# **DASK** Catalog & Manual

**Dentium Advanced Sinus Kit** 





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## **Introduction of DASK**

- Simple & easy access to sinus cavity
- Broad exposure of bony walls with special instruments

### **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 yield, remove the drill. Alternately, a partial preparation with DASK Drill #1 or #2 and up-fracture with osteotomes can be performed.

#### (800~1200rpm)

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

When the sinus cavity is accessed, **DASK Drill #3** is introduced and a much broader detachment from the sinus floor can be facilitated vertically with hydraulic pressure thanks to the internal irrigation hole. **DASK Drill #3** can also be used for a lateral window approach.

(800~1200rpm)

### **Drills for Lateral Approach**



DASK Drill #3

XED331035D

DASK Drill #4 DASK Drill #5 XRT064025 XRT084025

> DASK Drill #6 XST083025

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

#### (800~1200rpm)

\* 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.

#### (800~1200rpm)

\* 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.

## **Crestal Approach (Sinus Lifting)**

## **Thin-out Technique**



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.



Use (OSTEON<sup>™</sup> Lifting) bone graft material to fill the sinus through the osteotomy.



Use the dome-shaped sinus curette to gently lift the sinus membrane.



Fill and distribute OSTEON™ properly into the created space.



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



Placement of implant into the osteotomy.

## **Osteotome Technique**



After drilling, use an osteotome.



Use an osteotome to make a greenstick fracture.



Use a dome-shaped sinus curette to gently lift the sinus membrane.

### **Clinical Case**

### **Crestal Approach**



**Preoperative panoramic view** Due to caries elongation and tilt, tooth 15 and tooth 16 have to be extracted



Postoperative panoramic view



Final prosthesis in situ (Zirconia ceramic bridge)



DASK Drill #1 with a depth stopper to thin out the cortical bone of the sinus floor



A dome-shaped sinus curette is introduced to detach the Schneiderian membrane from the sinus floor



Bone graft material (OSTEON™ Lifting) is filled into the created space



Graft material evenly distributed laterally with a sinus-curette



Implants (SuperLine) placed into the osteotomy

## Lateral Approach (Sinus Elevation)

### Wall-off Technique



**DASK Drill #6** is used to cut a round bony island from the lateral wall like a trephine bur. Start to drill at a desired location and proceed until you see the shadow of 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 position 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.



Detach the sinus membrane using a domeshape sinus curette.





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



Fill bone graft material (OSTEON™ Sinus) into the created space.



If using Wall-off Technique, reposition the bony island after augmentation. Place implant (SuperLine™).

## Lateral Approach (Sinus Elevation)

### Clinical Case 1 : Wall-off Technique



Preoperative panoramic view



Postoperative panoramic view



DASK Drill #6 to prepare a bony window



The maxillary sinus is opened via a lateral window



Reposition the bony island after augmentation



Flaps Closed

### Clinical Case 2 : Thin-out Technique



Preoperative panoramic view



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



Postoperative panoramic view



Implants placed with bone graft filling (OSTEON™ Sinus GBG0510)



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



Flaps closed

## DASK (Dentium Advanced Sinus Kit)

#### DASK

- Simple & easy access to sinus cavity
- Broad exposure of bony walls with special instruments

DASK Drill   Scale 1 : 1.2 / mm			
Туре	DASK Drill #	REF	
Crestal Approach	DASK Drill #1	XRT <b>33</b> 2035	
	DASK Drill #2	XRT <b>37</b> 2035	
	DASK Drill #3	XED <b>33</b> 1035D	
Lateral Approach	DASK Drill #4	XRT <b>06</b> 4025	
	DASK Drill #5	XRT <b>08</b> 4025	
	DASK Drill #6	XST <b>08</b> 3025	

 $\dot{\times}$ Note

DASK Drill #1~5 : Drill speed 800 to 1,200rpm, 30~45N.cm with internal irrigation DASK Drill #6 : Drill speed 800 to 1,200rpm, 30~45N.cm with external irrigation





## 05.14 05.14 05.14 05.14 10.6 12.6 12.6 14.6 14.6 16.6 xFDST04 xFDST04 xFDST02



#### Stopper | For XRT332035, XRT372035, XED331035D | Scale 1:1/mm

Drilling Depth	L	REF
08	10.6	XFDST 08
06	12.6	XFDST 06
04	14.6	XFDST 04
02	16.6	XFDST 02

#### Sinus Bur Kit

SDK

## DASK (Dentium Advanced Sinus Kit)

#### Sinus Elevation Instrument | Scale 1 : 0.6 / mm

REF	XSE1L
REF	XSE2L
REF	XSE3L
REF	XSE4L



#### Sinus Kit

XSKL

XSE1L	Enria				• <i>•</i> =
XSE2L			ntium		
XSE3L			••••	1	
XSE4L				•	<u></u>
		5		-	

## **Osteotome Kit**

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





Туре	REF	ØA	ØB
	XOF 20 <b>A</b> 1	Ø1.7	Ø2.8
	XOF 34 <b>A</b> 1	Ø2.3	Ø2.8
XOFK	XOF 38 <b>A</b> 1	Ø2.7	Ø3.2
(Convex)	XOF 43 <b>A</b> 1	Ø2.8	Ø3.8
	XOF 48 <b>A</b> 1	Ø3.0	Ø4.3
XOFBK Type B (Concave)	XOF 20 <b>B</b> 1	Ø1.7	Ø2.8
	XOF 34 <b>B</b> 1	Ø2.3	Ø2.8
	XOF 38 <b>B</b> 1	Ø2.7	Ø3.2
	XOF 43 <b>B</b> 1	Ø2.8	Ø3.8
	XOF 48 <b>B</b> 1	Ø3.0	Ø4.3

## **DASK Maintenance**

#### **Sterilization and Instrument Care Procedures**

- Please follow legal regulations, as well as hygienic guidelines to prevent contamination and infection.
- Please remember that you are responsible for the maintenance and sterility of your medical/dental products/device. It is important to use and follow proper cleaning, disinfection and sterilization procedures.
- It is also important to follow the manufacturer's recommendation on usage of drills. Please keep a log as to how many times the drills are used.
- Drill usage is determined by surgical site not per patient. Bone density and usage determine the life of the drills.
- Drills should be considered for replacement around 20 uses based on bone density. Check drills often for wear.
- **01** All instruments immediately after use must be pre-soaked for a few minutes in a germicidal bath to loosen and prevent debris from attaching to instruments. Do not soak over-night.
- 02 Scrub with a soft brush to remove any debris.
- 03 For internal irrigation drills, use a reamer or small gauge needle to clean out drill internally.
- 04 Before using an ultrasonic cleaner, wrap drills in a 2 x 2 gauze to prevent rubbing against each other.
- 05 Rinse thoroughly with warm water.
- 06 Clean all instrument trays with a germicidal cleaner prior to replacing instruments in kit.
- 07 Dry completely and place back into kit.
- 08 Always check for damage or corrosion after rinsing and drying.
- 09 Seal the tray in a sterilization pouch.
- 10 Sterilize using a steam autoclave in 121°C/250°F for 30 minutes or refer to sterilizer manufacturer's recommendations.
- **11** Store in a dry area at room temperature.

#### Maintenance Period for DASK Drills

All surgical drills shall be replaced with new one after approximately 20 uses based on bone density.

DASK Drill #1	DASK Drill #4
(800 ~1,200rpm, 30~45N.cm with internal irrigation)	(800 ~1,200rpm, 30~45N.cm with internal irrigation)
DASK Drill #2	DASK Drill #5
(800 ~1,200rpm, 30~45N.cm with internal irrigation)	(800 ~1,200rpm, 30~45N.cm with internal irrigation)
DASK Drill #3	DASK Drill #6
(800 ~1.200rpm, 30~45N.cm with internal irrigation)	(800 ~1,200rpm, 30~45N.cm with external irrigation)

## OSTEON<sup>™</sup> / OSTEON<sup>™</sup> II Sinus & Lifting

Synthetic Bone Grafting Material

## OSTEON<sup>™</sup> / OSTEON<sup>™</sup> II Sinus

- For sinus augmentation via lateral approach
- Reduced time and more convenience with a special syringe
- $\bullet$  HA coated with  $\beta$  TCP: excellent osteoconductivity for new bone formation









## OSTEON<sup>™</sup> / OSTEON<sup>™</sup> II Lifting

- For sinus augmentation via crestal approach
- Much smaller particle size of OSTEON™ OSTEON™ II within a narrow diameter syringe fitted to the crestal approach





Composition of OSTEON<sup>™</sup> HA Scaffold (70%) + β - TCP Coating (30%) / 100% synthetic



Composition of OSTEON<sup>™</sup> II HA Scaffold (30%) + β - TCP Coating (70%) / 100% synthetic

#### **Products**

Туре	REF	Volume (cc)	Particle Size (mm)
OSTEON™ Sinus	GBG0510SS	0.50	0.5~1.0
	GBG1020SS	0.50	1.0~2.0
OSTEON™ Lifting	GBG0305LS	0.25	0.3~0.5
	GBG0510LS	0120	0.5~1.0
OSTEON™ II Sinus	DT7G0510050SS	0.50	0.5~1.0
	DT7G1020050SS	0.00	1.0~2.0
OSTEON™ II Lifting	DT7G0205025LS	0.25	0.2~0.5
	DT7G0510025LS	0.20	0.5~1.0



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