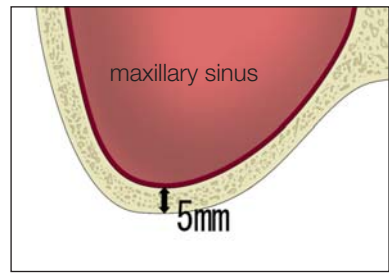


Socket Lift Tip

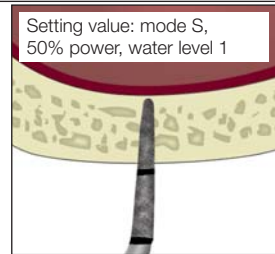
Process examples for elevation of maxillary sinus membrane



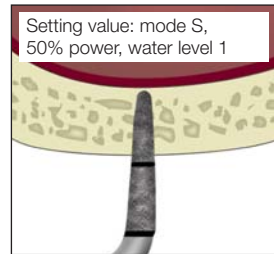
*A case of around 5mm from the base of cortical bone to maxillary sinus.
 *Bone tissue is type 3 and good condition.
 *In addition to positive diagnosis by CT image, the vertical bone width should be diagnosed well and the implant preparation site could be formed until the base of maxillary antrum.

1. A type of implant preparation site for a regular size implant ø4.0mm.

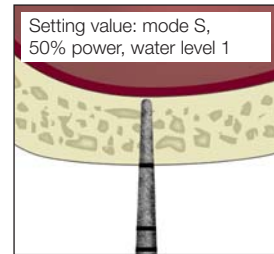
At the case of using VarioSurg



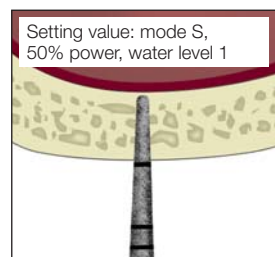
1. Bone cutting to within 1mm to the base of maxillary antrum by using **SG15A** tip. Please be careful not to push the tip too much.



2. Repeat bone cutting by using **SG15B** tip to increase width. Please be careful not to push the tip too much.



3. Repeat bone cutting by using **SG15C** tip. The implant preparation site is formed with seeking in the same way as the depth gauge is used.

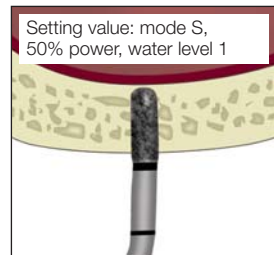


4. Bone cutting continued by using **SG15D** tip. The implant preparation site is formed with seeking in the same way as the depth gauge is used. Site preparation at this stage is ø1.7mm.

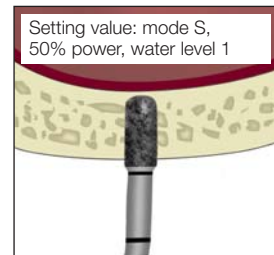
At the case of using drilling



1. By using a drill up to ø3.0mm, the implant preparation site is perforated to 1mm before the base of maxillary antrum at low-speed rotation.



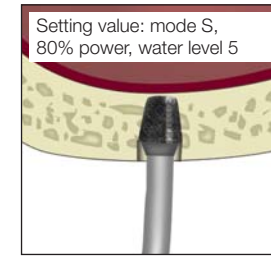
5. Bone cutting by using **SG16A** tip. The implant preparation site is formed until little of the base of cortical bone remains.



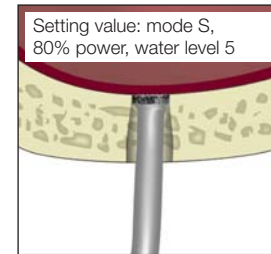
6. Repeat bone cutting by using **SG16B** tip. The implant preparation site is formed until little of the base of cortical bone remains.



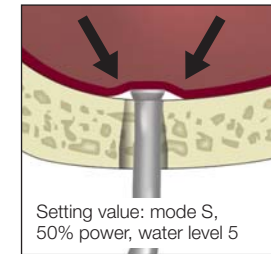
Clinical example: the implant preparation site is formed by using **SG16B** tip. The implant preparation site is ø2.8mm.



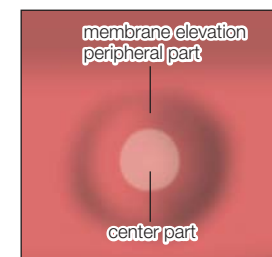
7. Using sufficient water irrigation, the implant preparation site is formed by using **SCL2D** tip. The water level is set to 5. Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane. At the case of using drilling, this step is excluded.



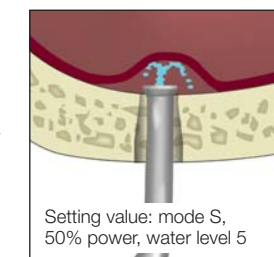
8. Using sufficient water irrigation, the implant preparation site is continued to be formed by using **SCL1D** tip. The water level is set to 5. The cavity floor of the implant preparation site is cut by using the edge of the top of the tip. Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane.



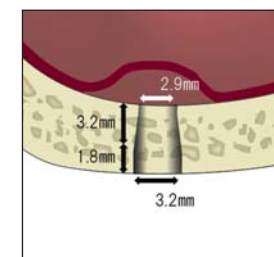
9. The maxillary antrum membrane is exfoliated by using **SCL1** tip. The water level is set to 5. Slowly insert the top of the tip between the membrane and bone. Moving the tip along the wall of the implant preparation site will exfoliate the membrane. Please be careful, since the membrane can be torn at the edge (arrow part) between the bone and the membrane.



This image shows the elevated membrane which you will see from the maxillary antrum side. Please check the condition of maxillary antrum membrane using the endoscope.



10. The Maxillary antrum membrane can now be elevated by using **SCL1** tip.



11. The completed formation of the implant preparation site. At the case of using drilling, the straight implant preparation site of ø3.2mm is formed.



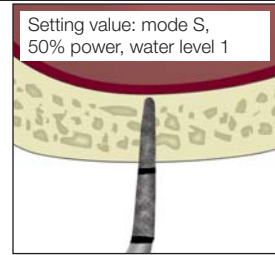
Clinical example: Before the mucous membrane of maxillary sinus is elevated.



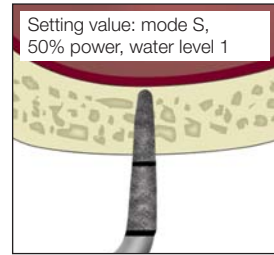
Clinical example: The state of elevation of the mucous membrane of the maxillary sinus by using **SCL1** tip.

2. A type of implant preparation site for a wide size implant $\phi 5.0\text{mm}$.

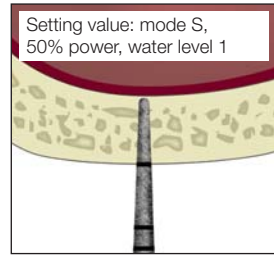
At the case of using VarioSurg



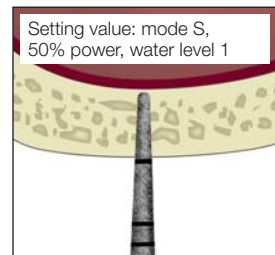
1. Bone cutting to within 1mm to the base of maxillary antrum by using **SG15A** tip. Please be careful not to push the tip too much.



2. Repeat bone cutting by using **SG15B** tip to increase width. Please be careful not to push the tip too much.



3. Repeat bone cutting by using **SG15C** tip. The implant preparation site is formed with seeking in the same way as the depth gauge is used.

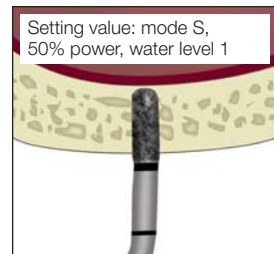


4. Bone cutting continued by using **SG15D** tip. The implant preparation site is formed with seeking in the same way as the depth gauge is used. Site preparation at this stage is $\phi 1.7\text{mm}$.

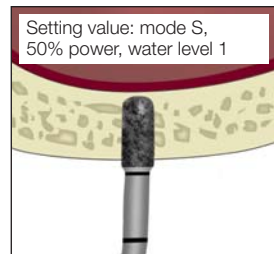
At the case of using drilling



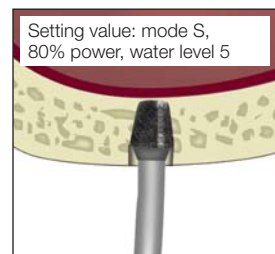
1. By using a drill up to $\phi 3.5\text{mm}$, the implant preparation site is perforated to 1mm before the base of maxillary antrum at low-speed rotation.



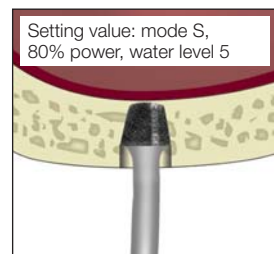
5. Bone cutting by using **SG16A** tip. The implant preparation site is formed until little of the base of cortical bone remains.



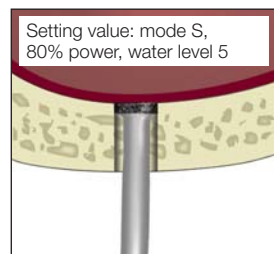
6. Repeat bone cutting by using **SG16B** tip. The implant preparation site is formed until little of the base of cortical bone remains.



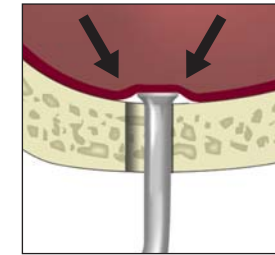
7. Using sufficient water irrigation, the implant preparation site is formed by using **SCL2D** tip. The water level is set to 5. Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane. At the case of using drilling, this step is excluded.



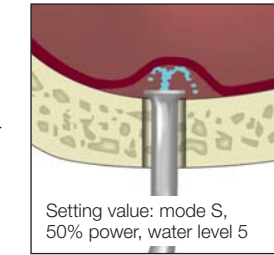
8. Using sufficient water irrigation, the implant preparation site is formed by using **SCL4D** tip. The water level is set to 5. Please be careful not to force the tip into the implant site. Too much water pressure may exert on the maxillary antrum membrane. At the case of using drilling, this step is excluded.



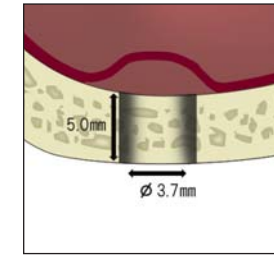
9. Using sufficient water irrigation, the implant preparation site is continued to be formed by using **SCL3D** tip. The water level is set to 5. The cavity floor of the implant preparation site is cut by using the edge of the top of the tip. Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane.



10. The maxillary antrum membrane is exfoliated by using **SCL3** tip. The water level is set to 5. Slowly insert the top of the tip between the membrane and bone. Moving the tip along the wall of the implant preparation site will exfoliate the membrane. Please be careful, since the membrane can be torn at the edge (arrow part) between the bone and the membrane.



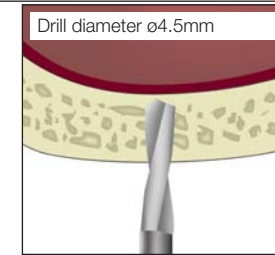
11. The maxillary antrum membrane can now be elevated by using **SCL1** tip.



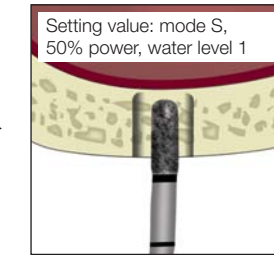
12. The completed formation of the implant preparation site.

3. A type of implant preparation site for a wide size implant $\phi 6.0\text{mm}$.

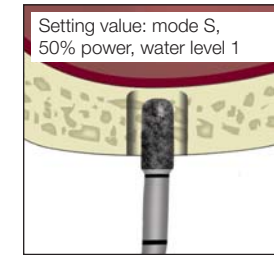
At the case of using drilling



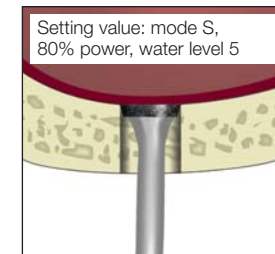
1. Using a drill up to $\phi 4.5\text{mm}$, the implant preparation site is perforated before 1mm to the base of maxillary antrum at low-speed rotation.



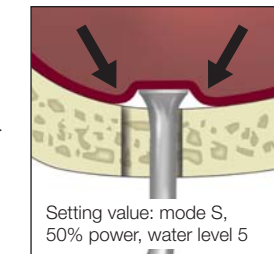
2. Bone cutting by using **SG16A** tip. The implant preparation site is formed until little of the base of cortical bone remains.



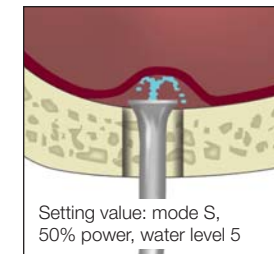
3. Repeat using a **SG16B** tip to increase width. The implant preparation site is formed until little of the base of cortical bone remains.



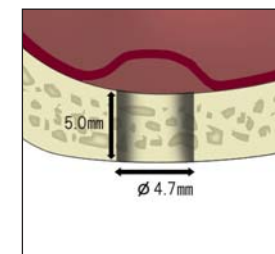
4. Using sufficient water irrigation, the implant preparation site is continued to be formed by using **SCL5D** tip. The water level is set to 5. The cavity floor of the implant preparation site is cut by using the edge of the top of the tip. Please be careful not to force the tip into the implant preparation site. Too much water pressure may exert on the maxillary antrum membrane.



5. The maxillary antrum membrane is exfoliated by using **SCL5** tip. The water level is set to 5. Slowly insert the top of the tip between the membrane and bone. Moving the tip along the wall of the implant preparation site will exfoliate the membrane. Please be careful, since the membrane can be torn at the edge (arrow part) between the bone and the membrane.



6. The maxillary antrum membrane can now be elevated by using **SCL5** tip.



7. The completed formation of the implant preparation site.