

*SuperLine* & IMPLANTIUM



**Dentium**  
Developed by Clinicians for Clinicians

Specifications are subject to change without prior notice.

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**Dentium Product Introduction**

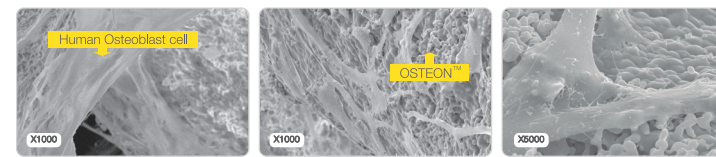
*Two implants with the same surgical solution and one prosthetic platform*

**SuperLine™ & IMPLANTIUM®**

Developed by Clinicians for Clinicians

High potential growth factor carrier thanks to well defined 3 dimensional macro-porous and micro-porous structure

**HA Scaffold (70%) +  $\beta$ -TCP Coating (30%) / 100% synthetic**



In vitro test of OSTEON™



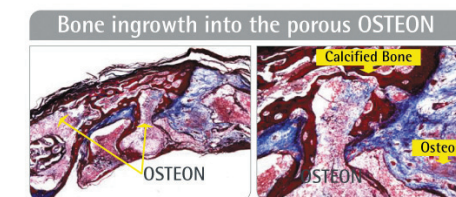
0.25 / 0.5 / 1.0cc with particle size of 3.5–0.5mm, 0.5–1.0mm or 1.0–2.0mm



Syringe Type

OSTEON Lifting: 0.25cc  
OSTEON Sinus: 0.5cc

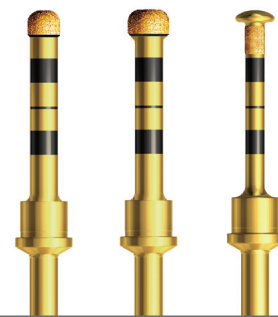
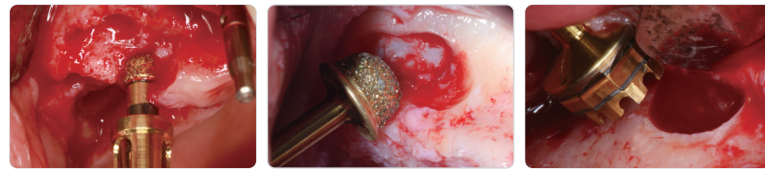
**In vivo test-rabbit calvaria model**



- 4 weeks later in rabbit calvaria.
- New bone was well formed in the pores and around the OSTEON.

# DASK

- Simple & easy access to sinus cavity
- Minimal risk of membrane perforation
- Broad exposure of bony walls with special tools



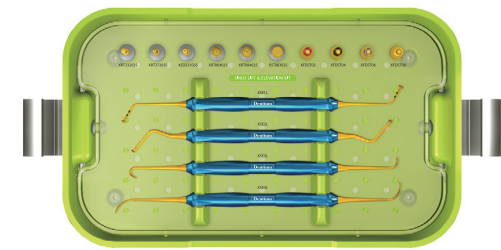
Crestal Approach (Sinus Lifting)



Lateral Approach (Sinus Elevation)



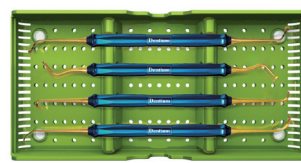
Sinus Elevation Instruments



DASK Kit (Dentium Advanced Sinus Kit)



Sinus Bur Kit



Sinus Kit

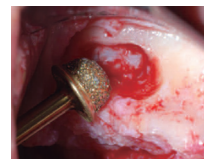
## Clinical Case 1 : Thin-out Technique



Preoperative panoramic view



Postoperative panoramic view



DASK Drill #4 for antrostomy approach onto the lateral wall of the maxilla.



A dome-shaped sinus curette is used first around the bony window for sinus membrane detachment



Implants placed with bone graft filling (OSTEON Sinus GBG0510)



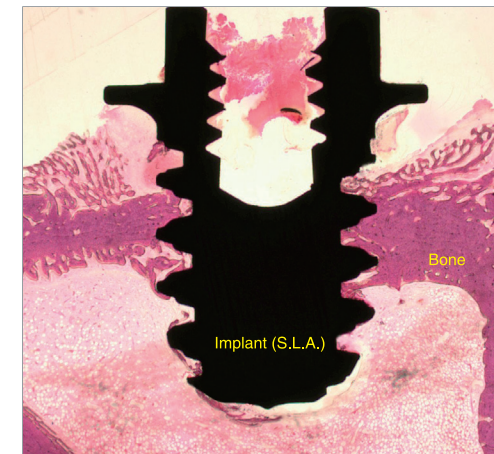
Flaps closed

# S.L.A. Surface

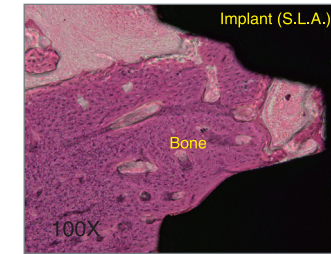
## S.L.A. (Sandblasting with Large grit and Acid etching)

- Higher bone-to-implant contact.
- Very good bone formation on the surface

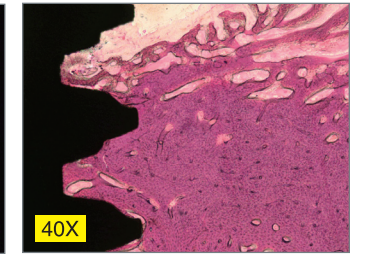
### In vivo test



New bone formation is very good inside each thread.



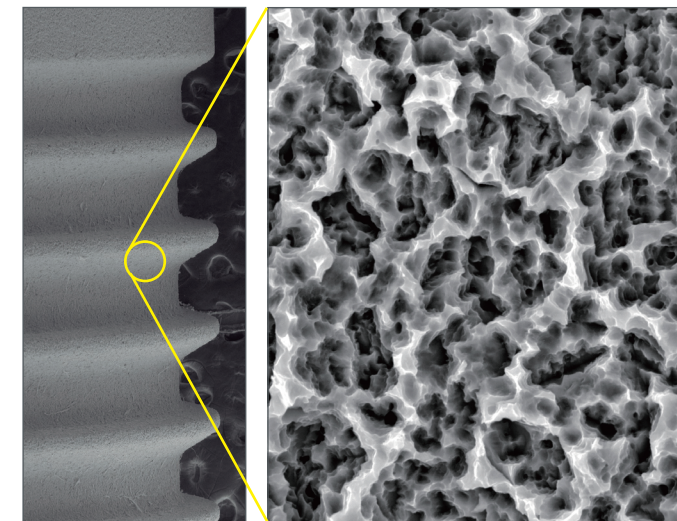
100X



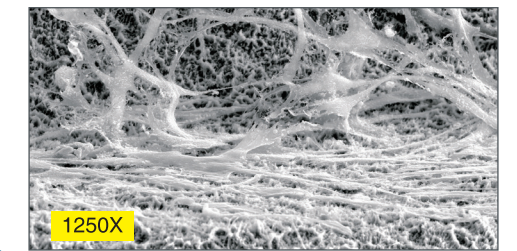
40X

## Human osteoblast

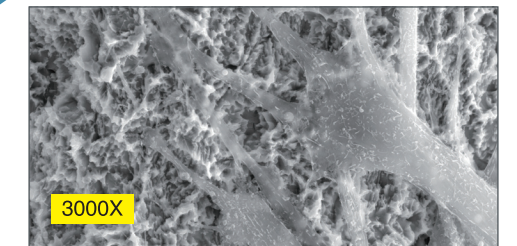
- Well attached and proliferated human osteoblasts



S.L.A. surface

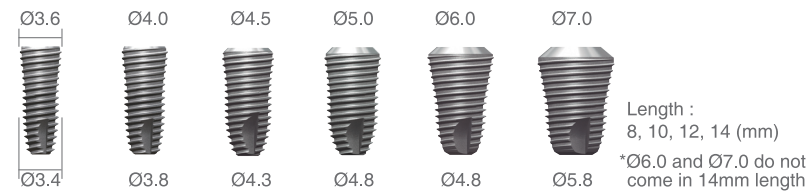


1250X



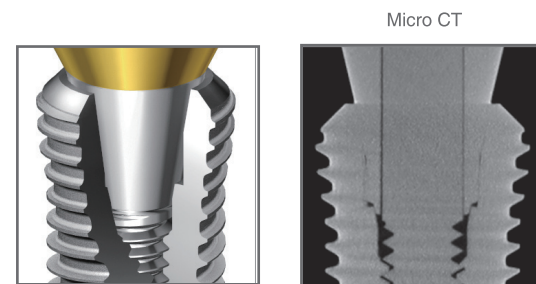
3000X

Cell number 3x104, After 7 days of cell culture



### “Immediate Implantation with Excellent Bone Response”

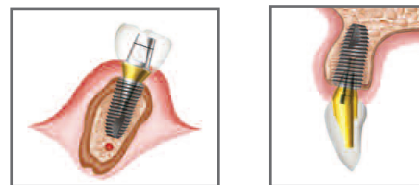
- Higher stabilization in extraction socket
- Early loading in upper posterior with self tapping
- Harmony with anatomy
- Tapered design for sharp & fast insertion



### A Internal Connection

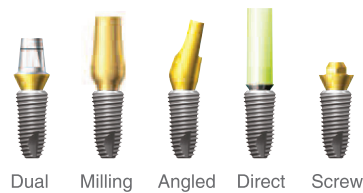
- The conical hex connection between implant and abutment interface ensures hermetic sealing.
- The biologic connection distributes load to the fixture evenly. Therefore it helps minimize micro-movement and marginal bone loss.
- Implant fixture with all kinds of diameters share the same internal hex.

### B Tapered Design



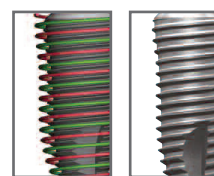
- Tapered load distribution may achieve excellent bone response.
- Tapered design may harmonize with surrounding bone anatomically.
- The large surface area helps provide excellent initial stability with sinus augmentation.

### C Variety of Prosthesis



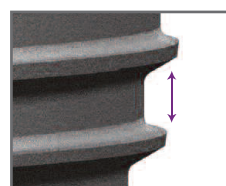
- Offer the best possible solution for patients
- Single abutment connection is used for all implant diameters

### D Double Thread & Thread Height



- Increased thread height helps increase the initial stability.
- Double thread may decrease chair time of implantation

### E Osseointegration



- The greater distance between the threads may promote early osseointegration



Regular Platform

### A Optimal Fixation Threads

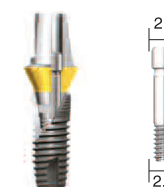
- Synchronized positive neck threads.
- Initial stability & maximum sealing between the cortical bone and fixture owing to the micro threads.
- Optimal fixation threads reduce stress of marginal cortical bone and minimize marginal bone loss.



### B Biological Thread

- Thread platform design creates excellent bone to implant contact.
- Threads charge the bone with ease.
- Self tapping function.

### C Single Platform



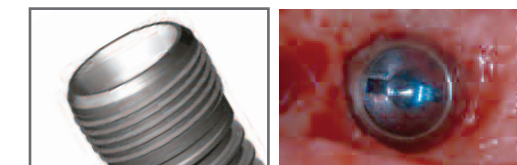
- Single abutment connection is used for all implant diameters.
- One abutment screw fits all abutments and fixture platforms.

### E Abutment Tin-Coating



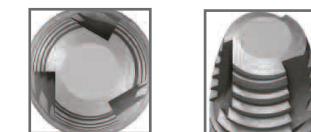
- Esthetic gold color with TiN-coating.

### D Bacteria Resistant Bevel



- The tapered bevel platform design may make bone profiling unnecessary at 1st and/or 2nd surgery.

### F Flat End



- The 3 blade self tapping design minimizes bone destruction.
- Tapered apical shape promotes easier insertion.