





Discover True Innovation



## About Alpha-Bio Tec

For over 25 years, Alpha-Bio  $_{\text{Tec}}$  has been an industry leader in manufacturing of implants, prosthetic parts and a variety of dental surgical instrumentation. Alpha-Bio  $_{\text{Tec}}$  continually aspires to create simple and easy to use solutions with attention to details that are reflected throughout the treatment process - from the early stage of treatment planning to the final restoration.

Alpha-Bio Tec presents the new I.C.E. (Implant Classical Esthetics) implant: Another example of the company's unique ability to turn scientific innovation into an effective implantology product.

# **Confidence and Predictability**

The I.C.E. implant is ideal for dental professionals who demand precision, reliability and safety. Designed for ease of use and guaranteeing smooth insertion, I.C.E. is best described as providing a "perfect fit and perfect results". In line with Alpha-Bio Tec's compatible products, I.C.E. is also designed for use with most of the standard internal hexagon platform prosthetics.

I.C.E. is indicated for use in a wide range of clinical cases and bone types. It can be deployed in standard implantations, immediate loading, immediate implantations, and sinus lifts. Testimonials show the I.C.E. success in providing superior confidence and exceptional esthetic results.

"Alpha-Bio Tec's products continue to prove themselves. Inserting the I.C.E. implant is remarkably easy - it glides smoothly into the socket without any effort at all."

Dr. Shlomo Birshan, D.M.D





#### **Design Features:**

- Extremely precise and durable
- One platform for all diameters
- Platform switching

#### Advantages:

- Solid connection
- Perfect implant-abutment fit
- Simple restoration process



#### ······ CORONAL PART

#### **Design Features:**

- Back-tapered\*
- Micro threads with 4 split starts\*\*
- Split coronal micro threads
- Rough surface reaches the top

### Advantages:

- Great BIC (Bone Implant Contact) in the cortical part
- Large surface area
- Improved stress distribution
- Reduces pressure on cortical bone
- Less crestal resorption
- Long-term esthetic appearance



## ··· IMPLANT BODY AND CORE

### **Design Features:**

- Tapered body and core
- Osteotome like condensing body

### Advantages:

- Smooth and gentle bone penetration
- High primary stability
- High bone condensation properties



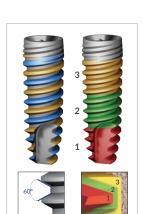
### · IMPLANT THREADS

#### **Design Features:**

- Double thread design with 2 mm step
- Variable thread design
- 60° thread profile with 0.3 mm trapezoid-based shape

### Advantages:

- Easy and smooth insertion
- Fast and controlled bone penetration
- Excellent bone grip
- Moderate self-drilling capability
- Reduces pressure on bone
- High primary stability



### ······ APICAL PART

## **Design Features:**

- Very narrow apical part
- Apical blades
- Efficient cutting flute
- Flat apical border
- Sharp and deep apical threads

## Advantages:

- Smooth initial penetration
- High primary stability (also in immediate implantation)



- $^*$  ICE implants with Ø4.2, Ø4.65 and Ø5.3 in lengths 10 mm and longer.
- \*\* ICE implants with  $\emptyset$ 4.2,  $\emptyset$ 4.65 and  $\emptyset$ 5.3 in lengths 6 and 8 mm have micro threads with 2 split starts. **Note:** The illustration shows ICE implant  $\emptyset$ 4.2 / 13 mm.

"I like the fact that I.C.E. can be used for all clinical cases. This way, I know I'm always prepared to handle any situation that comes up. I.C.E. is one product I know I can depend on."

Dr. Max Eisenberg, D.M.D

## **Discover True Innovation**

I.C.E. is designed for dental practitioners who require peace of mind as well as predictability, efficiency and durability. I.C.E. meets a variety of indications and serves both soft and hard bone types. It guarantees quick and easy insertion and improved initial stability. The I.C.E. implant can be integrated into a range of surgical procedures, including immediate loading, immediate implantation and sinus lifts.

The I.C.E. is available in varying diameters (3.75mm, 4.2mm, 4.65mm and 5.3mm) and lengths (8-16mm) and can be deployed with most standard platform prosthetics.



## Alpha-Bio Tec. Implant Surface

## Implant surface process:

- Sand-blasting to create a macro surface of 20-40 microns
- Double thermal acid etching process to create micro pitting between 1-5 microns

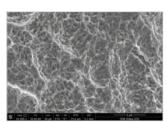
#### NanoTec advantages:

- Increased early bone to implant contact
- Increased stability
- Shorter healing period
- Higher predictability



#### References:

Light microscopy photography of non-decalcified histology staining toloidin blue after 3 weeks. TUBIA of New Zealand rabbits. The study of Dr. Omer Cohen and Prof. Ofer Moses, Tel-Aviv University. Histology performed in laboratory of Prof. Dr. Dr. Daniel Rothamel, University of Cologne, 2014.



SEM of surface, magnification: X 10 000

"With the I.C.E. implant, my team and I are confident every time we use it. It's much more than confidence - we know we're working with a quality implant and providing our patients with the safest most esthetic solution available."

Dr. Yaniv Mayer, D.M.D Periodontist

# **Histological Studies**

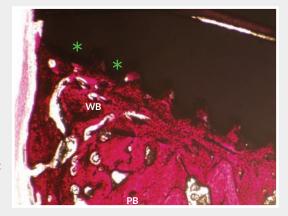
Alpha-Bio Tec's strength is in its effort to provide a successful implant based on comprehensive research and testing. I.C.E. implant's preliminary trials offer evidence to support the implant's osseointigration efficiency.

The following histological images show significant evidence of the I.C.E. bone regeneration as early as 3 weeks after implantation. Furthermore, 6 weeks from implantation there is a clear indication of integration between the bone and the implant. These results are enabled by the implant macrogeometry and Alpha-Bio Tec's unique implant surface treatment.

**1. Coronal area** (Magnification: x 20)

3 weeks after implantation

Note: There is a perfect adhering of woven bone (WB) to the implant coronal part composed of micro threads (\*).



★ Implant cervical micro threads

WB: Zone of young woven bone filling the micro-gap between implant and osteotomy

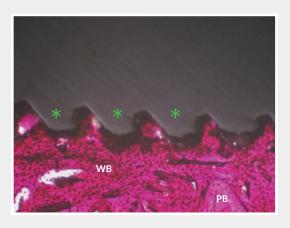
PB: Pristine bone

**NB**: New original Lamellar bone. Note perfect integration of bone into grooves of micro-threads

2. Coronal area (Magnification: x 100)

3 weeks after implantation

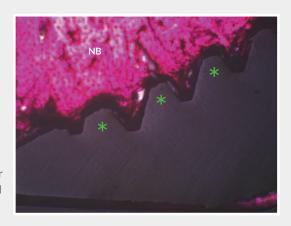
**Note:** A higher magnification of picture 1. There is adhering of woven bone (WB) in early stages to rod the implant coronal part.



**3. Coronal mesial area** (Magnification: x 100)

6 weeks after implantation

**Note:** There is a perfect adhering between the 'New original lamellar bone' (NB) and the implant coronal part (\*).



The above images demonstrate the implant's clinical advantages allowed by the unique *NanoTec*™ implant surface with its innovative micro threads shape, which results in perfect oseointegration.

## **Clinical Advantages**

Provides the best results in the simplest and the most complicated cases, for all bone types

Achieves very high primary stability, due to its excellent bone condensing ability

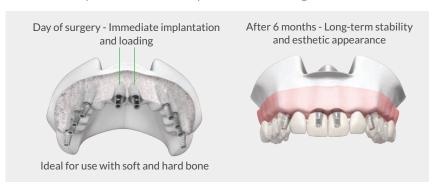
Enables much smaller osteotomy in bone types III and IV

Short and long-term stability of the crestal bone

Long-term esthetic appearance due to modern and advanced coronal part which maintains the tissues around the implant and creates very dense and 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.



## **Gentle to Hard Bone**

Due to the constant and deep threads design and it's shape, the I.C.E. provides smooth and gentle penetration even in cases of bone type I and II.

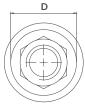


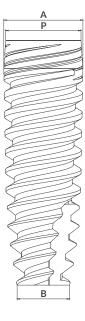
## Firm in Soft Bone

Due to the unique trapezoid-base shape, variable threads design, the tapered body and the ability to penetrate smaller osteotomy, the I.C.E. provides very high primary stability in bone type III and IV.



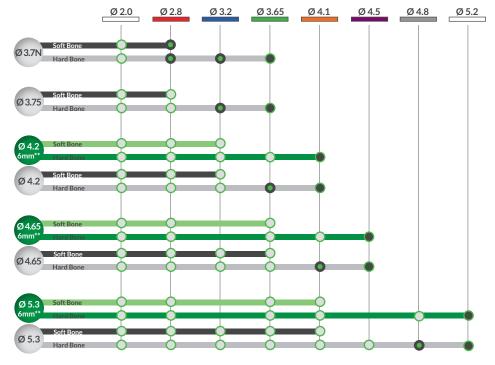
Diameter	Length	Ref. No.	Dimensions			
			А	В	D	Р
Ø 3.7N	10 mm	1000	Ø 3.7	Ø 2.2	Ø 3.5	Ø 3.7
	11.5 mm	1001	Ø 3.7	Ø 2.2	Ø 3.5	Ø 3.7
	13 mm	1003	Ø 3.7	Ø 2.2	Ø 3.5	Ø 3.7
Ø 3.75	8 mm	1018	Ø 3.75	Ø 2.6	Ø 3.5	Ø 3.75
	10 mm	1010	Ø 3.75	Ø 2.6	Ø 3.5	Ø 3.75
	11.5 mm	1011	Ø 3.75	Ø 2.6	Ø 3.5	Ø 3.75
	13 mm	1013	Ø 3.75	Ø 2.6	Ø 3.5	Ø 3.75
	16 mm	1016	Ø 3.75	Ø 2.6	Ø 3.5	Ø 3.75
Ø 4.2	6 mm	1056	Ø 4.2	Ø 2.7	Ø 3.5	Ø 4.2
	8 mm	1028	Ø 4.2	Ø 2.8	Ø 3.5	Ø 4.2
	10 mm	1020	Ø 4.2	Ø 2.8	Ø 3.5	Ø4
	11.5 mm	1021	Ø 4.2	Ø 2.8	Ø 3.5	Ø4
	13 mm	1023	Ø 4.2	Ø 2.8	Ø 3.5	Ø4
	16 mm	1026	Ø 4.2	Ø 2.8	Ø 3.5	Ø4
Ø 4.65	6 mm	1036	Ø 4.65	Ø 2.9	Ø 3.85	Ø 4.65
	8 mm	1038	Ø 4.65	Ø3	Ø 3.85	Ø 4.65
	10 mm	1030	Ø 4.65	Ø3	Ø 3.85	Ø 4.45
	11.5 mm	1031	Ø 4.65	Ø3	Ø 3.85	Ø 4.45
	13 mm	1033	Ø 4.65	Ø3	Ø 3.85	Ø 4.45
Ø 5.3	6 mm	1046	Ø 5.3	Ø 3.8	Ø 3.85	Ø 5.3
	8 mm	1048	Ø 5.3	Ø 3.45	Ø 3.85	Ø 5.3
	10 mm	1040	Ø 5.3	Ø 3.45	Ø 3.85	Ø 5.1
	11.5 mm	1041	Ø 5.3	Ø 3.45	Ø 3.85	Ø 5.1
	13 mm	1043	Ø 5.3	Ø 3.45	Ø 3.85	Ø 5.1





#### Important:

- The length of the drill\* tip is included in the depth marks measurement (measured from the tip of the drill up to the middle of the indication line). The length of the laser marked drill tip varies according to the drill diameter.
- In cases of extremely hard bone it is recommended to make adjustments to the specific site.
- The drill tip length should be considered when preparing the osteotomy.





\* The length of the drill is measured from the tip to the middle of the depth marking.

- O Throughout entire implant's length O 3mm shorter than implant length
- In cases of bone type I or wide cortical plate

<sup>\*</sup> Images are for illustrative purposes only \*\*Length: 6mm







Smart Implantology Solutions 💿 🕒 🍥



WARRANTY OUR WARRANTY - YOUR PEACE OF MIND

For more information, please visit our website www.alpha-bio.net\\

 $Alpha-Bio\ {\tiny \ Tec}'s\ products\ are\ CE-marked\ in\ accordance\ with\ the\ Council\ Directive\ 93/42/EEC\ and\ Amendment\ 2007/47/EC.$   $Alpha-Bio\ {\tiny \ \ Tec}\ complies\ with\ ISO\ 13485:2012\ and\ the\ Canadian\ Medical\ Devices\ Conformity\ Assessment\ System\ (CMDCAS).$