Sinus-T

Surgical Instruments Sinus-T

Osteotome Technique by TR Sinus System

“TR Sinus System” contains trephine drills and round drills, will provide easy & safe sinus membrane lifting.

Order Code: SNT 01

To overcome the short of bone length on maxillary molar area in case of sinus membrane lifting, osteotome technique is useful to obtain sufficient bone for placing implant.
Sinus Protocol

Precise X-Ray reading is very important to approach closely under the sinus floor with trephine drill.

1 Drilling (Trephine Drill)
Choose correct length of stopper and put it on the trephine drill and then drill 0.5~1mm under the sinus floor. (Drill Speed : 1,000 ~ 1,500 RPM)
Putting stopper on the trephine drill reduce the risk of perforation of sinus floor accidentally during the surgery.

2 Push (Osteotome)
After malleting at correct position of osteotome, do microfracture safely on sinus floor.
Mallet 2 or 3 times to obtain a microfracture on sinus floor.
If the several malletings do not work for the microfracture, do drilling again with trephine drill toward sinus floor. (Drill Speed : 15 ~ 20 RPM)

3 Drilling (Round Drill)
Enter the osteotomy site with round drill, thereby lift the sinus membrane slowly. (Drill Speed : 15 ~ 20 RPM)
Round drill minimizes the risk of perforation of sinus membrane with rounded shape.

4 Insertion (Fixture)
After checking the lift of the sinus membrane, place the fixture.
Dr.SOS
Surgical Instruments Dr.SOS

Immediate Action For Emergency
The Kit for the easy removal of Broken Abutment Screw
Regeneration of damaged internal threads in the fixture

Order Code: DRS 00

0.3 Slot Driver
When Torx Abutment Screw Head was damaged, you can use 0.3 Slot Driver instead of 1.7 Torx Driver.
External Guide (External Connection)
It is connected to fixture and guides through Remove Bar to enter and support broken abutment screw.

Internal Guide (Internal Taper Connection)
It is connected to fixture and guides through Remove Bar to enter and support broken abutment screw.
Reverse Cutting Drill
Connect the Reverse Cutting Drill to low speed handpiece, with 1,000~2,000 RPM in reverse rotation. Then, repeat drilling up and down to grind and change the top of the broken screw.

*CAUTION*: Be careful not to break it with overheating.

Screw Tapping
When internal threads in the fixture were damaged, use Screw Tapping to regenerate fixture internal threads.

<table>
<thead>
<tr>
<th>Screw</th>
<th>Ø1.6</th>
<th>Ø1.8</th>
<th>Ø2.0</th>
<th>Ø2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Fixture</td>
<td>Narrow</td>
<td>Regular</td>
<td>T-Wide</td>
<td>Wide</td>
</tr>
<tr>
<td>Non Submerged Internal Fixture</td>
<td></td>
<td>Internal Fixture</td>
<td>(PSI, IFI)</td>
<td></td>
</tr>
<tr>
<td>Submerged Internal Fixture</td>
<td>SM Narrow</td>
<td>SM Regular</td>
<td>SM Wide</td>
<td>Extra Wide</td>
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</tbody>
</table>

Torque Wrench
DTW 0060

Handle
RBH 10
Immediate Action For Emergency, Dr. SOS
The Kit for the easy removal of Broken Abutment Screw
Regeneration of damaged internal threads in the fixture

Ready
After cleaning thoroughly broken screw area, repeat inserting oral-use oil to let the broken screw out.

Guide Fixing
Locate a proper guide from the "Dr.SOS Kit" onto a fixture inside mouth and support it securely to make it vertical.
*You can use ratchet to support the guide when it’s hard to support the guide by hand.

A) Remove Bar
Connect Remove Bar to the Handle, reverse it by hand to remove the Broken Abutment Screw, and be careful not to drop off the product into the mouth.
*Confirm the level or line on the Remove Bar.

B) Remove Bar + Handpiece
After connecting the Remove Bar into low speed handpiece, it is also possible to remove it with reverse rotation of low RPM.
*Less than 25 RPM.
*Remove Bar and drill extension connection enables a longer use.

Explore
Use explore to completely remove it after reaching certain height.

Screw Tapping
When fixture internal threads were damaged, use Screw Tapping to regenerate fixture internal threads and connect Abutment.

TIP)
When pulling, hand will feel it touches. If no touch on hands, lean guide and bur left and right until getting feel.
Bone Expander Set

Surgical Instruments Bone Expander

Order Code: BEP(M) 00

Osteotomes have been utilized in a variety of techniques designed to prepare implant sites in maxilla, to elevate the floor of the maxillary sinus and to expand the atrophic edentulous ridge. Despite its effectiveness, the surgical mallet is not well tolerated by patients. Using a drill to prepare implant sites in maxilla and mandibular also have a risk of maxillary perforation and penetration into the nerve mandibularis. As safe alternative and complementary instruments to the osteotomes and drills, Bone Expander can be used for preparation of implant sites, atraumatic ridge expansion and condensing of bone.

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
<th>Apical/Neck(Ø)</th>
<th>Length</th>
<th>Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2mm Initial Drill</td>
<td>MSD 1218M</td>
<td>1.2</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>1.0/1.6mm Bone Expander</td>
<td>BEP 1716</td>
<td>1.0 / 1.6</td>
<td>17</td>
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<tr>
<td>1.3/2.3mm Bone Expander</td>
<td>BEP 1723</td>
<td>1.3 / 2.3</td>
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<tr>
<td>1.7/3.1mm Bone Expander</td>
<td>BEP 1731</td>
<td>1.7 / 3.1</td>
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<td>2.4/3.7mm Bone Expander</td>
<td>BEP 1737</td>
<td>2.4 / 3.7</td>
<td>17</td>
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<tr>
<td>3.0/4.4mm Bone Expander</td>
<td>BEP 1744</td>
<td>3.0 / 4.4</td>
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<tr>
<td>3.5/5.1mm Bone Expander</td>
<td>BEP 1751</td>
<td>3.5 / 5.1</td>
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<tr>
<td>Driver(short)</td>
<td>MHDC 2520</td>
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<td>Driver(long)</td>
<td>MHDC 2525</td>
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<tr>
<td>Driver(short)</td>
<td>MHDR 2513</td>
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<tr>
<td>Driver(long)</td>
<td>MHDR 2518</td>
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<tr>
<td>Torque Wrench</td>
<td>DTW 0060</td>
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<tr>
<td>Open Wrench</td>
<td>OW 002</td>
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</tr>
</tbody>
</table>
In order to give depth and direction to desired surgical area, 1.2mm drill is used. (800 rpmn 1200rpm is the capable engine speed)

To expand the implantation site, 1.6mm Bone Expander (Color Code: Yellow) is used (Check Laser Marking)

*Connect the Bone Expander with Adapter. Then finish with Ratchet Wrench.

Use 2.3 Bone Expander (Color Code: Yellow) to expand the desired surgical area. (Check Laser Marking)

Use 3.1mm Bone Expander (Color Code: Yellow) to expand the desired surgical area. (Check Laser Marking)

Use 3.7mm Bone Expander (Color Code: Red) to expand the desired surgical area. (Check Laser Marking)

Use 4.4mm Bone Expander (Color Code: Green) to expand the desired surgical area. (Check Laser Marking)

Continue by using 5.1mm Bone Expander to expand the desired surgical area. (Check Laser Marking)

Hardening the Bone has a risk of Ischemia which makes the Doctor to check whether sufficient bleeding is occurring.

Give Scrape to the desired surgical area to increase bleeding - Bleeding help Osseo Integration.

Implant SFW 5312 to the expanded hole by Bone Expander
**Sinus Lift Kit**

**Surgical Instruments Sinus Lift Kit**

Custom designed kit comprised of 6 tools used in sinus procedures  
Order Code: SLK 01

<table>
<thead>
<tr>
<th>Sinus Elevator &amp; Membrane Lift Tips</th>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td></td>
<td>DSNK 01</td>
<td>Membrane Detach Elevator</td>
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<tr>
<td></td>
<td>DSNK 02</td>
<td>Membrane Elevator</td>
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<td></td>
<td>DSNK 03</td>
<td>Membrane Elevator</td>
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<td></td>
<td>DSNK 04</td>
<td>Bone Graft Packer</td>
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<td></td>
<td>DSNK 05</td>
<td>Membrane Elevator</td>
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# Osteotome Kit

**Surgical Instruments Osteotome Kit**

Order Code: OST 01

<table>
<thead>
<tr>
<th>Diameter(L)</th>
<th>Image</th>
<th>Code</th>
<th>Application</th>
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<tbody>
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<td>Ø2.0</td>
<td><img src="image1" alt="Image" /></td>
<td>OSE 2228</td>
<td>Sinus Elevation</td>
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<tr>
<td>Ø2.8</td>
<td><img src="image2" alt="Image" /></td>
<td>OSL 2028</td>
<td>SM/IFI/FTN Initial Drill</td>
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<tr>
<td>Ø2.1</td>
<td><img src="image3" alt="Image" /></td>
<td>OSL 2130</td>
<td>FTN 33xxB Compaction</td>
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<tr>
<td>Ø3.0</td>
<td><img src="image4" alt="Image" /></td>
<td>OSL 2133</td>
<td>SFN 38xx/IFI 35xxPM Compaction</td>
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<td>Ø3.5</td>
<td><img src="image5" alt="Image" /></td>
<td>OSL 3039</td>
<td>SFR 45xx/IFI 40xxM Compaction</td>
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<td>Ø3.9</td>
<td><img src="image6" alt="Image" /></td>
<td>OSL 3546</td>
<td>SFW 53xx/IFI 48xxM/FTN 50xxB Compaction</td>
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</table>
Bone Planer Set

Bone Planers are used to flatten the uneven bone during osteotomy reparation

Size & Code

<table>
<thead>
<tr>
<th>Width</th>
<th>Ø4.95</th>
<th>Ø5.65</th>
<th>Ø5.9</th>
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<tbody>
<tr>
<td>Narrow</td>
<td>BP 5010</td>
<td>BP 5710</td>
<td>BP 5910</td>
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<tr>
<td>Regular</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Wide</td>
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</tr>
</tbody>
</table>

Protocol

1. **Guide Drilling**
   Drill through the cortical bone at the selected site for the implant placement.

2. **Initial Drilling**
   Select an appropriate drill stopper according to the desired depth of implant placement.

3. **Bone Planing**
   Insert its guide part into a drilled osteotomy site and remove the uneven bone.

*Handpiece speed is recommended to be in a range between 400–600 rpm.*