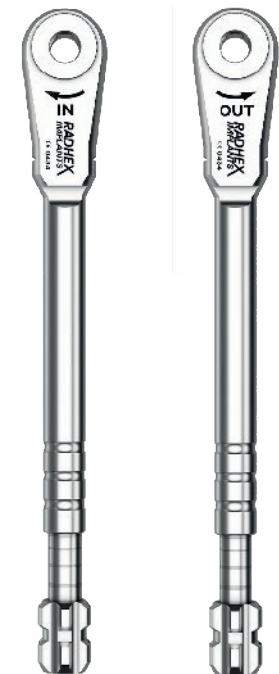
CRR001

Llave Dinamométrica

The **Radhex Implants®** Implant System Dynamometric Wrench is an instrument developed with a high-quality stainless steel body, designed with an extension arm that allows the adequate and safe application and control of torque in the threading or unscrewing maneuver.

The design of the **Radhex Implants®** Torque Wrench (DIN) includes the following Technical Characteristics:

- ▶ Body design in Surgical Steel.
- ▶ Torque wrench with adjustable internal torque control.
- ▶ Torque wrench with torque display for body breakage.
- ▶ Laser Engraving in Entry Position (front) or Threading Exit Position (reverse).
- ▶ Washable and Autoclavable.
- ▶ Torque socket with 3.7 Hexagon.
- ▶ Torque control from 10Ncm to 40Ncm: 10Ncm per marking line.
- ▶ Locking function with full adjustment, acting as a Ratchet Wrench.



DIN001

Handles and Extensions

Handle or tool handle

This instrument made of surgical stainless steel allows perform manual application of torque for threading and unscrewing of:

- Implants: when connecting with manual keys - Drivers - holder implants, being possible to take the implant for transport and start cavity threading.
- Micro-screws: manual adjustment of micro-screws for attachments.
- Manual bone expanders: for performing expansive osteotomy crest.

It comes in two modalities and has the following characteristics:

- Smaller diameter head: Ø 8 mm, which allows manual application of moderate torque. (Ref. MNG002).
- Larger diameter head: Ø 14 mm, which allows manual application with a higher torque than the previous one. (Ref. MNG001).
- Torque socket with 3.7 Hexagon and suitable for elastic retention.
- Smaller diameter head: Ø 8 mm, which allows manual application of a moderate die, to adjust the screws of the transfers of open bucket, (MNG003).
- Washable and Autoclavable.

Extenders

This instrument made of surgical stainless steel allows extend the length of other tools, when clinical circumstance it requires.

It comes in two modalities and has the following characteristics:

- Manual extensions with torque socket with 3.7 Hexagon. (Ref. PRM).
- Extensions for handpiece with torque socket to handpiece motorized hand. (Ref. PRC).
- Washable and Autoclavable.

Handles for Manual Screwdriving

MNG001
Major Handle



MNG002
Minor Handle



Open Cover Handles

MNG003
Minor Handle



PRM

PRM001
Manual Extension
Short



PRM002
Prolongador Manual
Largo



PRC

PRC000
Extender
contra angle



PRC001
Extender
handpiece
Short



PRC002
Extender
handpiece
Long



Implant holder keys - Technical Specifications

PHE system implant holder keys: Star and Hexa Grip

Instrumentation Made of surgical stainless steel, suitable for the function of taking and transporting the implant from its sterile container vial, to the operating cavity prepared for insertion, and subsequent application of the threading torque until the implant is completely inserted.

The design of the implant holder keys - Drivers - from **Radhex Implants®**, includes the following

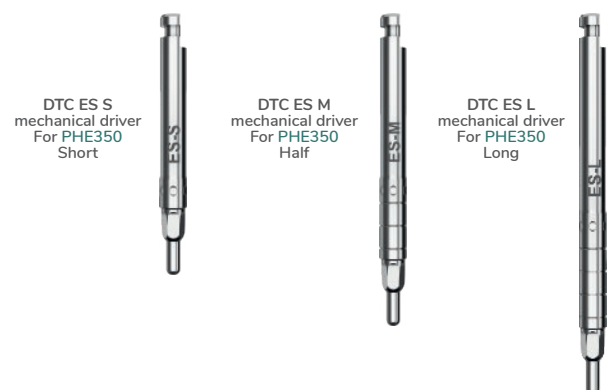
Technical characteristics:

- ▶ Surgical Steel Body
- ▶ Tension Retention - Friction
- ▶ Horizontal markings for working depth orientation.
- ▶ Reference points for orientation of the connection indexing, in threading.
- ▶ Option of Manual wrenches with torque socket with 3.7 Hexagon.
- ▶ Wrench option For handpiece with contra-angle torque taking.
- ▶ Marked with identification laser engraving, for product reference.
- ▶ Washable and Autoclavable.
- ▶ Driver valid for ES Platforms: **PHE350**. Identification color: GREEN
- ▶ Stargrip type driver valid for EM Platforms: **PHE410 / PHEA410**. Identification color: GREEN

DTM-ES



DTC-ES



DTM-EM



DTC-EM



PHI system implant holder keys: Hexa Grip

Instrumentation Made of surgical stainless steel, suitable for the function of taking and transporting the implant from its sterile container vial, to the operating cavity prepared for insertion, and subsequent application of the threading torque until the implant is completely inserted.

The design of the implant holder keys - Drivers - from **Radhex Implants®**, includes the following

Technical characteristics:

- ▶ Surgical Steel Body
- ▶ Tension Retention - Friction
- ▶ Horizontal markings for working depth orientation.
- ▶ Reference points for orientation of the connection indexing, in threading.
- ▶ Option of Manual wrenches with torque socket with 3.7 Hexagon.
- ▶ Wrench option For handpiece with contra-angle torque taking.
- ▶ Marked with identification laser engraving, for product reference.
- ▶ Washable and Autoclavable.
- ▶ Driver valid for **PHI350 / PHI450 / PHIA350 / PHIA450** Platforms.
- ▶ Identification Color: BLUE

DTM-HI

DTM HI S
Driver manual for
Internal Hexagon
Short



DTM HI L
Driver manual for
Internal Hexagon
Long

**DTC-HI**

DTC HI S
Mechanical driver for
Internal Hexagon
Short



DTC HI M
Mechanical driver for
Internal Hexagon
Half



DTC HI L
Mechanical driver for
Internal Hexagon
Long



PCI system implant holder keys: Hexa Grip

Instrumentation Made of surgical stainless steel, suitable for the function of taking and transporting the implant from its sterile container vial, to the operating cavity prepared for insertion, and subsequent application of the threading torque until the implant is completely inserted.

The design of the implant holder keys - Drivers - from Radhex Implants®, includes the following

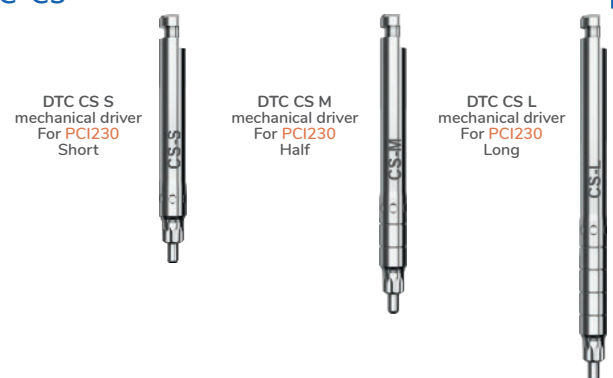
Technical characteristics:

- ▶ Surgical Steel Body
- ▶ Tension Retention - Friction
- ▶ Horizontal markings for working depth orientation.
- ▶ Reference points for orientation of the connection indexing, in threading.
- ▶ Option of Manual wrenches with torque socket with 3.7 Hexagon.
- ▶ Wrench option For handpiece with contra-angle torque taking.
- ▶ Marked with identification laser engraving, for product reference.
- ▶ Washable and Autoclavable.
- ▶ Driver valid for CS Platform: **PCI230**. Identification color: YELLOW.
- ▶ Driver valid for CM Platform: **PCI280**. Identification color: SEAWATER.
- ▶ Driver valid for CL Platform: **PCI350**. Identification color: VIOLET.

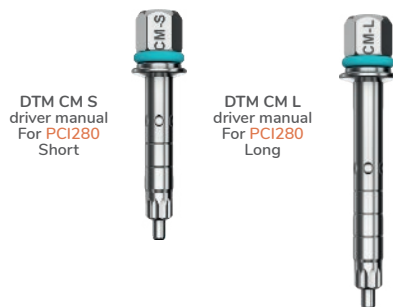
DTM-CS



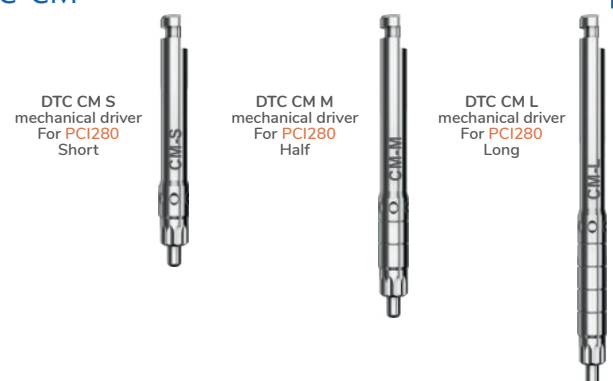
DTC-CS



DTM-CM



DTC-CM



DTM-CL



DTC-CL



SLD system implant holder keys: Hexa Grip

Instrumentation Made of surgical stainless steel, suitable for the function of taking and transporting the implant from its sterile container vial, to the operating cavity prepared for insertion, and subsequent application of the threading torque until the implant is completely inserted.

The design of the implant holder keys - Drivers - from **Radhex Implants®**, includes the following

Technical characteristics:

- ▶ Surgical Steel Body
- ▶ Tension Retention - Friction
- ▶ Option of Manual wrenches with torque socket with 3.7 Hexagon.
- ▶ Wrench option For handpiece with contra-angle torque taking.
- ▶ Marked with identification laser engraving, for product reference.
- ▶ Washable and Autoclavable.
- ▶ Driver valid for Platforms **SLD c / SLD b**.
- ▶ Identification color: WHITE.

DTM-HI**DTC-HI**

Implant holder key characteristics: Hexa Grip X2 type driver

Direct implant take-up, without “Pick and Place” transporter, using a double hexagonal prism body.

The safest and most robust retention by tense friction mechanism.

Absence of risk due to breakage of the conveyor or micro-screw.

Reduction of mechanical stress in the connection, preventing its deformation.

Maximum use of insertion torque.

Greater transport ergonomics, more comfort in the operating procedure and handling.

Driver with depth control marks, to verify insertion level in the same installation procedure.

implant placement.

Reference points for indexing control of the implant hexagon, indicating its flat faces.

Identification color code for platform per implant system.

With guide bolt to maintain stability of the implant in its threading.



Prosthetic screwdrivers

This instrument made of surgical stainless steel allows manual or mechanical application of torque for threading and unscrewing micro-screws and direct threading attachments to the implant.

- ▶ Manually operated screwdrivers, with torque socket with 3.7 Hexagon and suitable for elastic retention.
- ▶ Mechanically driven screwdrivers, with torque socket suitable for universal handpiece.
- ▶ Marked with identification laser engraving, for product reference.
- ▶ Washable and Autoclavable.
- ▶ Identification color codes: GREEN for 1.20mm..
- ▶ Identification color codes: BLUE for 1.25mm

DTM-1.20



DTC-1.20



DTM-1.25



DTC-1.25





Surgical Boxes

- ▶ Practical format for all the instruments required for implant placement: clearly organized and at hand.
- ▶ With stored Instrumental indications recorded.
- ▶ Solid materials, washable and resistant to autoclave sterilization.
- ▶ Surgical Kit Options.
- ▶ Plastic or Stainless Steel material options.
- ▶ Resistant, easy to transport and adequate volumes.
- ▶ Simple distribution: color coding of instruments.

Aesthetics, presentation, order, ergonomics and simplicity in design are combined in our surgical kits as the pillars to facilitate the work of the surgeon, because we think of the professional, from the very circumstance of the surgical act, and to Therefore, we seek to facilitate your maneuvers, with elements that are easy to identify and understand, bringing the design closer to simplicity of understanding, which will always allow a more agile and dynamic performance in the interventions carried out.

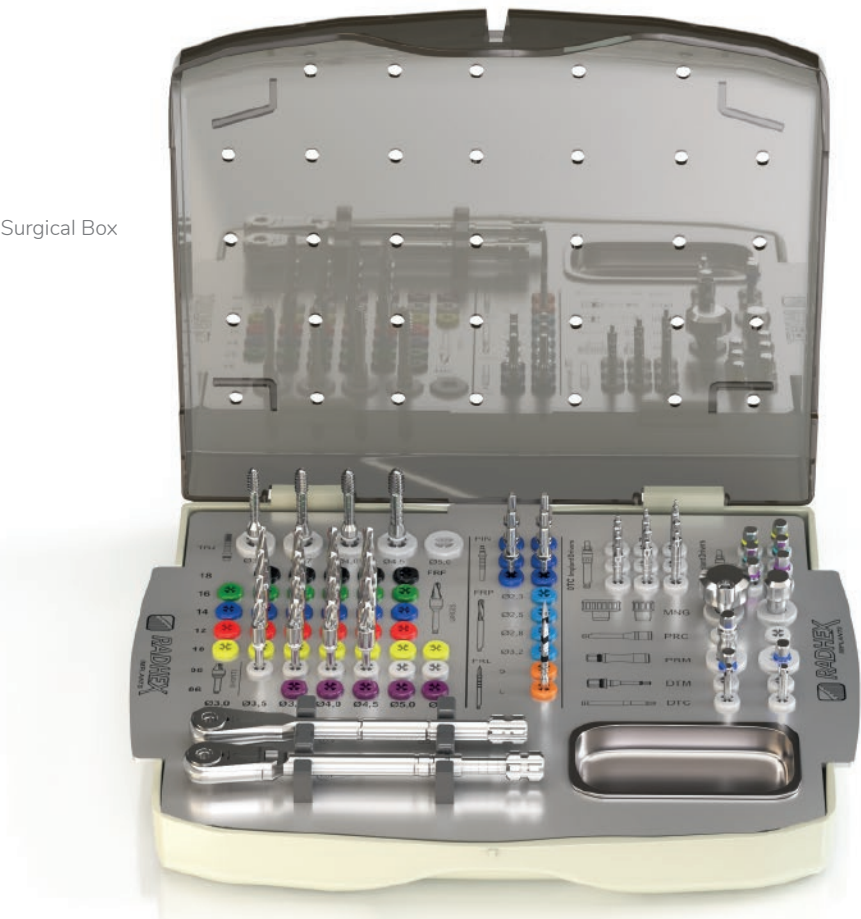
For your convenience, the **Radhex Implants®** surgical instrument kit has the characteristic of being versatile, and can be used for any of the lines of the **Radhex Implants®** system in any type of surgery, with the only particularity that the only variable element in Depending on the line of implants used, they are the implant holder keys or "Drivers".

The surgical kit is designed to safely store and sterilize the surgical instruments and auxiliary components of the **Radhex Implants®** implant system.

In addition to the entire milling cutter kit, even in basic content configurations, it incorporates a ratchet wrench, as well as parallelizing pins that facilitate control of the milling direction.

It is completed with a series of torque handles and screwdrivers to work at the right moments. Of particular relevance are the **Radhex Implants®** drills with a fixed depth stop for maximum safety, designed appropriately to recover bone and be able to perform autologous grafts thanks to the biological drilling technique at low revolutions without irrigation.

ORG-KIT - Surgical Box



COMPLEMENTARY STRAWBERRIES****

Kit Shorts:	Kit FIT:	Kit FRF Ø5.0:	Kit FRF Ø6.0:	Kit FRF L 16:	Kit FRF L 18:
FRF0640	FRF1030	FRF0850	FRF0660	FRF1635	FRF1835
FRF0645	FRF1230	FRF1050	FRF0860	FRF1637	FRF1837
FRF0650	FRF1430	FRF1250	FRF1060	FRF1640	FRF1840
FRF0660	FRF1630	FRF1450	FRF1260	FRF1645	FRF1845
				FRF1650	FRF1850

Important: Any element not contained in the description of Basic Kits must be requested separately.
The Kits are not References or unique products, their configuration is based on the Basic Kits provided in this catalog.
Each of the components is presented in individual packaging.



RADEL PPSU LARGE PHE PLASTIC SURGICAL KIT - Basic Assembly -

Base Code	Description	Amount
ORG-KIT	Large Plastic Surgical Box - Stainless steel plate, (195 mm x 155 mm x 56 mm).	1
CRR001	Ratchet.	1
DIN001	Dynamometric Wrench.	1
FRL001 L	Lanceolate Strawberry.	1
FRF*	End Mill with Single Stop.	16
TRJ**	High Density Bone Taps.	4
PRM001	Short Manual Extension.	1
PRC001	Short Contra-angle Extension.	1
MNG001	Large Manual Screwdriver Handle	1
MNG002	Small Manual Screwdriver Handle	1
PIN-FRL	Parallelism PINS.	6
DTM120 S	Manual Screwdriver 1.20 Short	1
DTM120 L	Manual Screwdriver 1.20 Long	1
DTC120 S	Contra-angle Screwdriver 1.20 Short	1
DTC120 L	Contra-angle Screwdriver 1.20 Long	1
DTM-EM (S y L)	Manual Screwdriver Driver: Short and Long	2
DTC-EM (S, M y L)	Contra-angle Screwdriver Driver: Short, Medium and Long	3

* 4 Strawberry Diameters: Ø 3.50; 3.75; 4.00 and 4.50 mm. by 4 Lengths 08, 10, 12 and 14 mm.
** 4 TRJ diameters: Ø 3.50; 3.75; 4.00 and 4.50 mm.
*** Short, Medium and Long versions of implant-bearing Drivers, for each platform. (PHE350 drivers sold separately).
**** The Complementary Kits contain one component of each reference mentioned.
It is possible to configure Complete Kits.

RADEL PPSU LARGE PHI PLASTIC SURGICAL KIT - Basic Assembly -

Código Base	Descripción	Cantidad
ORG-KIT	Large Plastic Surgical Box - Stainless steel plate, (195 mm x 155 mm x 56 mm).	1
CRR001	Ratchet.	1
DIN001	Dynamometric Wrench.	1
FRL001 L	Lanceolate Strawberry.	1
FRF*	End Mill with Single Stop.	16
TRJ**	High Density Bone Taps.	4
PRM001	Short Manual Extension.	1
PRC001	Short Contra-angle Extension.	1
MNG001	Large Manual Screwdriver Handle	1
MNG002	Small Manual Screwdriver Handle	1
PIN-FRL	Parallelism PINS.	6
DTM125 S	Manual Screwdriver 1.25 Short	1
DTM125 L	Manual Screwdriver 1.25 Long	1
DTC125 S	Contra-angle Screwdriver 1.25 Short	1
DTC125 L	Contra-angle Screwdriver 1.25 Long	1
DTM-HI (S y L)	Manual Screwdriver Driver: Short and Long	2
DTC-HI (S, M y L)	Contra-angle Screwdriver Driver: Short, Medium and Long	3

* 4 Diámetros de Fresas: Ø 3.50; 3.75; 4.00 y 4.50 mm. por 4 Longitudes 08, 10, 12 y 14 mm.
** 4 Diámetros de TRJ: Ø 3.50; 3.75; 4.00 y 4.50 mm.
*** Versiones Cortas Medias y Largas de Drivers porta implantes, para cada plataforma. (Drivers de PHE350 se expenden aparte).
**** Los Kits complementarios contienen un componente de cada referencia mencionada.
Es posible configurar Kits Completos.

RADEL PPSU LARGE PCI PLASTIC SURGICAL KIT - Basic Assembly -

Código Base	Descripción	Cantidad
ORG-KIT	Large Plastic Surgical Box - Stainless steel plate, (195 mm x 155 mm x 56 mm).	1
CRR001	Ratchet.	1
DIN001	Dynamometric Wrench.	1
FRL001 L	Lanceolate Strawberry.	1
FRF*	End Mill with Single Stop.	16
TRJ**	High Density Bone Taps.	4
PRM001	Short Manual Extension.	1
PRC001	Short Contra-angle Extension.	1
MNG001	Large Manual Screwdriver Handle	1
MNG002	Small Manual Screwdriver Handle	1
PIN-FRL	Parallelism PINS.	6
DTM125 S	Manual Screwdriver 1.25 Short	1
DTM125 L	Manual Screwdriver 1.25 Long	1
DTC125 S	Contra-angle Screwdriver 1.25 Short	1
DTC125 L	Contra-angle Screwdriver 1.25 Long	1
DTM CS (S y L)	Manual Screwdriver Driver: Long for PCI230 Platforms	1
DTC CS (S, M y L)	Medium Contra-Angle Screwdriver Driver for PCI230 Platforms	1
DTM CM (S y L)	Manual Screwdriver Driver: Long for PCI280 Platforms	1
DTC CM (S, M y L)	Contra-Angle Screwdriver Driver: Medium for PCI280 Platforms	1
DTM CL (S y L)	Manual Screwdriver Driver: Long for PCI350 Platforms	1
DTC CL (S, M y L)	Contra-Angle Screwdriver Driver: Medium for PCI350 Platforms	1

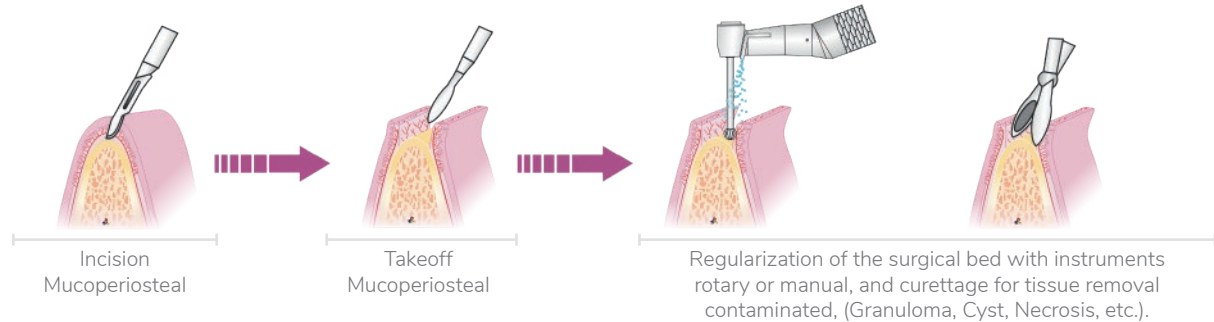
* 4 Strawberry Diameters: Ø 3.50; 3.75; 4.00 and 4.50 mm. by 4 Lengths 08, 10, 12 and 14 mm.
** 4 TRJ diameters: Ø 3.50; 3.75; 4.00 and 4.50 mm.
*** Short, Medium and Long versions of implant-bearing Drivers, for each platform. (PHE350 drivers sold separately).
**** The Complementary Kits contain one component of each reference mentioned.
It is possible to configure Complete Kits.

Technical Handling

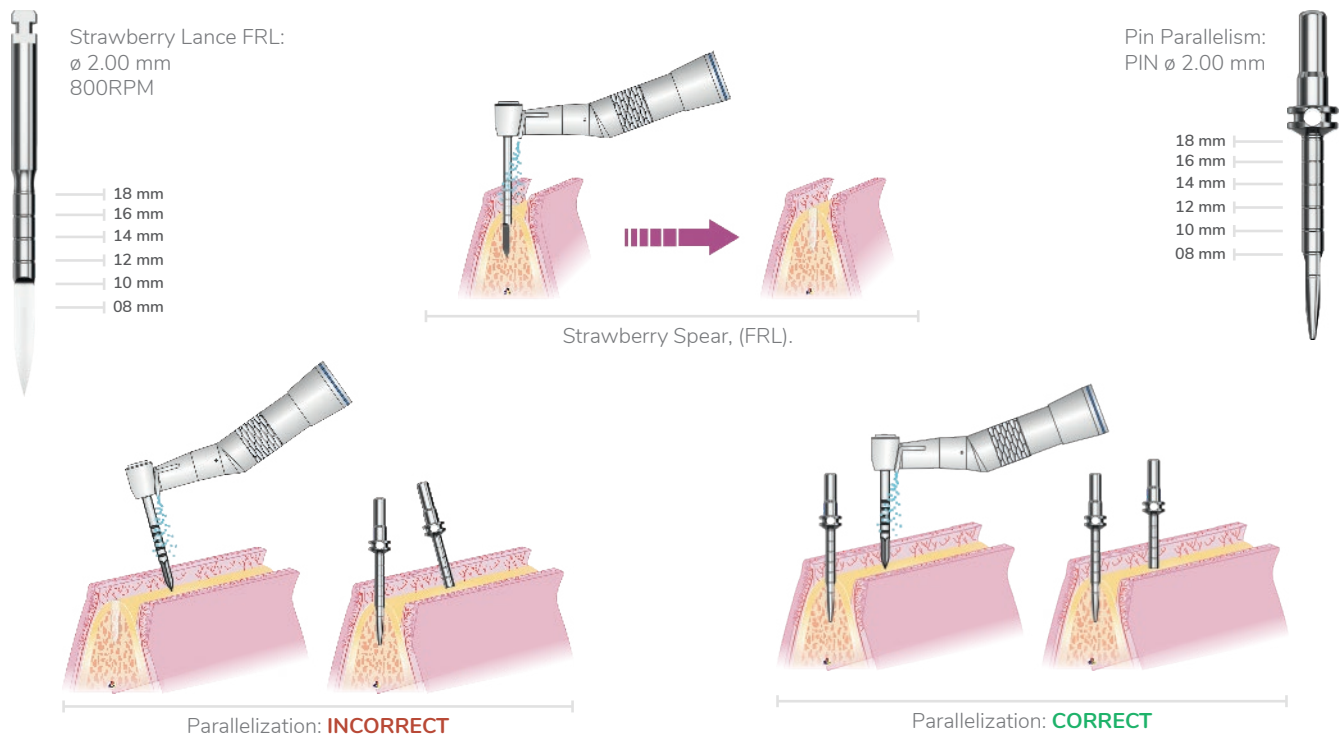
Cavity Drilling and Preparation Protocol

Preliminary maneuvers for cavity preparation

1- Preparation of the maxillary crest, with rotating instruments or rongeur, the cavity initiation is carried out with the FRL lance drill at 800 RPM. Pay attention to parallelism and axi-ality during the maneuver. Next, cavity orientation must be verified with the parallelization pins, verifying the orientation relationship with respect to present teeth, occlusal plane or other prepared cavities.



2- Use of Spear Drill, to define the orientation and working cavity depth, it must be used at 800 R.P.M. and after this it is advisable to verify the cavity orientation with the Parallelism Pins, taking as reference the dental arch, other existing implants, axial direction, occlusal and aesthetic parameters of the patient. Before passing the final drill corresponding to the cavity, it is always possible to correct the drilling direction.



Important: Avoid overheating due to friction: The recommendation, as in any implant system, is that milling be carried out:

- With abundant irrigation to allow the serum to cool the surgical steel of the drill, keeping the possible temperature rise under control.
- Intermittently, (moving forward and backward), to prevent the accumulation of bone mud in the channels between the milling blades from obstructing the cutting capacity of the milling cutter, causing friction. This is especially relevant in high-density bones, where it is even advisable to interrupt the drilling cycle to remove the bone mud contained between the blades of the drill, as the professional deems appropriate.

Summary Milling Procedure:

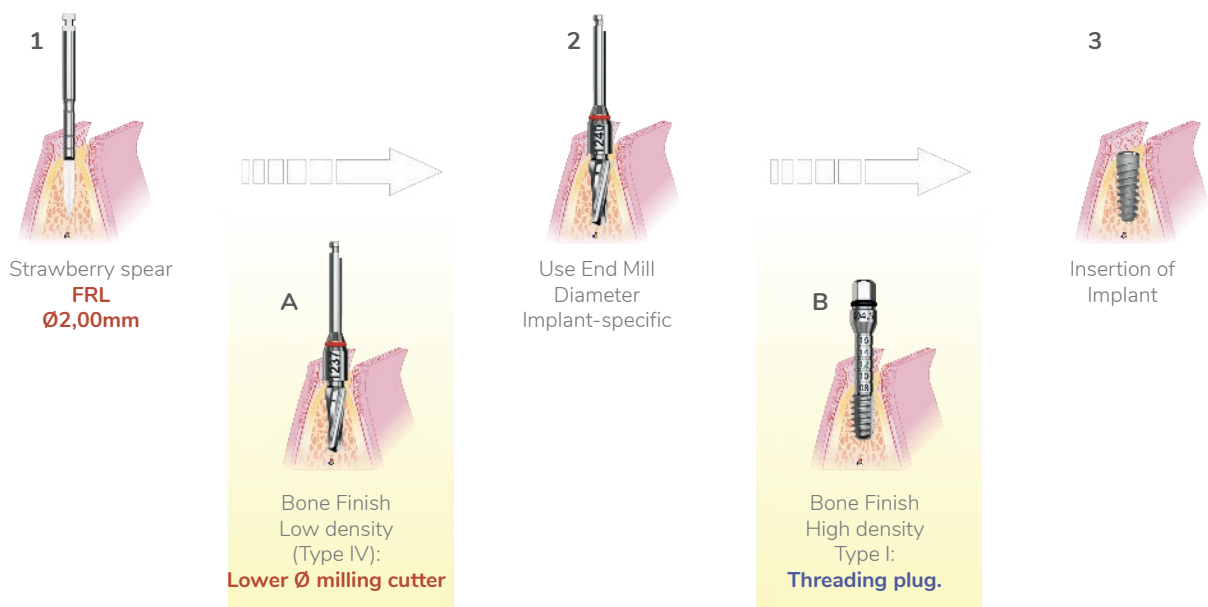
Cavity Preparation.

As simple as three steps.

The cavity configuration is another characteristic of the technical simplicity of application of the **Radhex Implants®** system.

As simple as:

- 1 Start with bur lance with inputs and outputs, (intermittent), at 800 rpm and with abundant irrigation.
Control parallelism and axiality.
- 2 Pass final drill with inputs and outputs, (intermittent), at 500 rpm, with abundant irrigation.
Attention: only when it is necessary to finish the cavity, with a drill equal to or greater than Ø 4.00 mm, incorporate the use of intermediate drills (with a smaller diameter than the final one selected).
- 3 Insert the implant. Insertion Speed:
50 RPM for PHI, PHE models.
25 RPM for PHIA, PHEA and PCI models.



*The milling must always be progressive, because the milling cutters have a conical profile.

There are only 2 possible variables depending on the bone:

A- Low density: finish the cavity with a drill with a smaller diameter than the implant.

B- High density: Attention: the **Radhex Implants®** FRF final drills have a finish adjusted to the core of the implant, and to ensure correct insertion until the end, always finish the cavity with a tap.

(Bone Thread Former).

*The milling protocols described in this catalog are applicable for PHE models; PHI and PCI.

Recommendations on milling depth

Recommendations Regarding the selection of milling cutter to establish the milling depth:

Regarding the drilling depth, there is a broad consensus, which indicates taking into account at least a safety margin of 2 mm, in order to protect, preventing any injury or damage, to any relevant or risk anatomical structure. (For example: inferior dental nerve, floor of nasal passages, etc.).

The depth of bone available for the cavity must be measured with the help of diagnostic imaging technologies, and the safety margin is a premise that must be respected.

In this sense, the Final Drills (FRF), from **Radhex Implants®**, have a very high level of safety, because they all have a fixed stop for each implant measurement.

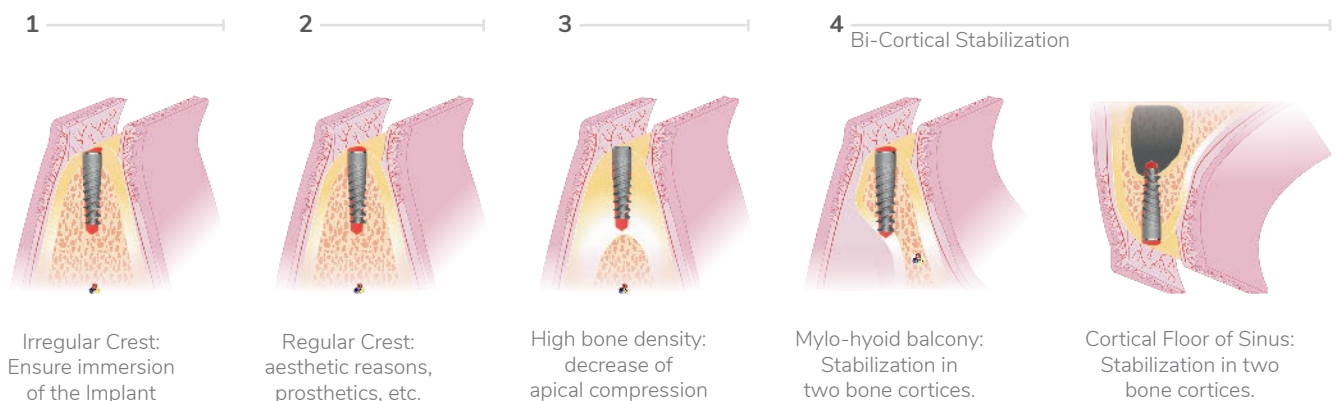
A special mention must be made to the leading edge of the Final Drills (FRF), since they increase the length by 0.65 mm with respect to the reference length of the drill, (verify the accuracy of these measurements in the description section of Final Strawberries - FRF-).

However, in certain cases, and as long as there is NO risk of damage or injury to a relevant anatomical structure, it is advisable to drill with a drill of greater length, immediately following that of the implant you wish to use, especially if any of the following situations:

- 1 Sinuous ridges with anatomical surface irregularities, which slow down the drill stop, before reaching the level at which the surgeon wishes to position the implant platform.
- 2 Regular crest, in which the surgeon decides to perform a subcrestal positioning, at the level of the implant platform, whether for aesthetic, prosthetic or biological reasons.
- 3 When faced with situations of high bone density (Type I), it is advisable to reduce the stress and apical compression of the implant (ischemia), reducing the possibility of necrosis due to over-compression with the subsequent risk created for the osseointegration of the implant, and facilitating inserting the implant to the desired level.
- 4 *Search for bicortical anchorage: for example: Anchorage in the floor cortex of the maxillary sinuses, or floor of the nasal cavities, these bone cortices provide high stability to the implant, and if the surgeon decides to address them, they must be milled to allow the passage of the implant and that its apical thread is firmed and stabilized in these cortices. If these cortices are not milled, and the apex of the implant reaches them, there is a risk that the cortex itself will slow down the advancement of the implant, causing all the advancement effort to fall on the threaded perimeter bone, in which the implant is affirmed, which in the face of a high torque, and due to apical resistance in its advancement, can destabilize the implant by “falsification” of the bone thread, with the subsequent risk of not introducing the implant at the desired positional level, and with risk of failure in its bone-integration.

*It is a maneuver that requires adequate surgical skill, so it should only be approached by professionals with training and experience in these techniques.

- 5 For any reason the surgeon sees fit to extend the drilling to a greater depth.



Detailed procedure by bone density, for diameter 3.00 mm*

Implant cavity Ø 3.00mm

	FRL	FRF	Cavity Finish Threading	Insertion
Speed- R.P.M.	800 R.P.M.	500 R.P.M.		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 3,00mm		25-50 R.P.M.



Tipo 4

1

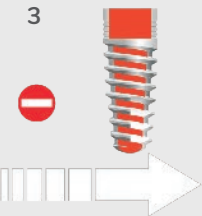


Strawberry spear
Diameter
**Bottom, (Ø2.00mm),
to the implant FRL**

2



3



Cavity finishing
less than diameter
implant core.
The implant is inserted
by **compression** and
self-tapping.

4



Insertion of
Implant



Tipo 3



Tipo 2



Tipo 1

1



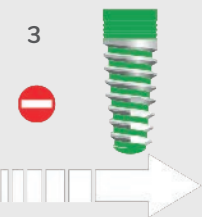
Strawberry spear
FRL Ø2,00mm

2



Use End Mill
Diameter
**Same(Ø3.00mm),
implant FRF1230**

3



Cavity finishing
equal to diameter of
implant core.
The implant is inserted
by **self-tapping**.

4



Insertion of
Implant

* The cavity preparation procedure for a diameter of 3 mm is only applicable to the PCI implant model.
The milling sequence is demonstrated in this example with a final drill of length 12 mm.
The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.
The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

Detailed procedure by bone density, for diameter 3.50 mm*

Implant cavity Ø 3.50mm

	FRL	FRF	Cavity Finish Threading	Insertion
Speed- R.P.M.	800 R.P.M.	500 R.P.M.		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 3,00mm Ø 3,50mm		25-50 R.P.M.



Tipo 4

1



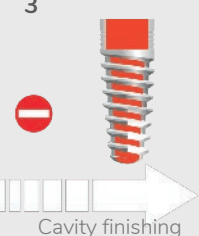
Strawberry spear
FRL Ø2,00mm

2



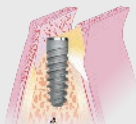
Use End Mill
Diameter
Lower, (Ø3.00
mm), to the implant
FRF1230

3



Cavity finishing
less than diameter
implant core.
The implant is inserted
by **compression** and
self-tapping.

4



Insertion of
Implant



Tipo 3



Tipo 2

1



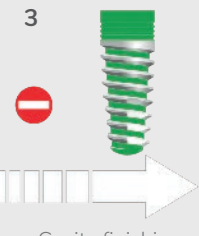
Strawberry spear
FRL Ø2,00mm

2



Use End Mill
Diameter **Equal**
(Ø3.50mm),
implant
FRF1235

3



Cavity finishing
equal to diameter of
implant core.
The implant is inserted
by **self-tapping**.

4

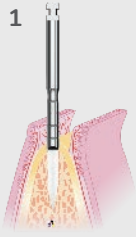


Insertion of
Implant



Tipo 1

1



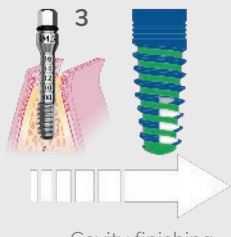
Strawberry spear
FRL Ø2,00mm

2



Use End Mill
Equal diameter
(Ø3,50mm),
implant
FRF1235 + **Terraja**

3



Cavity finishing
equal to profile
implant, with
threading plug.
The implant is inserted
by **threading**.

4



Insertion of
Implant

The milling sequence is demonstrated in this example with a final drill of length 12 mm.
The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.
The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

Detailed procedure by bone density, for diameter 3.75 mm*

Implant cavity Ø 3.75mm

	FRL	FRF	Cavity Finish Threading	Insertion
Speed- R.P.M.	800 R.P.M.	500 R.P.M.		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 3,50mm Ø 3,75mm		25-50 R.P.M.



Tipo 4

1



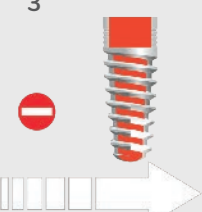
Strawberry spear
FRL Ø2,00mm

2



Use End Mill
Diameter
Bottom, (Ø3,50
mm), to the implant
FRF1235

3



Cavity finishing
less than diameter
implant core.
The implant is inserted
by **compression** and
self-tapping.

4



Insertion of
Implant

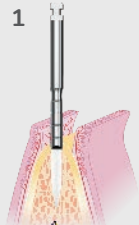


Tipo 3



Tipo 2

1



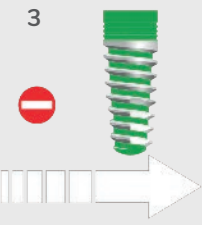
Strawberry spear
FRL Ø2,00mm

2



Use End Mill
Equal diameter
(Ø3,75mm),
implant
FRF1237

3



Cavity finishing
equal to diameter of
implant core.
The implant is inserted
by **self-tapping**.

4

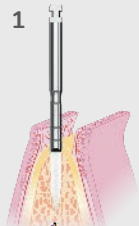


Insertion of
Implant



Tipo 1

1



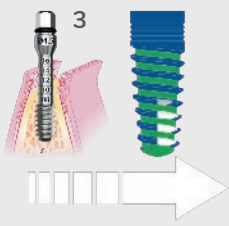
Strawberry spear
FRL Ø2,00mm

2



Use End Mill
Equal diameter
(Ø3,75mm),
implant
FRF1237 + Terraaja

3



Cavity finishing
equal to profile
implant, with
threading plug.
The implant is inserted
by **threading**.

4



Insertion of
Implant

The milling sequence is demonstrated in this example with a final drill of length 12 mm.
The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.
The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

Detailed procedure by bone density, for diameter 4.00 mm*

Implant cavity Ø 4,00mm

	FRL	FRF	FRF	Cavity Finish Threading	Insertion
Speed-R.P.M.	800 R.P.M.	500 R.P.M.	500 R.P.M.		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 3,50mm	Ø 3,75mm Ø 4,00mm		25-50 R.P.M.

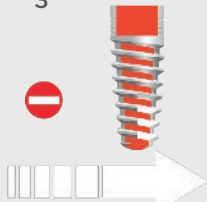
Tipo 4



1 Strawberry spear
FRL Ø2,00mm

2a Use Strawberry previous diameter
Bottom, (Ø3,50 mm), to the implant FRF1235

2b Use Strawberry previous diameter
Bottom, (Ø3,75 mm), to the implant FRF1237

3 
Cavity finishing less than diameter implant core.
The implant is inserted by **compression** and **self-tapping**.

4 
Insertion of Implant

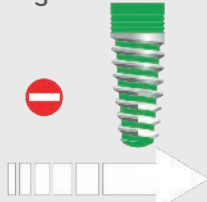
Tipo 3

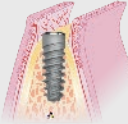


1 Strawberry spear
FRL Ø2,00mm

2a Use Strawberry previous diameter
Bottom, (Ø3,50 mm), to the implant FRF1235

2b Use End Mill Equal diameter
(Ø4,00mm), implant FRF1240

3 
Cavity finishing equal to diameter of implant core.
The implant is inserted by **self-tapping**.

4 
Insertion of Implant

Tipo 2



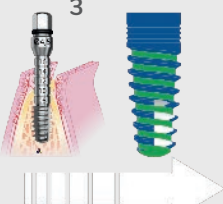
Tipo 1



1 Strawberry spear
FRL Ø2,00mm

2a Use Strawberry previous diameter
Bottom, (Ø3,50 mm), to the implant FRF1235

2b Use End Mill Equal diameter
(Ø4,00mm), implant FRF1240 + Terraja

3 
Cavity finishing equal to profile implant, with **male of thread**. The implant is introduced by **threaded**.

4 
Insertion of Implant

The milling sequence is demonstrated in this example with a final drill of length 12 mm.

The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.

The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

Detailed procedure by bone density, for diameter 4,50 mm*

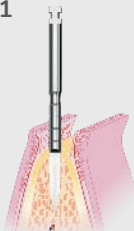
Implant cavity Ø 4,50mm

	FRL	FRF	FRF	Cavity Finish Threading	Insertion
Speed-R.P.M.	800 R.P.M.	500 R.P.M.	500 R.P.M.		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 3,75mm	Ø 4,00mm Ø 4,50mm		25-50 R.P.M.



Tipo 4

1



Strawberry spear
FRL Ø2,00mm

2a



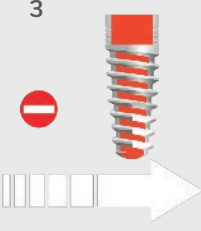
Use Strawberry
previous diameter
Bottom, (Ø3,75
mm), to the implant
FRF1237

2b



Use Strawberry
previous diameter
Bottom, (Ø4,00
mm), to the implant
FRF1240

3



Cavity finishing
less than diameter
implant core.
The implant is inserted
by **compression** and
self-tapping.

4

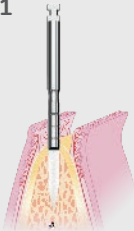


Insertion of
Implant



Tipo 3

1



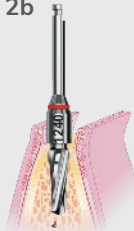
Strawberry spear
FRL Ø2,00mm

2a



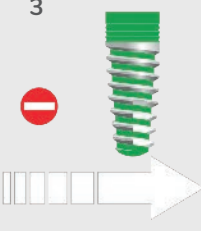
Use Strawberry
previous diameter
Bottom, (Ø3,75
mm), to the implant
FRF1237

2b



Use End Mill
Equal diameter
(Ø4,50mm),
implant
FRF1245

3



Cavity finishing
equal to diameter of
implant core.
The implant is inserted
by **self-tapping**.

4

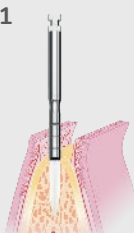


Insertion of
Implant



Tipo 1

1



Strawberry spear
FRL Ø2,00mm

2a



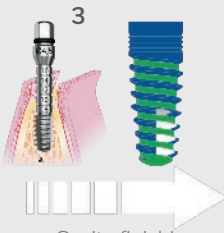
Use Strawberry
previous diameter
Bottom, (Ø3,75
mm), to the implant
FRF1237

2b



Use End Mill
Equal diameter
(Ø4,50mm),
implant
FRF1245 + Terraaja

3



Cavity finishing
equal to profile
implant, with **male
of thread**. The implant
is introduced by
threaded.

4



Insertion of
Implant

The milling sequence is demonstrated in this example with a final drill of length 12 mm.
The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.
The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

Detailed procedure by bone density, for diameter 5,00 mm*

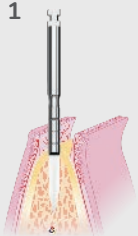
Implant cavity Ø 5,00mm

	FRL	FRF	FRF	FRF	Cavity Finish Threading	Insertion
Speed-R.P.M.	800 R.P.M.	500 R.P.M.	500 R.P.M.	500 R.P.M		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 3,75mm	Ø 4,00mm Ø 4,50mm	Ø 4,50mm Ø 5,00mm		25-50 R.P.M.



Tipo 4

1



Strawberry spear
FRL Ø2,00mm

2a



Use Strawberry previous diameter
Bottom, (Ø3,75 mm), to the implant
FRF1237

2b



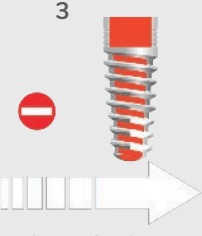
Use Strawberry previous diameter
Bottom, (Ø4,00 mm), to the implant
FRF1240

2c



Usar Fresa previa diámetro
Inferior, (Ø4,50 mm), al implante
FRF1245

3



Cavity finishing less than diameter implant core.
The implant is inserted by **compression** and **self-tapping**.

4



Insertion of Implant



Tipo 3

1



Strawberry spear
FRL Ø2,00mm

2a



Use Strawberry previous diameter
Bottom, (Ø3,75 mm), to the implant
FRF1237

2b



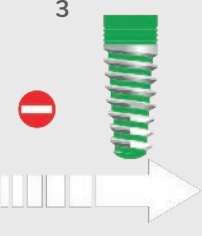
Use Strawberry previous diameter
Bottom, (Ø4,50 mm), to the implant
FRF1245

2c



Use End Mill Equal diameter
(Ø5,00mm), implant
FRF1250

3



Cavity finishing equal to diameter of implant core.
The implant is inserted by **self-tapping**.

4

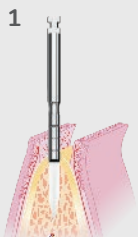


Insertion of Implant



Tipo 1

1



Strawberry spear
FRL Ø2,00mm

2a



Use Strawberry previous diameter
Bottom, (Ø3,75 mm), to the implant
FRF1237

2b



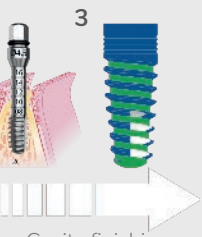
Use Strawberry previous diameter
Bottom, (Ø4,50 mm), to the implant
FRF1245

2c



Use End Mill Equal diameter
(Ø5,00 mm), implant
FRF1250 + Terraja

3



Cavity finishing equal to profile implant, with **male of thread**. The implant is introduced by **threaded**.

4



Insertion of Implant

The milling sequence is demonstrated in this example with a final drill of length 12 mm.
The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.
The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

Detailed procedure by bone density, for diameter 6,00 mm*

Implant cavity Ø 6,00mm

	FRL	FRF	FRF	FRF	Cavity Finish Threading	Insertion
Speed-R.P.M.	800 R.P.M.	500 R.P.M.	500 R.P.M.	500 R.P.M.		25-50 R.P.M.
Diameter	Ø 2,00mm	Ø 4,00mm	Ø 4,50mm Ø 5,00mm	Ø 4,50mm Ø 6,00mm		25-50 R.P.M.

*La guía para cavidades de elevado diámetro, (Ø 6,00 mm), asume un carácter orientativo, siendo el profesional el que determinará la secuencia definitiva para establecer el fresado cavitario.

Tipo 4

1 Strawberry spear
FRL Ø2,00mm

2a Use Strawberry previous diameter Bottom, (Ø4,00 mm), to the implant FRF1040

2b Use Strawberry previous diameter Bottom, (Ø5,00 mm), to the implant FRF1050

2c

3
Cavity finishing less than diameter implant core.
The implant is inserted by **compression** and **self-tapping**.

4 Insertion of Implant

Tipo 3

Tipo 2

1 Strawberry spear
FRL Ø2,00mm

2a Use Strawberry previous diameter Bottom, (Ø4,00 mm), to the implant FRF1040

2b Use Strawberry previous diameter Bottom, (Ø5,00 mm), to the implant FRF1050

2c Use End Mill Equal diameter (Ø6,00mm), implant FRF1060

3
Cavity finishing equal to diameter of implant core.
The implant is inserted by **self-tapping**.

4 Insertion of Implant

Tipo 1

1 Strawberry spear
FRL Ø2,00mm

2a Use Strawberry previous diameter Bottom, (Ø4,00 mm), to the implant FRF1040

2b Use Strawberry previous diameter Bottom, (Ø5,00 mm), to the implant FRF1050

2c Use End Mill Equal diameter (Ø6,00 mm), implant FRF1060 + Terraja

3
Cavity finishing equal to profile implant, with **male of thread**. The implant is introduced by **threaded**.

4 Insertion of Implant

The milling sequence is demonstrated in this example with a final drill of length 10 mm.
The drilling procedure recommended by Radhex Implants® cannot replace the experience or judgment of the surgeon.
The surgeon must interpret and definitively decide the dimensions and quantities of drills to make the cavity in each case.

ANNOTATIONS

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