SDI

DENTAL

Science Development & Innovation

SDI
DENTAL

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SDI Dental Implants was founded in 2005 by a group of experienced dental surgeons and mechanical specialists seeking better and affordable implants.
Their interest in offering better solutions for their patients continues to drive the company to improve products constantly & introduce innovative solutions for difficult surgical situations.
With top-of-the-line technology and extensive industry experience, we specialize in the development, manufacturing and marketing of dental implants, prosthetic products and surgical tools.
The company's manufacturing site if fully equipped with the latest state of the art machines, measuring devices, Q.A and assembly lines in clean rooms.

SDI Implants are distributed around the globe in more than 20 countries through selected distributors.

SDI offers a wide range of implants, prosthetic products, tools, accessories and CAD/CAM solutions required for the dentist to perform an accurate and successful treatment.
SDI is deeply committed to the core values of quality, service, innovation and integrity, reflected in every step of our work process and supported by all our employees.
Standing behind SDI implants are a team of world class practitioners and engineers devoted to the continued research and development of new progressive products and technologies, responding and leading the changes and challenges of implant dentistry.
SDI Products and manufacturing sites adhere to the most strict international quality standards and regulations: ISO13485:2003 Quality System for Medical Devices, ISO 9001:2008 Quality Management System and CE Directive for Medical Devices 93/42/EEC.

All SDI products are CE approved.

SDI Vision:
To be the preferred choice of dentists worldwide by offering simple, creative and comprehensive solutions.

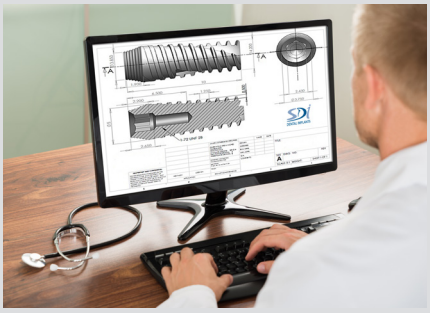
SDI Values:
- Quality
- Innovation
- Service
- Integrity

Customer Service
We at SDI understands the importance of providing excellent service. Our global network of professional representatives and our highly-trained customer care support team are well equipped to meet the needs of patients and clinicians.

We are constantly working to improve our already high standards of quality, performance and reliability backed by service and support.

ENGINIRING CAD CAM

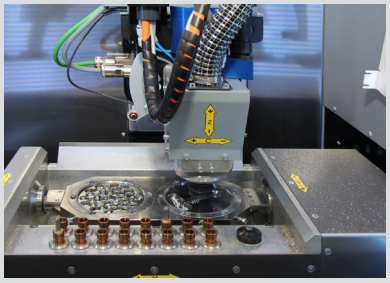
Our company specializes in designing computer-aided dental elements
The planning department engineers have extensive experience in many areas
Computerized mechanical design.
Strength of materials.
Simulation of assemblies and subassemblies.
Metallurgy.
Human engineering and product planning to use a simple stable and comfortable to the doctor and the patient.



Dental product design requires a comprehensive scientific thinking concerning mechanical strength of the product and the ability to ensure the survival during transplantation as well as the creation of a precise-strong connection and resistant to vibration and continuous wear.
We are working on the continuous development of new products and improving existing products to ensure total quality so as to assure long-term success in improving the patient's quality of life.

STATE OF THE ART ACURATE MACHINING

Our company has a modern factory with high quality computerized machines very secure continuous and repeatable accuracy.
Manufacturing operations based on a computerized manufacturing system and program management and monitoring of the different jobs and Very strict production process, controlled by skilled workers with knowledge and experience.



QUALITY INSPECTION

Our company manufactures medical-dental products during application and adaptation most stringent workmanship standards in the industry.
The company's products are tested in the production process and in the transition between the various productions stages by qualified Inspectors in accordance with the specifications defined of production procedures.

Our company is certified to iso13485-2012 and carries the CE-1023 icon.
Our company is working constantly to improve the quality policy and ensuring maximum quality level of the company's products, all to ensure excellent products And customer satisfaction.

CLEAN ROOM PACKING

Packaging process is done in a clean room ensures purification level specified by the medical device for dental implants.
Packaging room environment ensures hygiene product during the sterile packaging and ensuring long shelf life without any possible contamination of the product
This room clean environment suitable for international labor standards defined in the CE standard.

CONCEPTS OF SURFACE TRAEATMENT

dental implant surfaces - physicochemical properties, biological performance, and method's adopted by SDI

Introduction

Pure titanium and titanium alloys are well established standard materials in dental implants. Because of their favorable combination of mechanical strength, chemical stability, and Biocompatibility. Integration of titanium implants with the Surrounding bone is critical for successful bone regeneration and healing of dental implant. The concept of osteointegration was discovered by Branemark and his co-worker and, has had a dramatic influence on clinical treatment of oral implants. The first generation of successfully used clinical titanium implants, which were machined with a smooth surface texture, now Approach 50 years in clinical use. Since then, implant surfaces have long been recognized to Play an important role in molecular interactions, cellular response and osteointegration, and Scientists all over the world have developed the second generation implants with surfaces Which can accelerate and improve the implant osteointegration.

These second generation of clinically used implants underwent,

Mechanical blasting
Coupled or not
With acid etch
Bioactive coatings
Anodized
Laser modified surfaces.

The main objective for the development of implant surface modifications is to promote Osteointegration, with faster and stronger bone formation.

This will likely confer better Stability during the healing process, which, preferentially, will improve the clinical Performance in the area of poor bone quality and quantity.

Furthermore, such promotion may, in turn, accelerate the bone healing and thereby allowing immediate or early loading Protocols. Recently growing micro and Nano- technology is rapidly advancing surface engineering in implant dentistry. Such advances in surface engineering technologies have resulted in more complicated surface properties from micro- and nanometer scales, including the morphology, chemistry, crystal structure, physical, and mechanical properties.

Such surfaces, intentionally modified with respect to microscale and nanoscale features, may represent a next generation of oral implant systems if possible to transfer to complex three-dimensional geometries. Hitherto, micro- and Nano-fabricated surfaces have not reached the clinical evidence stage. However, it is not known whether the improved bone response is due to surface roughness or the surface Composition. Furthermore, somewhat surprisingly, there is yet not enough hard evidence (Randomized clinical trials) to tell whether the second generation of the implants has a better Clinical performance than the machined implants used earlier.

Nevertheless, experimental Evidence from in vitro and in vivo studies strongly suggests that some types of surface Modifications promote a more rapid bone formation than machined surfaces. It has been proposed that increasing osteo conductivity by these surface design strategies is Related to the altered implant topography resulting in enhanced osteoblast and pre osteoblast Adhesion, thereby leading to accelerated bone formation. However, it is well known that titanium implantation in bone results in contact of the titanium surface with complex environment including blood components and other Cells, not only the osteogenic ones. Recently, it has been shown that changes in the physicochemical Properties of the titanium results in significant modulation of cell recruitment, Adhesion, inflammation and bone remodeling activities in addition to regulation on bone Formation response.

These different methods for implant surface modification may lead to different and unique Surface properties that might affect the host-to-implant response.

This chapter reviews the state of art of development in dental implant surfaces and current Trends in surface modifications that aim to accelerate the osteointegration of dental Implants. The above article contains an overview of the most popular surface textures, adopted by **SDI**, chemical modifications including Nano-surface design based on nanoscale modification of the implant surface, but also briefly describe the interface biology of oral implants.

Surface roughness of titanium implants

Surface roughness has been identified as an important parameter for implants and its Capacity for being anchored in bone tissue. There exist a variety of different manufacturing Methods to increase the surface roughness of the implant, where the

most commonly used are:

Machining
Sandblasting
Acid etching
Anodic oxidation
Laser modification

Or a Combination of these. Further, commercially available implants have been categorized According to the roughness value (Sa) into 4 groups:

Smooth (Sa < 0.5 µm)
Minimally rough (Sa = 0.5-1.0 µm)
Moderately rough (Sa = 1.0-2.0 µm)
Rough (Sa > 2.0 µm).

The Sa value represents the mean height of peaks and pits of the Surface, while another important parameter is Sdr, which represents the developed surface Area compared to a perfect flat area. With a larger surface area a larger contact to the bone Tissue could be obtained.

There exists another 50 some direct or combined surface roughness Parameters, however It is unknown to what extent these are Important. For Sa measurements different factors will affect the out coming result as the type of equipment used, the area of analysis, the filtering process of the raw data, the cut-off Values as well as where on the implant the measurements are performed. To obtain more comparable values in the literature guidelines for measurements have been published further, it is important to acknowledge that the surface chemistry and surface phase composition of the implant surface will change by altering the surface roughness.

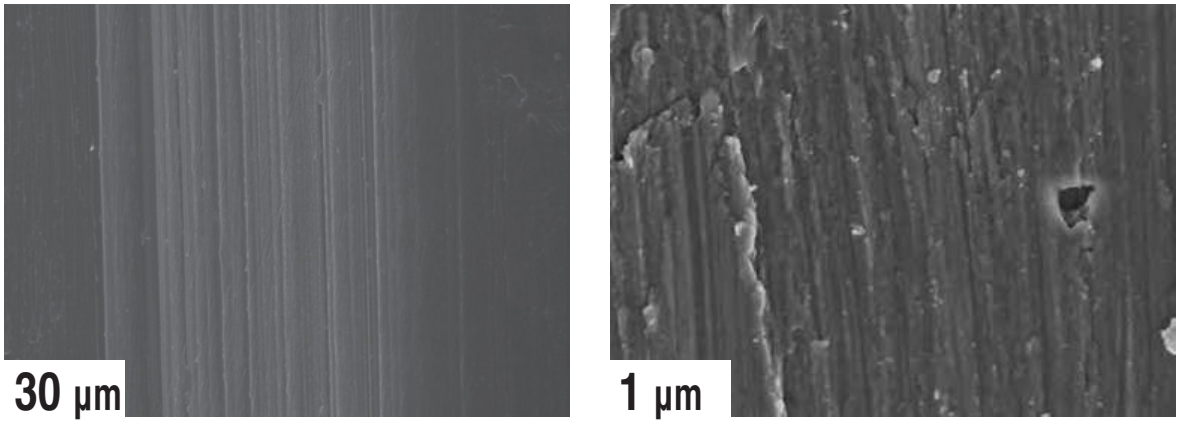
Machined surface

The first generation of Osseo integrated implants had a relatively smooth machined surface (Brenemark et al. 1969). The machined implant surface is solely turned and considered to be Minimally rough (Figure 1).

Different roughness values have been published using different Measuring techniques. Moreover, manufacturing tools, bulk material, lubricant and Machining speed will influence the resulting surface topography. Typical Sa values for Machined surfaces are 0.3-1.0 µm. The surface oxide consists of a 2-10 nm thick mostly Amorphous layer of TiO2 (Lausmaa, 1996). Depending on the sterilization method the oxide Layer could be crystallized into rutile structure (Jarmar et al., 2008). Further, the thickness And temperature is important on the phase composition.

The bone responses to machined surfaces have been extensively evaluated in different animal models as well as clinical trials. The machined surface was the first used surface in clinical Dental applications and has excellent long time follow-up. Further, other extra oral applications with bone anchored implants use machined Implants, such as bone anchored hearing aids and bone anchored Amputations prosthesis For major limbs as legs and arms. The healing around the implant is characterized by an increase in bone-implant contact Starting at the implantation while the biomechanical stability slightly decrease over the first Weeks, possible due to inflammation and bone remodeling, and being fully recovered after 4 Weeks in rat tibia (Branemark et al., 1997). Endosteal down growth of bone tissue covering The implant threads occurs in the marrow cavity and reach up to 70% bone implant contact After 16 weeks in rat tibia which could be compared to clinically stable oral implants Retrieved up to 16 year after implantation where the bone-implant contact was measured to 56-85% (Sennerby et al., 1991). 85 % bone-implant contact was observed for a clinically Stable bone anchored amputations prosthesis retrieved after 11 years.

Further, in the latter study it was shown that hydroxyapatite forms directly at the implant Surface shown in high-resolution transmission electron microscopy (TEM).



Scanning electron micrograph of machined implant surface.

Sandblasted surface

Increased roughness of an implant could be achieved by blasting the surface by small Particles, usually called sandblasting or grit blasting (Figure 2). When the particles hit the Implant surface it will create a crater. The surface roughness is hence dependent on the bulk Material, the particle material, the particle size, the particle shape, the particle speed and the Density of particles.

The resulting surface roughness is usually anisotropic consisting of Craters and ridges and occasionally particles embedded in the surface.

The surface roughness increases with the size of the particles used Where 25 µm particles blasted surfaces were rougher than the machined surface while Smoother than 75 µm and 250 µm blasted surfaces.

Typical Sa values are 0.5-2.0 µm. Further, implants blasted with 25 µm and 75 µm particles show higher removal torque compared to a machined implant surface after 12 weeks of healing in either rabbit tibia or femur.

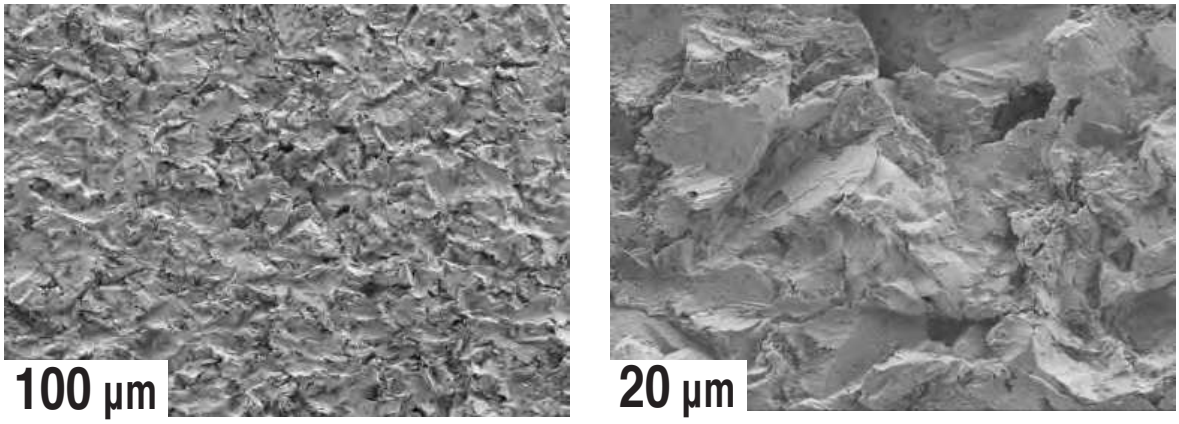
Significantly higher bone-implant contact was observed for the 25 µm blasted surface Compared to machined surface while the bone area within the threads were significantly Higher for the machined surface after 12 week and 1 year healing.

The blasting particle material, either TiO_2 or Al_2O_3 with a size of 25 µm, didn't show any difference in bone response with respect to removal torque, bone implant Contact and bone area after 12 weeks healing.

Similar Removal torque while significantly higher bone-implant contact and bone area was observed for implants blasted with 25 µm particles compared to 250 µm particles.

The biological response to blasted implants show an optimal bone response with Regards to removal torque values and bone implant contact to implants when a roughness of 1.5 µm is achieved.

No ultrastructural studies of the interface between Bone and implant surface have been found in the literature for blasted implants.



Scanning electron micrograph of sandblasted surface.

Anodized surface

The anodized surface is a partial crystalline and phosphate enriched titanium oxide characterized by a microstructure surface with open pores in the low micrometer Range. Adonization or anodic oxidization as it's also called is an electrochemical Process carried out in an electrolyte. The structural and chemical properties could be tailored by varying different process parameters, such as anode potential, electrolyte composition, temperature and current.

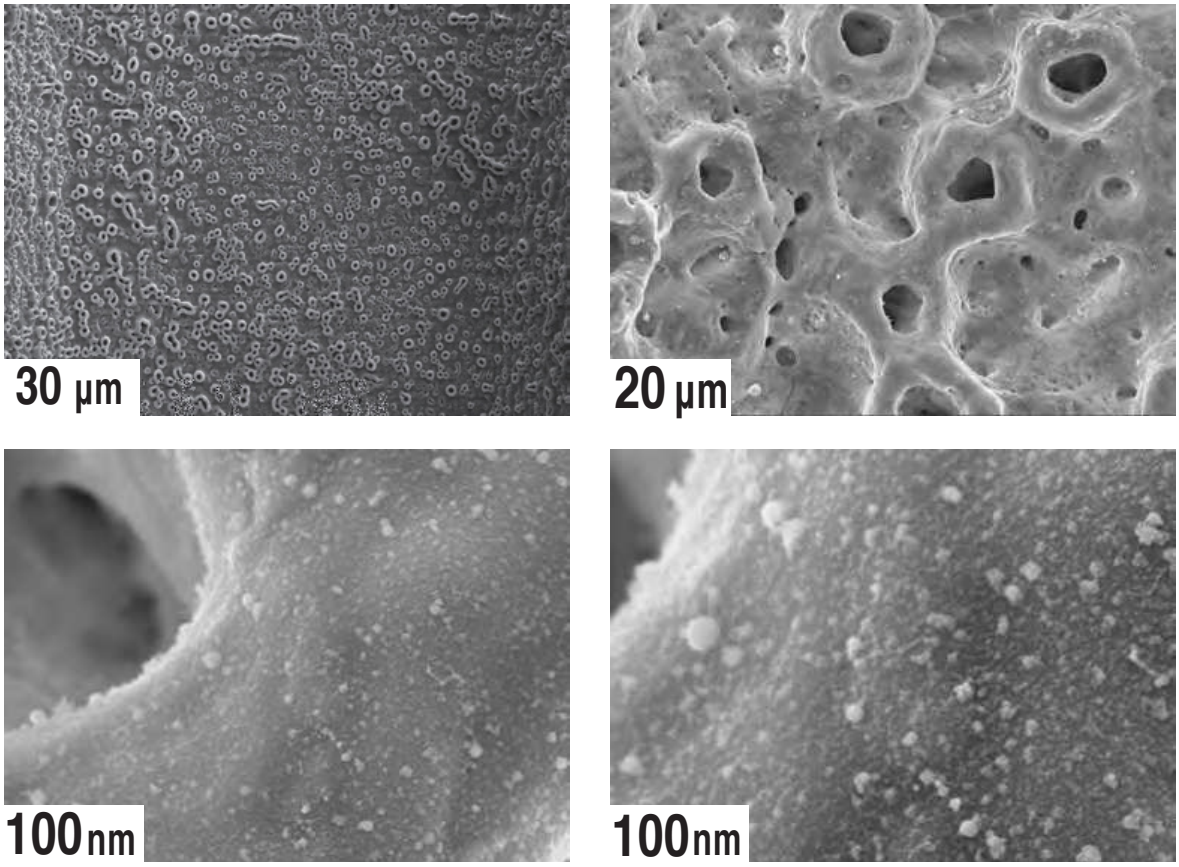
Further, depending on the electrolyte composition, different ions could be integrated in the oxide layer, such as phosphorous, calcium and magnesium. At lower voltages, below the dielectric breakdown limit, a rather constant oxide growth is obtained, while at higher voltages, an increased gas evolution is obtained rendering the surface oxide porous.

The crystalline structures of anodized oxides are amorphous with crystalline grains of anatase The bone response to anodized implants has been evaluated in different species and healing Times and most often compared to the original machined surface. Significant higher bone to Implant contact has been reported as well as increased biomechanical removal torque values For phosphorous containing anodized surfaces compared to machined surfaces.

The phosphorous containing anodized surface has also been shown to promote the early molecular events taking place at the immediate implant surface. Further, increased bone implant contact was obtained when calcium ions were incorporated in the anodized oxide compared to non-calcium containing anodized oxide surface in the rabbit as well as higher removal torques were observed for magnesium incorporated oxides compared to non-magnesium oxide surfaces.

Prepared samples showed an amorphous zone between the bone tissue and the implant Surface. Furthermore, in the

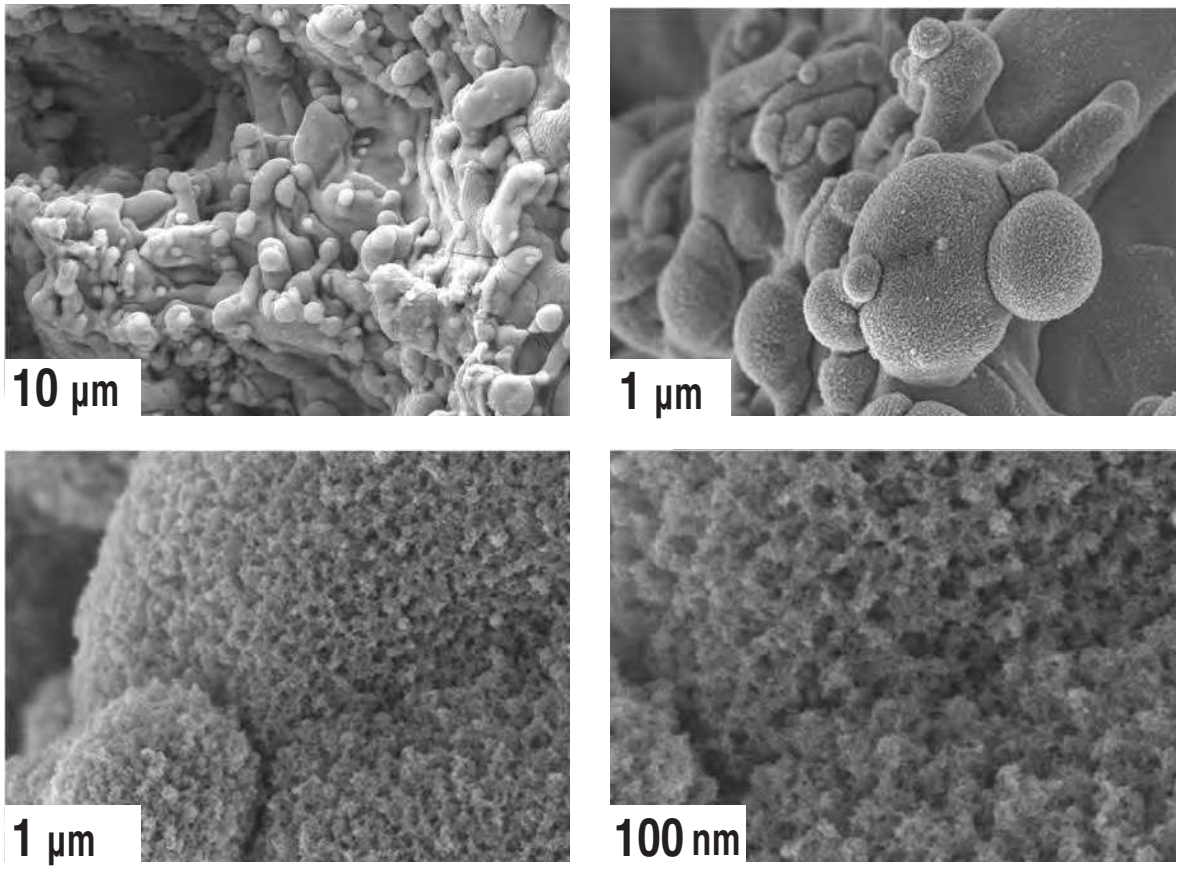
later study, interdiffusion of titanium, Phosphorus and calcium between the bone and the coating where intimate bone-implant Contact was observed, suggested that chemical bonding also exists within this interface.
The Remove torque to anodized implants has been compared to sandblasted, acid etched, and machined implants in animal models. Significantly higher removal torque was observed for Anodized implants compared other groups in a rabbit model after 12 weeks.
A higher clinical success rate was observed for the anodized titanium implants in comparison With turned titanium surfaces of similar shapes.
Two mechanisms have been proposed to explain this osteointegration:
Mechanical interlocking through bone growth in pores, and biochemical bonding.



Scanning electron micrograph of an anodized implant surface, the Presence of pores with dimensions around 1-10 µm, and smaller pores with diameters below 1 µm, Nano features on the anodized implant surface.

Laser modified micro- and Nano-structured surface

Laser is an emerging field for use as a micromachining tool to produce a 3-D structure at Micrometer and nanometer level. The technique is a method of choice for complex surface Geometries.
The technique generates short pulses of light of single wavelength, providing Energy focused on one spot.
It is rapid, extremely clean, and suitable for the selective Modification of surfaces and allows the generation of complex microstructures/ features with high resolution.
These advantages make the technique interesting for geometrically complex biomedical implants. The above Implants has surface modified with laser micromachining Process to create micro- and Nano-structured surface roughness in only the inner part of the Thread. The inner part of the thread is believed to be more suitable for bone formation than the outer part.
The laser technique has several advantages, add no chemicals and can be used in routine Manufacturing. Only the valley and parts of the flank of the implant threads was laser Treated while the remaining part was left as-machined.
The idea behind this design is that the flack portion of the implant thread, which might have the higher risk to expose to the Scanning electron micrograph of above



Scanning electron micrograph of implants - The bottom portion of the threads is modified by laser processing, whereas the parts of the flanks and the tops are as machined. Higher magnification of the laser modified surface, showing the nanotopography.

implants. The bottom portion of the threads is modified by laser processing, whereas the parts of the flanks and the tops are as machined. Higher magnification of the laser modified surface, showing the microorganism and plaque, is characterized by relatively smooth surface to minimize the incidence of peri-implantitis, whereas the valley part of the implant threads has the rougher surface.

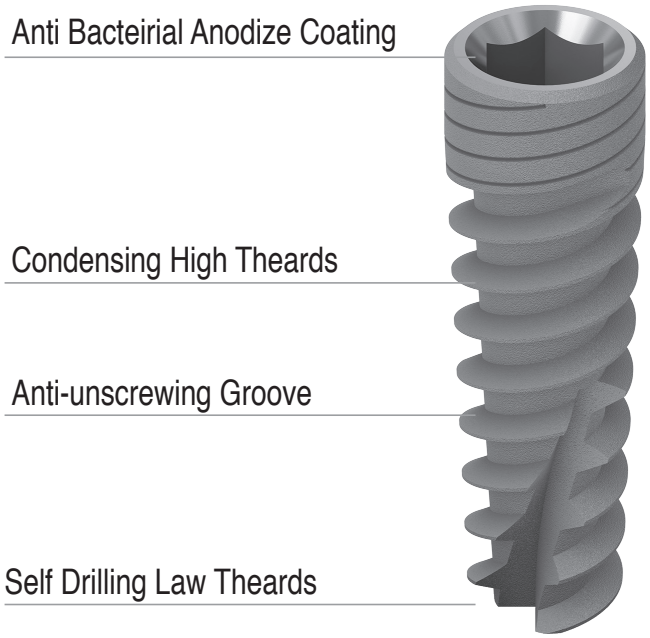
Short-term, experimental in vivo studies of laser-modified titanium implants with nanoscale Surface topographical features have demonstrated a significant increase in removal Torque and different fracture mechanisms of clinical importance is that nanostructured surfaces promoted long-term bone bonding And interface strength in vivo as determined by a coalescence between mineralized bone And the nanostructured surface and a substantial increase in removal torque one 1-year retrospective case series showed excellent clinical results of above Dental implants placed according to conventional procedures.

reference: Ahmed M. Ballo, Omar Omar, Wei Xia and Anders Palmquist (2011). Dental Implant Surfaces – Physicochemical Properties, Biological Performance, and Trends, Implant Dentistry - A Rapidly Evolving Practice, Prof. Ilser Turkyilmaz (Ed.), ISBN: 978-953-307-658-4, InTech, Available from:
http://www.intechopen.com/books/implant-dentistry-a-rapidly-evolving-practice/dental-implant-surfacesphysicochemical-properties-biological-performance-and-trends

SDI DENTAL

DENTAL IMPLANTS

DYNAMIC - CONICAL IMPLANT



The **DTNAMIC** is the optimal solution for immediate implantation and immediate loading

The **DYNAMIC**, has exceptional self-drilling capabilities and a unique spiral body design which enables it to change its position during placement and obtain very high primary stability, also in very complicated clinical cases.

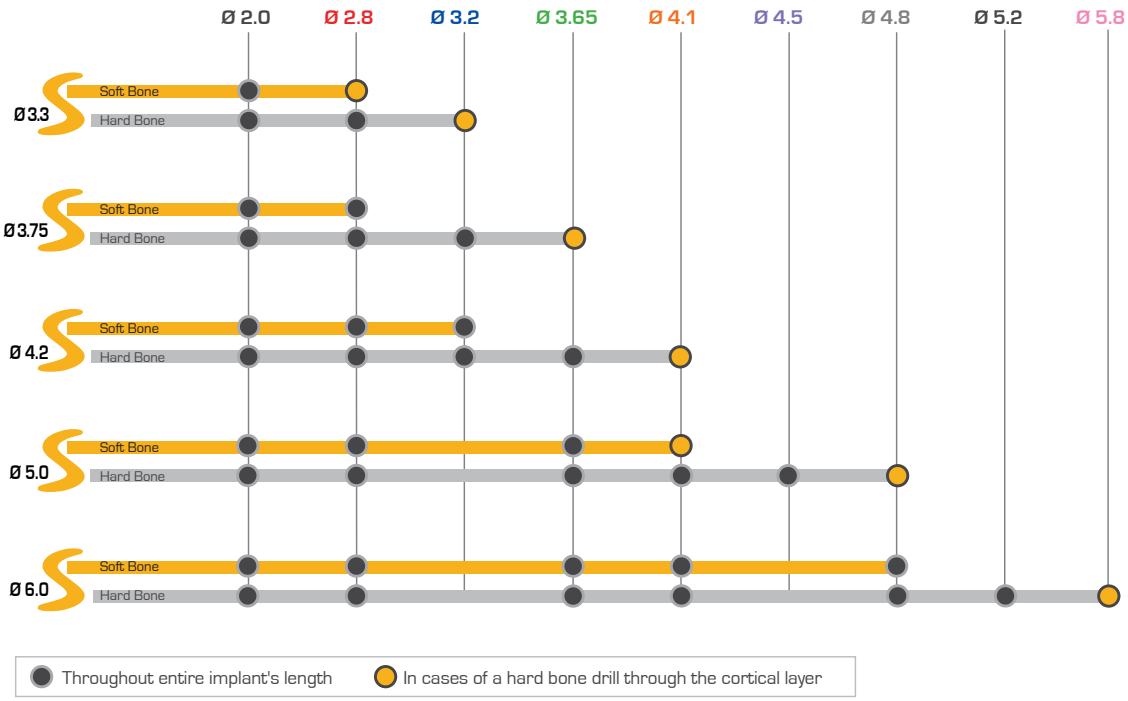
Clinical advantages:

- Bone condensing properties and high primary stability
- Self-directing during insertion
- Enables the changing of direction for optimal restorative position
- Enables a smaller osteotomy, resulting in minimal bone loss and reduced trauma
- Enables narrow ridge expansion
- Reduces the risk of damaging neighboring teeth
- Reduces the risk of perforating the lingual or buccal cortex.

Length \ Dia	3.30	3.75	4.20	5.00	6.00
6.00		SDI-F3706	SDI-F4206	SDI-F5006	SDI-F6006
8.00	SDI-F3308	SDI-F3708	SDI-F4208	SDI-F5008	SDI-F6008
10.00	SDI-F3310	SDI-F3710	SDI-F4210	SDI-F5010	SDI-F6010
11.50	SDI-F3311	SDI-F3711	SDI-F4211	SDI-F5011	SDI-F6011
13.00	SDI-F3313	SDI-F3713	SDI-F4213	SDI-F5013	SDI-F6013
16.00	SDI-F3316	SDI-F3716	SDI-F4216	SDI-F5016	

Anodized coating technology unique anti-bacterial process.

- The implants undergo an anodized coating process which contributes to creating an anti-bacterial shell on the Titanium.
- The coating is made from natural ingredients Food Standard \ Medicine and unattended polluting industrial materials.
- The anodizing contributes to the mechanical strength and prevents friction between the Implant and prosthetic parts.
- **Surface treatment unique approach**
- Our company has adopted the method of surface treatment based on SLA or the RBM technology using quality materials to create desired implant Topography. We have chosen not to use chemicals and industrial pollutants which may be harmful. We decided to use citric acid naturally stabilized as a key component in the process of removing residue media during surface treatment.
- The use of natural acid ensures very good implant bone contact and prevents situations of rejection of implants resulting from acid treatment consisting of aggressive industrial chemicals that are decomposed after a certain period.
- This process is unique and is based on years of experience and f thousands of implants manufactured and implanted around the world.

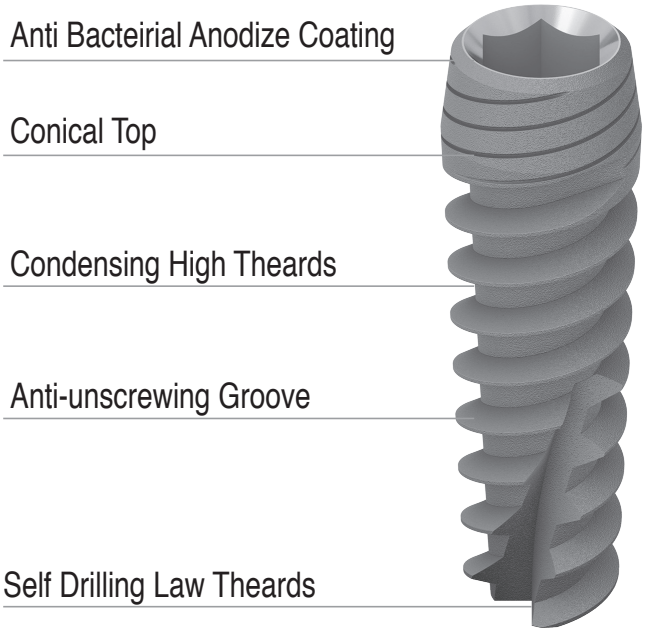


Drilling protocol

The recommendations presented in this drilling Protocol, based on long experience of specialists in the world. However it is important to examine each case on its merits based on the physician's ability to perform the procedure, and the state of the patient's jaw implant transpires with the beginning and there may be changes according to the situation.

In principle, we recommend using a drill that its diameter smaller than the diameter of the implant, in the case of **soft bone** condition. Also, consider using a similar drill diameter implant intended for implantation in the case of **hard bone** in order to avoid trauma to the bone and ensure rapid bone building around the implant.

ULTIMATE IMPLANT



The **ULTIMATE** provides perfect esthetics and clinical results for all bone types, from the simplest to the most complicated cases. It introduces a perfect balance between high primary stability and sensitivity to the bone, which makes it highly suitable implant for immediate implantation and loading.

The **ULTIMTE** can be placed in standard implantations, immediate implantations, immediate loading, and sinus lifts.

Clinical advantages:

- Provides the best results for all bone types in both simple and complex cases.
- Achieves very high primary stability due to its excellent bone condensing ability
- Enables much smaller osteotomy in bone types lll and IV
- Short and long-term stability of the crestal bone
- Long-term esthetic appearance - the modern, advanced coronal piece maintains the tissues around the implant and creates a very dense, stable crestal bone attachment.
- Perfect balance between high primary stability and gentleness to the bone, makes it the most suitable implant for immediate implantation and loading

Length \ Dia	4.20	5.00	6.00
6.00	SDI-F4306		SDI-F6106
8.00	SDI-F4308	SDI-F5108	SDI-F6108
10.00	SDI-F4310	SDI-F5110	SDI-F6110
11.50	SDI-F4311	SDI-F5111	SDI-F6111
13.00	SDI-F4313	SDI-F5113	SDI-F6113
16.00	SDI-F4316	SDI-F5116	

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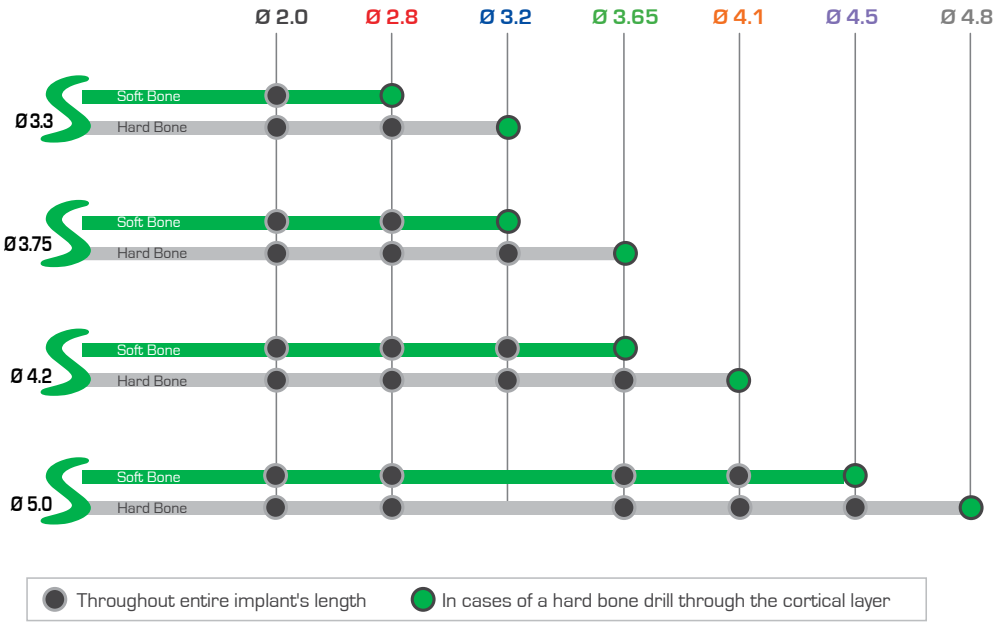

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SOLUTION FLEX IMPLANT

The excellent solution for very hard bone or cases of limited vertical bone volume.

The **SOLUTION FLEX** is a standard cylindrical implant with a unique body and core design that provides minimal pressure on hard bone, and therefore, most suitable for use with bone types I and II.

Clinical advantages:

- Easy insertion and better control during placement
- Excellent for bone types I and II
- Suitable for use with limited bone volume, especially in the mandible
- Reduces pressure on bone

Length \ Dia	3.30	3.75	4.20	5.00	6.00
6.00		SDI-G3706	SDI-G4206	SDI-G5006	SDI-G6006
8.00	SDI-G3308	SDI-G3708	SDI-G4208	SDI-G5008	SDI-G6008
10.00	SDI-G3310	SDI-G3710	SDI-G4210	SDI-G5010	SDI-G6010
11.50	SDI-G3311	SDI-G3711	SDI-G4211	SDI-G5011	SDI-G6011
13.00	SDI-G3313	SDI-G3713	SDI-G4213	SDI-G5013	SDI-G6013
16.00	SDI-G3316	SDI-G3716	SDI-G4216	SDI-G5016	

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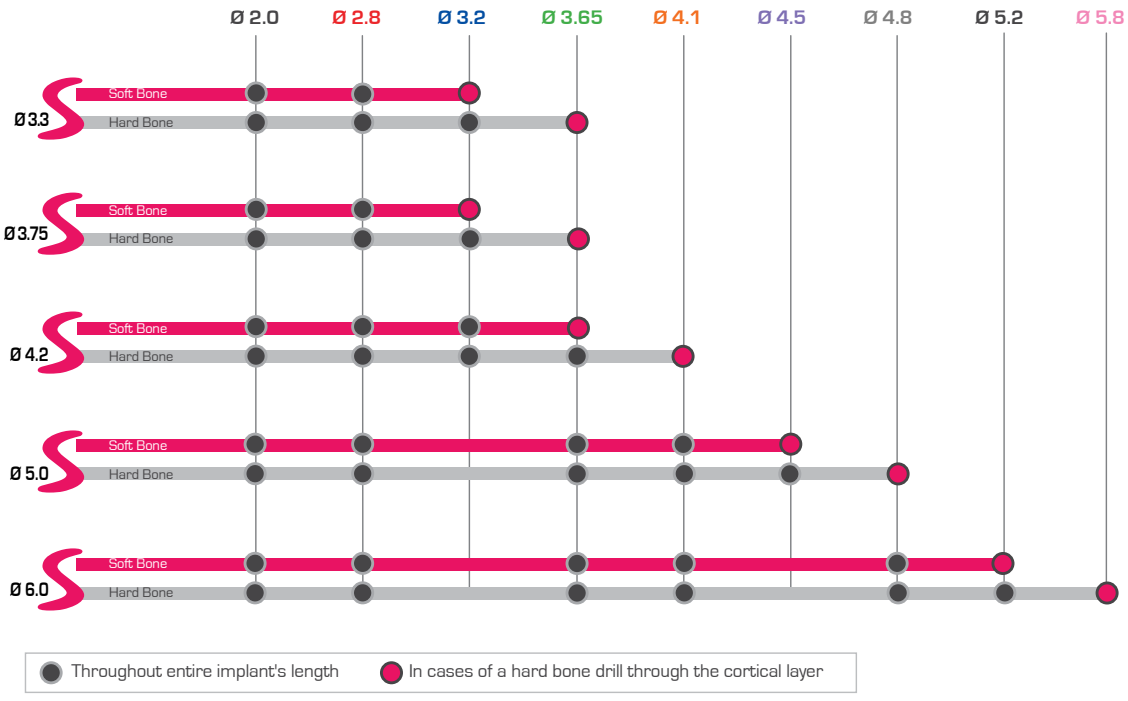

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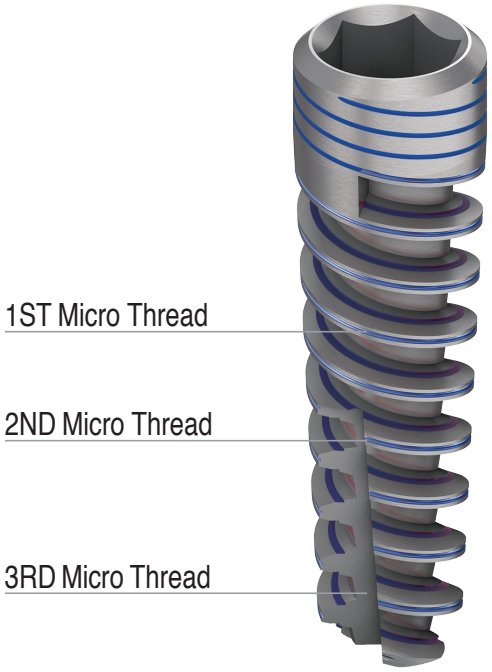
TI-CLEAR IMPLANT



Back to Basics

The Ti- Clear implant

This dental implant is a concept based on DYNAMIC Conical Implant. The Conical structure of the implant, single-threaded and self-drilling head of the implant is identical to the Dynamic conical implant.

The first generation of osseointegrated implants had a relatively smooth machined surface (Branemark et al. 1969). The machined surface was the first used surface in clinical dental applications and has excellent long time follow-up (Adell et al., 1981; Br'nemark et al.,1977).

It is well known that smooth surfaces like glass promote fluid movement as opposed to rough surfaces, thus a constant flow of liquid around the implant at bone contact is essential and a promoting factor to ossesiointegration.

After years of research that included world known practitioners and researchers from well known medical institutions, We decided to enhance the remarkable success of the DYNAMIC implant and to produce a series of implants which are based on computerized mechanical corrugation. The computerized mechanical corrugation increases the surface of the implant and creates a morphology that exhibits excellent conditions for integration between the implant to the bone. The uniqueness if this process is that the implant surface conditions are produced during the machining process using specially developed blades for this purpose.

Length \ Dia	3.30	3.75	4.20	5.00	6.00
6.00		SDI-BI3706	SDI-BI4206	SDI-BI5006	SDI-BI6006
8.00	SDI-BI3308	SDI-BI3708	SDI-BI4208	SDI-BI5008	SDI-BI6008
10.00	SDI-BI3310	SDI-BI3710	SDI-BI4210	SDI-BI5010	SDI-BI6010
11.50	SDI-BI3311	SDI-BI3711	SDI-BI4211	SDI-BI5011	SDI-BI6011
13.00	SDI-BI3313	SDI-BI3713	SDI-BI4213	SDI-BI5013	SDI-BI6013
16.00	SDI-BI3316	SDI-BI3716	SDI-BI4216	SDI-BI5016	

The result is a pure dental implant, manufactured from, Medical Grade 5 titanium - without any chemical treatments, chemical etching, rinsing industrial soaps and aggressive acids that may chemically decompose causing inflammation and risk of emission of the implants.

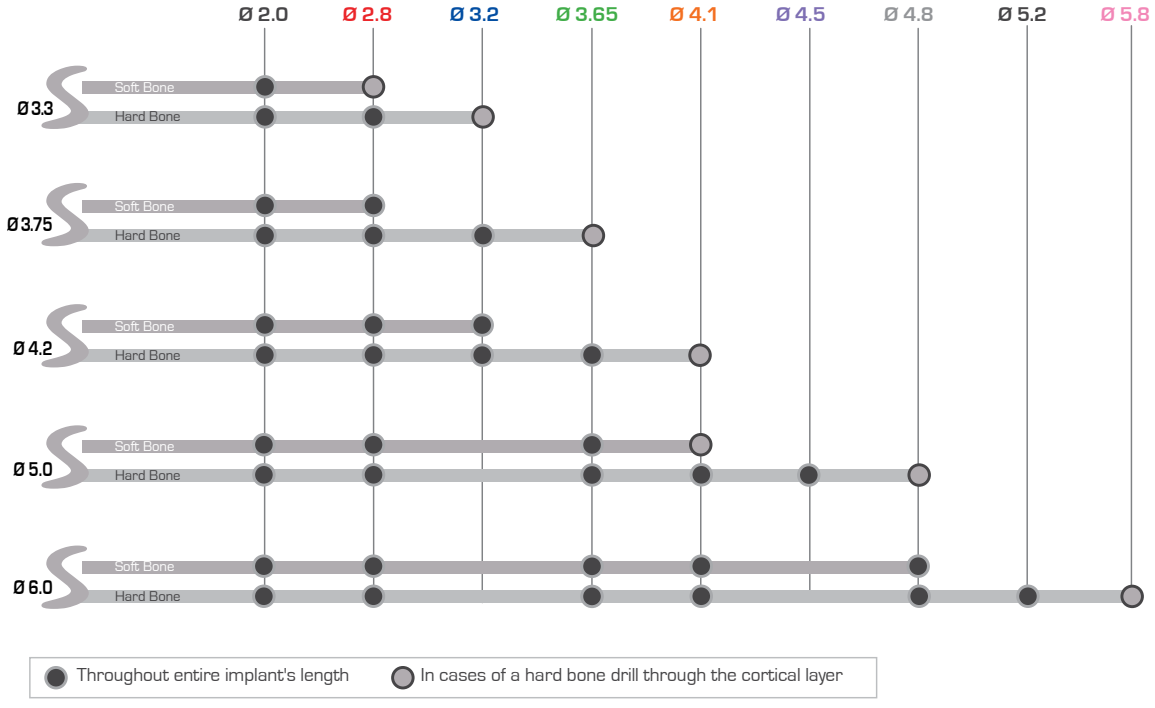
Innovation

To encourage bone growth around this unique implant and creating Osseo integration, the company developed with Ghimas S.p.A a unique gel, SLURRY in a physical form that is characterized by a micro dispersion of solids in a gel. This gel has an ultra microstructure of the solid which, being in a sufficient amount of liquid, cannot settle, with complex physical interactions between the solid particles surrounded by hydrophilic molecules and forces of chemical attraction thus keeping the product fluid and cohesive.

From a biological standpoint the SLURRY ensures better Bio-compatibility and more harmonious degradation of the polymer and copolymer and of theco-formulates, which are therefore more easily absorbed by the organism using normal metabolic systems (e.g. the KrebS CyclE).

The unique combination of pure titanium implant with mechanical roughening (without and chemical substances that cause infection) combined with our Unique gel is to our experience one of the best implant solutions available in the market.

Proven clinical experience of using these implants in recent years testifies to the success and consistency of the proposed process benefits.

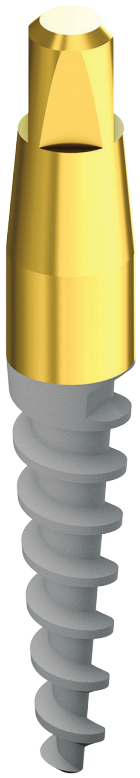


Drilling protocol

The recommendations presented in this drilling Protocol, based on long experience of specialists in the world. However it is important to examine each case on its merits based on the physician's ability to perform the procedure, and the state of the patient's jaw implant transpires with the beginning and there may be changes according to the situation.

In principle, we recommend using a drill that its diameter smaller than the diameter of the implant, in the case of **soft bone** condition. Also, consider using a similar drill diameter implant intended for implantation in the case of **hard bone** in order to avoid trauma to the bone and ensure rapid bone building around the implant.

SOLO IMPLANT



The **SOLO** is a one piece, conical, narrow, integral implant combined with an abutment.

The **SOLO** is specially designed for: Narrow ridges with sufficient depth, Narrow interdental spaces, Temporary restoration between permanent implants.

Suitable for: Immediate loading, All bone types but optimal usage is in dense bone.

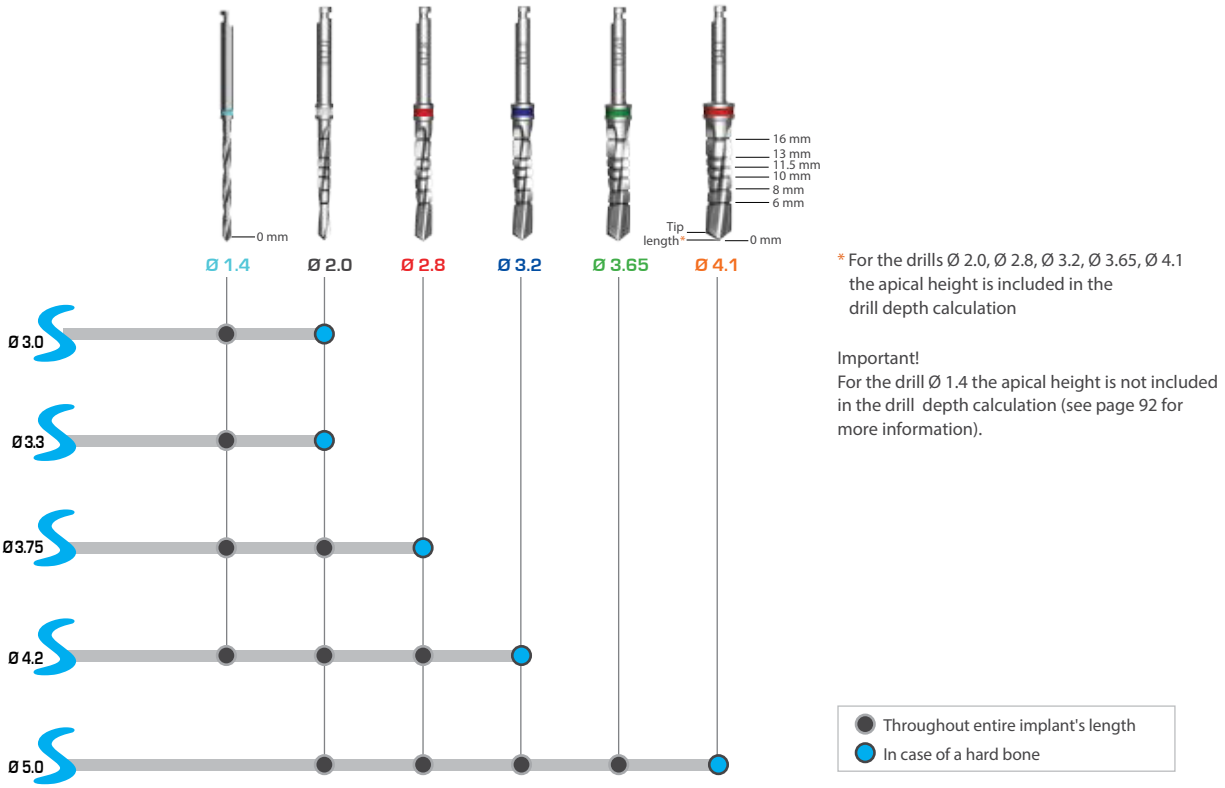
Mechanical preparation should be done in the patient's mouth (not in lab).

The implant is produced in three diameters: 3 mm, 3.3 mm and 3.75 mm.

Length \ Dia	3.00	3.30	3.75
10.00	SDI-P3010	SDI-P3310	SDI-P3710
11.50	SDI-P3011	SDI-P3311	SDI-P3711
13.00	SDI-P3013	SDI-P3313	SDI-P3713
16.00	SDI-P3016	SDI-P3316	SDI-P3716

Surface treatment unique approach

- Our company has adopted the method of surface treatment based on SLA or the RBM technology using quality materials to create desired implant Topography. We have chosen not to use chemicals and industrial pollutants which may be harmful. We decided to use citric acid naturally stabilized as a key component in the process of removing residue media during surface treatment.
- The use of natural acid ensures very good implant bone contact and prevents situations of rejection of implants resulting from acid treatment consisting of aggressive industrial chemicals that are decomposed after a certain period.
- This process is unique and is based on years of experience and of thousands of implants manufactured and implanted around the world.



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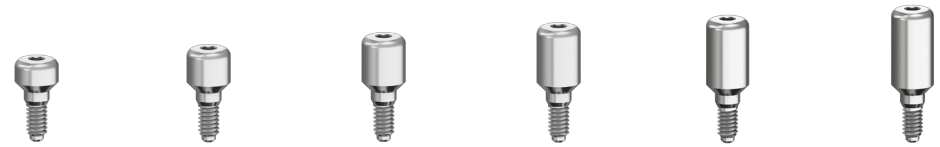
SDI DENTAL

PROSTHETICS

Healing Cups

Diameter 3.8 mm Slim



Cat No.	SDI-H3802	SDI-H3803	SDI-H3804	SDI-H3805	SDI-H3806	SDI-H3807
Height	2.00 mm	3.00 mm	4.00 mm	5.00 mm	6.00 mm	7.00 mm

Diameter 4.6 mm Standart

Cat No.	SDI-H4602	SDI-H4603	SDI-H4604	SDI-H4605	SDI-H4606	SDI-H4607
Height	2.00 mm	3.00 mm	4.00 mm	5.00 mm	6.00 mm	7.00 mm

Diameter 5.5 mm Wide

Cat No.	SDI-H5502	SDI-H5503	SDI-H5504	SDI-H5505	SDI-H5506	SDI-H5507
Height	2.00 mm	3.00 mm	4.00 mm	5.00 mm	6.00 mm	7.00 mm

Diameter 6 mm Wide

Cat No.	SDI-H6303	SDI-H6304	SDI-H6305	SDI-H6306	SDI-H6307	SDI-H6308
Height	3.00 mm	4.00 mm	5.00 mm	6.00 mm	7.00 mm	8.00 mm

Straight Abutments

Straight Abutment

Cat No.	SDI-A5908	SDI-A5909	SDI-A5911	SDI-A5912	SDI-A5601	SDI-A5602
Height	8.5 mm	9.5 mm	11.5 mm	12.5 mm	8.5 mm	10.5 mm

Straight Shoulder Abutment

Cat No.	SDI-A4801	SDI-A4802	SDI-A4803	SDI-A4804	SDI-A5001	SDI-A5002
Height	8.5 mm	9.5 mm	10.5 mm	11.5 mm	9.5 mm	Non-Hex 9.5 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm	4.00 mm	1.70 mm	1.70 mm

Straight Shoulder Narrow Abutment

Cat No.	SDI-A5300	SDI-A5301	SDI-A5302	SDI-A6006	SDI-A6008	SDI-A6011
Height	8.5 mm	8.5 mm	8.5 mm	6.00 mm	8.00 mm	11.00 mm
Shoulder	0.50 mm	1.50 mm	2.50 mm	N/A	N/A	N/A

Straight Anatomic Abutment

Cat No.	SDI-A4601	SDI-A4602	SDI-A4603	SDI-A4604
Height	9.00 mm	10.00 mm	11.00 mm	12.00 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm	4.00 mm

Screw for abutment

SDI-S8324
Included with all types of abutments

15⁰ Angulated Abutments

15⁰ Standart Abutment

Cat No.	SDI-A3207	SDI-A3208	SDI-A3209	SDI-A3211
Height	7 mm	8.5 mm	9 mm	11 mm

15⁰ Narrow Top Standart Abutment

Cat No.	SDI-A2807	SDI-A2809	SDI-A2811
Height	7 mm	8.5 mm	9 mm

15⁰ Narrow Standart Abutment

Cat No.	SDI-A3609
Height	9 mm

15⁰ Anatomic Standart Abutment

Cat No.	SDI-A2400	SDI-A2401	SDI-A2402	SDI-A2403	SDI-A2404
Height	8.5 mm	9.5 mm	10.5 mm	11.5 mm	12.5 mm
Shoulder	0.80 mm	1.00 mm	2.00 mm	3.00 mm	4.00 mm

Screw for abutment

SDI-S8324
Included with all types of abutments

25⁰ Angulated Abutments

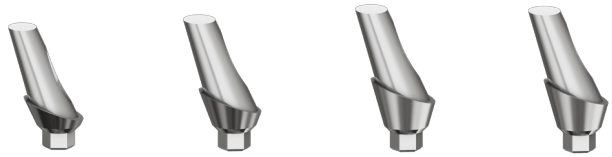
25⁰ Standart Abutment

Cat No.	SDI-A3407	SDI-A3409	SDI-A3411
Height	7 mm	9 mm	11 mm

25⁰ Narrow Top Standart Abutment

Cat No.	SDI-A3007	SDI-A3009	SDI-A3011
Height	7 mm	9 mm	11 mm

25⁰ Anatomic Standart Abutment



Cat No.	SDI-A2601	SDI-A2602	SDI-A2603	SDI-A2604
Height	9.5 mm	10.5 mm	11.5 mm	12.5 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm	4.00 mm

25⁰ Narrow Standart Abutment

Cat No.	SDI-A3809
Height	9 mm

Screw for abutment

SDI-S8324
Included with all types of abutments

Ball Attachment

Metal Cap For Ball Attachment

Cat No.	SDI-T3001

Ball Attachment




Cat No.	SDI-T3002	SDI-T3003	SDI-T3004	SDI-T3005
	Silicone Extra soft	Silicone soft	Silicone standart	Peek

Caps 2.5mm for Ball Attachment








Cat No.	SDI-T1200	SDI-T1201	SDI-T1202	SDI-T1203	SDI-T1204	SDI-T1205	SDI-T1206	SDI-T1207
Height	0.5 mm	1 mm	2 mm	3 mm	4 mm	5 mm	6 mm	7 mm

Temporary Peek Abutments

Peek Straight Anatomic Abutment

Cat No.	SDI-P4510	SDI-P4520	SDI-P4530
Height	9 mm	10 mm	11 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm

15⁰ Peek Anatomic Abutment

	1.00 mm	2.00 mm	3.00 mm
Cat No.	SDI-P2401	SDI-P2402	SDI-P2403
Height	9 mm	10 mm	11 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm

25⁰ Peek Anatomic Abutment

Cat No.	SDI-P2601	SDI-P2602	SDI-P2603
Height	9 mm	10 mm	11 mm
Shoulder			

Screw for abutment

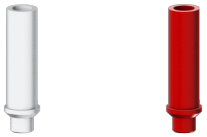
SDI-S8324
Included with all types of abutments

Castable Abutments

Castable Straight Anatomic Abutment

Cat No.	SDI-C4510	SDI-C4520	SDI-C4530
Height	9 mm	10 mm	11 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm

Custom Castable Narrow Abutment



Cat No.	SDI-C1001	SDI-C1002
	NON-HEX	HEX

Screw for abutment

SDI-S8324
Included with all types of abutments

Impression Components

Transfer For Open Tray

Cat No.	SDI-T4008	SDI-T4201	SDI-T4212
Diameter	4.75 mm	4.30 mm	4.75 mm
Height	8.00 mm	12.00 mm	12.00 mm

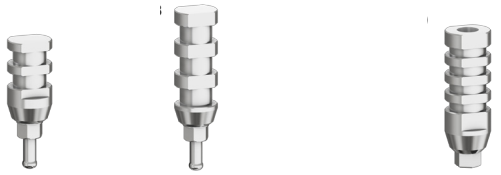
Transfer For Close Tray

Cat No.	SDI-T3507	SDI-T3511	SDI-T3601
Diamter	3.85 mm	4.50 mm	4.75 mm
Height	12.00 mm	12.00 mm	8.00 mm

Screw for Transfer

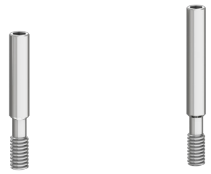
Cat No.	SDI-S2418
Height	24.00 mm

Click Transfer For Close Tray



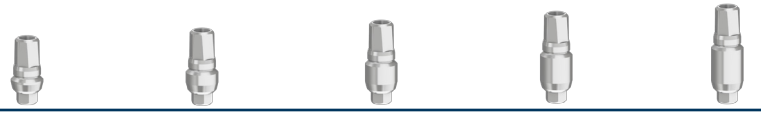
Cat No.	SDI-T3409	SDI-T3413	SDI-T4012
Diameter	4.70 mm	4.70 mm	4.80 mm
Height	9.00 mm	13.00 mm	11.80 mm

Screw for Transfer



Cat No.	SDI-S1307	SDI-S1610
Height	13.00 mm	16.00 mm

Ball Transfer



Cat No.	SDI-T3801	SDI-T3802	SDI-T3803	SDI-T3804	SDI-T3805
Diameter	4.75 mm	4.75 mm	4.75 mm	4.75 mm	4.75 mm
Shoulder	1.00 mm	2.00 mm	3.00 mm	4.00 mm	5.00 mm

Plastic Cap For Ball Transfer

Cat No.	SDI-T4401	SDI-T4402
Diameter	4.75 mm	4.75 mm
Height	7.00 mm	10.00 mm

Implant Analog

Cat No.	SDI-T6404	SDI-T6405
Diameter	4.00 mm	5.00 mm
Height	12.75 mm	12.75 mm

Power Click Attachmet

Power Click Straight Abutment

Cat No.	SDI-PCA00	SDI-PCA01	SDI-PCA03	SDI-PCA04	SDI-PCA05

Metal Cap For Power Click Attachment

Cat No.	SDI-PCMC0

Indirect Peek Adaptor

Cat No.	SDI-PCIA0

Peek Hosting For Power Click Attachment

Cat No.	SDI-PCPH0

Silicone Sealed Ring

Cat No.	SDI-PCSSR

Transfer For Power Click Attachment

Cat No.	SDI-PCTR0

Analog For Power Click Attachment

Cat No.	SDI-PCAN0

Multi-Units

Multi-Unit Straight Abutment

Cat No.	SDI-M0101	SDI-M0102	SDI-M0103	SDI-M0104	SDI-M0105	SDI-M0106
Height	1.00 mm	2.00 mm	3.00 mm	4.00 mm	5.00 mm	6.00 mm

Multi-Unit Plastic castable Sleeve

Cat No. SDI-MPL01

Multi-Unit Titanuiem Sleeve

Cat No. SDI-MTI01

Multi-Unit Short Titanuiem Sleeve

Cat No. SDI-MTI0S

Healing Cap For Multi-Unit

Cat No. SDI-M0HC1

Transfer For Multi-Unit

Cat No. SDI-M0TR1

Analog For Multi-Unit

Cat No. SDI-M0AN1

Screw for Multi-Unit

SDI-M0SC1
Included with all types of abutments

Angulated Multi-Unit

Angulated Multi-Unit Abutment

Cat No.	SDI-MU09	SDI-MU18	SDI-MU30

Multi-Unit Plastic Castable Sleeve

Cat No.	SDI-MPLD

Multi-Unit Titanuiem Sleeve

Cat No.	SDI-MUTSDL

Multi-Unit Short Titanuiem Sleeve

Cat No.	SDI-MUTSDH

Healing Cap For Multi-Unit

Cat No.	SDI-MUHC1

Close Transfer For Multi-Unit

Cat No.	SDI-MUTRIC

Open Transfer For Multi-Unit

Cat No.	SDI-MUTRIO

Analog For Multi-Unit

Cat No.	SDI-MUANAD

Screw for Multi-Unit

Included with all types of abutments

Cat No.	SDI-MOSC1

Esthetic Screw Abutment

Esthetic Screw Abutment



Cat No.	SDI-AA005	SDI-AA010	SDI-AA020
Height	0.50 mm	1.00 mm	2.00 mm

Screw For Esthetic Abutment



Cat No.	SDI-AAS10	SDI-AAS11	SDI-AAS12
Height	10.50 mm	11.50 mm	12.50 mm

Plastic Hexal Sleeve For Esthetic Attachment

Cat No.	SDI-AAPSL-H

Plastic Non Hexal Sleeve For Esthetic Attachment

Cat No.	SDI-AAPSL

INSTRUMENTS, DRILLS & SURGICAL KITS

Instruments & Drills

Countersink

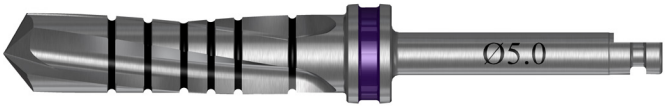
Cat No.	SDI-D1034	SDI-D1056
Diameter	⌀ 3.80-4.20 mm	⌀ 5.00-6.00 mm

Marking

Cat No.	SDI-D3410
Diameter	

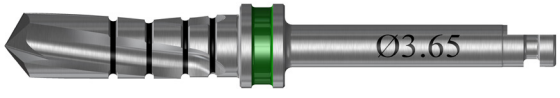
Extension

Cat No.	SDI-D3412
Diameter	



Standard 16 mm

Cat No.	SDI-D1220	SDI-D1225	SDI-D1228	SDI-D1232	SDI-D1236	SDI-D1242	SDI-D1252
Diameter	⌀ 2.00 mm	⌀ 2.50 mm	⌀ 2.8 mm	⌀ 3.2 mm	⌀ 3.65 mm	⌀ 4.20 mm	⌀ 5.20 mm

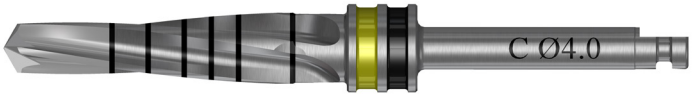


Short 11.5 mm

Cat No.	SDI-D1420	SDI-D1428	SDI-D1432	SDI-D1436	SDI-D1442	SDI-D1452
Diameter	⌀ 2.00 mm	⌀ 2.80 mm	⌀ 3.20 mm	⌀ 3.65 mm	⌀ 4.20 mm	⌀ 5.20 mm

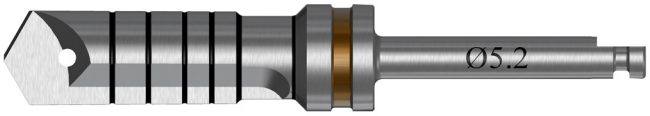
Trephine

Cat No.	SDI-D2020	SDI-D2030	SDI-D2040	SDI-D2050
Diameter	⌀ 2.00-3.00 mm	⌀ 3.00-4.00 mm	⌀ 4.00-5.00 mm	⌀ 5.00-6.00 mm



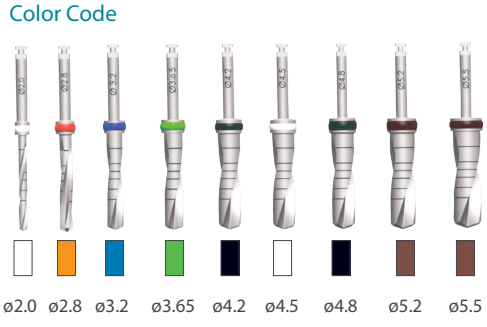
Conical 16 mm

Cat No.	SDI-D3018	SDI-D3020	SDI-D3025	SDI-D3027	SDI-D3028	SDI-D3031
Diameter	⌀ 1.8-2.4 mm	⌀ 2.0-3.2 mm	⌀ 2.5-3.7 mm	⌀ 2.7-4.0 mm	⌀ 2.7-4.5 mm	⌀ 3.1-5.5 mm

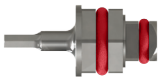
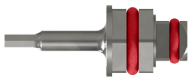


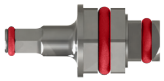
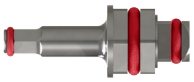
Gun 16 mm

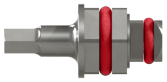
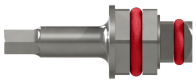
Cat No.	SDI-D3620	SDI-D3625	SDI-D3628	SDI-D3632	SDI-D3636	SDI-D3640	SDI-D3643	SDI-D3652
Diameter	⌀ 2.00 mm	⌀ 2.50 mm	⌀ 2.8 mm	⌀ 3.2 mm	⌀ 3.65 mm	⌀ 4.00 mm	⌀ 4.30 mm	⌀ 5.20 mm



Instruments

Driver Hex 1.25 mm			
			
Cat No.	SDI-X1207	SDI-X1210	SDI-X1215
Length	7.00 mm	10.00 mm	15.00 mm

Driver, Hex 2.42 mm Front Ring			
			
Cat No.	SDI-X2407	SDI-X2410	SDI-X2415
Length	7.00 mm	10.00 mm	15.00 mm

Driver, Hex 2.42 mm			
			
Cat No.	SDI-X2607	SDI-X2610	SDI-X2615
Length	7.00 mm	10.00 mm	15.00 mm

Tools & Surgical Kit

Cat No.	SDI-X1020
Description	Rachet

Cat No.	SDI-X1021
Description	Tourque Rachet

Cat No.	SDI-X1022
Description	Surgical Screw Driver Hex 2.42 mm

Cat No.	SDI-X1023
Description	Surgical Screw Long Driver

Cat No.	SDI-X1025
Description	Depth Probe

Starter Kit

Cat No.	SDI-STR-KIT

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