

# DASK (Dentium Advanced Sinus Kit)

## Catalog & Manual



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# Introduction of DASK

## Drills for Crestal Approach



DASK Drill #1  
XRT332035

DASK Drill #2  
XRT372035

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.

**(800~1200rpm)**

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



DASK Drill #3  
XED331035D

When the sinus cavity is accessed, **DASK Drill #3** is introduced and a 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 a lateral window approach.

**(800~1200rpm)**

## Drills for Lateral Approach



DASK Drill #4  
XRT064025

DASK Drill #5  
XRT084025

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.



DASK Drill #6  
XST083025

To make a lateral window through the wall-off technique.

**(800~1200rpm)**

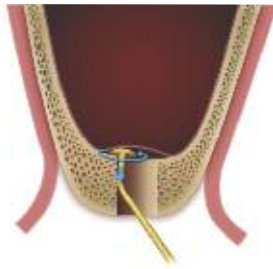
\* DASK Drill #6 is used to cut and detach a bony island like a trephine bur from the lateral wall. Uncontrolled overdrilling may lead to sinus perforation and possible damage to the membrane. External irrigation is necessary when drilling.

# Crestal Approach (Sinus Lifting)

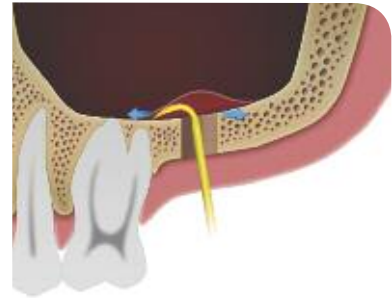
## Thin-out Technique



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 the dome-shaped sinus curette.



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



Use [OSTEON™ Lifting] bone graft material. To fill the sinus through the osteotomy site.



Fill and distribute OSTEON™ properly into the Created space.



Placement of implant into the osteotomy site.

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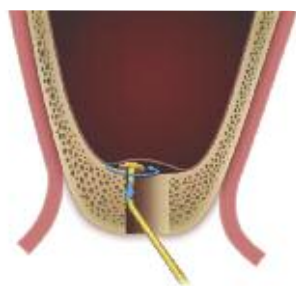
## Osteotome Technique



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.

# Crestal Approach (Sinus Lifting)

## Clinical Case : Crestal Approach



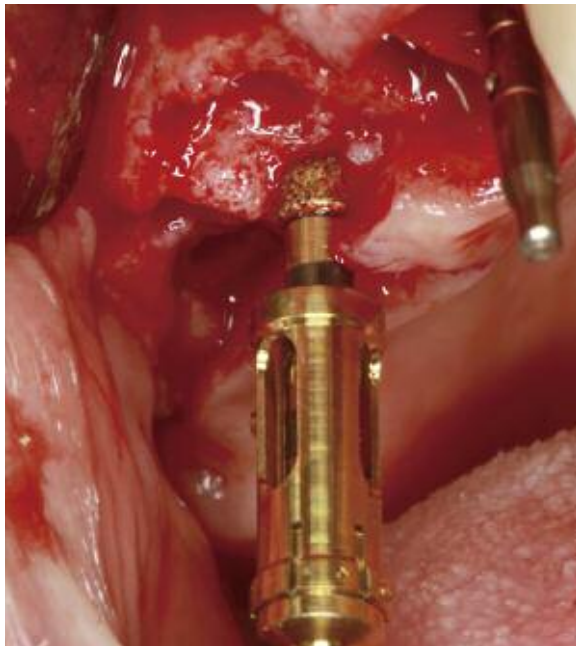
**Preoperative panoramic view**  
:Due to caries, elongation and tilt, tooth 15 and 16 have to be extracted



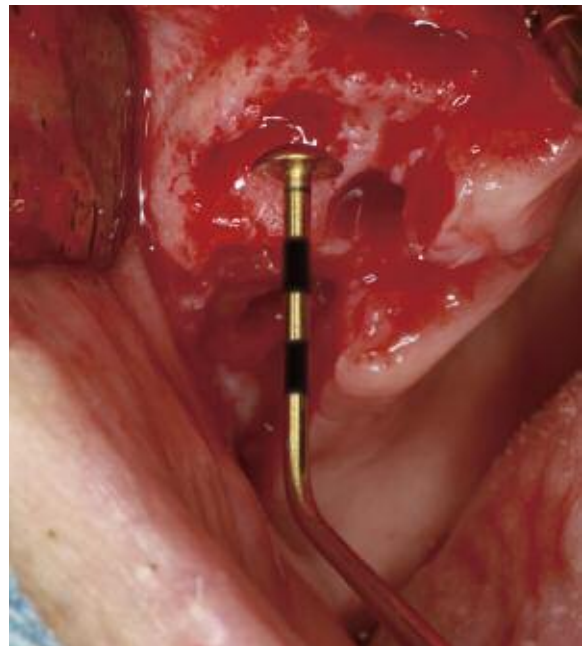
**Postoperative panoramic view**



Finally prosthesis in situ (Zirconia ceramic bridge).



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



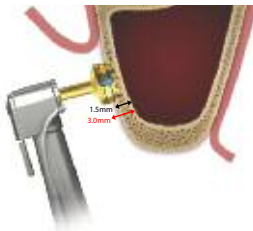
Implants (SuperLine) placed into the osteotomy

# Lateral Approach (Sinus Elevation)

## Wall-off Technique



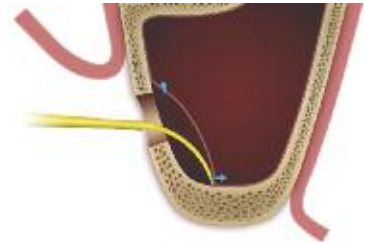
**DASK Drill #6** is used to cut a round bony island from the lateral wall like a trephine bur. Start to drill at a desired location and proceed until you see the shadow of sinus membrane. Then separate and lift the bony island up from the neighboring wall with a molt curette or a periosteal elevator. The bony island is repositioned back in its original position after bone augmentation.



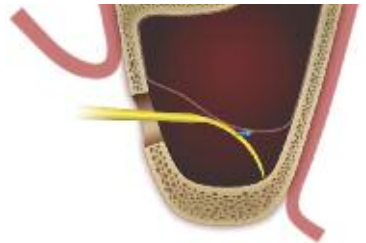
The first laser mark is 1.5mm and the second is 3.0mm. Overdrilling can cause sinus perforation and possible damage to the membrane.



Detach sinus membrane using a dome-shape sinus curette.



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



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

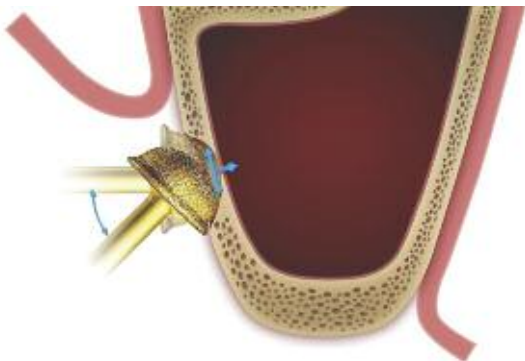


Fill graft material [OSTEON™ Sinus] into the created space properly.



The bony island can be repositioned after bone augmentation. Implant placed (SuperLine).

## 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.

# 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



The bony island can be repositioned after bone augmentation



Flaps Closed

## Clinical Case 2 : 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

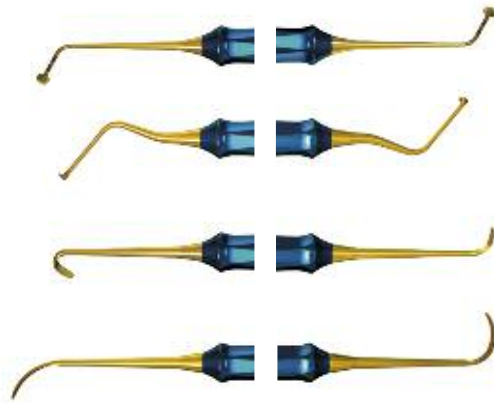




# DASK (Dentium Advanced Sinus Kit)

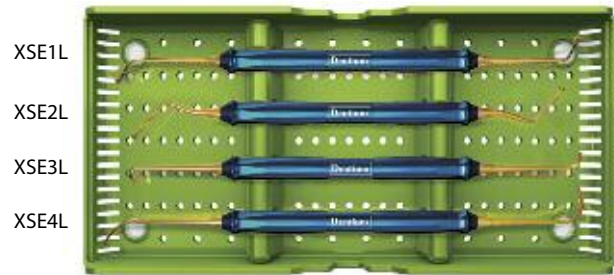
## Sinus Elevation Instrument | Scale 1 : 0.6 / mm

REF	XSE1L
REF	XSE2L
REF	XSE3L
REF	XSE4L



## Sinus Kit

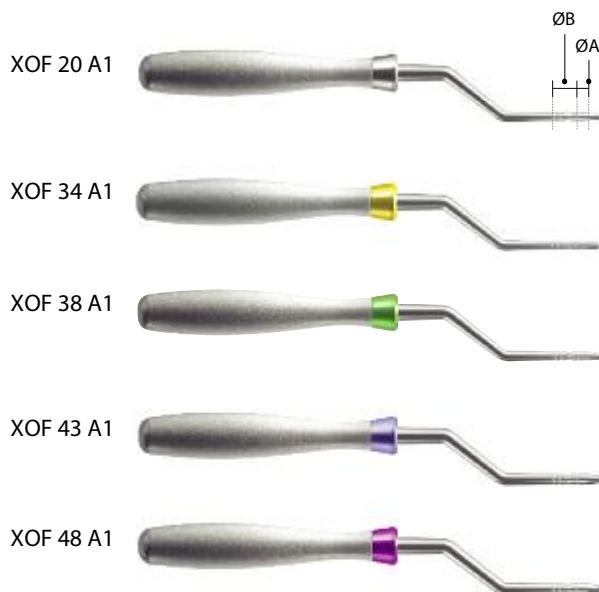
XSKL
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# Osteotome Kit

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

## Osteotomes | Final drill type / Scale 1 : 0.4 / mm



Type A  
(Convex)



Type B  
(Concave)

Type	Art. No.	ØA	ØB
XOFK <b>A</b> (Convex)	XOF 20 <b>A1</b>	Ø1.7	Ø2.8
	XOF 34 <b>A1</b>	Ø2.3	Ø2.8
	XOF 38 <b>A1</b>	Ø2.7	Ø3.2
	XOF 43 <b>A1</b>	Ø2.8	Ø3.8
	XOF 48 <b>A1</b>	Ø3.0	Ø4.3
XOFBK <b>B</b> (Concave)	XOF 20 <b>B1</b>	Ø1.7	Ø2.8
	XOF 34 <b>B1</b>	Ø2.3	Ø2.8
	XOF 38 <b>B1</b>	Ø2.7	Ø3.2
	XOF 43 <b>B1</b>	Ø2.8	Ø3.8
	XOF 48 <b>B1</b>	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 15- 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 cleanout 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/250F for 30 minutes or refer to manufacturer's recommendations.

**11** Store in a dry area at room temperature.

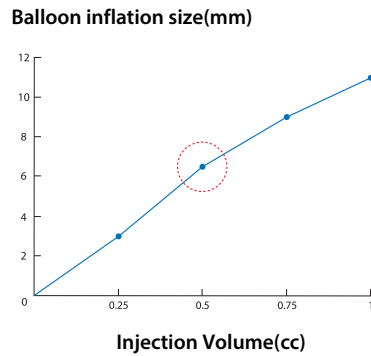
## Maintenance Period for DASK Drills

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

<p><b>DASK Drill #1</b> (800 ~1,200rpm, 30~45N.cm with internal irrigation)</p> <hr/>	<p><b>DASK Drill #4</b> (800 ~1,200rpm, 30~45N.cm with internal irrigation)</p> <hr/>
<p><b>DASK Drill #2</b> (800 ~1,200rpm, 30~45N.cm with internal irrigation)</p> <hr/>	<p><b>DASK Drill #5</b> (800 ~1,200rpm, 30~45N.cm with internal irrigation)</p> <hr/>
<p><b>DASK Drill #3</b> (800 ~1,200rpm, 30~45N.cm with internal irrigation)</p> <hr/>	<p><b>DASK Drill #6</b> (800 ~1,200rpm, 30~45N.cm with external irrigation)</p> <hr/>

# 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



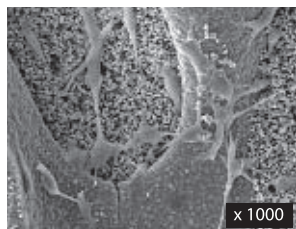
# OSTEON™ II (Sinus & Lifting)

- Osteoconductive synthetic bonegraft
- Almost resorbable due to higher  $\beta$ -TCP content(HA: $\beta$ -TCP = 30:70)
- Easy manipulation
- Excellent wettability

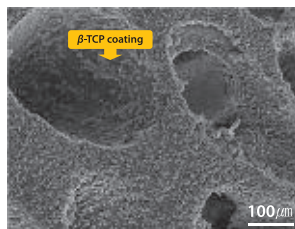
**OSTEON™ II = HA 30% +  $\beta$ -TCP 70%**

### Cell adhesion test

Osteoblast attached & spreaded well



### Microstructure



# DASK (Dentium Advanced Sinus Kit) Catalog & Manual

**Dentium**  
For Dentists By Dentists

Specifications are subject to change without prior notice.  
Some products that are to be launched in the market after necessary approvals are also listed in this catalog.

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