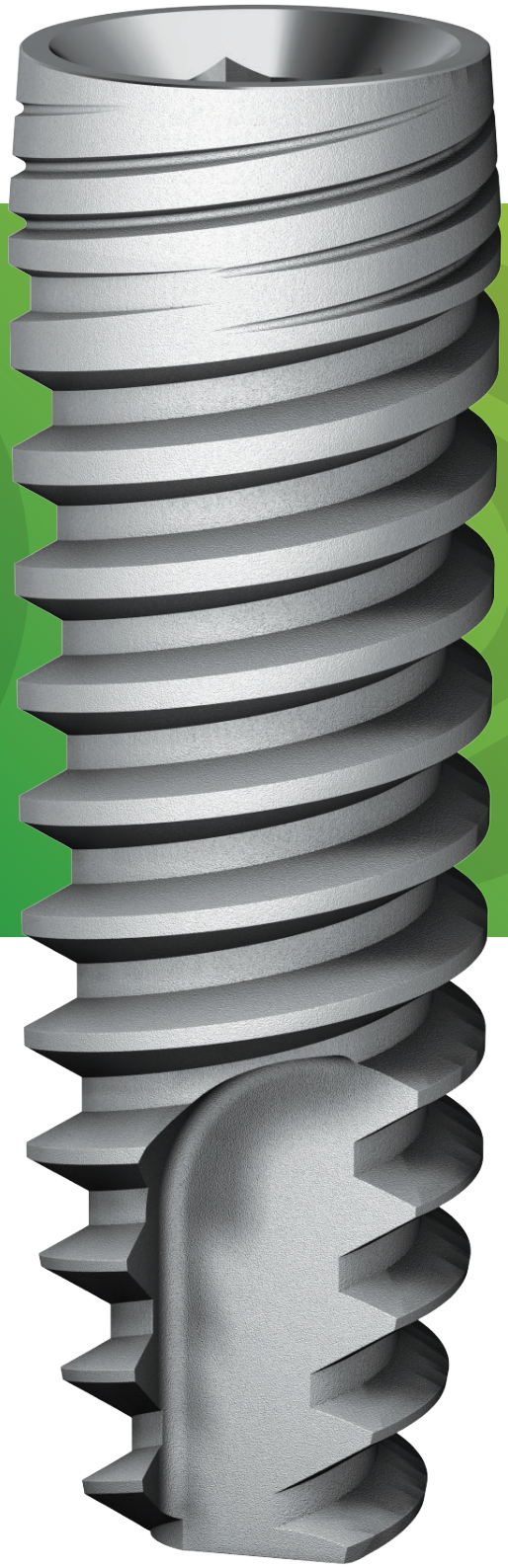
IH - Internl Hex



AlphaBio TEC
Simplantology

dICE™

Discover True Innovation

Discover True Innovation

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

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".

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. I.C.E testimonials demonstrate success with superior confidence and exceptional esthetic results.

The I.C.E. is available in varying diameters and lengths and can be deployed with most standard platform prosthetics.

ALPHA-BIO TEC NANOTEC™

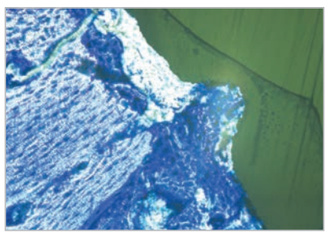
Alpha-Bio Tec. Implant Surface

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

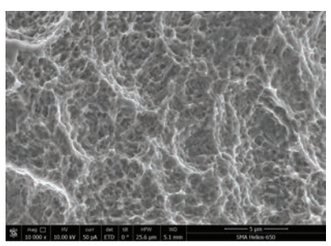
***NanoTec* advantages:**

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



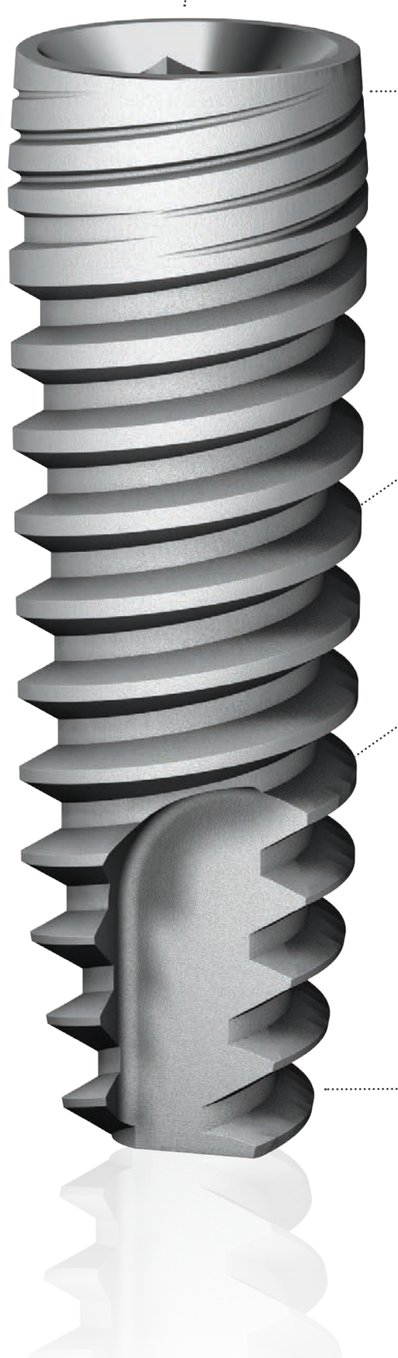
References:

Light microscopy photography of non-decalcified histology staining toloidin blue after 3 weeks. TIBIA 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

Scan to view ICE movie:



IMPROVED INTERNAL HEX

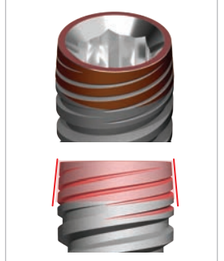
Design Features:
- Extremely precise and durable
- One platform for all diameters*
- Platform switching

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

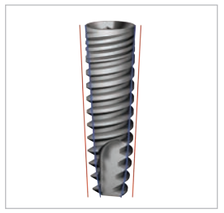
Advantages:
- Great BIC (Bone Implant Contact) in the cortical part
- Large surface area
- Improved stress distribution
- Reduces pressure on cortical bone
- Less crestal resorption
- Long-term esthetic appearance



IMPLANT BODY AND CORE

Design Features:
- Tapered body and core
- Osteotome like condensing body

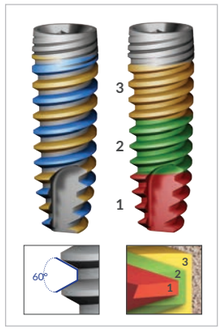
Advantages:
- Smooth and gentle bone penetration
- High primary stability
- High bone condensation properties



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)

* Do not use I.C.E. implants with: wide healing abutments (HSD5-3, HSD5-5, HSD6-5, HSD6-3), wide abutments (TLAB5, TLAB6, TLAD5, TLAD6, TLAD5-15) and wide analogs (IA5 and IA6).

** ICE implants with Ø4.2, Ø4.65 and Ø5.3 in lengths 10 mm and longer.

*** ICE implants with Ø4.2, Ø4.65 and Ø5.3 in lengths 6 and 8 mm have micro threads with 2 split starts.

**** Except 3.7N – Double threads 2X2.2 mm.

Note: The illustration shows ICE implant Ø4.2 / 13 mm.

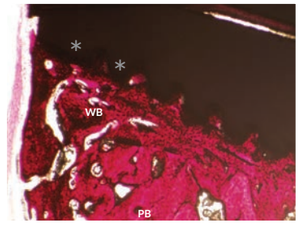
Histological Studies

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

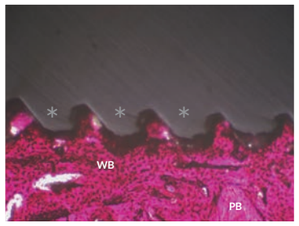
3 weeks after implantation



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

2. Coronal area
(Magnification: x 100)

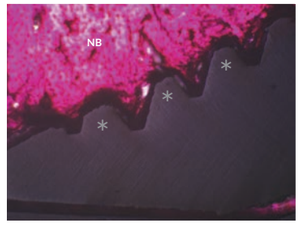
3 weeks after implantation



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 (*).

* 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

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.

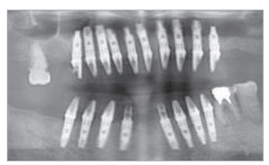
Clinical Advantages

- Provides the best results in the simplest and most complicated cases for all bone types
- Achieves very high primary stability, due to its excellent bone condensing ability
- Allows smaller osteotomy in bone types lll and IV
- Ideal for lower arch immediate implantation and immediate loading

The I.C.E. features a perfect balance between high primary stability and gentleness to the bone. The trapezoid shape of the threads and their variable design throughout the implant body provides a strong retention and grip of the implant to the bone. Additionally the body of the implant is tapered and acts as an osteotome which provides the implant with significant penetration ability during implantation. All of these qualities make the I.C.E. the most suitable implant for immediate implantation and immediate loading.

A case of immediate implantation and immediate loading of implants in the mandibula, on the day of the surgery

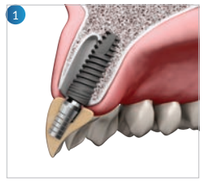
Immediate loading



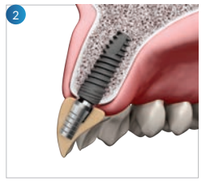
Excellent success rate and bone stability after 2 years

- 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.



Day of surgery -Immediate implantation and loading



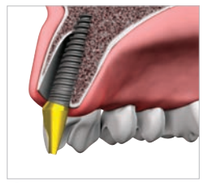
After 6 months - Long-term stability and esthetic appearance

- Ideal For Use In Esthetic Areas

The advanced, innovative coronal part of the I.C.E. demonstrates some of the highest BIC rates and helps preserve the tissues supporting the implant. As a result, a dense, stable bone grip is formed around the implant, which ensures an impressive short and long term aesthetic result. These properties make the I.C.E. implant ideal for cases of immediate implantation and immediate loading in the aesthetic areas. The below images show a case where I.C.E. Ø3.75/11.5 mm was immediately implanted and loaded after the extraction of an anterior tooth:

1 After the extraction, drill according to the required drill protocol as indicated on page 6

2 Insert the implant throughout the entire length of the prepared site until it reaches final depth



3 Form immediate loading with the appropriate abutment

4 Due to missing bone volume in the maxilla, a bovine bone augmentation was also performed

5 Perform tooth restoration at the day of the surgery

- Unique 6 mm short implant
  - Ideal for clinical procedures performed in proximity to the alveolar nerve
  - Enables to prevent sinus lift surgery or vertical bone augmentation

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

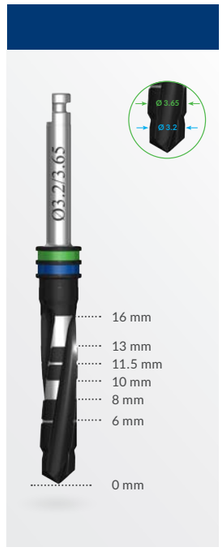
Due to the unique trapezoid-base shape, variable threads design, the tapered body and the ability to penetrate smaller osteotomy, the I.C.E. provides very high primary stability in bone type III and IV.

Caution!
With any insertion tool, avoid over-tightening the implant. Over-tightening may compromise the integrity of internal connection and over-compress the surrounding bone, compromising osseointegration. It is recommended to place the implant using torque lower than 50 Ncm.

dICE™ Drilling Sequence

Step Drilling Sequence

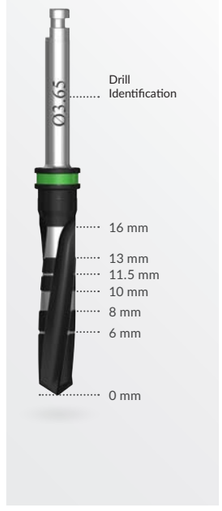
Ø Diameter	Soft Bone Type IV	Medium bone Type II&III	Hard bone Type I
Ø 3.7N	2.0 2.0/2.4	2.0 2.4/2.8 2.8/3.2	2.0 2.4/2.8 2.8/3.2 3.2/3.65 Cortical
Ø 3.75	2.0 2.4/2.8	2.0 2.4/2.8 2.8/3.2	2.0 2.4/2.8 2.8/3.2 3.2/3.65 Cortical
Ø 4.2	2.0 2.4/2.8 2.8/3.2	2.0 2.4/2.8 3.2/3.65	2.0 2.4/2.8 3.2/3.65 3.65/4.1 Cortical
Ø 4.65	2.0 2.4/2.8 3.2/3.65	2.0 2.4/2.8 3.2/3.65 3.65/4.1	2.0 2.4/2.8 3.2/3.65 3.65/4.1 4.1/4.5 Cortical
Ø 5.3	2.0 2.4/2.8 3.2/3.65 3.65/4.1	2.0 2.4/2.8 3.2/3.65 3.65/4.1 4.5/4.8	2.0 2.4/2.8 3.2/3.65 3.65/4.1 4.5/4.8 4.8/5.2 Cortical



Cortical – Drill through cortical plate with the larger diameter

Straight Drilling Sequence

Ø Diameter	Soft bone Type IV	Medium bone Type II&III	Hard bone Type I
Ø 3.7N	2.0 2.4*	2.0 2.8 3.2*	2.0 2.8 3.2* 3.65 Cortical
Ø 3.75	2.0 2.4 2.8*	2.0 2.8 3.2*	2.0 2.8 3.2* 3.65 Cortical
Ø 4.2	2.0 2.8 3.2*	2.0 2.8 3.2 3.65*	2.0 2.8 3.2 3.65* 4.1 Cortical
Ø 4.65	2.0 2.8 3.2 3.65*	2.0 2.8 3.2 3.65 4.1*	2.0 2.8 3.2 3.65 4.1* 4.5 Cortical
Ø 5.3	2.0 2.8 3.2 3.65 4.1*	2.0 2.8 3.2 3.65 4.1 4.5 4.8*	2.0 2.8 3.2 3.65 4.1 4.5 4.8* 5.2 Cortical

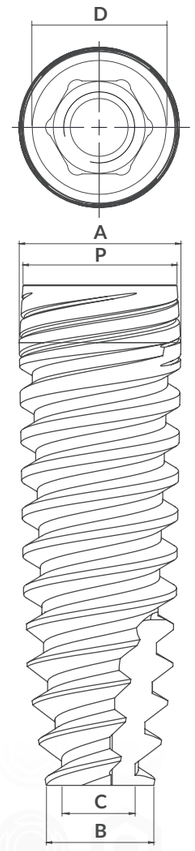


*3mm shorter than implant's length. Note that drill can be replaced by corresponding step drill, throughout entire implant's length. See step protocol

Cortical - Drill through cortical plate

Ordering Information

Ø Diameter	Length	Ref. No.	Dimensions A	B	C	D	P
Ø 3.7N 	10 mm	1000	Ø 3.7	Ø 2.2	Ø 1	Ø 3.5	Ø 3.7
	11.5 mm	1001	Ø 3.7	Ø 2.2	Ø 1	Ø 3.5	Ø 3.7
	13 mm	1003	Ø 3.7	Ø 2.2	Ø 1	Ø 3.5	Ø 3.7
Ø 3.75 	8 mm	1018	Ø 3.75	Ø 2.6	Ø 1.6	Ø 3.5	Ø 3.75
	10 mm	1010	Ø 3.75	Ø 2.6	Ø 1.6	Ø 3.5	Ø 3.75
	11.5 mm	1011	Ø 3.75	Ø 2.6	Ø 1.6	Ø 3.5	Ø 3.75
	13 mm	1013	Ø 3.75	Ø 2.6	Ø 1.6	Ø 3.5	Ø 3.75
	16 mm	1016	Ø 3.75	Ø 2.6	Ø 1.6	Ø 3.5	Ø 3.75
Ø 4.2 	6 mm	1056	Ø 4.2	Ø 2.7	Ø 2.7	Ø 3.5	Ø 4.2
	8 mm	1028	Ø 4.2	Ø 2.8	Ø 1.8	Ø 3.5	Ø 4.2
	10 mm	1020	Ø 4.2	Ø 2.8	Ø 1.8	Ø 3.5	Ø 4
	11.5 mm	1021	Ø 4.2	Ø 2.8	Ø 1.8	Ø 3.5	Ø 4
	13 mm	1023	Ø 4.2	Ø 2.8	Ø 1.8	Ø 3.5	Ø 4
	16 mm	1026	Ø 4.2	Ø 2.8	Ø 1.8	Ø 3.5	Ø 4
Ø 4.65 	6 mm	1036	Ø 4.65	Ø 2.9	Ø 2.9	Ø 3.5	Ø 4.65
	8 mm	1038	Ø 4.65	Ø 3	Ø 2	Ø 3.5	Ø 4.65
	10 mm	1030	Ø 4.65	Ø 3	Ø 2	Ø 3.5	Ø 4.45
	11.5 mm	1031	Ø 4.65	Ø 3	Ø 2	Ø 3.5	Ø 4.45
	13 mm	1033	Ø 4.65	Ø 3	Ø 2	Ø 3.5	Ø 4.45
Ø 5.3 	6 mm	1046	Ø 5.3	Ø 3.8	Ø 3.8	Ø 3.5	Ø 5.3
	8 mm	1048	Ø 5.3	Ø 3.45	Ø 2.45	Ø 3.5	Ø 5.3
	10 mm	1040	Ø 5.3	Ø 3.45	Ø 2.45	Ø 3.5	Ø 5.1
	11.5 mm	1041	Ø 5.3	Ø 3.45	Ø 2.45	Ø 3.5	Ø 5.1
	13 mm	1043	Ø 5.3	Ø 3.45	Ø 2.45	Ø 3.5	Ø 5.1



IH - Internl Hex

OUR WARRANTY – YOUR PEACE OF MIND

Alpha-Bio Tec's high quality products meet strict international standards.
This is why we can provide you with a Lifetime Warranty for our wide range of implants. In any case of a defect in the product, implant rejection, fracture or contamination of the product, subject to filing a complaint report, Alpha-Bio Tec shall replace the defective merchandise.

Warranty:
Alpha-Bio Tec warrants that all implants will be free of defects in materials and/or workmanship. This warranty applies to the original purchaser only. There are no warranties,
express or implied, except this warranty, which is given in lieu of any other warranties, express or implied, including any implied warranty of fitness for a particular purpose.

Important - Read instructions before use.
A complaint report is available at Alpha-Bio Tec's customer service and will be sent upon demand.

Alpha-Bio Tec's products are cleared for marketing in the USA* and are CE-marked in accordance with the Council Directive 93/42/EEC.
Alpha-Bio Tec's complies with EN ISO 13485:2016. Product availability may vary between countries.

Check our website www.alpha-bio.net for the most updated brochure version