Drilling



Saline irrigation for **DIOnavi. drilling practices**

Flapless Surgical Guided System

General guidence for the saline irrigation for guided flapless surgery



Saline irrigation between surgical drillings is recommended.

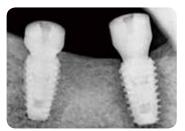
It is hard to efficiently irrigate down to osteotomy using the implant drilling handpiece irrigation because of the interference of remaining tissue and the surgical guide. During Flapless Guided Surgery to minimise **the bone heating**, **low speed drilling** is required. Once drilling is done, **metal needle tip should be socketed into the end of the osteotomy before the injection of saline**.

General guidelines for the saline irrigation at low speed drilling

Apply the continued saline irrigation procedure between each drilling sequence.

We would recommand doctors to apply the continued saline irrigation procedure even at low(under 50RPM) drilling speed to minimize the risk at critical bone heating and the complete removal of remaining tissues and particles in the osteotomy.

General guidelines for the guided surgery



Bone Heating

Please make sure your drilling does not exceed 10 seconds.

In case of low speed drilling on a high density bone, the bone heating risk increases. We recommend you to stick with the maximum drilling time of 10 seconds. If you are to pass 10 seconds during the drilling procedure, please stop and remove the drill apply enough cool saline down to osteotomy in order to prevent any damages from bone heating.



Place the metal needle tip deep into the osteotomy site.

In order to prevent any damage caused by over heating of the bone, you need to apply the low speed drilling and the **metal needle tip end goes all the way down to the bottom of the osteotomy before the injection of saline**.

- → Prevent bone heating by sufficient irrigation into the osteotomy site.
- → Complete removal of remaining tissues and particles inside the osteotomy.

Needle



Metal Needle

Place the Metal needle tip **deep into the osteotomy site**, in order to prevent any damage caused by over-heating of the bone and complete removal of remaining tissues and particles at drilled bone cavity.



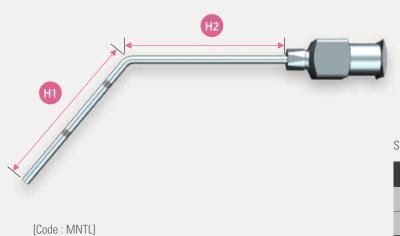


Place the metal needle tip deep into the osteotomy site.



With the needle tip not all the way down to osteotomy it is hard to irrigate.

Specification of the metal needle tip



| Spec. | : | 18G | OD | : | 1/2 |
|-------|---|-----|----|---|-----|
| | | | | | |

| Code | H1 | H2 |
|------|----|----|
| MNTE | 30 | 50 |
| MNTL | 25 | 25 |

Recommended capacity of the syringe : 30~50cc (Refrigerate before surgery)