ULT™

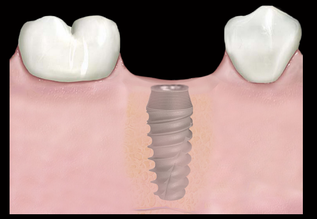
ULTIMATE PRECISION IMPLANT

DITRON DENTAL USA

BUT QUALITY OF WORK CAN BE EXPECTED ONLY THROUGH PERSONAL SATISFACTION, DEDICATION AND ENJOYMENT. IN OUR PROFESSION, PRECISION AND PERFECTION ARE NOT A DISPENSABLE LUXURY, BUT A SIMPLE NECESSITY

NIKLAUS WIRTH

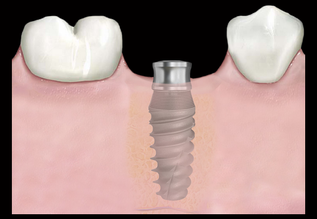
IMPLANT PROGRESSIONS OVER TIME



2-STAGE SURGERY

Since the beginning of mankind, humans have used dental implants in one form or another to replace missing teeth.

The 1st generation of root form dental implants were introduced to North America in 1982. These 1st generation dental implants followed very conservative protocols with frequent contraindications. They were placed by high-end oral & maxillofacial surgeons utilizing a 2-Stage surgical protocol that required long healing times to ensure that the dental implants were osseointegrated. The restorative options for the patients were limited.



1-STAGE SURGERY

The 2nd generation of dental implants were influenced by a market evolution to a wider segment of the population. This led to an increase in the placement of dental implants by general dentists. This influx of clinical cases required more simple and affordable dental implant solutions.

In addition, a 1-Stage surgical protocol was adopted often resulting in the immediate placement of dental implants into an extraction site. New dental implant designs coupled with enhanced surface treatments decreased the healing times required to achieve osseointegration.

IMMEDIATE LOAD

The ULT™ dental implant was designed as a 3rd generation dental implant system, providing a unique combination of outstanding precision with unequaled clinical versatility. The system includes a variety of dental implant diameters and lengths together with expansive restorative solutions from a single tooth to an All-On-4® restoration.

The 3rd generation dental implant designs and enhanced surface treatments allow dentists to immediately load the dental implants following placement.

WHY DITRON DENTAL USA?

VERSATILITY FROM START TO FINISH

PRECISION BUILT IN

Ditron Group, a precision machining world leader and the parent company for Ditron Dental and Ditron Dental USA was established in Israel in 1968.

Ditron Dental is founded on the basis of more than 50 years of experience in the design, production and delivery of ultra-precise mission critical products for the aerospace, aeronautical, automotive and Medical Device industries.

Our products have been installed in some of the most extreme and challenging environments in which failure is unacceptable, including Tesla, Daimler, Jaguar, Ferrari F-1, Robert Bosch Corp, BMW and Mercedes-Benz. With state-of-the-art technology and in-depth process control, we attain production at single micron level accuracies and have been one of the leading companies in the design, production and JIT "Just in Time" delivery of ultra-precise mission critical products.

COMMITMENT TO QUALITY & SAFETY

We believe a multi-disciplinary approach is the best catalyst for innovation and have teamed engineers, micro-machining specialists and top-notch clinicians to drive our research and development of high-end dental implant-based solutions.

Ditron Dental's ULT™ Ultimate Precision Dental Implant System offers outstanding simplicity, reliable function and exceptional flexibility. This allows you to deliver your patients high-quality, long lasting and esthetic restorations.

Our goal is to allow the reconstruction of the teeth as close as possible to the natural dentition, optimizing the long-term success of the dental implant system. We provide patients with a safe and reliable solution to improve their well-being and quality of life, both functionally and esthetically.

INSPECTION & CERTIFICATION

From raw materials to clean room packaging, all dental implants, prosthetic components and instruments undergo a comprehensive internal testing and inspection process. The testing includes fatigue, biocompatibility, pull-out and surface validation. This advanced quality assurance system aims to assure a Zero-PPM "Zero Defects per Million Parts". Outstanding precision and exceptional quality are an essential part of our corporate DNA.

The dental implants, prosthetic components and instruments are mechanically washed and disinfected and then sent to our ISO 14644-1 "Class 7" compliant cleanroom facilities for packaging. The cleanroom has particle counts of less than 1 per million/m^3.

Ditron Dental is certified under EN ISO 9001:2008, SN EN ISO 13485:2012 MDD 93/42/EEC Annex II and is authorized to use the CE mark on all Ditron Dental products. All products are 510 (k) cleared by the FDA.

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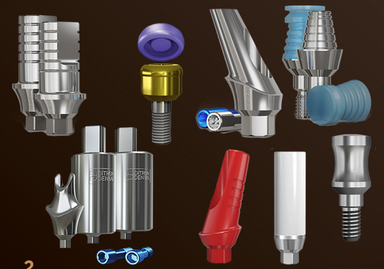


2

DITRON DENTAL USA PROVIDES A LIFETIME WARRANTY FOR ALL ITS DENTAL IMPLANTS AND PROSTHETIC COMPONENTS WHEN USED IN ACCORDANCE WITH THE SUPPLIED INSTRUCTIONS FOR USE (IFU) AND THE COMPANY'S PROTOCOLS.

1 SURGICAL KITS

2 PROSTHETIC COMPONENTS

3 ULT™ DENTAL IMPLANTS

3

MAKE OUR PRECISION **YOURS**

ULT™

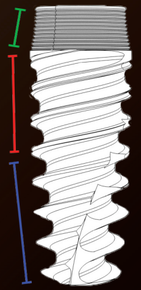
FEATURES & BENEFITS

ULT™ ULTIMATE PRECISION IMPLANT

The ULT™ Ultimate Precision Dental Implant System features a patented Reverse Concave Neck (RCN) with micro-threads that favor an a-traumatic dental implant-bone contact that resists axial loads.

This decreases the pressure on the cortical bone while avoiding vascular compression that preserves the peri-implant marginal bone and soft-tissue.

The dental implant system features an internal hexagon connection, the most widely used in the marketplace, eliminating the need to learn something new.

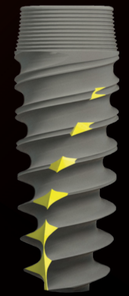


IMPLANT PROFILE

The ULT™ micro-macro geometry provides a uniform dental implant-bone contact with excellent initial stability.

The truncated-cone profile reproduces the root-form morphology of the missing tooth root that together with the convergent coronal taper allow greater flexibility for the dental implant placement.

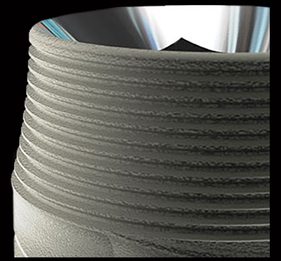
The dental implants are blasted with Al_2O_3 and double thermally acid-etched, followed by high purity cleaning procedures. This allows Ditron Dental to achieve superior EDS and XPS results.

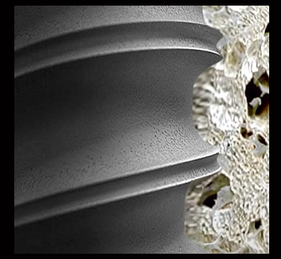


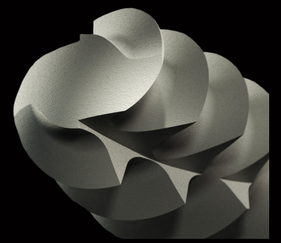
HELICAL APICO-CORONAL SLOTS

The ULT™ dental implant slots together with the characteristics of the implant body, the thread inclination and bone type allow for a reduced diameter osteotomy with the capacity for self-drilling and self-tapping. This preserves bone and reduces the resistance to dental implant insertion.

The apico-coronal slots allow the collection of blood and bone fragments from the osteotomy preparation. These materials can form a scaffold or matrix to assist with osteo-conduction and new bone formation.







MICRO THREADS

The micro-threads on the ULT™ dental implant neck apply biomechanical stimulation to the cortical bone, stimulate bone tropism and enhance the speed and quality of osseointegration.

They also increase the ability of the dental implant to resist axial loads while providing mechanical stimulus that helps preserve the peri-implant marginal bone and soft tissue.

PROGRESSIVE THREADS

The threads with the concave profile have an apical-coronal incremental thickness, Double Stressless Sharp Thread (DSST) that together with the descending concave profile between the threads, generates a gentle and progressive horizontal and vertical bone compaction.

This preserves the vascularity of the osteotomy while maintaining the peri-implant marginal bone and soft-tissue.

CUTTING APEX EDGE

Depending on the bone type and quality, the deep and sharp apical blades with a progressive thickness add a self-drilling and self-tapping capacity to the ULT™ dental implant.

The rounded apex improves the ease of insertion, allowing mild directional refinement during the initial stages of dental implant insertion.

MOLECULOCK™ & PLATFORM-SWITCHING

The MolecuLock™ biomechanical dental implant-abutment seal is designed to reduce micro-gaps to less than 0.5 microns. This reduced micro-gap is too narrow for bacteria to penetrate.

This effective MolecuLock™ seal, prevents the egress of bacteria. This protects crestal bone and soft tissue from the risks of peri-implantitis ensuring long-term dental implant success with maximum esthetics.

The platform-switching achieved with the ULT™ dental implant-abutment connection, leaves a constant horizontal progressive space that prevents coronal bone resorption and promotes soft-tissue growth.

There is one 2.45 mm dental implant-abutment internal hexagon connection for all diameters simplifying the restorative platform with less parts and pieces to inventory.

WELCOME TO A WORLD OF **PRECISION**

ULT™ IMPLANT SYSTEM

DIAMETERS & LENGTHS

Some believe all dental implants are created equal. We know better.

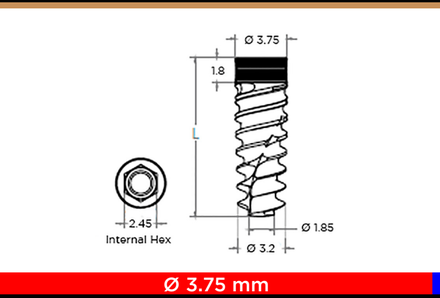
ULT™ ULTIMATE PRECISION IMPLANTS Ø 3.75-6.0 MM

The ULT™ Ultimate Precision Dental Implants are available in 4 diameters (3.75, 4.2, 5.0 and 6.0 mm) and 6 lengths (7.0, 8.0, 10.0, 11.5, 13.0 and 16.0 mm.) Each diameter has its own color coding that corresponds to the diameter of the surgical drills. A sterile Titanium Cover Screw for a 2-Stage surgical procedure is included in each dental implant package.

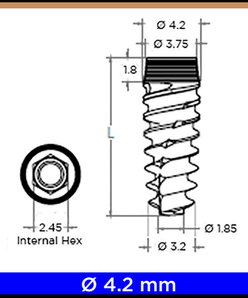
ULT™ IMPLANT SYSTEM DRILL SEQUENCE

BONE TYPE	I & II	III & IV
Ø 3.75 mm	Ø 1.9, 2.0, 2.8 & 3.2 mm	Ø 1.9, 2.0 & 2.8 mm
Ø 4.2 mm	Ø 1.9, 2.0, 2.8, 3.2 & 3.8 mm	Ø 1.9, 2.0, 2.8, & 3.2 mm
Ø 5.0 mm	Ø 1.9, 2.0, 2.8, 3.2, 3.8 & 4.5 mm	Ø 1.9, 2.O, 2.8, 3.2 & 3.8 mm
Ø 6.0 mm	Ø 1.9, 2.0, 2.8, 3.2, 3.8, 4.5, 5.0 & 5.5 mm	Ø 1.9, 2.0, 2.8, 3.2, 3.8, 4.5 & 5.0 mm

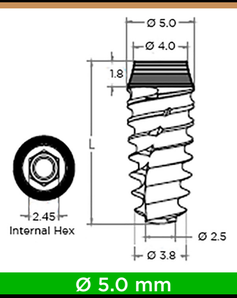
Even though the ULT™ dental implant thread design features the capacity for self-drilling and self-tapping, careful consideration should be used when placing the dental implant in Type I and II bone. A Countersink is recommended if the Type I and II bone drilling sequence protocol is not sufficient to fully seat the dental implant without exceeding the maximum recommended insertion torque of 60 Ncm for dental implant diameters 3.75 mm and above.



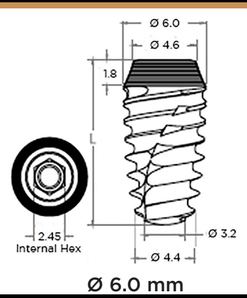
Ø 3.75 mm



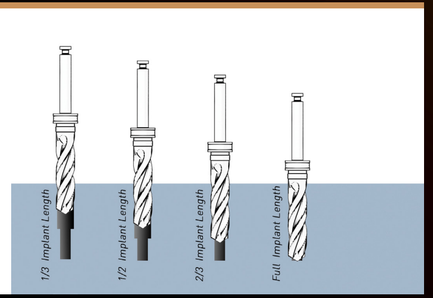
Ø 4.2 mm



Ø 5.0 mm



Ø 6.0 mm



When preparing the site to place an ULT™ dental implant, an additional 1.0 mm must be added to the length of the drill to account for the angled cutting tip. In addition, the depth of the last two drills used in the drilling sequence are limited anywhere from 1/3 to 2/3 the length of the dental implant being placed. The Instructions for Use (IFU) explain this in more detail.

BIOMECHANICAL **EXCELLENCE**

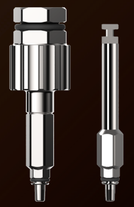
REVOLUTIONARY

INNOVATION

PACKAGING

The ULT™ dental implants are packaged in an ISO “Class 7” Clean Room. The dental implants are packaged in rectangular boxes allowing for convenient storage.

The packaging includes quick identification of the dental implant diameter and length with a color-coded seal on the top of each rectangular box. The back label on the box includes the Implant Type, Catalog Number, Diameter & Length, Batch Code, Manufacture Date, Expiration Date and CE Mark. Each ULT™ dental implant and cover screw are supplied in a sealed vial inside the rectangular box.



INSTRUMENTS

The ULT™ Dental Implant System instrumentation has been simplified to include a Hand and Rachet Driver together with a Motor Driver that can be used for dental implant insertion and both cover screw and healing abutment connections.

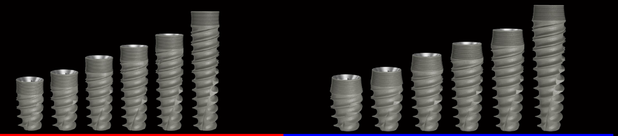
There is a conical 1.25 mm connection at the tip for cover screws and healing abutments with a 2.45 mm connection for the internal hexagon of the ULT™ dental implant. The Hand & Rachet Driver has a visual indicator for the hexagon position. The Hand and Rachet Driver comes in a short (26 mm) and long (29 mm) version. The Motor Driver comes in a short (23 mm) and long (26.5 mm) version.

IMPLANT-ABUTMENT CONNECTION

There is one 2.45 mm dental implant-abutment internal hexagon connection for all ULT™ dental implant diameters and lengths, simplifying the restorative platform with less parts and pieces to inventory.

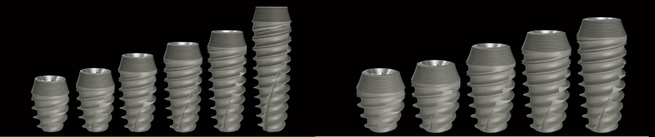
All connections are either engaged or non-engaged and utilize the MolecuLock™ biomechanical dental implant-abutment seal. The abutments vary in diameter from 3.8 to 6.0 mm and in length from 6.0 to 12.5 mm with collar heights ranging from 0.5 to 7.0 mm. There are Healing, Temporary and Overdenture Abutments as well as abutments for Cement, Screw-Retained and Multi-Unit restorations. Impression Copings, Analogs and CAD/CAM Digital Workflow solutions are also available.

ULT™ DENTAL IMPLANTS



Ø 3.75 mm
Length 7, 8, 10, 11.5, 13 & 16 mm

Ø 4.2 mm
Length 7, 8, 10, 11.5, 13 & 16 mm

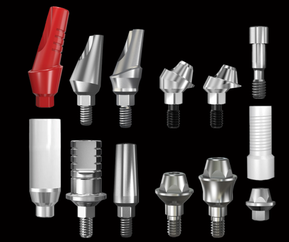


Ø 5.0 mm
Length 7, 8, 10, 11.5, 13 & 16 mm

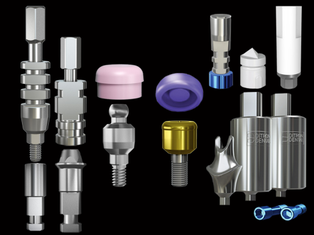
Ø 6.0 mm
Length 7, 8, 10, 11.5 & 13 mm

ABUTMENTS

HEALING &
TEMPORARY ABUTMENTS

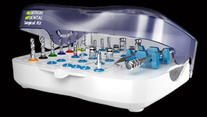


CEMENT, SCREW-RETAINED &
MULTI-UNIT RESTORATIONS



IMPRESSION COPINGS, ANALOGS,
OVERDENTURE & CAD/CAM

SURGICAL KITS

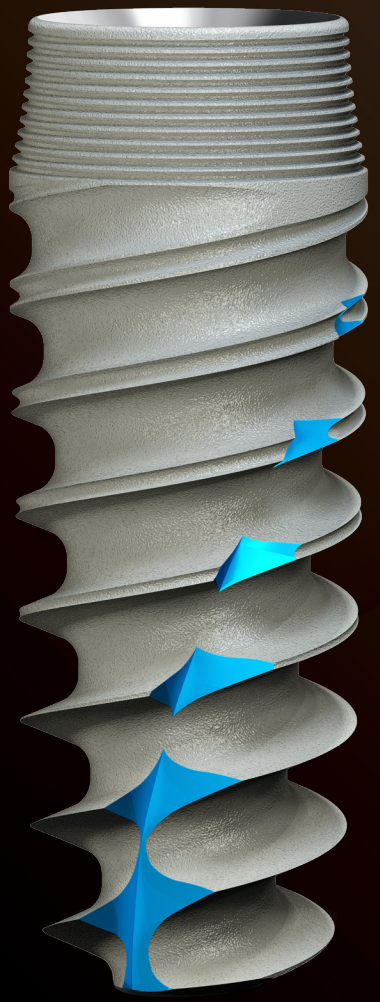


FULL SURGICAL KIT
TWIST DRILLS

D TUBE
INTEGRAL STOPPER DRILLS

SURGICAL TUBE
TWIST DRILLS

STEP INTO OUR WORLD



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