





The Original Spiral Implant



About Alpha-Bio TEC.

For over 25 years Alpha-Bio Tec has been a leader in developing, manufacturing and marketing implants, prosthetics parts, biomaterials and a variety of dental surgical instrumentation.

Alpha-Bio Tec believes in making implantology simple, while manufacturing the highest quality products for the global market and providing customers with the best service possible... Simplantology!

Originality and Innovation

After the SPI was launched, the uniquely shaped Spiral Implant was met with suspicion. Today, more than 10 years after, the SPI is the most widely used implant of Alpha-Bio Tec and has become a role model in the implantology market.

The SPI is a tapered internal hex implant with a unique combination of design features that enable easy insertion and very high initial stability. The unique shape of the implant body and its variable thread design $(double\ thread\ 2x2.4\ mm)\ equip\ it\ with\ some\ exceptional\ abilities\ such\ as\ the\ ability\ to\ change\ direction\ during$ placement and a notable success rate.

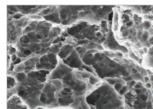


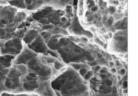
Implant surface process:

- 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







SEM of surface

Histology after 2 months



Design Features:

- Extremely precise internal hex
- One platform for all diameters

Advantages:

- Perfect implant-abutment connection
- Simple restoration process



Design Features:

- Micro rings*
- Bone platform shifting
- Rough surface to the top
- Threads reaching the top of the implant

Advantages:

- Greater surface area
- Prevention of alveolar crest cortical bone resorption
- Better load distribution
- Decreased crestal stress

IMPLANT BODY AND CORE

Design Features:

- Tapered body
- Tapered core more pronounced than the threads
- Osteotome like condensing body

Advantages:

- Bone condensing
- Primary stabilization
- Easy insertion

IMPLANT THREADS

Design Features:

- Double thread design with pitch 2.4
- Wide thread step
- Threads increase in the apical direction
- Variable threads design: o Coronal - thicker square threads o Middle – thinner square threads

Advantages:

- Easy insertion
- High primary stability

o Apical - V threads

- Bone condensing
- Self drilling
- Self tapping

APICAL PART

- **Design Features:** • Sharp and deep threads
- Narrow core
- Apical blades
- Straight apical border
- Condensing taper

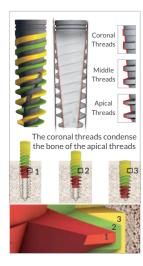
Advantages:

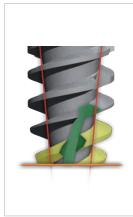
- Self tapping
- Self drilling
- Easy insertion
- Helps prevent damage to anatomical structures
- Enables the implant to penetrate small diameter prepared sites

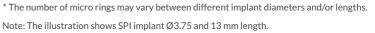














Clinical Advantages

- Bone condensing properties and very high primary stability
- Self-directing during insertion
- Enables the changing of direction for optimal restorative position
- Enables a smaller osteotomy, which results 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

Minor Changes in Parallelism

The unique self drilling capability of the SPI implant makes it possible to change the direction of the implant during placement. This helps achieve parallelism between implants and optimize implant placement. Implant redirection is simple - rotate it backwards 2-3 turns and then insert it into the desired position.



Begin inserting the implant into the desired position



Continue the insertion until the implant is fully seated in the desired position

Initial Stability in Soft bone and After Extraction

The implant's ability to achieve very high primary stability in minimal bone space and after extraction, is desirable in most clinical situations. The unique SPI implant core, thread-design and apical part allow it to be anchored and stabilized in very soft bone and after a continuous cextraction, due to its ability to penetrate prepared sites that are much narrower in diameter than those required for regular implants.

STABILIZATION AFTER EXTRACTION



Drill 2-3mm apically to the extraction Begin inserting the implant into the socket and continue drilling according to the drill protocol

prepared site



Continue inserting the implant to the final depth. Bone augmentation may be followed immediately if indicated



Place the cover screw and

STABILIZATION IN SOFT BONE



Drill using the 2mm laser drill



If the cortical bone is hard, you can use this drill as a countersink

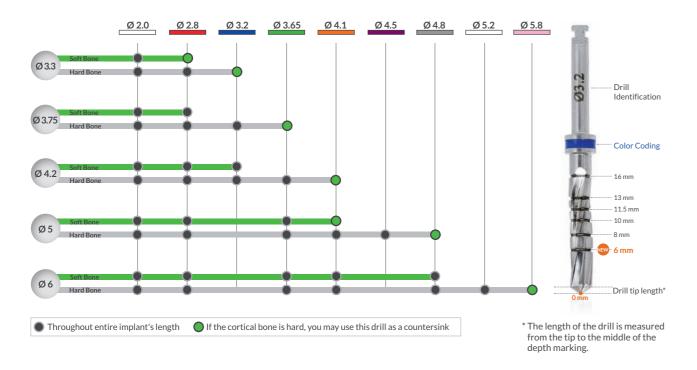


Begin inserting the implant into the prepared site until it achieves sufficient retention and stability





Drill Protocol

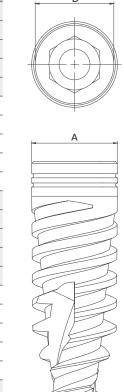


Important:

- $\bullet \ \ \text{In cases of extremely hard bone it is recommended to make adjustments to the specific site}.$
- The drill tip length should be considered when preparing the osteotomy.
- While the protocol is recommended for most clinical cases, additional professional consideration may be required in specific cases.

Ordering Information and Dimensions

| Diameter | Lawath | Def No | Dimensions | | | |
|----------|---------|----------|------------|--------|--------|--------|
| | Length | Ref. No. | Α | В | С | D |
| Ø 3.3 | 8 mm | 1308 | Ø 3.7 | Ø 2.55 | Ø 1.55 | Ø 3.5 |
| MANAM | 10 mm | 1300 | Ø 3.7 | Ø 2.55 | Ø 1.55 | Ø 3.5 |
| | 11.5 mm | 1301 | Ø 3.7 | Ø 2.55 | Ø 1.55 | Ø 3.5 |
| | 13 mm | 1303 | Ø 3.7 | Ø 2.55 | Ø 1.55 | Ø 3.5 |
| | 16 mm | 1306 | Ø 3.7 | Ø 2.55 | Ø 1.55 | Ø 3.5 |
| Ø 3.75 | 8 mm | 1358 | Ø 3.85 | Ø 2.9 | Ø2 | Ø 3.5 |
| | 10 mm | 1350 | Ø 3.85 | Ø 2.9 | Ø2 | Ø 3.5 |
| | 11.5 mm | 1351 | Ø 3.85 | Ø 2.9 | Ø2 | Ø 3.5 |
| | 13 mm | 1353 | Ø 3.85 | Ø 2.9 | Ø2 | Ø 3.5 |
| | 16 mm | 1356 | Ø 3.85 | Ø 2.9 | Ø2 | Ø 3.5 |
| Ø 4.2 | 8 mm | 1338 | Ø 4.2 | Ø3 | Ø 2.1 | Ø 3.85 |
| | 10 mm | 1330 | Ø 4.2 | Ø3 | Ø 2.1 | Ø 3.85 |
| | 11.5 mm | 1331 | Ø 4.2 | Ø3 | Ø 2.1 | Ø 3.85 |
| | 13 mm | 1333 | Ø 4.2 | Ø3 | Ø 2.1 | Ø 3.85 |
| | 16 mm | 1336 | Ø 4.2 | Ø3 | Ø 2.1 | Ø 3.85 |
| Ø5 | 8 mm | 1348 | Ø 4.95 | Ø 3.3 | Ø 2.6 | Ø 3.85 |
| | 10 mm | 1340 | Ø 4.95 | Ø 3.3 | Ø 2.6 | Ø 3.85 |
| | 11.5 mm | 1341 | Ø 4.95 | Ø 3.3 | Ø 2.6 | Ø 3.85 |
| | 13 mm | 1343 | Ø 4.95 | Ø 3.3 | Ø 2.6 | Ø 3.85 |
| | 16 mm | 1346 | Ø 4.95 | Ø 3.3 | Ø 2.6 | Ø 3.85 |
| Ø 6 | 8 mm | 1368 | Ø 5.95 | Ø 4.6 | Ø 3.35 | Ø 3.85 |
| | 10 mm | 1360 | Ø 5.95 | Ø 4.6 | Ø 3.45 | Ø 3.85 |
| | 11.5 mm | 1361 | Ø 5.95 | Ø 4.6 | Ø 3.45 | Ø 3.85 |
| | 13 mm | 1363 | Ø 5.95 | Ø 4.6 | Ø 3.45 | Ø 3.85 |

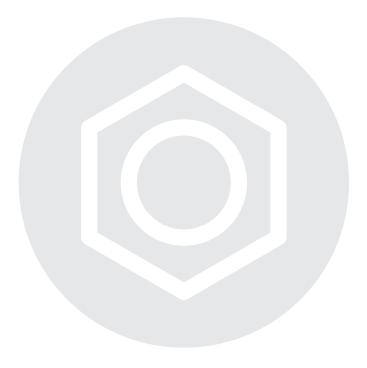




- Achieves very high primary stability
- Enables the changing of direction during placement
- Can penetrate smaller diameter prepared sites
- Ideal for immediate loading and immediate implantation
- Ideal for soft bone











Smart Implantology Solutions 💿 🕒 🍥



WARRANTY OUR WARRANTY - YOUR PEACE OF MIND

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

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