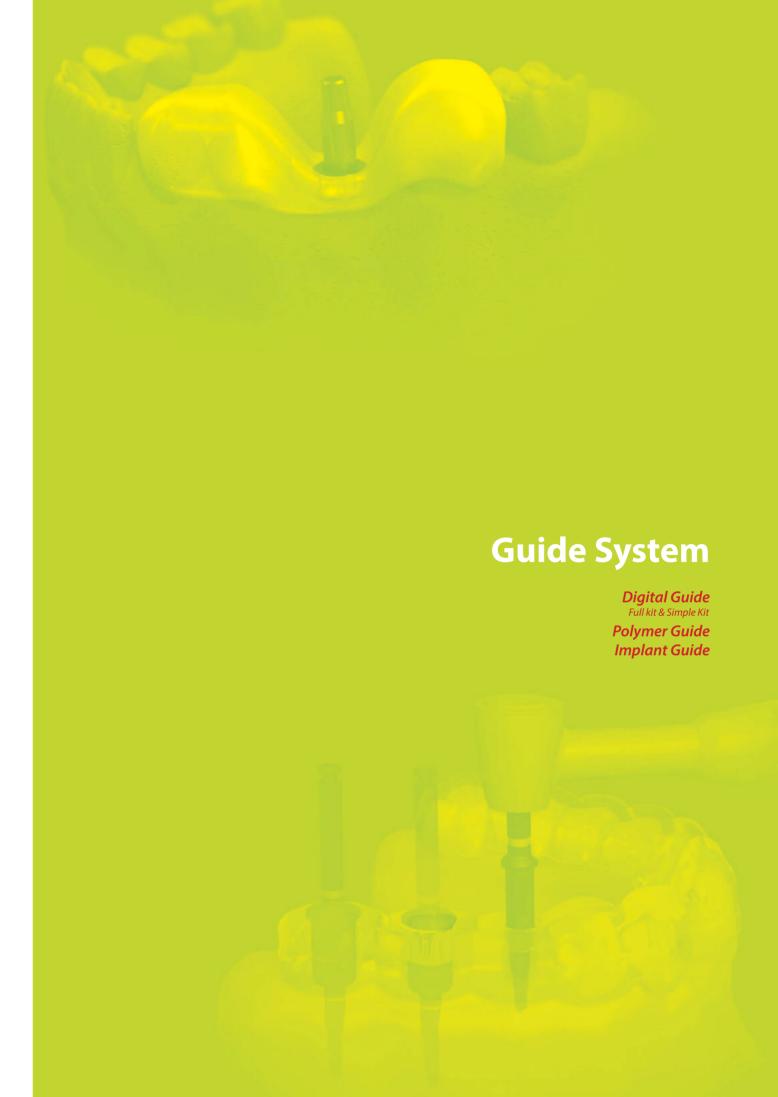


# Dentium Instruments for Total Solution

Catalog & Manual

# Index

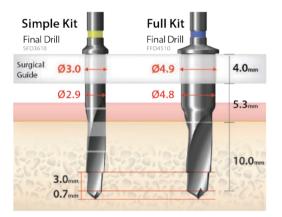
**Guide System Digital Guide** 04 Full Kit Simple Kit **Polymer Guide** 12 **Implant Guide** 14 18 Sinus Kit **Metal Kit RE Kit** 21 **Sinus Instruments DASK** 23 **Osteotome Kit** 28 **Sinus Elevator** 29 **GBR Instruments RS Kit** 31 **Harvest Drill** 36 Others **Help Kit** 39 **Temporary Shell** 46 **White Seal** 48 52 **TN-Brush** 



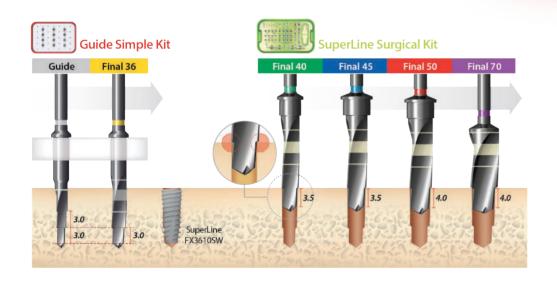
# **Digital Guide**

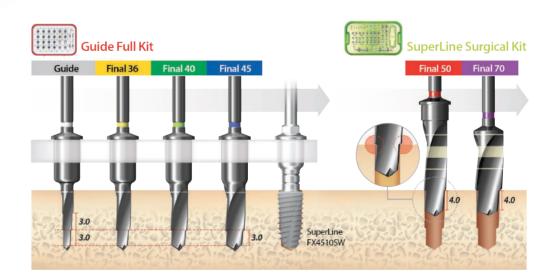
# Simple&accurate digital guided surgery

- Simple Kit or Full kit
- Non-Sleeve, Open Sleeve or Ti-Sleeve
- Enhanced guided function by step drill





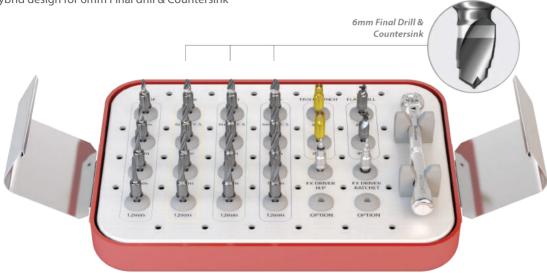


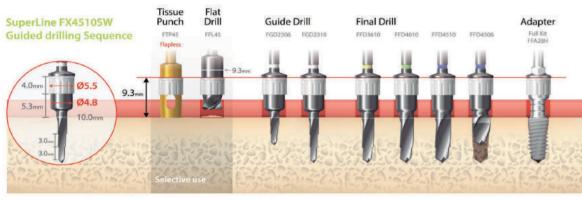


Digital Guide **Dentium Instruments Dentium Instruments** Digital Guide

# **Full Kit**

- For Ø36, Ø40, Ø45 Fixture
- · Hybrid design for 6mm Final drill & Countersink

















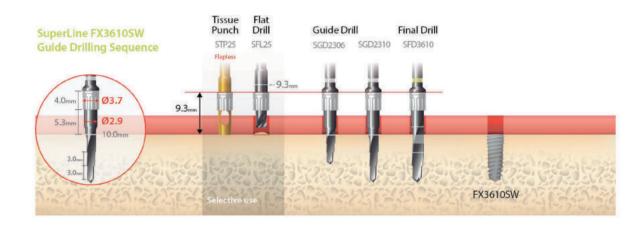


# **Simple Kit**

# Path&Depth Guided

- For Ø36 Fixture
- Ø3.0 Narrow Sleeve













Manual Manual Full Kit Full Kit **Dentium Instruments Dentium** Instruments

## Full Kit / Flapless Surgery (SuperLine FX4510SW Installation)



**Tissue Punch** FTP45 (1000rpm/30~45N·cm with irrigation)



Guide drill with Surgical guide FGD 2306 (1000rpm/30~45N·cm with irrigation)



Guide drill with Surgical guide FGD 2310 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide FFD 3610 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide FFD 4010 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide FFD 4510 (1000rpm/30~45N·cm with irrigation)



Countersink with Surgical guide FFD 4506 (1000rpm/30~45N·cm with irrigation)



Fixture installation with Surgical guide FFA28H SuperLine: FX4510SW(50rpm/70N·cm)



IOS Healing Abutment Connect IOS Healing Abutment & Take digital impression with intraoral scanner



Abutment selection Select Stock abutment or Customized abutment regarding tissue condition and occlusion

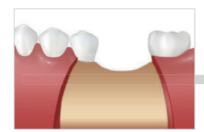


Provisional restoration Stabilize occlusion & Soft tissue



Final prosthesis

# Full Kit / Flap Surgery (SuperLine FX5010SW Installation)



Incision



Guide drill with Surgical guide FGD 2306 (1000rpm/30~45N·cm with irrigation)



Guide drill with Surgical guide FGD 2310 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide FFD 3610 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide FFD 4010 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide FFD 4510 (1000rpm/30~45N·cm with irrigation)



SuperLine Final drill XFD 5010 (1000rpm/30~45N·cm with irrigation) or (50rpm/70N-cm without irrigation)



SuperLine Countersink XCS 5029SW (1000rpm/30~45N·cm without irrigation)



Fixture installation SuperLine: FX5010SW (50rpm/70N·cm)



**IOS Healing Abutment** Connect IOS Healing Abutment & Take digital impression with intraoral scanner



Abutment selection Select Stock abutment or Customized abutment regarding tissue condition and occlusion



**Provisional restoration** Stabilize occlusion & Soft tissue



Final prosthesis

Manual Manual **Dentium Instruments Dentium Instruments** Simple Kit Simple Kit

## Simple Kit / Flapless Surgery (SuperLine FX3610SW Installation)



Tissue Punch (1000rpm/30~45N·cm with irrigation)



Guide drill with Surgical guide SGD 2306 (1000rpm/30~45N·cm with irrigation)



Guide drill with Surgical guide SGD 2310 (1000rpm/30~45N·cm with irrigation)



Final drill with Surgical guide SFD 3610 (1000rpm/30~45N·cm with irrigation)



Fixture installation SuperLine: FX3610SW (50rpm/70N·cm)



IOS Healing Abutment Connect IOS Healing Abutment & Take digital impression with intraoral scanner



Abutment selection Select Stock abutment or Customized abutment regarding tissue condition and occlusion

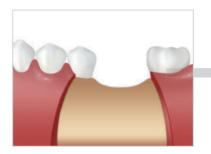


Provisional restoration Stabilize occlusion & Soft tissue



Final prosthesis

# Simple Kit / Flapless Surgery (SuperLine FX4510SW Installation)



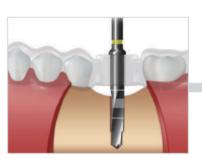
Incision



Guide drill with Surgical guide SGD 2306 (1000rpm/30~45N·cm with irrigation)



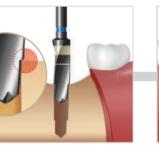
Guide drill with Surgical guide SGD 2310 (1000rpm/30~45N·cm with irrigation)



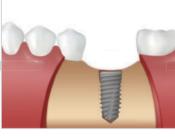
Final drill with Surgical guide SFD 3610 (1000rpm/30~45N·cm with irrigation)



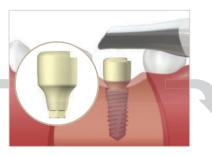
SuperLine Final drill XFD 4329 (1000rpm/30~45N·cm with irrigation) or (50rpm/70N·cm without irrigation)



SuperLine Countersink XCS 4529SW (1000rpm/30~45N·cm without irrigation)



Fixture installation SuperLine: FX4510SW (50rpm/70N·cm)



**IOS Healing Abutment** Connect IOS Healing Abutment & Take digital impression with intraoral scanner



Abutment selection Select Stock abutment or Customized abutment regarding tissue condition and occlusion



Provisional restoration stabilize occlusion & soft tissue



Final prosthesis

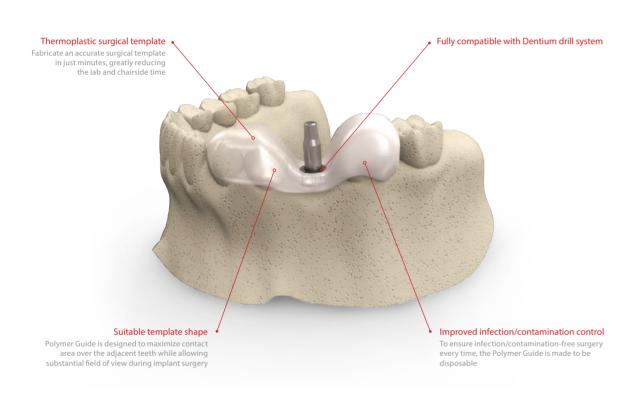
Dentium Instruments Polymer Guide Dentium Instruments Polymer Guide

# **Polymer Guide**

## Thermoplastic Surgical Template for Dental Implant Placement

- Fabricate precise surgical template in just minutes using hot water
- Disposable material to promote control of infection and contamination
- Titanium sleeve is compatible with Dentium Final Drills











a hole in the stone model Insert the Guide Pin

above 6

Soak the Polymer Guide in hot water above 65°C to soften up the material for on stone model

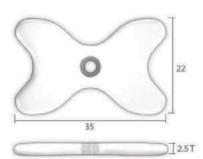


Remove the Guide Pin



Position the Polymer Guide intra-orall for drilling

PGSSK

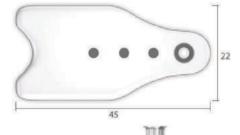




PGSCK

# Single Standard (5ea)

T	Art. No.
2.5	XSG 34 <b>35</b> S



# Cantilever Multi-Ready (5ea)

T	Art. No.
2.5	XSG 34 <b>45</b> C





Dentium Instruments Implant Guide Dentium Instruments Implant Guide

# **Implant Guide Kit**

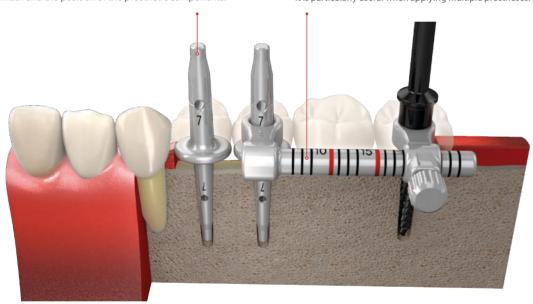
Surgical guide implementing Silicon Spacer, Unique Single Guide pin & Multi Guide

- The Multi Guide is designed to take into consideration the mesiodistal width and drilling position in the edentulous area
- Single guide pins and Spacers are configured based on the average of tooth width



Assist in the implant positioning as well as determining the width and the position of the prosthetic components.

The Multi Guide is adjustable in length and angle to guide the implant position and drilling. It is particularly useful when applying multiple prostheses.







Single Parallel Pin





.

7





Spacer + Guide Drill

Single Parallel Pin + Multi Guide

Final prosthesis



## GIGK

## Guide Drill

Diameter	L	Art. No.
00 c	29	GGD 26 29
Ø2.6	35	GGD 26 35



### Spacer

Width	Art. No.	
5.0	GSP 05	
7.0	GSP 07	
9.0	GSP 09	
11.0	GSP 11	



# Single Guide Pin

Width	Art. No.
4.0 / 5.0	GGP 04 05
6.0 / 7.0	GGP 06 07
8.0 / 9.0	GGP 08 09
10.0 / 11.0	GGP 10 11



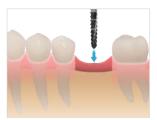
### Multi Guide

1G2
/



Manual **Dentium Instruments** Implant Guide

# Single Case (SuperLine FX5010SW Installation)









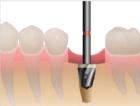
Incision

Spacer + Guide Drill Combination of Guide Drill and Spacer



Single Parallel Pin

Final Drill



Countersink







Fixture placement with Healing Abutment SuperLine

**Dual Abutment Connection** 

Final prosthesis

# Multiple Case (SuperLine Installation)



Spacer + Guide Drill Combination of Guide Drill and Spacer





Multi Guide Application of Tripod and Single Parallel Pin







Fixture placement with Healing Abutment





Final prosthesis

# **Metal Kit**

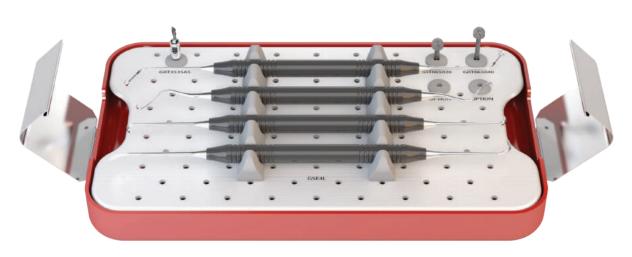
Sinus Kit RE Kit



Dentium Instruments Sius Kit Dentium Instruments Manual Sius Kit

# **Sinus Kit**

Unit: mm, Scale 1:1



# **GSEK**

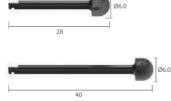
# **Crestal Drill**

Diameter	L	Art. No.
Ø3.5	35	GRT 35 35 AS



# **Lateral Drill**

Diameter	L	Art. No.
Ø6.0	28	GRT 06 50 28
Ø6.0	40	GRT 06 50 40



## Sinus Curette Scale 1:2/mm



# **Crestal approach** (SuperLine+ OSTEON™3 Lifting)



Crestal Drill

After Final drilling, eliminate the residual bone [1mm] using a Crestal Drill at low speed [20~100rpm] until feel a slight drop



Adjust the desired length of drilling with Stopper to prevent unexpected Sinus perforation



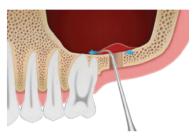
Eliminate the residual bone [1mm] using a Crestal Drill at low speed [20~100rpm] until feel a slight drop



Or eliminate the residual bone [1mm] using [Osteotome] until you feel a slight



**Sinus Curette**Use the dome-shaped sinus curette (GSE 1L) to detach Sinus membrane



Elevate the sinus membrane to create adequate space for graft material



Fill the Sinus cavity with [OSTEON™3 Lifting] graft material



Fill and distribute [OSTEON™3 Lifting]
graft material properly into the Created
space



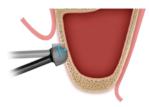
Fixture installation – [SuperLine] into the osteotomy site



Final prosthesis

Manual **Dentium Instruments** Sius Kit **Dentium Instruments** Ridge Expander Kit

# **Lateral approach** (SuperLine+OSTEON™3 Sinus+OSTEON™3 Collagen+Collagen Membrane)



Lateral Drill Thin down the lateral wall with Lateral Drill (Contra-Angle) to reach the Schneiderian membrane



 $Mesio-distally\ with\ a\ gentle\ pressure\ until\ You\ get\ a\ proper\ size\ and\ shape\ of\ window\ for$ bone augmentation





**Sinus Curette** Detach sinus membrane using a domeshape Sinus curette (GSE 1L)



Elevate the sinus membrane to create adequate Space for graft material

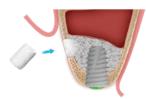




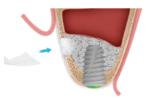
Fill the Sinus cavity with [OSTEON™3 Sinus] graft material



Fixture installation – [SuperLine] into the osteotomy site



Fill into [OSTEON™3 Collagen] into lateral wall



[Collagen Membrane] application



Final prosthesis

# **RE (Ridge Expander) Kit**

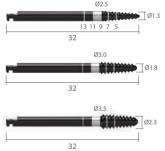
Unit: mm, Scale 1:1



## **GREK**

# Ridge Spreader

Diameter	L	Art. No.	
Ø1.3 / Ø2.5	32	GRS 13 25	
Ø1.8/Ø3.0	32	GRS 18 30	
Ø2.3 / Ø3.5	32	GRS 23 35	



## **Harvest Drill**

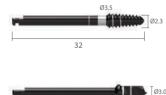
Diameter	L	Art. No.
Ø3.0	29	GHD 30 29

# **Disc Saw**

Diameter	L	Art. No.
Ø8.0	25	GDS 80 25

## **Bone Chisel**

Art. No.	GBC 18 45 13









# **Dentium Advanced Sinus Kit (DASK)**



# **DASK Drills**

**Sinus Instruments** 

DASK

Osteotome Kit Sinus Elevator



Туре	DASK Drill #	Art. No.
	DASK Drill # 1	XRT <b>33</b> 2035
Crestal Approach	DASK Drill # 2	XRT <b>37</b> 2035
	DASK Drill # 3	XED <b>33</b> 1035D
	DASK Drill # 4	XRT <b>06</b> 4025
Lateral Approach	DASK Drill # 5	XRT <b>08</b> 4025
	DASK Drill # 6	XRT <b>08</b> 3025

\* Note: Drill speed 800 to 1,200rpm, 30~45N·cm with irrigation

[ Unit: mm, Scale 1.2 : 1 ]

# **Stoppers** | for XRT332035, XRT372035, XED331035D



[ Unit: mm, Scale 1 : 1 ]

Drilling Depth	L	Art. No.
08	10.6	XFDST 08
06	12.6	XFDST 06
04	14.6	XFDST 04
02	16.6	XFDST 02

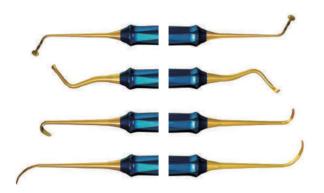
Dentium Instruments DASK Dentium Instruments

### **Sinus Bur Kit**



SDK

## **Sinus Elevation Instruments**



Art. No.	XSE1L
Art. No.	XSE2L
Art. No.	XSE3L
Art. No.	XSE4L

[ Unit: mm, Scale 0.68 : 1 ]

# **Drills for Crestal Approach**



The distance from the alveolar crest to the sinus floor should be measured on x-rays prior to surgery. Site preparation is performed with twist drills in sequence up to 1mm short of the sinus floor. Then DASK Drill #1 or #2 is used and the sinus floor is carefully approached under light apical pressure. When you feel the sinus floor yields, remove the drill. Or partial preparations with DASK Drill #1 or #2 and up-fracture with osteotomes can be performed.

\*The internal irrigation not only provides a cooling effect, but also adds hydraulic pressure to slightly lift the sinus membrane during drilling.



[800~1,200 rpm]

When the sinus cavity is accessed, DASK Drill #3 is introduced and much broader detachment from the sinus floor can be facilitated horizontally with hydraulic pressure thanks to the internal irrigation hole.

DASK Drill #3 can also be used for la teral window approach.

# **Drills for Lateral Approach**



To make a lateral window through the antrostomy (thin-out) approach

\*DASK Drill #4 or #5 is used to prepare a lateral sinus window using light pressure and rotating strokes. The DASK Drill #4 or #5 is designed to minimize the risk of sinus membrane perforation.

To make a lateral window through the wall-off technique

\*DASK Drill #6 is used to cut and detach a bony island like a trephine bur from the lateral wall. Uncontrolled overdrilling may lead to sinus perforation and possible damage to the membrane. External irrigation is necessary when drilling.

DASK

### **DASK Maintenance**

### Sterilization and Instrument Care Procedures

- It is important to use protective clothing and face shield while cleaning contaminated instruments.
- Always wear protective glasses, mask, gloves, etc. for your safety.
- 1. Rinse instruments immediately after use under running tap water (<40° C) for a minimum of one (1) minute to remove all debris including extraneous body uids, bone debris and tissue.
- 2. Soak all instruments immediately after rinsing in an enzymatic cleaning solution \* for 10 to 20 minutes (Do not soak overnight.)
  - \*Follow manufacturer's instructions and observe recommended cleaning solution concentrations (enzymatic detergent with a pH level between 7-10 and temperature not to exceed 40° C). Do not use incompatible cleaning solutions to clean instruments.
- 3. For internal irrigation drills, use a 1mL syringe and a 25 gauge needle to clean the drill irrigation hole with a minimum of 0.2mL of the prepared cleaning solution. Repeat this step two (2) more times for a total of three (3) rinses.
- 4. of the prepared cleaning solution. Repeat this step two (2) more times for a total of three (3) rinses.
- 5. Scrub with a soft brush a minimum of 1 (one) minute to remove any debris from the drill.
- 6. Rinse instruments under running tap water 9<40°C) for a minimum of 1 minute. Use a 1mL syringe and a 25 gauge needle with a minimum of 0.2mL of tap water to forcefully ush inside the drill irrigation hole. Repeat ushing of drill irrigation hole two(2) more times for a total of three (3) ushes.
- 7. Place instruments into an ultrasonic cleaner with neutral detergent\*\*. Keep instruments inside the ultrasonic bath for 15 minutes using a frequency of 25-50 kHz. Ensure multiple instruments placed within the bath remain separated. \*\*Follow manufacturer's instructions and observe recommended neutral detergent solution concentrations (neutral detergent with a pH level between 7-10 and temperature not to exceed 40°C). Do not use incompatible neutral detergent solutions to clean instruments.
- 8. Rinse instruments thoroughly with running tap water(<40°C)for a minimum of 1 (one) minute until all traces of neutral detergent solution are removed. Rinse inside drill irrigation hole using a 1mL syringe and a 25 gauge needle with a minimum of 0.2mL of tap water. Repeat rinsing drill irrigation hole two (2) more times for a total of three (3) rinses.
- 9. Gently wipe instruments with a soft lint-free cloth or place the instruments in a drying cabinet (60°C for less than 10 hours) until fully dry. Blow residual water from drill irrigation hole using a 1mL syringe and a 25 gauge needle. Visually inspect instruments in a well-lit area to ensure they are clean, dry and free of residue.
- 10. a well-lit area to ensure they are clean, dry and free of residue.
- 11. Clean instrument trays with a germicidal cleaner prior to returning instruments into Kit.
- 12. Always check for damage or corrosion after rinsing and dryin

Manual Manual **Dentium Instruments** DASK **Dentium Instruments** DASK

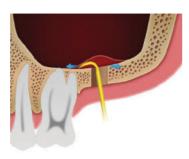
## Crestal Approach (Sinus Lifting) (SuperLine+OSTEON™3 Lifting)



**DASK Drill** After Ø3.8 Final drilling, eliminate the residual bone (1mm) using a DASK Drill #1 or #2 (in hard bone) until you feel a slight drop



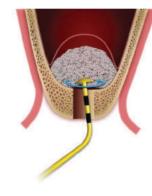
**Sinus Elevation Instruments** Detach the sinus membrane to create adequate space for graft material using dome-shaped curette



Elevate the Sinus membrane to create adequate space for graft material



Fill the sinus cavity with [OSTEON™3 Lifting] graft material



Fill and distribute [OSTEON™3 Lifting] graft material properly into the Created space



Fixture installation – [SuperLine] into the osteotomy site

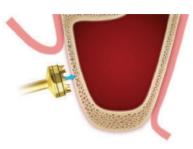


Final prosthesis

26

# **Lateral Approach (Sinus Elevation)** (SuperLine+OSTEON™3 Sinus)

### Wall-off Technique



DASK Drill#6 is used to cut a round bonylsland from the lateral wall like a trephine bur.

Start to drill at a desired location and proceed until you see the shadow of the sinus membrane. Then, separate and lift the bony island up from the neighboring wall with a molt curette or a periosteal elevator.

The bony island is repositioned back in its original after bone augmentation



The first laser mark is 1.5mm and the second is 3.0mm. Overdrilling can cause sinus perforation and possible damage to the membrane

## Thin-out Technique



Thin down the lateral wall with DASK Drill #4 or #5 at a 45 degree angle to reach the Schneiderian membrane



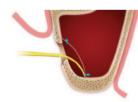
Move the DASK Drill #4 or #5 Mesio-distally with a gentle pressure until You get a proper size and shape of the window for bone augmentation



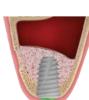
Sinus Elevation Instruments Detach sinus membrane using a domeshape Sinus curette

Fill the Sinus cavity with

[OSTEON™3 Sinus] graft material



Elevate the sinus membrane to create adequate space for graft



Fixture installation – [SuperLine] into the osteotomy site



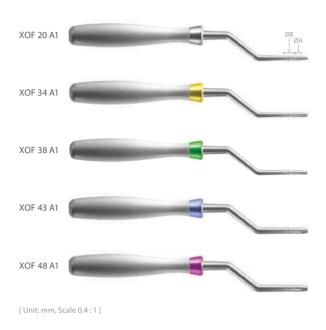
Final prosthesis

Dentium Instruments Osteotome Kit Dentium Instruments Sinus Elevator

# **Osteotome Kit**

• Osteotomes compress the bone laterally, providing denser bony interface rather than removing valuable bone from the surgical site

# Osteotomes | Final drill type





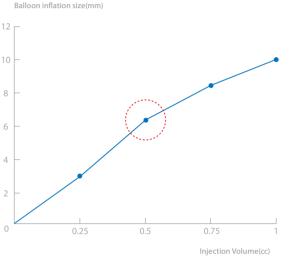
Type	Art. No.	ØA	ØΒ
	XOFK 20 <b>A</b> 1	Ø1.7	Ø2.8
XOFK	XOFK 34 <b>A</b> 1	Ø2.3	Ø2.8
Α	XOFK 38 <b>A</b> 1	Ø2.7	Ø3.2
(Convex)	XOFK 43 <b>A</b> 1	Ø2.8	Ø3.8
	XOFK 48 <b>A</b> 1	Ø3.0	Ø4.3
	XOFK 20 <b>B</b> 1	Ø1.7	Ø2.8
XOFBK	XOFK 34 <b>B</b> 1	Ø2.3	Ø2.8
В	XOFK 38 <b>B</b> 1	Ø2.7	Ø3.2
(Concave)	XOFK 43 <b>B</b> 1	Ø2.8	Ø3.8
	XOFK 48 <b>B</b> 1	Ø3.0	Ø4.3

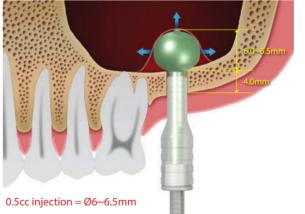
# **Sinus Elevator**

- Makes the sinus lift easy and drastically reduce the possibility of membrane perforation
- Balloon expansion of 0.5cc saline equals 6mm of membrane elevation



Туре	Art. No.
Including Syringe	GSB 38
Balloon Only	GSB 38B
Balloon inflation size(mm)	
12 _	





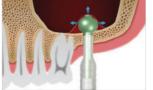




Detach the sinus membrane to create adequate space for graft material.

Carefully insert the Sinus Elevator into the Osteotomy site.









Placement of implant into the osteotor

Expand the balloon progressively.

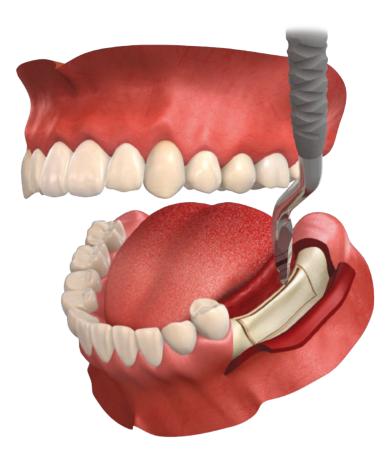
vate the sinus membrane throug the balloon inflation.

Fill the Sinus cavity with Placeme [OSTEON3™ Lifting] graft material.

**Dentium Instruments** 

# **RS (Ridge Spreader) Kit**

- Allows the achievement of space for implantation through the spreading of the bone with chisel without drilling
- There are three types of Ridge Spreaders to create space up to Ø4.5mm
- Convenient surgeries due to the compatibility with hand-piece and ratchet
- Easy-to-use kit component













**Dentium Instruments** RS Kit **Dentium Instruments** RS Kit

# **RS (Ridge Spreader) Kit**



XRSK

## Kit contents



## **Bone Chisel**



XBC305013

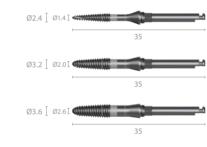
# Ratchet



Art. No. XRCA1

[ Unit: mm, Scale 0.6 : 1 ]

# **Ridge Spreader Drills**



Diameter	L	Art. No.
Ø1.4 / Ø2.4	35	RS142435
Ø2.0 / Ø3.2	35	RS203235
Ø2.6 / Ø3.6	35	RS263635

# **Round Bur**



Diameter	L	Art. No.
Ø4.0	35	XRB4035

# **Ratchet Adapter**



Art. No.	XRA3917

# Mini Saw



Diameter	L	Art. No.
Ø8.0	25	XDS8025

[ Unit: mm, Scale 1 : 1 ]

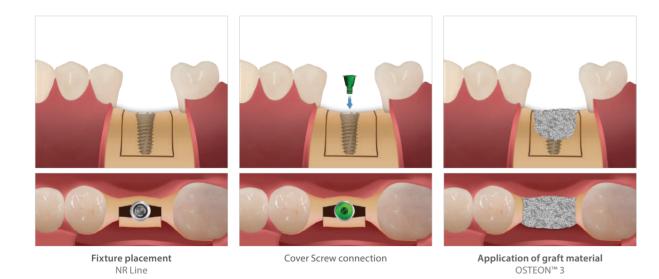
Dentium Instruments Manual RS Kit Dentium Instruments Manual RS Kit

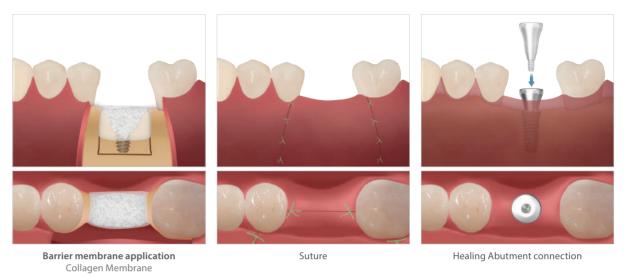
# **Ridge Spreading** (NR Line + OSTEON™ 3 + Collagen Membrane)

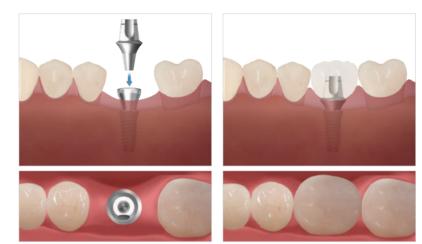




Expansion with Ridge Spreader (20~60rpm / 30~45N·cm) - Expanding alveolar bone ridge to make space for fixture







Dual Abutment connection Final prosthesis

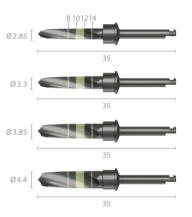
Dentium Instruments Harvest Drill

# **Harvest Drill**

Collect autogenous bone and prep osteotomy simultaneously and effectively using the specially designed drills, the Harvest Drills

- Sharp, pointed tip to prevent drill chattering for precise drilling
- Drill stoppers applicable to control the depth of the drilling for safe and efficient bone harvesting, especially in the buccal side of the ridge
- Recommended drill speed of less than 100 rpm / 50N·cm helps preserve the vital autogenous bone
- $\bullet \ \ \text{Excellent clinical results may be achieved when harvested autogenous bone is combined with Osteon $^{\text{\tiny{TM}}}$ II}$

# **Harvest Drills**



Diameter	L	Art. No.
Ø2.85	35	XFH 34 35
Ø3.3	35	XFH 38 35
Ø3.85	35	XFH 43 35
Ø4.4	35	XFH 48 35

# **Harvest Drill Stopper**



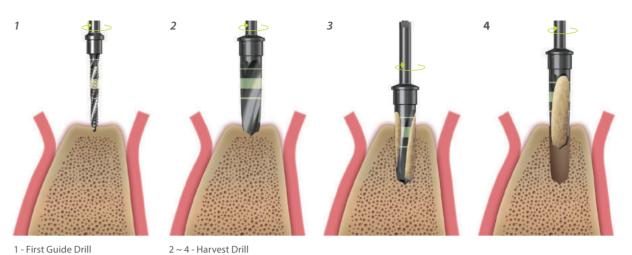
Diameter	L	Art. No.
Ø6.14	15.9	XFHST04

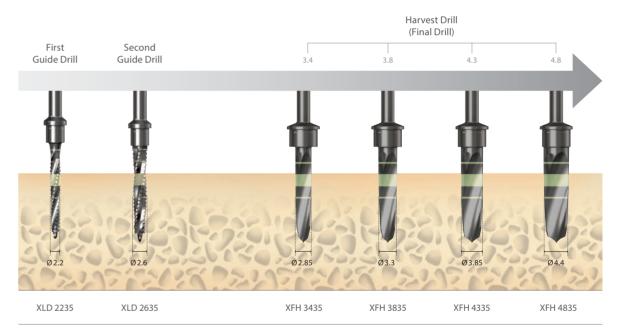


Dentium Instruments Harvest Drill

## **Final Drill**

1,000rpm/30~45N·cm with irrigation





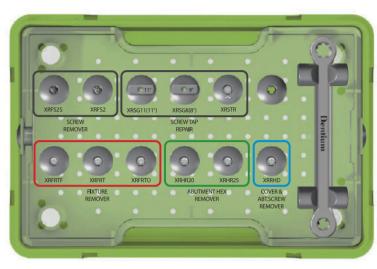
 $<sup>^* \, \</sup>text{During the 4.3/4.8 fixture insertion into the bone density of D3} \sim \text{D4}, \, \text{the 3.35/3.85 harvest drilling process can be skipped}.$ 

30~100rpm/30~50N·cm without irrigation

# **Help Kit**

- Easy solution for critical problems which may occur in the prosthetic process consist of 5 tools in a kit
- (Screw Remover/ Abutment Hex Remover/ Screw Tap Repair / Fixture Remover / Cover & Abutment Screw Remover)
- Compatible with most dental implant products now available on the global market
- Heavy duty with robust design and proven materials

# IMPLANTIUM *Super*Lrne SrmpleLrnell



X

# **Screw Remover**

**Others** 

Temporary Shell White Seal TN-Brush

Help Kit

L	Art. No.
25	XRF S2S
35	XRF S2



# **Abutment Remover**

20 XRHR 20 25 XRHR 25	Т
20	
V I	

# **Screw Tap Repair**

XRSTR
XRSG11
XRSG8



# **Fixture Remover**

_		
	Туре	Art. No.
		XRFRTF
	Remover	XRFRT
		XRFRTO
	Wrench	XRFRW



# **Cover & Abutment Screw Remover**

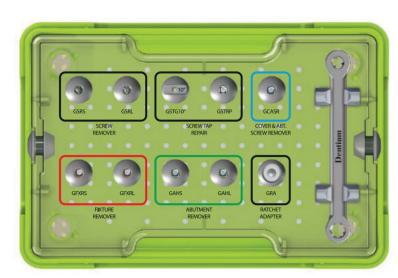






Dentium Instruments Help Kit Dentium Instruments Manual Help Kit

# NR Lrne



GXIH

## **Screw Remover**

L	Art. No.
29	GSRS
33	GSRL



# **Abutment Remover**

L	Art. No.
20	GAHS
25	GAHL



# **Screw Tap Repair**

L	Art. No.
25	GSTRP
GUIDE	GSTG10



Fixture Remover		<b>(10)</b>	Ì
Туре	Art. No.		
25	GFXRS	17 H	
30	GFXRL	25	
Wrench	XRFRW		



# **Cover & Abutment Screw Remover**

L	Art. No.	0
25	GCASR	

# Ratchet adapter

L	Art. No.
13.9	GRA



## **Screw Remover**

## Application

To remove the remaining screw when the abutment screw is broken inside the fixture

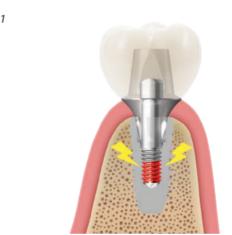
### Advantage

Easy to remove the broken screw, as well as protect the internal threads of the fixture from being damaged

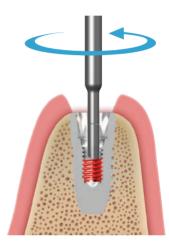
### Usage

- 1. Set the torque of the implant motor to 30~50 rpm in a CCW (counterclockwise) direction
- 2. Assemble the tool with the hand-piece
- 3. Run the motor while keeping the tip of the tool appropriately contacted with the broken screw until successfully removed

<sup>\*</sup>Caution: Do not overload the tool with pressure; apply moderate pressure



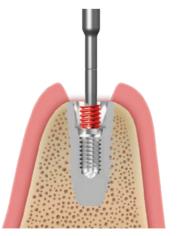




Use the friction force of the tool rotating counterclockwise to remove the screw

Hand-piece Speed: 30~50rpm / CCW

3



Allow the screw to gradually come out in a swaying motion

4



### **Abutment Hex Remover**

## Application

To remove the remaining hex when the hex portion of an abutment is broken

### Advantage

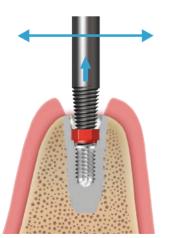
3

Easy to remove the broken hex, as well as protect the internal threads of the fixture from being damaged *Usage* 

- 1. Insert the tool inside into the remaining hex hole of the fixture inside
- 2. Assemble the ratchet with the tool and rotate it in a CW (clockwise) direction to lock the tool tip with the remaining hex
- 3. Disengage the ratchet and remove the remaining hex by gently rocking the tool
- 4. If necessary, the hole located in the upper portion of the tool may be used with the crown ejector (not included)



Dual Abutment (Hex)

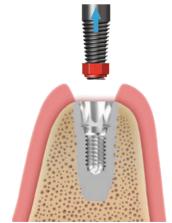


Once the tool is tightly locked to the hex remnant, disengage the ratchet Gently rock the tool until the hex is successfully removed

2



Rotate the tool clockwise so that the remaining hex gets tightly engaged to the tool



# **Screw Tap Repair**

**Dentium Instruments** 

### **Application**

To recreate the internal thread lines of the fixture when it is damaged

### Advantag

Easy to recreate the internal threads with the help of the guides corresponding to different internal angulation (8, 11 degrees) of the fixture

### Usage

- 1. Place the guide with corresponding degree to the fixture
- 2. Assemble the tap tool with ratchet
- 3. Start tapping using the tap tool with appropriate torque
- 4. If excessive debris accumulates, pause tapping and remove using suction
- 5. Repeat steps 3 and 4 until completed

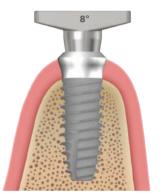
\*Caution: Do not apply excessive torque onto the tap tool

It is highly recommended to use the ratchet after the initial engagement of the tool and the internal threads

1



SuperLine / IMPLANTIUM:11°



SimpleLine II: 8°

3



Tap with the guide attached



Remove the tool and the guide to suction the debris

<sup>\*</sup>Caution: Do not overload the tool with pressure; apply moderate pressure

<sup>\*</sup>If excessive debris accumulates, pause tapping and remove using suction

Dentium Instruments Manual Help Kit Dentium Instruments Manual

### **Fixture Remover**

### Application

To remove the fixture when critically damaged with no other recovery options

### Advantage

Easy to remove the failed fixture without causing damage to the adjacent bone

### Usage

- 1. Assemble the tool with ratchet, and insert it into the failed fixture to be removed
- 2. Gently rotate the ratchet in a CCW direction until the tool is tightly locked into the fixture
- 3. Continue to rotate the ratchet with greater torque in a CCW direction until the failed fixture is completely removed
- 4. Separate the tool from the removed fixture by rotating it in a CW direction. If necessary, use the wrench (included) to hold the fixture while rotating the tool with ratchet in a CW direction

<sup>\*</sup>Caution: Sufficient irrigation should be applied to the tool to prevent excessive heating during the procedure



IMPLANTIUM / SuperLine:11°



SimpleLine II:8°

2~3



Rotate the tool in a counter clockwise direction until it is tightly locked into the fixture Continue to rotate with additional torque until the failed fixture is completely removed 4



Separate the tool from the fixture using the ratchet and the wrench that are included in the kit

### **Cover & Abutment Screw Remover**

### **Application**

To disengage the cover screw, healing abutment and abutment screw from the fixture when the 1.28 hex on the head is stripped or damaged

### Advantaae

Easy to disengage the cover screw, healing abutment and abutment screw with stripped or damaged hex

### Usage

- 1. Assemble the tool with the ratchet and place it over the damaged 1.28 hex of the cover screw, healing abutment or abutment screw that needs to be removed
- 2. Gently rotate the ratchet in a CCW direction to tightly engage the tapered top of the tool into the damaged 1.28 hex.
- 3. Continue to rotate the ratchet in a CCW direction with greater torque until the cover screw, healing abutment or abutment screw is completely removed
- 4. After the removal, rotate the ratchet in a CW to separate the tool and the removed component





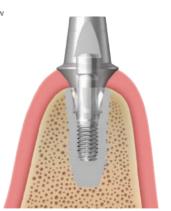
2 Loading downward



Help Kit

Rotate the tool counterclockwise until tightly locked into the 1.28 hex of the cover screw

3 Abutment Screw



4 Loading downward



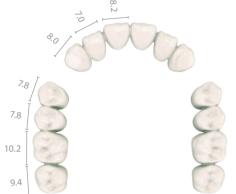
Rotate the tool counterclockwise until tightly locked into the 1.28 hex of the abutment screw

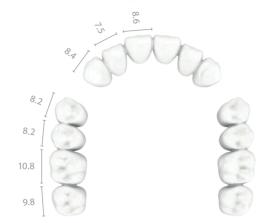
**Manual & Clinical Case Dentium Instruments** Temporary Shell **Dentium Instruments** Temporary Shell

# **Temporary Shell**

## **Preformed Temporary Crown**

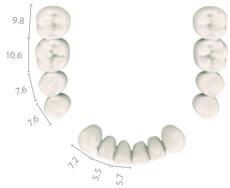
- Esthetic appearance that mimics a natural tooth
- Convenient for both single and multi-unit restoration

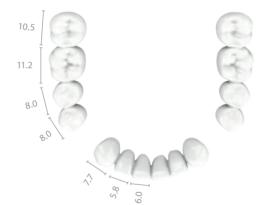
















Shade		Туре	REF	
orgun	A2	Full set	TSA2-FS	
000000	Translucent	Full set	TSTR-FS	









Healing

Temporary Abutment connection

Temporary Abutment preparation

Temporary Shell try-in











Filling of the Temporary Shell with acrylic Resin

Placement of Temporary Shell

Contouring of the cervical crown

Placement of Temporary Shell













Temporary Abutment connection

Temporary Shell try-in

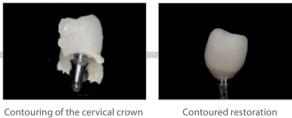
Filling of the Temporary shell with



Acrylic resin setting









Contoured restoration

Provisional restoration

Dentium Instruments White Seal Wh

# **White Seal**

## Easier filling and removal

• Unlike the conventional cotton or impression material, the plush material allows a greater user-friendliness during dental procedures

## No odor & color change

• Odor and color changing problem seen in Silicone or other sealing materials is eliminated

### Stable form maintenance

• The rod with proper stiffness helps maintain its form while preventing the upper application layer from collapsing

## Easy to fill into the screw hole

• White Seal™ is available in 30mm (length) size. The user may easily cut off the desired length and conveniently store away the rest for later use

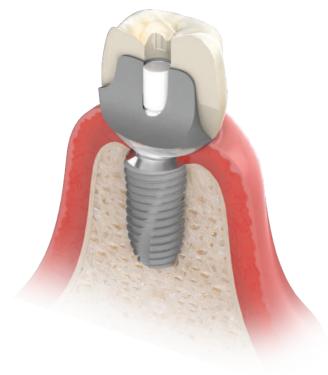
# **Color / Odor Change Test**



# **Products**

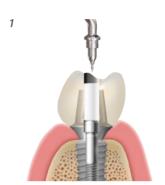
Diameter	Length	Art. No.
Ø1.9	30	AHF 19030
Ø2.3	30	AHF 23030



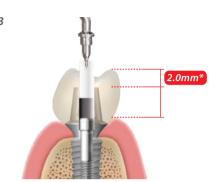


### How to use

Cut off a piece of the White Seal™ in the desired size with scissors or a knife. Insert the piece into the abutment hole and seal it with a resin material. (\*It is recommended to submerge the White Seal™ 2.0mm from the occlusal surface.)









White Seal™





Hole resin filling After 15 months

# **White Seal Tool**

# **Depth Gauge & Delivery Holder**



## Remover

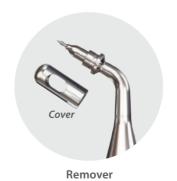


Application	Art. No.
NR Line	XSWN
SuperLine, Implantium, SimpleLine II	XSWS

Application	Art. No.
Use common	XSWR



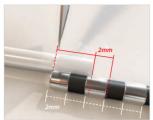




## 1 Cutting the White Seal™

**Dentium Instruments** 









# 2 Delivery the White Seal™ (Delivery holder)

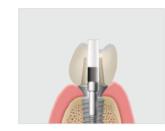








# 3 Delivery the White Seal™ (Depth gauge)

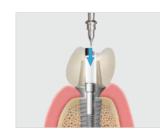


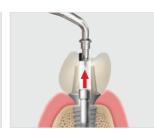






## 4 Removal of the White Seal™ (Remover)





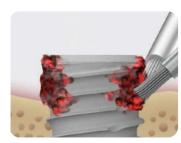




**Dentium Instruments** TN-Brush **Dentium Instruments** 

# **TN-Brush**

- Remove plague and granulation tissue around the fixture using spinning brush
- The force of shape restoration is excellent with chosen highly elastic brush



Use brush left to right or top to bottom 500~800 rpm with irrigation

### Brush

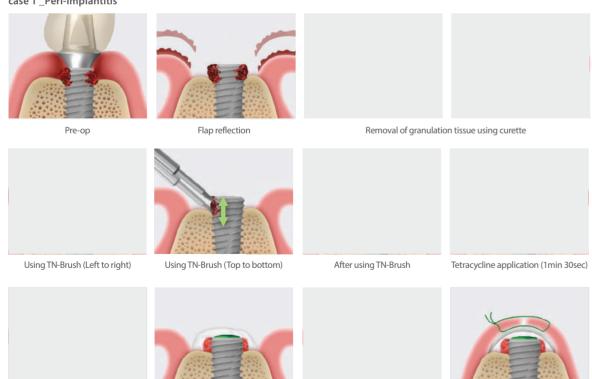
Diameter	Art. No.
Ø0.8	TN-0.8
Ø1.0	TN-1.0
Ø1.3	TN-1.3



[ Unit: mm, Scale 2:1]

Manual case 1 \_Peri-implantitis

After Washing



Bone graft (Collagen graft)

Bone graft (OSTEON™ II Collagen + Autogenous bone)

### case 2\_Peri-implantitis









TN-Brush

Removal of granulation tissue using

Using TN-Brush (Left to right)

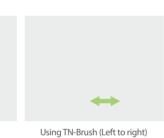
Using TN-Brush (Top to bottom)



After using TN-Brush

Healing

## Case 3\_Peri-implantitis





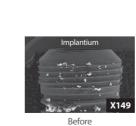


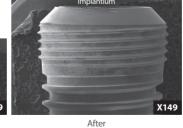
Case 4\_Periodontal treatment

Pre-op

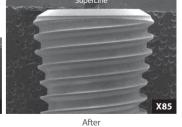


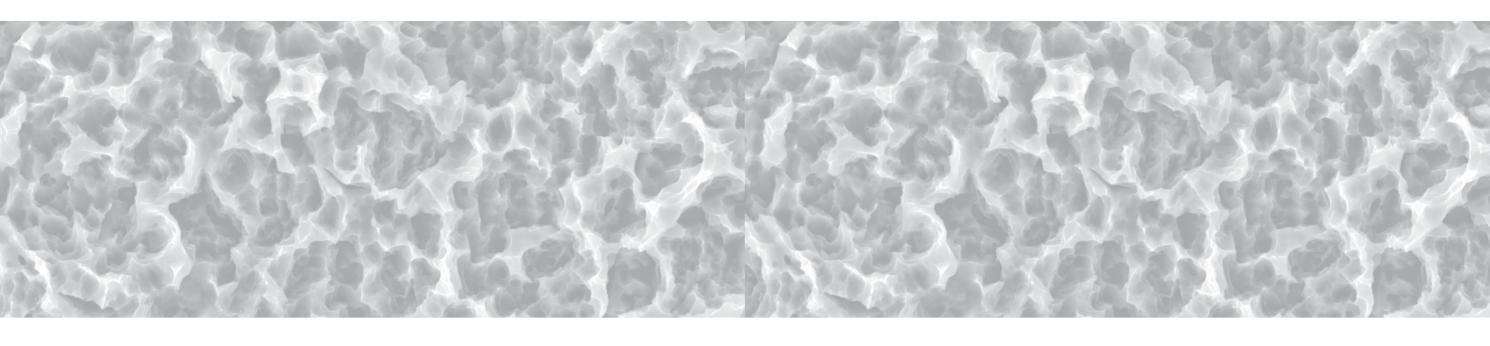
### SEM





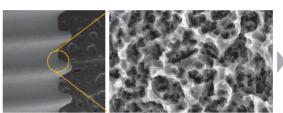






# Simple Predictable 15 Years of Clinical Evidence

**S.L.A.** (Sandblasting with Large grits and Acid etching) **Surface?** 







Cell number 3 X 10, after 7 days of cell culture



# OVER A **DECADE** OF COMMITMENT TO THE BEST PRODUCTS FOR DENTISTS AND PATIENTS



# **Dentium Instruments**

for Total Solution

Catalog & Manual

